



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I  
OFFICE OF THE DIRECTOR  
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS

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**Testimony of the Department of Commerce and Consumer Affairs**

**Before the  
House Committee on Transportation  
Thursday, February 1, 2024  
10:00 a.m.  
Conference Room 312**

**On the following measure:  
H.B. 1997, RELATING TO THE INTERISLAND TRANSPORT OF HYDROGEN**

Chair Todd and Members of the Committee:

My name is Michael Angelo, and I am the Executive Director of the Department of Commerce and Consumer Affairs' (Department) Division of Consumer Advocacy. The Department offers comments on this bill.

The purpose of this bill is to authorize the Public Utilities Commission (Commission) to establish a discounted rate by tariff for water carriers that engage in the interisland transport of hydrogen.

The Department supports the cost-effective production and delivery of renewable fuels that align with the State's clean energy and climate policies. The Department recognizes the intent of this bill, which the Department believes is seeking to enable a greater diversity in the type of renewable fuels available for use within the State. Hydrogen is a renewable fuel if it is produced from renewable resource types that are defined under Hawaii Revised Statutes § 269-91.

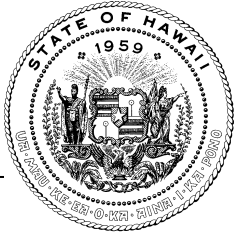
The Department is concerned; however, that the customers of water carriers transporting hydrogen between the islands will bear additional financial burden by enacting the discount because water carriers will likely attempt to recover their decreased revenues by raising rates for other cargo types. Hawaii residents and businesses are already paying high interisland cargo rates since Young Brothers LLC (Young Brothers), the State's regulated water carrier providing interisland shipping, was granted an average (interim) rate increase of about 46% in a pandemic emergency order a few years ago. (See Order No. 37280 issued on August 17, 2020 in Docket No. 2019-01117). The Department also notes there is no financial benefit identified to water carriers' ratepayers from providing the discounted rate for shipping hydrogen. As such, enacting this discount would result in an inequitable burden to Young Brothers' customers bearing the additional costs of providing the discount.

The Department also notes its concerns as to whether there is currently a need to ship hydrogen between the islands and, if such a need did arise in the future, water carrier customers on islands other than Oahu would inequitably bear the cost of providing hydrogen to Oahu at a discounted shipping rate. The Hawaii Natural Energy Institute (HNEI) of the University of Hawaii concludes on pages 7 and 8 of its December 2023 report to the Hawaii State Legislature on the "[Potential Production and Use of Renewable Hydrogen in Hawaii](#)" that:

- Oahu has sufficient land and resources to meet potential near-term [hydrogen] uses but if developed at a larger scale than considered in this report, Oahu would be required to import hydrogen to meet its needs.
- [A]ll the islands other than Oahu have ample land to meet any reasonable on-island uses.
- [I]nterisland shipping was found to be complex and expensive limiting the large-scale applications of hydrogen to the neighbor islands for the foreseeable future.
- While the use of hydrogen for long-term storage (aka firm power) is an often mentioned application, the use of hydrogen to provide

energy during periods of extended low solar or wind resource [availability] was found to require very large amounts of on-island storage. Although included as a potential end-use throughout the report, the amount and cost of this storage is considered prohibitive based on currently available technology.

Thank you for the opportunity to testify on this bill.



# HAWAII STATE ENERGY OFFICE STATE OF HAWAII

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Testimony of  
**MARK B. GLICK, Chief Energy Officer**

before the  
**HOUSE COMMITTEE ON TRANSPORTATION**

Thursday, February 1, 2024  
10:00 AM  
State Capitol, Conference Room 312 and Videoconference

Providing Comments on  
**HB 1997**

## **RELATING TO THE INTERISLAND TRANSPORT OF HYDROGEN.**

Chair Todd, Vice Chair Kila, and Members of the Committee, the Hawai'i State Energy Office (HSEO) respectfully offers comments on HB 1997 that authorizes the Public Utilities Commission to establish a discounted rate by tariff for water carriers that engage in the interisland transport of hydrogen.

As a part of Hawai'i's energy strategy, HSEO believes energy generated from hydrogen will play a role in the State's target to sequester more atmospheric carbon and greenhouse gases than emitted within the State as quickly as possible, but no later than 2045, and supports incentives for its development. HSEO recently identified local clean hydrogen production at scale as a decarbonization opportunity in our *Hawai'i Pathways to Decarbonization* report.<sup>1</sup>

HSEO defers to the appropriate agencies for comment on the fiscal, administrative, and regulatory impacts of this bill.

