

**TESTIMONY OF
THE DEPARTMENT OF THE ATTORNEY GENERAL
KA 'OIHANA O KA LOIO KUHINA
THIRTY-SECOND LEGISLATURE, 2024**

ON THE FOLLOWING MEASURE:

H.B. NO. 2767, RELATING TO RENEWABLE FUEL.

BEFORE THE:

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

DATE: Thursday, February 1, 2024 **TIME:** 9:30 a.m.

LOCATION: State Capitol, Room 325 and Videoconference

TESTIFIER(S): Anne E. Lopez, Attorney General, or
Cynthia M. Johiro, Deputy Attorney General

Chair Lowen and Members of the Committee:

The Department of the Attorney General provides the following comments regarding this bill.

This bill proposes to update the renewable fuels production tax credit established by section 235-110.32, Hawaii Revised Statutes, to incentivize locally grown, produced, generated, or collected renewable fuel.

Taxpayers who produce renewable fuels are provided an additional credit value of \$1 per gallon for renewable fuels “produced from locally grown or recycled renewable feedstock.” Page 3, lines 7 through 10 (emphasis added). “Locally grown” is defined as “renewable feedstock that is grown, produced, generated, or collected in the State.” Page 6, lines 10 through 11.

This bill could be subject to challenge as violating the Commerce Clause of the United States Constitution, which provides that Congress shall have the power to “regulate Commerce . . . among the several States.” U.S. Const. art. I, § 8, cl. 3. “Though phrased as a grant of regulatory power to Congress, the Clause has long been understood to have a ‘negative’ aspect that denies the States the power unjustifiably to discriminate against or burden the interstate flow of articles in commerce.” *Or. Waste Sys., Inc. v. Dep’t of Env’tl. Quality*, 511 U.S. 93, 98 (1994). This negative aspect of the Commerce Clause is known as the Dormant Commerce Clause; this doctrine prohibits states from “advancing their own commercial interests by curtailing the movement of

articles of commerce, either into or out of the state," *Fort Gratiot Sanitary Landfill, Inc. v. Mich. Dep't of Nat. Res.*, 504 U.S. 353, 359 (1992) (internal brackets omitted), to address "economic protectionism," i.e., "regulatory measures designed to benefit in-state economic interests by burdening out-of-state competitors." *Dep't of Revenue of Ky. v. Davis*, 553 U.S. 328, 337 (2008).

A tax credit may violate the Dormant Commerce Clause if it is "facially discriminatory, discriminatory in effect, or discriminatory in purpose." See *DIRECTV v. Utah State Tax Comm'n*, 364 P.3d 1036, 1040 (Utah 2015). For example, in *Bacchus Imports Ltd. v. Dias*, 468 U.S. 263 (1984), the United States Supreme Court struck down an exemption from the liquor tax for sales of okolehau and fruit wine brewed in Hawaii from locally grown products upon finding that the exemption bestowed a commercial advantage on locally produced products; see also *New Energy Co. of Ind. v. Limbach*, 486 U.S. 269 (1988) (holding that ethanol tax credit for each gallon of ethanol sold, but only if ethanol produced in Ohio, violated Dormant Commerce Clause).

Similar to the situation in *Bacchus Imports*, the proposed tax credit may be challenged under the Commerce Clause because it could be construed by a court as bestowing a commercial advantage on products using "locally grown" feedstock insofar as the credit encourages and incentivizes the purchase and use of such products versus products manufactured with the same ingredients grown outside of the State.

Based on the foregoing, we respectfully ask that these concerns be addressed. Accordingly, we recommend deleting the following: (1) in section 1 of the bill, page 1, lines 13-14, the phrase "locally sourced firm"; (2) also in section 1, page 2, line 3, the phrase "locally sourced firm"; and lines 6-7, "to incentivize locally grown, produced, generated, or collected renewable fuel"; (3) in section 235-110.32(a), HRS, as amended by section 2(1) of the bill, the wording on page 3, line 7, from the word "provided" up to the word "State" on line 10; and (4) in section 235-110.32(o), HRS, as amended by section 2(4) of the bill, page 6, lines 10-11, the definition of "locally grown" feedstock. These changes would resolve the Department's constitutional concerns.

Thank you for the opportunity to provide comments.

JOSH GREEN M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TAXATION

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GARY S. SUGANUMA
DIRECTOR

KRISTEN M.R. SAKAMOTO
DEPUTY DIRECTOR

**TESTIMONY OF
GARY S. SUGANUMA, DIRECTOR OF TAXATION**

TESTIMONY ON THE FOLLOWING MEASURE:

H.B. No. 2767, Relating to Renewable Fuel.

BEFORE THE:

House Committee on Energy & Environmental Protection

DATE: Thursday, February 1, 2024

TIME: 9:30 a.m.

LOCATION: State Capitol, Room 325

Chair Lowen, Vice-Chair Cochran, and Members of the Committee:

The Department of Taxation ("Department") offers the following comments regarding H.B. 2767 for your consideration.

