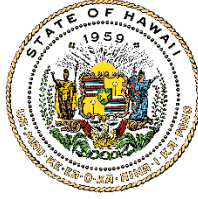
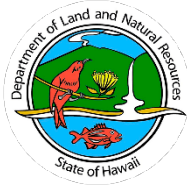


JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA

P.O. BOX 621  
HONOLULU, HAWAII 96809

DAWN N.S. CHANG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
RYAN K.P. KANAKA'OLE  
FIRST DEPUTY  
DEAN D. UYENO  
ACTING DEPUTY DIRECTOR - WATER  
AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES  
ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

Testimony of  
DAWN N. S. CHANG  
Chairperson  
Before the Senate Committees on  
WATER AND LAND  
and  
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

Monday, March 18, 2024  
1:45 PM  
State Capitol, Conference Room 229 & Videoconference

In consideration of  
HOUSE BILL 2020, HOUSE DRAFT 2  
RELATING TO RENEWABLE ENERGY

House Bill 2020, House Draft 2, proposes to amend the definition of “renewable energy producer” in section 171-95, Hawaii Revised Statutes (HRS) to allow renewable energy producers to sell to entities other than an electric utility company regulated under chapter 269, HRS. **The Department of Land and Natural Resources (Department) strongly supports this measure.**

As written, to be eligible for a directly negotiated lease under section 171-95, HRS, a renewable energy producer is required to sell all of the net power produced from the demised premises to an electric utility company regulated under chapter 269, HRS. The Department believes that this statute is outdated and in need of modernization. Evolving renewable energy technology now includes far more than electricity generated by solar panels and governing statutes should reflect that new reality. For example, a renewable energy project could produce energy in a form other than electricity, such as hydrogen, that would not involve the sale of electricity or “wheeling,” which testifiers have expressed concern about in prior testimony. To alleviate these concerns, the Department suggests an alternative approach to amend section 171-95, subsection (c) as follows (new language and proposed deletion shown in bold):

SECTION 2. Section 171-95, Hawaii Revised Statutes, is amended by amending subsection (c) to read as follows:

"(c) For the purposes of this section, "renewable energy producer" means:

(1) Any producer or developer of ~~[electrical or thermal]~~ renewable energy ~~[as defined in §269-91 produced by wind, solar energy, hydropower, geothermal resources, landfill gas, waste to energy, ocean thermal energy conversion, cold seawater, wave energy, biomass, including municipal solid waste, biofuels or fuels derived from organic sources, hydrogen fuels derived primarily from renewable energy, or fuel cells where the fuel is derived primarily from renewable sources]~~ , as defined in section 269-91, that ~~[sell all of]~~ sells the net power produced from the demised premises ~~[to an electric utility company regulated under chapter 269 or that sells all of the thermal energy it produces to customers of district cooling systems; provided that up to twenty-five per cent of the power produced by a renewable energy producer and sold to the utility or to district cooling system customers may be derived from fossil fuels]~~ **without utilizing another entity's power grid; provided however, nothing herein is intended to prevent a producer or developer of renewable energy to sell the net power produced utilizing another entity's power grid if approved by the Public Utilities Commission and the entity owning the power grid;** ~~[or]~~

(2) Any grower or producer of plant or animal materials used primarily for the production of biofuels or other fuels; provided that nothing herein is intended to prevent the waste product or byproduct of the plant or animal material grown or produced for the production of biofuel, biogas, hydrogen, or other fuels[, ~~electrical energy, or thermal energy,~~] from being used for other useful purposes[-]; or

(3) Any producer of renewable energy, as defined in section 269-91, that uses the renewable energy to provide district heating or cooling services ~~[provided that energy from renewable energy producers shall not be wheeled over existing utility lines]."~~

Removing the requirement that power be sold to an electric utility company would benefit the Department with greater flexibility to generate revenue to support its mission by expanding the pool of potential applicants eligible for leases via direct negotiation rather than the cumbersome and costly auction process. More importantly, the recommendation proposed above provides greater opportunity for the expansion of renewable energy production in Hawai'i.

Mahalo for the opportunity to testify on this measure.

**HB-2020-HD-2**

Submitted on: 3/16/2024 3:25:27 PM

Testimony for EET on 3/18/2024 1:45:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Russell Tsuji	Testifying for Department of Land and Natural Resources	Support	Remotely Via Zoom

Comments:

Written testimony from DLNR previously submitted on another Capitol account. Request for a Zoom link for additional DLNR staff testifying remotely for HB2020 HD2.

