



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

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MARK B. GLICK
CHIEF ENERGY OFFICER

Testimony of
MARK B. GLICK, Chief Energy Officer

before the
SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

Tuesday, January 30, 2024
1:30 PM
State Capitol, Conference Room 229 and Videoconference

In Support of
SB 2504

RELATING TO STATE PROGRAMS.

Chair DeCoite, Vice Chair Wakai, and members of the Committee, the Hawai'i State Energy Office (HSEO) supports SB 2504 that serves as a housekeeping bill to close out measures that were put into place to support Hawai'i's efforts to pursue one billion dollars in Federal funding for a Hawaii Pacific Hydrogen Hub.¹

Although Hawai'i's application was not selected for funding,² HSEO appreciates that the Legislature provided much-needed support for Hawai'i's efforts to engage positively with Consortium partners and to submit a credible proposal to the United States Department of Energy. HSEO gained considerable knowledge through the process that could accelerate the development of green hydrogen in Hawai'i for use in critical energy resilience applications and heavy-duty trucks and buses. HSEO is also pleased to report that two projects included in the H2Hub proposal are moving forward, and HSEO will continue to support those projects, as well as pursue the development of the most promising opportunities and financial support from other federal funds and available resources.

¹ News release, "Integrated Hawai'i Pacific Hydrogen Hub Completes Full Application For Federal Funding."
<https://energy.hawaii.gov/integrated-hawaii-pacific-hydrogen-hub-completes-full-application-for-federal-funding/>

² United States Department of Energy, "Regional Clean Hydrogen Hubs Selections for Award Negotiations."
<https://www.energy.gov/oced/regional-clean-hydrogen-hubs-selections-award-negotiations>

As the funds will not be required, HSEO supports this bill.

Thank you for the opportunity to testify.



To: The Senate Committee on Energy, Economic Development, and Tourism (EET)
From: Sherry Pollack, 350Hawaii.org
Date: Tuesday, January 30, 2024, 1:30pm

In strong support of SB2504

Aloha Chair DeCoite, Vice Chair Wakai, and members of the EET Committee,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org is in **strong support of SB2504** which repeals Part II of Act 66, Session Laws of Hawaii 2023, which requires the Department of Business, Economic Development, and Tourism to work with the University of Hawaii on workforce development activities that support the development of the Hawaii Pacific Hydrogen Hub and related aspects of the State's hydrogen energy industry. This measure also repeals the appropriation for DBEDT.

It is important to note that hydrogen is an inefficient use of clean electricity. It is always more efficient to use renewable power directly than to convert renewable energy to hydrogen for use as an energy source. In addition, hydrogen fuel cells cost much more and are far less efficient than battery-electric cars.

To protect our climate and future, we need ambitious efforts to electrify our transportation sector wherever we can, as quickly as we can.

Mahalo for the opportunity to testify on this measure.

Sherry Pollack
Co-Founder, 350Hawaii.org



Environmental Caucus of The Democratic Party of Hawai'i

To: Senate Committee on Energy, Economic Development, and Tourism
Hon. Lynn DeCoite, Chair
Hon. Glenn Wakai, Vice Chair

Re: SB 2504 RELATING TO STATE PROGRAMS

Hearing: Tuesday, January 30, 2024, 1:30 p.m., Room 229 & videoconference

Position: Strong support

Aloha, Chairs Gabbard and DeCoite, Vice Chairs Richards and Wakai, and Members of the Committees on Agriculture and Environment and Energy, Economic Development, and Tourism:

The Environmental Caucus of the Democratic Party of Hawai'i strongly supports SB 2504. This bill would repeal Part II of Act 66, Session Laws of Hawaii 2023, which requires the Department of Business, Economic Development, and Tourism to work with the University of Hawaii on workforce development activities that support the development of the Hawaii Pacific Hydrogen Hub and related aspects of the State's hydrogen energy industry. This measure also repeals the appropriation for DBEDT.

The PLATFORM OF THE DEMOCRATIC PARTY OF HAWAII'I as adopted at the 2022 State Convention on May 28, 2022, states as follows:

ENVIRONMENT AND ENERGY

Protect and preserve Hawai'i's environment and achieve energy sustainability. Advance measures to re-establish a healthy climate and environment for humans and fellow species, including actions to urgently address climate change. Work towards 100% clean renewable energy goals. [Emphasis added.]

We believe that all people have the right to live in a clean, healthy and safe environment. We believe that the preservation of our natural environment and its ecological well-being is essential to ensuring a safe, healthy, bountiful life for future generations in Hawai'i. We support policies that create a more sustainable society. We support the restoration, preservation, and protection of native ecosystems.

We believe in the resource management principles outlined in the Public Trust doctrine of the Hawai‘i State Constitution. We support policy that incorporates indigenous resource-management practices and technologies such as the Ahupua‘a System in modern urban planning and development to create an ecologically sustainable balance between the needs of the people and the rights of nature.

We believe that a key part of a sustainable and self-sufficient future for Hawai‘i lies in *achieving energy independence through a transition to clean renewable energy sources. We support policies that eliminate our dependence on fossil fuels and other dirty energy sources.* We support policies that expand access to public transportation and encourage transit-oriented development and walkable communities. [Emphasis added.]

One of the main disadvantages of hydrogen fuel is that it is a highly flammable gas and can be dangerous if not handled properly. Hydrogen production can also be expensive and energy-intensive, especially if non-renewable sources such as oil and natural gas are used. Additionally, hydrogen that escapes during the production process could erode the ozone layer and exacerbate global warming.

According to a review published in Environmental Chemistry Letters, hydrogen production and utilization can have environmental impacts such as greenhouse gas emissions, water consumption, and air pollution. Hydrogen combustion, like any combustion reaction that heats air to high temperatures, creates harmful pollutants called nitrogen oxides. These are linked to smog, acid rain, and damaging health impacts such as asthma and respiratory infections.

In order to **reduce both electricity rates and greenhouse gases**, we should immediately disincentivize expensive and polluting hydrogen fuel production and use by eliminating the hydrogen hub requirement from state programs.

For all these compelling reasons, logic and science dictate that we absolutely must repeal Part II of Act 66, Session Laws of Hawaii 2023, which requires the Department of Business, Economic Development, and Tourism to work with the University of Hawaii on workforce development activities that support the development of the Hawaii Pacific Hydrogen Hub and related aspects of the State's hydrogen energy industry.

Thank you for the opportunity to testify.

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