H.B. 2767 makes significant changes to the Renewable Fuels Production Tax Credit (RFPTC) in section 235-110.32, Hawaii Revised Statutes (HRS). The bill increases the annual dollar amount that may be claimed from 20 cents to 35 cents per 76,000 British thermal units (BTUs) of renewable fuels produced and sold for distribution in the State, adds an additional \$1 to the credit amount per gallon of renewable fuels produced from renewable feedstock locally grown or recycled in the State, and adds another \$1 to the credit amount per gallon of renewable fuels produced with lifecycle greenhouse gas emissions at least 75 percent below that of fossil fuels. The bill also changes the per-taxpayer credit cap from a set amount of \$3,500,000 per taxable year to 75 percent of the total amount of RFPTC credits allowed in a taxable year, increases the credit's aggregate cap from \$20,000,000 to \$80,000,000 per taxable year and provides that if a taxpayer's credit is reduced because the aggregate cap is reached in a given tax year, the taxpayer may claim a credit for the amount of the reduction in the subsequent year.

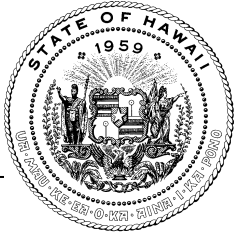
Additionally, H.B. 2767 extends the time period during which the RFPTC may be claimed by a taxpayer by amending the definition of "credit period" from 10 to 20 consecutive years and provides that any taxpayer that previously claimed RFPTC credits would be reset for tax years beginning after December 31, 2023. The measure also extends the Hawaii State Energy Office's (HSEO) deadline to issue certificates from 30 to 60 days after the taxpayer's statement is due, and adds a new requirement for HSEO to determine whether the lifecycle greenhouse gas emissions for each type of qualified fuel produced by the taxpayer is under 75 percent lower than the lifecycle greenhouse gas emissions of fossil fuels. The bill also adds definitions for "lifecycle greenhouse gas emissions" and "locally grown". H.B. 2767 is effective upon approval and would apply to taxable years beginning after December 31, 2023.

The Department defers to HSEO regarding its ability to certify the RFPTC with these proposed changes, but requests that these certification requirements be maintained. The Department does not have the subject-matter expertise in renewable energy necessary to certify these credits, nor does it have the administrative capability to track aggregate caps.

The Department further notes that the measure's amendment to section 235-110.32(a) at page 4, lines 4-6, which provides that "any taxpayer who previously claimed credits under this chapter shall be reset for tax years beginning after December 31, 2023," is ambiguous. If the intent of this provision is to allow taxpayers who previously claimed the RFPTC credit to be eligible to claim the RFPTC credit for a single 20-year period beginning in tax year 2024, the Department suggests amending the provision to read as follows:

Each taxpayer, together with all of its related entities as determined under section 267(b) of the Internal Revenue Code and all business entities under common control, as determined under sections 414(b), 414(c), and 1563(a) of the Internal Revenue Code, shall not be eligible for more than a single [~~ten-year~~] credit period[-]; provided that for taxable years beginning after December 31, 2023, a taxpayer may be eligible to claim the credit for a single credit period notwithstanding any claim made by the taxpayer for the credit under this section for taxable years beginning before January 1, 2024.

Thank you for the opportunity to provide comments on this measure.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

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Testimony of
MARK B. GLICK, Chief Energy Officer

before the
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Thursday, February 1, 2024
9:30 AM
State Capitol, Conference Room 325 and Videoconference

Providing Comments on
HB 2767

RELATING TO RENEWABLE FUEL.

Chair Lowen, Vice Chair Cochran, and Members of the Committees, the Hawai'i State Energy Office (HSEO) provides comments on HB 2767, which 1) updates the Renewable Fuels Production Tax Credit (RFPTC) to incentivize locally grown, produced, generated, or collected renewable fuel; 2) extends the credit period from ten to twenty consecutive years; and 3) increases the total amount of tax credits allowed to \$80,000,000 in any calendar year.

HSEO's comments are guided by its mission to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy, decarbonized economy.

HSEO appreciates the intent of the proposal to expand the RFPTC, which is a significant financial incentive for renewable fuel producers and contributes to achieving greater energy security for Hawai'i. HSEO recommended in the recent HSEO Act 238 Report the following actions to improve the efficacy of the RFPTC: 1) requiring renewable fuel to meet an established lifecycle carbon intensity threshold; 2) lowering the production minimum to allow for smaller renewable fuels producers to take advantage of the tax credit; and 3) removing or extending the 10-year eligibility limit as

desirable means to expand the RFPTC.¹ HSEO appreciates that the recommendations of the Act 238 report are reflected in this bill.

HSEO recommends the following changes HB 2767, distinguished in **bold**.