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

TO THE  
SENATE COMMITTEES ON  
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM  
and  
WATER AND LAND

Monday, March 18, 2024  
1:45 p.m.

Chairs DeCoite and Inouye, Vice Chairs Wakai and Elefante, and Members of the Committees:

**MEASURE:** H.B. No. 2020, HD2

**TITLE:** RELATING TO RENEWABLE ENERGY.

**DESCRIPTION:** Expands the definition of “renewable energy producer” that is used to determine the Board of Land and Natural Resources’ disposition of public lands to renewable energy producers. Effective 7/1/3000. (HD2)

**POSITION:**

The Public Utilities Commission (“Commission”) supports this measure and offers the following comments for consideration.

**COMMENTS:**

The Commission supports this measure to allow the Board of Land and Natural Resources to lease public lands to renewable energy producers. This effort should assist in expanding the market for renewable energy in order to complement the State’s efforts to achieve its renewable energy goals. The Commission recognizes the potential advantages of a more diverse energy market that would promote the production of clean energy and understands that producers of renewable energy play an important role in the State’s transition to renewable energy. This measure would serve to increase the number of allowed producers and provide more flexibility and options for sellers and buyers in the renewable energy market.

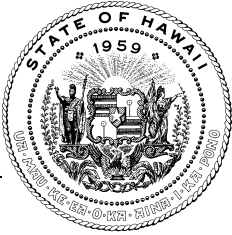
The Commission observes that the measure provides consistency across statutes by aligning the definition of “renewable energy” in HRS § 171-95 with the definition in Chapter 269. The Commission notes that the two definitions are currently substantially similar and supports this modification.

The Commission suggests a minor clarifying amendment:

Page 4, lines 12 – 13:

“provided that nothing in this definition shall be construed to allow wheeling of electricity that is not authorized by law or rule approved by the public utilities commission.”

Thank you for the opportunity to testify on this measure.



# HAWAII STATE ENERGY OFFICE STATE OF HAWAII

235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone:  
Web:

JOSH GREEN, M.D.  
GOVERNOR

SYLVIA LUKE  
LT. GOVERNOR

MARK B. GLICK  
CHIEF ENERGY OFFICER

(808) 451-6648  
energy.hawaii.gov

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

before the  
**SENATE COMMITTEES ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM  
AND  
WATER AND LAND**

Monday, March 18, 2024  
1:45 PM  
State Capitol, Conference Room 229 and Videoconference

In Support of  
**HB 2020, HD2**

**RELATING TO RENEWABLE ENERGY.**

Chairs DeCoite and Inouye, Vice Chairs Wakai and Elefante, and members of the Committees, the Hawai'i State Energy Office (HSEO) supports HB 2020, HD2, with an amendment. HB 2020, HD2, expands the definition of "renewable energy producer" that is used to determine the Board of Land and Natural Resources' disposition of public lands to renewable energy producers.

HSEO advises that (1) clarifying the definition would be helpful, and (2) the anticipated need for renewable energy extends beyond the electricity sector, since the state's decarbonization goals include the reduction in greenhouse gases from fuels used in the transportation sector, utility gas, and nonregulated fuel gases.

HSEO recommends a further refinement to a change that was recently made to this bill. HSEO recommends that on page 4, lines 12 and 13 be revised to read as follows:

"provided that nothing in this definition shall be construed to allow wheeling that is not authorized by law, or rule or order of the public utilities commission."

This change will address concerns about potential complexities being introduced into DLNR's statute.

HSEO supports this bill, as it provides clarity and consistency in definition with HRS section 269-91. The contents of the definitions are shown side-by-side in the table below for comparison.

HRS Section <a href="#">171-95(c)</a> (existing)	From HRS Section <a href="#">269-91</a>
<p>For the purposes of this section, "renewable energy producer" means:</p> <p>(1) Any producer or developer of electrical or thermal energy produced by wind, solar energy, hydropower, geothermal resources, landfill gas, waste-to-energy, ocean thermal energy conversion, cold seawater, wave energy, biomass, including municipal solid waste, biofuels or fuels derived from organic sources, hydrogen fuels derived primarily from renewable energy, or fuel cells where the fuel is derived primarily from renewable sources that sell all of the net power produced from the demised premises to an electric utility company regulated under chapter 269 or that sells all of the thermal energy it produces to customers of district cooling systems; provided that up to twenty-five per cent of the power produced by a renewable energy producer and sold to the utility or to district cooling system customers may be derived from fossil fuels; or</p> <p>(2) Any grower or producer of plant or animal materials used primarily for the production of biofuels or other fuels; provided that nothing herein is intended to prevent the waste product or byproduct of the plant or animal material grown or produced for the production of biofuel, other fuels, electrical energy, or thermal energy, from being used for other useful purposes.</p>	<p>For the purposes of this part: "Renewable energy" means energy generated or produced using the following sources:</p> <p>(1) Wind;</p> <p>(2) The sun;</p> <p>(3) Falling water;</p> <p>(4) Biogas, including landfill and sewage-based digester gas;</p> <p>(5) Geothermal;</p> <p>(6) Ocean water, currents, and waves, including ocean thermal energy conversion;</p> <p>(7) Biomass, including biomass crops, agricultural and animal residues and wastes, and municipal solid waste and other solid waste;</p> <p>(8) Biofuels; and</p> <p>(9) Hydrogen produced from renewable energy sources.</p>