Thank you for the opportunity to testify.

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<sup>1</sup> Hawai'i State Energy Office. *Hawai'i Pathways to Decarbonization*. 2023. [https://energy.hawaii.gov/wp-content/uploads/2024/01/Act-238\\_HSEO\\_Decarbonization\\_Report.pdf](https://energy.hawaii.gov/wp-content/uploads/2024/01/Act-238_HSEO_Decarbonization_Report.pdf)

TESTIMONY OF  
LEODOLOFF R. ASUNCION, JR.  
CHAIR, PUBLIC UTILITIES COMMISSION  
STATE OF HAWAII

TO THE  
HOUSE COMMITTEE ON  
TRANSPORTATION

February 1, 2024  
10:00 a.m.

Chair Todd, Vice Chair Kila, and Members of the Committee:

**MEASURE:** H.B. No. 1997

**TITLE:** RELATING TO THE INTERISLAND TRANSPORT OF HYDROGEN.

**DESCRIPTION:** Authorizes the Public Utilities Commission to establish a discounted rate by tariff for water carriers that engage in the interisland transport of hydrogen.

**POSITION:**

The Public Utilities Commission (“Commission”) offers the following comments for consideration.

**COMMENTS:**

The Commission appreciates the intent of this measure to enable discounted rates for transport of hydrogen in support of a clean energy economy.

The Commission observes that in accordance with HRS §§ 269-16.5, 269-26.5, 269-26.6, 269-27.3, and 269-27.7, there are currently different types of discount programs that could offer models for implementing such a program. The program most similar to that contemplated in this measure was developed under HRS § 269-26.6, which authorizes the Commission to establish preferential water carrier service rates for agricultural activities. On November 3, 1995, the Commission approved an amendment to Young Brother’s tariff, Tariff No. 5-A, by Order No. 14356. This amendment defines the “Island Agricultural Product Discount,” which was later modified in 2009. The current iteration of

the agricultural discount provides a 35 percent reduction in container rate and 30 percent reduction in all other intrastate shipment types for agricultural products.<sup>1</sup>

The Commission appreciates the flexibility offered by the Committee in establishing said discounted rate for the advancement of clean energy opportunities for Hawaii. Should this measure pass, the Commission would likely incorporate discussion of and decision on discounted rates for transportation of hydrogen within an ongoing or future rate case. The Commission could also consider an application by a regulated utility for such a discounted commodity rate. In its examination of the issue, consistent with the Commission's past testimony on related measures, the Commission would consider potential cross-subsidization from all other customers and determine any appropriate remediations.

The Commission observes that there may be issues to work out to ensure safe transport of hydrogen. Given the nature of this measure, the Commission respectfully defers to Department of Transportation, Harbors Division, and other maritime regulatory entities as to the feasibility of transportation of hydrogen, along with any applicable and necessary safety standards.

Thank you for the opportunity to testify on this measure.

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<sup>1</sup> Following Commission Orders on the Island Agricultural Product Discount, the Legislature passed HB2644 HD2, SD1, CD1 in the 2012 Legislative session, which the governor signed into law as Act 232 (SLH 2012), formally including this type of discount within the Commission's statutes.

**HB-1997**

Submitted on: 1/29/2024 11:22:10 AM

Testimony for TRN on 2/1/2024 10:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Douglass S. Adams	Department of Research & Development, County of Hawaii	Support	Written Testimony Only

Comments:

Chair Todd, Vice Chair Kila, and Members of the Committee on Transportation:

Thank you for the opportunity to testify in SUPPORT of HB1997, which authorizes the Public Utilities Commission to establish a discounted rate by tariff for water carriers that engage in the interisland transport of hydrogen. This bill enables the creation of a forward-looking approach to the development of local renewably-generated energy and its availability across the state.

The Department encourages the Committee to recommend the passage of HB1997 by the House of Representatives.

very respectfully

Douglass Adams, Director



Written Statement of  
**David H. Molinaro**  
HCATT Manager  
Hawaii Center for Advanced Transportation Technologies  
before the  
**House Committee on Transportation**

Thursday, February 1, 2024  
10:00 AM  
State Capitol, Conference Room 312

In consideration of  
**HB 1997**  
**RELATING TO INTERISLAND TRANSPORT OF HYDROGEN**

Chair Todd, Vice Chair Kila, and Members of the Committee.