Rationale for each change is provided below:

Section 2. Item 1 (a)

For each taxpayer producing renewable fuels, the annual dollar amount of the renewable fuels production tax credit during the [~~ten-year~~] credit period shall [~~be~~] include an amount equal to **20 35** cents per seventy-six thousand British thermal units of renewable fuels using the lower heating value sold for distribution in the State; provided that the taxpayer's production of renewable fuels is not less than ~~two~~ **one** billion five hundred million British thermal units **lower heating value** of renewable fuels per calendar year; provided further that there shall be an additional credit value of ~~\$1.00 per gallon-15 cents per seventy-six thousand British thermal units of renewable fuels using the lower heating value~~ for renewable fuels produced from renewable feedstock locally grown or recycled in the State; ~~provided further that there shall be an additional credit of \$1.00 per gallon for renewable fuels produced with lifecycle greenhouse gas emissions at least seventy-five per cent below that of the fossil fuels~~; provided further that the tax credit shall only be claimed for fuels with lifecycle emissions **at least seventy-five per cent** below that of fossil fuels **in which the renewable fuel is most likely to replace**

HSEO suggests lowering the threshold of the RFPTC to support smaller producers of renewable fuel who may not meet the production threshold of 2.5 billion British thermal units using the lower heating value. This was a recommendation also discussed in the Act 238 report.² While HSEO supports increasing the credit for renewable fuels producers, HSEO believes the current credit amount of 20 cents per

¹ Hawai'i State Energy Office (2023). Hawai'i Pathways to Decarbonization, Act 238 Report to the 2024 Hawai'i State Legislature (Act 238 Report). (Page 11)

² Hawai'i Pathways to Decarbonization Act 238 (SLH 2022) Report to the 2024 Hawai'i State Legislature (p.99). https://energy.hawaii.gov/wp-content/uploads/2024/01/Act-238_HSEO_Decarbonization_Report.pdf

76,000 Btu using lower heating value (LHV) is adequate to incentivize the production of renewable fuels with imported feedstock and the additional credit of 15 cents per 76,000 Btu LHV may be best suited for fuels produced using local feedstock.

Further, HSEO recommends consistent units of energy be used for the tax credit, as gallons may not be the most appropriate for certain fuel types, such as natural gas which is more commonly measured in units of volume. Accordingly, the use of the British thermal unit (btu) derived using the lower heating value is an appropriate metric to compare energy sources, or fuels, on an equal basis, and consistency allows for easier accounting and verification.

Relating to subsection (d) amendments, HSEO recommends the following changes, distinguished in **bold**:

"(d) Within [~~thirty~~] sixty calendar days after the due date of the statement required under subsection (c), the Hawaii state energy office shall:

(1) Acknowledge, in writing, receipt of the statement;

(2) Issue a certificate to the taxpayer reporting the amount of renewable fuels produced and sold, the amount of credit that the taxpayer is entitled to claim for the previous calendar year, and the cumulative amount of the tax credit during the credit period; and

(3) Provide the taxpayer with a determination of whether the lifecycle greenhouse gas emissions for each type of qualified fuel produced is lower than that of fossil fuels[-] and whether the lifecycle greenhouse gas emissions for each type of qualified fuel produced is seventy-five per cent lower than that of the **fossil fuel in which the renewable fuel is most likely to replace.**"

HSEO suggests specifying the comparative fossil fuel be the fossil fuel in which the renewable fuel is most likely to replace. HSEO believes this clarification is needed as different fossil fuels exhibit different carbon intensities.

"Lifecycle greenhouse gas emissions" means the aggregate attributional core lifecycle greenhouse gas emissions values

including upstream emissions, midstream emissions, transportation emissions, and generation or operational emissions. utilizing the most recent version of Argonne National Laboratory's Greenhouse gasses, Regulated Emissions, and Energy use in Technologies (GREET) Model, inclusive of agricultural practices and carbon capture sequestration.

Regarding requiring the use of the GREET model, HSEO advises that while HSEO uses the GREET model to verify the emissions analysis after submittal and has included reference to the model in its guidance documents for the credit, the GREET model may not be the best accounting tool to capture lifecycle emissions in certain circumstances. For example, there are occasions when renewable fuels producers may have completed a more individualized and comprehensive GHG analysis and submitted it to another regulatory agency for fuel contracts to the utility.

Finally, guidance from the Environmental Protection Agency (EPA) renewable fuels program suggests that sequestration activities, unrelated to the production of the fuels, not be included in the lifecycle analysis.³ The lifecycle assessment of fuel production should not include activities that are unrelated to the fuel lifecycle (e.g., offset projects) or emissions associated with physical and organizational infrastructure (e.g., facility construction, employees commuting to the facility). Accordingly, HSEO recommends only onsite sequestration activities directly related to the production of the fuels, e.g. soil amendments and climate-smart agricultural practices be included in the emissions analysis. These activities would automatically be included in the upstream emissions analysis, therefore HSEO recommends removing language referencing carbon capture sequestration to avoid potential misinterpretation.

Thank you for the opportunity to testify.

³ US Environmental Protection Agency (2023). Lifecycle Analysis of Greenhouse Gas Emissions under the Renewable Fuel Standard. Available at: <https://www.epa.gov/renewable-fuel-standard-program/lifecycle-analysis-greenhouse-gas-emissions-under-renewable-fuel#:~:text=The%20EPA's%20assessment%20of%20fuel,employees%20commuting%20to%20the%20facility>).