HSEO defers to the appropriate agency on the administration of this measure.  
 Thank you for the opportunity to testify.





**Hawaiian  
Electric**

**TESTIMONY BEFORE THE SENATE COMMITTEES ON  
WATER & LAND  
AND  
ENERGY, ECONOMIC DEVELOPMENT & TOURISM**

**HB 2020, HD2  
Relating to Renewable Energy**

Monday, March 18, 2024  
1:45 pm  
State Capitol, Conference Room 229

James Abraham  
Associate General Counsel  
Hawaiian Electric

Dear Chair Inouye, Chair DeCoite, Vice Chair Elefante, Vice Chair Wakai, and Members of the Committees,

My name is James Abraham and I am testifying on behalf of Hawaiian Electric offering comments and a proposed amendment to HB 2020, HD2, Relating to Renewable Energy.

Hawaiian Electric appreciates the intent of the bill to try to enable more renewable development on State land; however, we have concerns that the bill would incentivize renewable development on State land that may not support the State as a whole in achieving its renewable goals, including the renewable portfolio standard. As Hawai'i works to achieve 100% renewable energy by 2045, land constraints will become a significant obstacle, as there is a limited amount of land viable for renewable energy projects. To help achieve renewable goals set forth in statute, we believe that renewable energy developed on State land should be made available for renewable RFPs that lower costs and increase renewable energy utilization for the broader utility customer base.

We appreciate the prior committee's inclusion of language to help ensure that this bill does not result in the unintended consequence of enabling wheeling of electricity. As noted in our prior testimonies on this bill, Hawaiian Electric has strong equity concerns with establishing wheeling in Hawai'i. With respect to the last clause of Section 2 (lines 12-13), which provides that this bill does not enable wheeling of electricity, Hawaiian Electric respectfully requests that the Committee include the below clarifying amendment:

provided that energy from renewable energy  
producers shall not be wheeled over [~~existing~~]  
**public** utility lines **or infrastructure**.

This language would help avoid confusion as to whether new utility lines or other utility infrastructure could be utilized for purposes of wheeling electricity.

Hawaiian Electric appreciates the Committee's consideration of its comments on and proposed amendment to HB 2020, HD2. Thank you for this opportunity to testify.



**Hawai'i Forest Industry Association**

7192 Kalaniana'ole Hwy  
Suite A-143A, #249  
Honolulu, HI 96825  
Phone: 808/933/9411  
Email: hfia@hawaiiiforest.org

**Date:** 03/14/24

**TO:** EET Chair DeCoite, EET Vice Chair Wakai, WTL Chair Inouye, WTL Vice Chair Elefante, EET and WTL Committee Members Fukunaga, Mercado Kim, Fevella, Chang, McKelvey, Fevella

**FROM:** Hawai'i Forest Industry Association (HFIA)

**SUBJECT:** Testimony in Support of HB2020 HD2 Relating to Renewable Energy

Dear Chair Nakashima and Committee Members,

The Hawai'i Forest Industry Association (HFIA) is a state-wide association of landowners, woodworkers, forest professionals and concerned citizens working toward healthier and more productive forests across the state of Hawaii. On behalf of the Directors and members of the Hawai'i Forest Industry Association, please support HB2020 HD2.

The Hawaii Forest Industry Association is in support of expanding the definition of "renewable energy producer" to that which is outlined in Section 2, Subsection 2 of HB2020 HD1. The HFIA is particularly interested in and supportive of the sector of renewable energies coming from plant materials. In the "invasive species" capital of the world, it seems logical that the production of biofuel from the woody invasive species we find ourselves inundated by here in Hawai'i, should fit within the definition of "renewable energy producer".

Please Support HB2020 HD2.