The Hawaii Center for Advanced Transportation Technologies (HCATT) **supports** HB 1997 to authorize the Public Utilities Commission to establish a discounted rate by tariff for water carriers that engage in the interisland transport of hydrogen.

In order for Hawaii to develop a hydrogen industry, interisland shipping capabilities must be promoted and encouraged to transport hydrogen on an economically viable scale. Sea transport of hydrogen is the only viable option for Hawaii and in order to capitalize and utilize the transportation infrastructure in use by countries such as Japan and Australia, a reduction in the cost hydrogen transportation would be beneficial.

Financial incentives whether in the form of production tax credits, carbon reduction tax credits, or in this case of this legislation, reduction in tariffs for interisland transportation of hydrogen will aid in the stimulus needed to support the development of a hydrogen industry in Hawaii and further provisions Hawaii Revised Statute §196-10, support Hawaii's 2045 RPS mandate, and foster a new renewable energy industry in this State.

Mahalo for the opportunity to present this testimony.





To: The House Committee on Transportation (TRN)  
From: Sherry Pollack, 350Hawaii.org  
Date: Thursday, February 1, 2024, 10:00am

**In opposition to HB1997**

Aloha Chairs Todd, Vice Chairs Kila, and Committee members,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org **opposes HB1997** that would authorize the Public Utilities Commission to establish a discounted rate by tariff for water carriers that engage in the interisland transport of hydrogen.

Investing in hydrogen at this time is a poor use of our limited resources. 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



*WRITTEN TESTIMONY ONLY*

February 1, 2024

Representative Chris Todd, Chair  
Representative Darius K. Kila, Vice Chair  
House Committee on Transportation

**RE: House Bill 1997 – RELATING TO THE INTERISLAND TRANSPORT OF HYDROGEN**  
**Hearing date: February 1, 2024, 10:00 a.m.**

Aloha Chair Todd, Vice Chair Kila, and Members of the Committee:

Thank you for the opportunity to submit testimony on behalf of Young Brothers, LLC (“YB”) offering **COMMENTS** for House Bill 1997 – Relating to the Interisland Transport of Hydrogen.

YB is a common carrier by water, transporting property by tug and barge between the islands of Oahu, Hawaii, Kauai, Maui, Molokai, and Lanai. YB is currently the only water common carrier authorized to transport property under Chapter 271G, Hawaii Revised Statutes (“HRS”) (i.e., the Hawaii Water Carrier Act), subject to the regulatory authority of the Public Utilities Commission of the State of Hawaii (“PUC”). Since 1900, customers across Hawaii have relied on YB’s frequent, regular, and universal sailings to serve as the bridge that connects all communities in this island-state.

This measure would, authorize the PUC to establish a discounted tariff rate for hydrogen transported by regulated intrastate water carriers such as YB.

YB is committed to sustainability, environmental responsibility, and the brightest possible future within our shared communities. YB understands that there are many potential benefits to the use of hydrogen as a clean fuel source and appreciates efforts to facilitate the transportation of hydrogen between our islands. However, it should be noted that:

- 1) Offering a discount for any cargo type (e.g., hydrogen) generally necessitates increased rates to other customers to subsidize the discount (unless external funding is provided); and
- 2) YB has limited experience transporting hydrogen and expects that there will be safety and operational challenges associated with transporting hydrogen. These challenges could be further complicated by the form of the hydrogen (i.e., gas or liquid, container type, etc.) and the quantity. Addressing such challenges could increase YB’s operational costs, which would also mean increased rates for other ratepayers, especially if they are already subsidizing a discount.

Thank you for your service to the State of Hawaii and for the opportunity to testify on this measure.

Sincerely,

Kris Nakagawa  
Vice President, External and Legal Affairs



P.O. Box 37158, Honolulu, Hawai`i 96837-0158  
Phone: 927-0709 [henry.lifeoftheland@gmail.com](mailto:henry.lifeoftheland@gmail.com)

COMMITTEE ON TRANSPORTATION

Rep. Chris Todd, Chair

Rep. Darius K. Kila, Vice Chair

DATE: Thursday, February 1, 2024

TIME: 10:00 A.M.

PLACE: Conference Room 312

HB 1997 Interisland Transport of Hydrogen.