HB-2767

Submitted on: 1/30/2024 12:29:43 PM

Testimony for EEP on 2/1/2024 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Gene Harrington	Biotechnology Innovation Organization	Comments	Written Testimony Only

Comments:

BIO supports HB 2767 and urges a ‘yes’ vote on this important legislation, which will greatly benefit Hawaii’s agricultural sector. Under the bill, the production of locally produced renewable fuel - generated by Hawaii grown crops – will be incentivized, reducing carbons emissions and boosting the economy, especially in rural areas.

TAX FOUNDATION OF HAWAII

126 Queen Street, Suite 305

Honolulu, Hawaii 96813 Tel. 536-4587

SUBJECT: INCOME TAX, Renewable Fuels Production Tax Credit Enhancement

BILL NUMBER: HB 2767, SB 3360

INTRODUCED BY: HB COCHRAN; SB by DECOITE

EXECUTIVE SUMMARY: Updates the Renewable Fuels Production Tax Credit to incentivize locally grown, produced, generated, or collected renewable fuel. Extends the credit period from ten to twenty consecutive years. Increases the total amount of tax credits allowed to \$80,000,000 in any calendar year.

SYNOPSIS: Amends section 235-110.32, HRS, to raise the credit from 20 to 35 cents per 76,000 BTU of renewable fuels produced and sold for distribution in the State. Removes the \$3.5 million aggregate cap on the credit but specifies that the credit awarded to any one taxpayer shall not exceed 75% of the total amount of credits awarded in the year. Adds a \$1 per gallon credit for renewable fuels produced from locally sourced renewable feedstock. Adds a \$1 per gallon credit for production of renewable fuels produced with lifecycle greenhouse gas emissions at least seventy-five per cent below that of fossil fuels. Increases the time within which the Hawaii State Energy Office is given to respond to a request for certification from 30 to 60 days. Raises the aggregate credit cap from \$20 million to \$80 million. Increases the credit period from 10 to 20 consecutive years.

Adds a definition of “lifecycle greenhouse gas emissions” as the aggregate attributional core lifecycle greenhouse gas emissions values utilizing the most recent version of Argonne National Laboratory's Greenhouse gasses, Regulated Emissions, and Energy use in Technologies (GREET) Model, inclusive of agricultural practices and carbon capture sequestration.

Adds a definition of “locally grown” as renewable feedstock that is grown, produced, generated, or collected in the State.

EFFECTIVE DATE: Upon approval; applicable to taxable years beginning after December 31, 2023.

STAFF COMMENTS: Act 202, SLH 2016, enacted a renewable energy production credit with a five-year life. The credit sunset on December 31, 2021. The credit was revived by Act 16, SLH 2022 with an aggregate cap of \$20 million.

While the idea of providing a tax credit to encourage such activities may have been acceptable a few years ago when the economy was on a roll and advocates could point to credits like those to encourage construction and renovation activities, what lawmakers and administrators have learned in these past few years is that unbridled tax incentives, where there is no accountability or limits on how much in credits can be claimed, are irresponsible as the cost of these credits goes far beyond what was ever intended. Instead, lawmakers should encourage alternative energy

production through the appropriation of a specific number of taxpayer dollars. The State could directly purchase energy, or it could give a subsidy to developers. Then, lawmakers would have a better idea of what is being funded and hold the developers of these alternate forms of energy to a deliberate timetable or else lose the funds altogether. A direct appropriation would be preferable to the tax credit as it would: (1) provide some accountability for the taxpayers' funds being utilized to support this effort; and (2) not be a blank check.

There is also a constitutional issue. The bill applies an additional credit for fuel from "locally grown" feedstock which is defined as grown, produced, generated, or collected in the State. This restriction could be unconstitutional under the Commerce Clause of the Constitution because the same preferential tax treatment is not allowed for competing products from other States. *See In re Hawaiian Flour Mills, Inc.*, 76 Haw. 1, 868 P.2d 419 (1994); *Bacchus Imports, Inc. v. Dias*, 468 U.S. 263 (1984); Hawaii Tax Information Release No. 93-4. In *Hawaiian Flour Mills*, the Hawaii Supreme Court determined that a general excise tax exclusion for locally grown, raised, or caught agricultural, meat, or fish products for consumption out-of-state violated the Commerce Clause of the United States Constitution. The Court found that appellant Hawaiian Flour Mills, Inc. was entitled to the exemption from the general excise tax on its sales of fresh food products to be consumed out-of-State by persons engaged in interstate or foreign commerce, whether or not the fresh food products were locally grown, raised, or caught.