Mahalo,

Guy Cellier, President  
Hawai'i Forest Industry Association

*Established in 1989, HFIA's is a nonprofit organization founded by people committed to sustainable forest management. HFIA's mission is to promote healthy and productive forests and a sustainable forest industry through management, education, planning, information exchange, and advocacy. HFIA has over 130 members including woodworkers, landowners, sawyers, foundations, foresters, growers, educators, environmentalists, architects, millers, ranchers, and others interested in HFIA's mission and goals.*

**HFIA Board of Directors**

Officers: President Guy Cellier, Vice President Irene Sprecher, Secretary Taylor Coons, Treasurer Wade Lee  
Directors: Jeremy Campbell, Aaron Hammer, Nicholas Koch, Michael Sowards, Aileen Yeh



**Testimony to  
The Senate Committee on Energy, Economic Development and Tourism & the Committee on  
Water and Land  
March 14, 2024  
1:45 PM  
Conference Room 229 & VIA videoconference  
Hawaii State Capitol  
  
HB 2020 HD2**

Chair DeCoite, Vice Chair Wakai, Chari Inouye, Vice Chair Elefante, and members of the committee,

Hawaii Gas **supports** HB 2020 SD2, that expands the definition of "renewable energy producer" that is used to determine the Board of Land and Natural Resources' disposition of public lands to renewable energy producers.

Since 1904, Hawaii Gas has been a pioneer in the gas industry. Hawaii Gas is again at the leading edge of our industry given our integration of both renewable natural gas (RNG) and hydrogen into our fuel supply mix and distributing it through our utility pipeline system. Hawaii Gas plays a vital role in Hawaii's energy portfolio by providing clean, reliable, and cost-effective energy to over 70,000 customers on all islands, all of whom depend on the company for water heating, cooking, drying, and other commercial and industrial applications. Hawaii Gas continues to look towards new, innovative, and economic ways to incorporate renewable energy sources while also reducing our greenhouse gas emissions.

By amending the definition of "renewable energy producer" to incorporate a broader range of renewable energy sources and removing restrictions on selling power exclusively to electric utility companies, this bill will promote innovation and investment in renewable energy solutions across various sectors including renewable natural gas and hydrogen and support the State in achieving its ambitious renewable energy goals.

We urge you to support HB 2020 HD2 , which will help accelerate Hawaii's journey towards a cleaner, more sustainable energy future.

Thank you for the opportunity to testify.



Testimony Before the Senate Committees on Water and Land and  
Energy, Economic Development and Tourism

By David Bissell  
President and Chief Executive Officer  
Kaua'i Island Utility Cooperative  
4463 Pahe'e Street, Suite 1, Lihu'e, Hawai'i, 96766-2000

Monday, March 18, 2024; 1:45 pm  
Conference Room #229 & Videoconference

**House Bill No. 2020 HD2 - RELATING TO RENEWABLE ENERGY**

To the Honorable Chairs Lorraine R. Inouye and Lynn DeCoite, Vice Chairs Brandon J.C. Elefante and Glenn Wakai, and Members of the Committees:

Kaua'i Island Utility Cooperative (KIUC) is a not-for-profit utility providing electrical service to more than 34,000 commercial and residential members.

**KIUC supports this measure as amended.**

Over the past 10 years, KIUC has significantly increased its renewable generation. In 2010, KIUC's energy mix included 10% renewable. Renewable production now stands at roughly 60%. This large growth in renewable generation is not only well-ahead of established goals, it has significantly stabilized KIUC's rates: since May 2022, KIUC has posted the lowest residential electricity rates in the state and is currently lower than rates recorded in several localities on the mainland, such as San Diego.

Rate stabilization on Kaua'i is largely attributable to KIUC securing long-term power purchase agreements for utility-scale renewable projects. Solar facilities and battery storage systems connected to utility-scale solar facilities account for roughly two-thirds of our renewable production and are among our lowest priced energy sources. We believe that utility-scale projects owned or contracted by KIUC best serve our members, as they deliver electricity at prices that smaller, privately-owned projects could not achieve.

Franchised utility companies have a duty to serve all customers, the flip side is the utility needs to have the opportunity to serve all customers to avoid subsidization. We encourage a cautious and comprehensive approach to wheeling involving any non-franchise public utility operators. It is essential that any allowed wheeling include proper costing of services from the franchise utilities, which should include consideration of potentially stranded investments.

KIUC agrees with the amendments in HD2 which prohibit the wheeling of energy from renewable energy producers using existing utility lines.

Mahalo for your consideration.