SUGGESTED AMENDMENT

Aloha Chair Todd, Vice Chair Kila and Members of the Committee

Life of the Land is Hawai`i's own energy, environmental and community action group advocating for the people and `aina for 54 years. Life of the Land's mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

HB 1997 authorizes the Public Utilities Commission to establish a discounted rate by tariff for water carriers that engage in the interisland transport of hydrogen.

State law uses "hydrogen" in some places and "renewable hydrogen" in other places. All uses should mean only "renewable energy." The shipped hydrogen should include only

“renewable hydrogen.” The Commission requires life cycle (cradle-to-grave”) greenhouse gas analyses for electric and gas contracts and has the option to require greenhouse gas analyses for water, wastewater, or telecommunications providers (HRS §269-6(b)). The law is silent for shipping. Greenhouse gas analysis is not included in the Hawaii Water Carrier Act (HRS §271G).

**PROPOSED AMENDMENT:** “§271G- Discounted rate; interisland transport of hydrogen. The public utilities commission may establish a discounted rate by tariff for water carriers that engage in the interisland transport of **renewable** hydrogen. The process for tariff filings of water carriers for the discounted rate may be established by the public utilities commission." **The Commission shall explicitly consider the life cycle greenhouse gas emissions associated with producing, shipping, and using hydrogen.**

Mahalo

Henry Curtis  
Executive Director

Statement of  
**Brigadier General Stanley J. Osserman Jr. (USAF Ret.), President**

Tigershark, LLC

Before the

**House Committee on Transportation**

1 February 2024

10:00 am

State Capitol Conference Room #312

In consideration of

**HB1997**

**Relating to Interisland Transportation of Hydrogen**

Chair Todd

30 January 2024

Vice Chair Kila and Distinguished Committee Members:

I stand in strong support to this bill.

As the former director of the Hawaii Center for Advanced Transportation Technologies (HCATT; 2013 to 2019), Hawaii Department of Business, Economic Development and Tourism (DBEDT). My HCATT Director position was designated by the legislature as the “Hydrogen Implementation Coordinator for the state of Hawaii”. I continue to serve our state by promoting clean, renewable energy solutions. This testimony is NOT being given for compensation of any kind, commercial, political or private. I am presenting to you today as a concerned “Life-Long” citizen of the State of Hawaii with extensive professional experience in energy systems, retail and wholesale business, military matters, international commerce, aviation, construction, maritime operations, and public safety, among others. My goal is to help our government leaders make good strategic choices.

I have studied and worked with The U.S. Dept. of Energy’s National Labs, organizations and companies trying to develop solutions to the many challenges we face as we divest from fossil fuels, on the grid and in all forms of transportation. I learned that Hydrogen will play a significant role in, not only ground transportation, but commercial cargo and tanker shipping, grid storage and even in agriculture, farm equipment, material handling and too many other areas to list. When I started at HCATT in 2013, I knew more than most about the potential for hydrogen in the energy sector, and I’m happy to report that hydrogen, although not a common household topic, is rapidly developing, world wide, into all the areas that were predicted a decade or more ago, particularly large scale transportation and long term grid energy storage. Most people don’t realize that Hawaii is the home to some of the most knowledgeable hydrogen professionals on the planet, and they would like to help Hawaii lead the way in all things hydrogen.

Creating clean hydrogen, known as “Green Hydrogen” will most likely begin at scale in Hawaii County. This production will support adoption of hydrogen by the rest of the state as the other counties “catch up” with geothermal power generation and generating their own Green Hydrogen. This will require economical transport between islands for many years to come, in fact many predict that hydrogen may be produced in high enough volume that we would be able to EXPORT hydrogen to the Mainland US and Asia. Can you imagine Hawaii becoming an Energy exporting state! It starts with enabling the economical movement of hydrogen across our state as we transition to a fossil fuel free economy. This concept is not a new idea! I remember Spark Matsunaga promoting hydrogen when I was a young man. It makes sense and it needs your support on bills like HB1997 to get through cross over and to the governor’s desk.

For six and a half years I did a weekly show on Think Tech Hawaii dedicated to energy called “Stan the Energy Man”. I’m humbled and amazed at how many people have watched those videos and many of them deal with hydrogen. I hope you will look at hydrogen as one of the key enablers to get Hawaii to a clean and sustainable energy future! HB 1997 is an important part of that effort.

Brigadier General, Stanley J. Osserman Jr. (USAF Ret.)

President, Tigershark, LLC