Digested: 1/30/2024



February 1, 2024

**TESTIMONY ON HB 2767
RELATING TO RENEWABLE FUEL**

House Committee on Energy and Environmental Protection
The Honorable Nicole E. Lowen, Chair
The Honorable Elle Cochran, Vice Chair

February 1, 2024, 9:30am
Conference Room 325
State Capitol 415 South Beretania Street

Dear Chair Lowen, Vice Chair Cochran, and Members of the Committee:

Thank you for the opportunity to provide comments on HB 2767, Relating to Renewable Fuel. Airlines for America[®] (A4A) is the principal trade and service organization of the U.S. airline industry¹. A4A and its members have a strong climate change record and are committed to working across the aviation industry and with government leaders in a positive partnership to achieve net-zero carbon emissions by 2050, which parallels the Biden administration's goal to achieve net-zero greenhouse gas emissions in the aviation sector by 2050.

Airlines, governments and other aviation stakeholders have recognized that achieving net-zero aviation emissions by 2050 will require a very rapid transition from conventional (fossil) jet fuel to sustainable aviation fuel (SAF). SAF is a drop-in fuel, meaning that it works with existing aircraft engines, pipelines, and storage infrastructure, as long as it is blended up to 50% with conventional jet fuel and qualified to the relevant ASTM standards for alternative jet fuel. Work is underway to approve uses up to 100% SAF. SAF can bring meaningful reductions in aviation carbon emissions, reducing lifecycle emissions intensity of fuel up to 80% compared to conventional jet fuel today, with future pathways having potential for 100% reductions.

The primary impediment to rapid scale up of SAF production capacity remains the relative cost to jet fuel buyers of SAF compared to conventional jet fuel, and the relative cost of production of SAF compared to Renewable Diesel (RD)². SAF is typically produced at the same production facilities as RD, but because the production economics of RD are more favorable, RD production volumes are substantially higher. Incentives such as tax credits that provide more value to SAF are one way to increase SAF production and use. Conversely, tax credits that provide more value to RD than SAF will further inhibit SAF production.

¹ A4A's members are: Alaska Airlines, Inc.; American Airlines Group Inc.; Atlas Air, Inc.; Delta Air Lines, Inc.; Federal Express Corporation; Hawaiian Airlines, Inc.; JetBlue Airways Corp.; Southwest Airlines Co.; United Airlines Holdings, Inc.; and United Parcel Service Co. Air Canada, Inc. is an associate member.

² Note that Renewable Diesel and Biodiesel are not the same fuels. Neither Renewable Diesel or Biodiesel can be used in aircraft. However, SAF, RD, and Biodiesel can utilize same or similar feedstocks.

Achieving this rapid transition to SAF requires industry and government to work in partnership, at both the federal and state levels, to expand SAF production capacity across the country. A4A and our members strongly support tax incentives – in particular the SAF Blenders Tax Credit (BTC) – needed to catalyze SAF production. The Biden administration also strongly advocated for the enactment of these kinds of incentives, and we are thankful for the critical support the administration provided to ensure enactment of the SAF-BTC and Clean Fuels Production Credit (CFPC) – as well as other tax incentives like the Clean Hydrogen Credit – that will provide support vital to successfully engendering exponential growth in domestic SAF production through 2030.

Ensuring the sustainability and environmental integrity of feedstocks and the production technology pathways is critical to the continued recognition and acceptance of SAF to achieve the carbon emissions reduction ambitions of aviation. We support establishing strong and robust sustainability and technical requirements based on objective criteria and the latest scientific research. A4A and its members are feedstock and technology neutral for SAF production, we firmly believe that any production pathway that can meet robust technical and sustainability requirements should be eligible for incentive programs, such as this proposal.

A4A and our member airlines value our partnership with the State of Hawai'i and believe there is a unique opportunity to jointly develop a market for cost competitive SAF. Thank you for your consideration of our feedback. Please do not hesitate to contact us if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'S Williams', is positioned below the 'Sincerely,' text.

Sean Williams
Vice President, State and Local Government Affairs
swilliams@airlines.org



January 31, 2024

**TESTIMONY IN SUPPORT OF HB 2767
RELATING TO RENEWABLE FUEL**

House Committee on Energy and Environmental Protection (EEP)
The Honorable Nicole E. Lowen, Chair
The Honorable Elle Cochran, Vice Chair

February 1, 2024, 9:30am
House Conference Room 325
State Capitol 415 South Beretania Street

Chair Lowen and Vice Chair Cochran, and members of the Committee,

Thank you for the opportunity to provide testimony in SUPPORT of HB 2767, Relating to Renewable Fuels. We believe that the proposed legislation presents a win-win opportunity for our state, our environment, and our agricultural sector.

Pono Pacific is the state leader in land management with over 20+ years of experience across the Hawaiian Islands with an emphasis on conservation lands, agriculture, and renewable energy. Pono Pacific has partnered with Par to develop a supply of locally grown feedstocks for biofuel production. Locally grown feedstocks will provide farmers with a viable economic commodity to supply the refinery and help put idle lands to work. HB 2767 will help Hawaii farmers compete against imported feedstocks by providing an additional credit of \$1 per gallon for renewable fuels produced from locally grown renewable feedstocks.