To: The Senate Committee on Energy and Economic Development, and Tourism (EET)  
and  
The Senate Committee on Water and Land (WTL)  
From: Sherry Pollack, 350Hawaii.org  
Date: Monday, March 18, 2024, 1:45pm

### In opposition to HB2020 HD2

Aloha Chairs DeCoite and Inouye, Vice Chairs Wakai and Elefante, and members of the EET and WTL committees,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org **opposes HB2020 HD2** that amends the definition of "renewable energy producer" in section 171-95, HRS, which allows the Board of Land and Natural Resources to lease public lands to renewable energy producers without public auction, to: incorporate the definition of "renewable energy" as defined in section 269-91, HRS; repeal the requirement that the renewable energy producer sell all of the net power produced from the public land to electric utility companies regulated under chapter 269, HRS, and all of the thermal energy it produces to customers of district cooling systems; and include any provider of district heating or cooling services utilizing renewable energy.

Expanding opportunities for leasing state land without public auction is bad policy. But what is most concerning, this measure could potentially exacerbate emissions problems in our state, emissions that are currently ignored due to the state's flawed definition of "renewable energy."

While it is essential that the state quickly transition off of dirty fossil fuels, it is also essential that what we transition *to* are truly clean energy sources, sources that do not contribute to climate breakdown or local air pollution. Before expanding the definition of "renewable energy producer" and the requirement that the renewable energy producer sell all the net power produced from the demised premises to electric utility companies, we must first correct the critical errors contained within the definition of "renewable energy."

Case in point, burning biomass (typically trees) and trash incineration are considered renewable, despite that fact that these energy sources emit more harmful greenhouse gases than coal.<sup>1</sup> In addition, "hydrogen fuels derived primarily from renewable energy" are considered "renewable" ---*primarily* meaning also derived from fossil fuels, and ignoring the fact that hydrogen is a leaky gas that has a warming potential around 37.3 times greater than emitted CO<sub>2</sub> over a 20-year time period.<sup>2</sup>

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<sup>1</sup> <https://www.energyjustice.net/files/biomass/woodybiomass.pdf> and <https://www.energyjustice.net/incineration/worsethancoal>

<sup>2</sup> <https://www.nature.com/articles/s43247-023-00857-8>

Last year was the hottest year in human history, and this year is expected to be even hotter. Scientists have reported that, for the first time, global warming has exceeded the 1.5C warming “limit” across an entire year. In summary: **We are the first generation to feel the effect of climate change and the last generation who can do something about it.** If we don’ get our act together quickly, we will leave our children and future generations a world that is increasingly unhealthy and uninhabitable. Bottom line, we must stop putting carbon into the atmosphere. But that won’t happen with false climate solutions. Let’s clean up our definition of ‘renewable’ so we can truly take the actions required in a climate crisis, and move towards a safe climate and a better future for all. Our children are counting on us.

Mahalo for the opportunity to testify.

Sherry Pollack  
Co-Founder, 350Hawaii.org

**HB-2020-HD-2**

Submitted on: 3/14/2024 3:07:55 PM

Testimony for EET on 3/18/2024 1:45:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Jacqueline S. Ambrose	Individual	Support	Written Testimony Only

Comments:

Aloha,

Yes to expanding the definition of "renewable energy producer" that is used to determine the Board of Land and Natural Resources' disposition of public lands to renewable energy producers.



**HB-2020-HD-2**

Submitted on: 3/17/2024 6:42:44 AM

Testimony for EET on 3/18/2024 1:45:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Glen Kagamida	Individual	Support	Written Testimony Only

Comments:

GOOD IDEA.

MAHALO!

**HB-2020-HD-2**

Submitted on: 3/14/2024 4:11:08 PM

Testimony for EET on 3/18/2024 1:45:00 PM

Submitted By	Organization	Testifier Position	Testify
Ruta Jordans	Individual	Oppose	Written Testimony Only

Comments:

Expanding opportunities for leasing state land without public auction is bad policy. But what is most concerning, this measure could potentially exacerbate emissions problems in our state, emissions that are currently ignored due to the state’s flawed definition of "renewable energy."

While it is essential that the state quickly transition off of dirty fossil fuels, it is also essential that what we transition to are truly clean energy sources, sources that do not contribute to climate breakdown or local air pollution. Before expanding the definition of "renewable energy producer" and the requirement that the renewable energy producer sell all the net power produced from the demised premises to electric utility companies, we must first correct the critical errors contained within the definition of “renewable energy.”

Case in point, burning biomass (typically trees) and trash incineration are considered renewable, despite that fact that **these energy sources emit more harmful greenhouse gases than coal.**