Finding viable uses for agriculture lands that will encourage sustainability in our environment and that produce positive economic cash flow for Hawaii is a critical need. Locally grown biofuel feedstocks offer significant benefits for our farmers. These crops can thrive on marginal land, improving soil health and reducing erosion. They require less water and fertilizer than traditional row crops. By creating a demand for these crops, the renewable fuels industry can revitalize rural communities, create new jobs, and diversify farm income streams.

We believe this bill should be amended to also provide credits for the production of sustainable aviation fuel (SAF). Par Hawaii has publicly committed to spend significant



capital retrofitting its Kapolei refinery to produce renewable fuels, including SAF. Transitioning to SAF, derived from renewable sources like energy crops, presents a crucial step towards decarbonizing air travel. SAF can bring meaningful reductions in aviation carbon emissions, with lifecycle emissions intensity up to 50 to 80% lower than conventional jet fuel. Investing in local SAF production is not just economically sound, it's an environmental imperative.

Hawaii needs to be competitive with other states that have already adopted tax credits for SAF and other renewable fuels and provide local production and consumption with the necessary advantages to succeed, especially as the industry is just starting to get off the ground. Initially to be competitive, local SAF production will need government support.

Growing biofuel feedstocks locally helps to create new agricultural jobs, encourage food production through infrastructure synergies, and does not compete with food crops when using oil seed cover crops. Pono Pacific believes these feedstocks will be able to provide a quality biofuel product and usable byproducts (such as animal feed) to help support Hawaii's sustainability goals, and agricultural, ranching and dairy sectors of the local economy.

The production and distribution of SAF is not just about farms; it is about building a robust green energy infrastructure within our state. From biofuel refineries to logistics companies, the entire chain creates high-paying jobs, attracts investment, and boosts Hawaii's overall economic output. Investing in local SAF production positions us as a leader in the burgeoning clean aviation fuel market, attracting further investment and innovation.

Renewable fuels face a financial hurdle and cost more to produce than conventional alternatives. This bill proposes a strategic set of tax incentives tailored to incentivize local renewable fuel production and imports of renewable fuels into Hawaii. These incentives will empower us to cultivate energy independence, foster economic growth, and create a sustainable future for our islands. Incentives and credits, therefore, are not a perpetual need but a bridge to get biofuel production to maturity and scale when it can compete successfully against traditional petroleum-based fuels.

The proposed tax incentives for local renewable fuel production are not just an economic stimulus package; they represent a strategic investment in Hawaii's future. By supporting our farmers, fostering clean energy innovation, and building a more sustainable aviation industry, we can secure a brighter future for generations to come.



Importantly, the proposed tax incentives, and specifically the additional \$1 credit for renewable fuels produced from locally grown renewable feedstock, does not run afoul of the Commerce Clause. Hawaii’s biofuel tax credit aligns with the Biden administration’s goals for clean energy transition and climate change mitigation, potentially paving the way for collaboration and federal support. The pertinent legal question is whether promoting energy security through biofuels produced from locally grown sustainable feedstock is a “legitimate public purpose.” Unlike most states, Hawaii’s geographic isolation significantly amplifies its vulnerability to fuel price fluctuations and supply disruptions. This unique dependency on imported fossil fuels necessitates innovative solutions tailored to its specific context.

The U.S. Supreme Court has stated: “As long as a State does not needlessly obstruct interstate trade or attempt to ‘place itself in a position of economic isolation,’ it retains broad regulatory authority to protect the health and safety of its citizens and the integrity of its natural resources.” *Maine v. Taylor*, 477 U.S. 131, 151 (1986) (quoting *Baldwin v. G.A.F. Seelig, Inc.*, 294 U.S. 511, 527 (1935)). Based on this principle, the legal test is not whether the law “allow[s] for companies outside of Hawaii to be qualified.” Under the U.S. Supreme Court’s legal test, a tax credit is valid if it “serves a legitimate local purpose” and this purpose could not be served as well by other available means, even if the tax credit favors Hawaii taxpayers over other taxpayers in interstate commerce. *Id.* at 138 (quoting *Hughes v. Oklahoma*, 441 U.S. 322, 336 (1979)). The substantial local benefits of the tax credit (energy security, environmental protection, economic development) clearly outweigh the minimal burden on interstate commerce.

The unique combination of Hawaii’s energy vulnerability, limited renewable options, and the minimal impact of the tax credit on interstate commerce, coupled with its substantial local benefits and alignment with national goals, provides a compelling case for upholding its legality under the Commerce Clause. Recognizing and supporting Hawaii’s innovative approach to energy security paves the way for a more sustainable energy future for the nation as a whole.

We urge you to amend and pass this legislation and unlock the immense potential of locally produced SAF. Together, we can build a cleaner, more prosperous future for all. Thank you for your time and consideration.

Mahalo,



Chris Bennett
Vice President of Sustainable Energy Solutions
Pono Pacific Land Management, LLC



February 1, 2024

**TESTIMONY IN SUPPORT OF HB 2767
RELATING TO RENEWABLE FUELS**

House Committee on Energy and Environmental Protection (EEP)
The Honorable Nicole E. Lowen, Chair
The Honorable Elle Cochran, Vice Chair

February 1, 2024, 9:30am
House Conference Room 325
State Capitol 415 South Beretania Street

Chair Lowen and Vice Chair Cochran, and members of the Committee,

Thank you for the opportunity to provide testimony in **SUPPORT** of HB 2767, Relating to Renewable Fuels.

As we noted in our supporting testimony for a separate bill, HB 2296, Hawaii has made significant progress to decarbonize our economy over the past 15 years since the Hawaii Clean Energy Initiative launched in 2008. Yet, there is much work still to be done. Transportation emissions account for over 50% of Hawaii's GHG emissions.¹ Electrifying the vehicle fleet will reduce emissions as the electric grid becomes greener. However, there are limited options available to address emissions with trucks and other heavy-duty vehicles. The aviation sector faces particular challenges.

States on the US West Coast have started to address these challenges by introducing incentives for the use of low carbon fuels. In California, as reported by the California Air Resources Board, over 50% of diesel demand is now met by Renewable Diesel (RD). RD is a low-carbon fuel produced by processing used cooking oil, animal fats and vegetable oils. Similarly, there are small but growing volumes of renewable fuels for the aviation sector. This product is called Sustainable Aviation Fuel (SAF), and it is produced in a similar process and from the same feedstocks as RD².

These liquid renewable fuels are critical to meeting Hawaii's clean energy goals. This was a key finding in the recent Act 238 Hawaii Decarbonization Pathway Study which calls for RD and SAF to be a significant part of Hawaii's fuel supply beginning later this decade.³ See the chart in Appendix A.

¹ https://health.hawaii.gov/cab/files/2023/05/2005-2018-2019-Inventory_Final-Report_rev2.pdf (Pages 26-27 document Transportation sector emissions of 10.68 MT of CO2 equivalent in the most recent reporting period of 2019. Total net emissions were 19.42 MT CO2 equivalent.)

² RD and SAF are produced from the same feedstocks as biodiesel but have superior properties including serving as drop-in replacements for traditional diesel and jet fuel.

³ <https://energy.hawaii.gov/what-we-do/clean-energy-vision/decarbonization-strategy/>



The good news is that Hawaii companies are stepping up to meet the need for these fuels. However, the cost to produce these fuels is significantly higher than the cost of fossil fuels, and additional financial incentives are required to initiate and sustain the production of these fuels. States on the US West Coast have had success in bringing renewable fuels to the market, but it has required state-level financial incentives of up to \$1.00-2.00 per gallon. Without action, these desirable renewable fuels will be produced and delivered to other markets including the West Coast.

Together with Hawaiian Airlines and Pono Pacific, a Hawaii-based land conservation and management company, and with input from a broad range of stakeholders, we developed a proposal that became HB 2296 to foster the production of renewable fuel in Hawaii. HB 2296 would have significantly expanded the existing Hawaii renewable fuels production tax credit to provide the incentives needed to bring these fuels to market in Hawaii. There are important aspects to HB 2296 that should be considered here.

While HB 2767 has many elements that support local production of renewable fuels, it should be amended to address several important items:

- Aviation fuel is approximately 40% of Hawaii's total fuel demand, and its single largest segment. The Act 238 report identified a large need for SAF. However, SAF will not be economically available in Hawaii without additional incentives, because SAF costs more to produce than biodiesel or RD. We strongly recommend an additional incentive of \$1.00 per gallon to bridge the production costs of SAF, as proposed in HB 2296.
- While we understand the current State budget realities, we believe the aggregate annual cap should be \$100 million. This higher amount will encourage more supply and bring Hawaii closer to its renewable energy goals. If necessary, the higher cap could be phased in over 2-3 years.
- We recommend clarifying that eligible fuel must be produced and sold in Hawaii. While this seems to be implied by the language in the second paragraph in Part (a) of the current law, it is not as clear as it could be.
- The current law is unclear on what happens when the annual aggregate cap is reached. Part (f) instructs the State Energy Office to cease issuing credit certificates once the annual aggregate cap is reached, potentially creating a "first come, first served" problem. Part (f) should be amended to make it clear that credits will be allocated proportionally if the credits in a given year exceed the annual cap.

Mahalo for allowing Par Hawaii to share our comments in support of HB 2767.

Act 238 Hawaii Decarbonization Pathway Study

- December 2023 Act 238 Pathways to Decarbonization Study modeled 3 scenarios
- **Study finds that renewable liquid fuels are critical to Hawaii reaching its decarbonization goals**
- Recommends an expansion of renewable fuels production tax credit

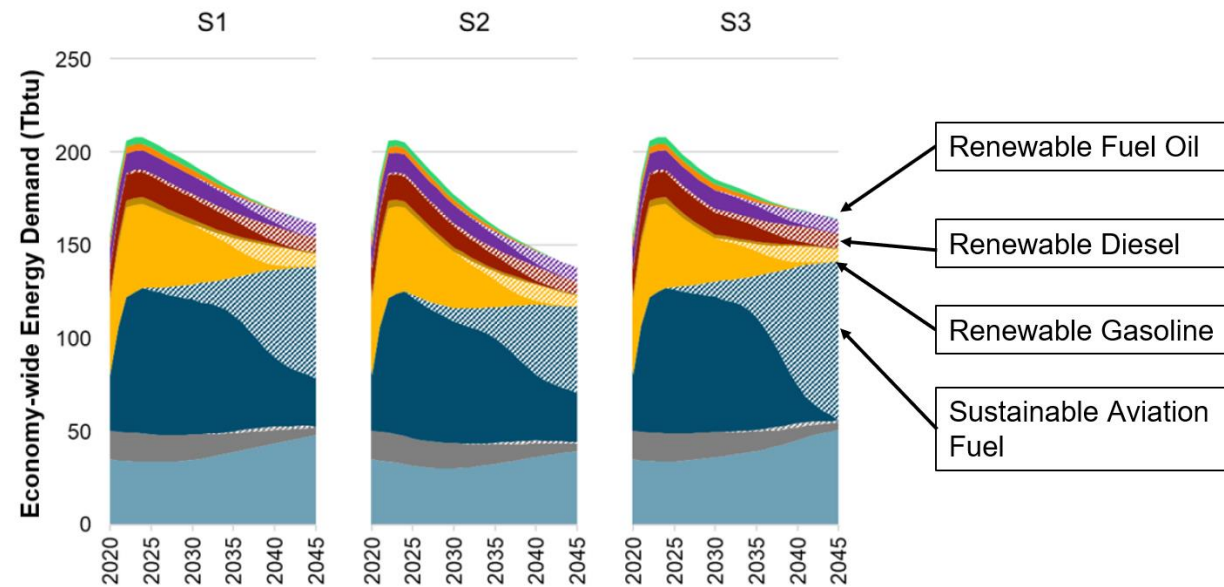


Figure 54 Economywide energy demand from 2020 through 2045 (excludes fuels combusted for electricity generation)



February 1, 2024

**TESTIMONY ON HB 2767
RELATING TO RENEWABLE FUEL**

House Committee on Energy and Environmental Protection
The Honorable Nicole E. Lowen, Chair
The Honorable Elle Cochran, Vice Chair

February 1, 2024, 9:30am
Conference Room 325
State Capitol 415 South Beretania Street

Chair Lowen, Vice Chair Cochran, and members of the Committee,

Thank you for the opportunity to provide comments on HB 2767, Relating to Renewable Fuel.

This bill expands on the renewable fuels production tax credit with a higher base credit value, incremental value for locally produced or recycled feedstock, incremental value if the lifecycle emissions intensity of the renewable fuel achieves a 75 percent reduction compared to conventional fuels, the elimination of the restrictive \$3.5 million cap per producer, and a significant increase to the annual cap for the program. While we are supportive of these changes, we believe the bill should be amended to address several items, the most important of which is the need to provide incremental value for sustainable aviation fuel (SAF) compared to renewable diesel (RD), in order to close the relative margin gap between RD and SAF. Without this incremental value, producers will not have incentive to produce SAF, and there is risk that aviation emissions, which comprise approximately half of Hawaii's transportation emissions, will not be addressed with this tax credit.

Aviation emissions represent a very small part of overall global carbon emissions. Nonetheless, aviation represents a higher proportion of Hawaii's fossil fuel usage, given our unique dependence on air transportation and relatively limited utilization of road fuel. Within Hawaii, it is worth noting that aviation fuel usage is driven predominantly (estimated about 90%) by long-haul travel; with its short flight distances, the intrastate flying on which our community depends drives relatively little fuel consumption. In order to address the existential threat of human-caused climate change, airlines in the U.S. have all committed to reach net-zero in the decades to come.

Sustainable aviation fuel (SAF) is widely viewed as the most promising technology to advance aviation decarbonization. The U.S. airline industry has pledged to work with government leaders and other stakeholders to make 3 billion gallons of cost-competitive SAF available to U.S. aircraft operators in 2030. SAF is a drop-in fuel, meaning that it works with existing aircraft engines, pipelines, and storage infrastructure, as long as it is blended up to 50% with conventional jet fuel. SAF can bring meaningful reductions in aviation carbon emissions, with lifecycle emissions intensity up to 50 to 80% lower than conventional jet fuel.

While HB 2767 has many elements that support local production of renewable fuels, it should be amended to address several important items:



- Include additional value of \$1.00 per gallon if the renewable fuel is SAF. This is needed in order to 'level the playing field' between SAF and renewable diesel (RD). SAF is currently inherently less profitable for producers than RD for a number of reasons including: higher physical fuel value, higher yield, lower infrastructure costs and more revenue from certain federal programs. For these reasons, additional value is needed in order to ensure some production volume is allocated to SAF.
- Include a lifecycle greenhouse gas emissions intensity reduction threshold that must be met in order to qualify for the tax credit. While the bill provides for additional value if the lifecycle emissions intensity achieves a 75 percent reduction, the base credit value can be obtained as long as the fuel has 'lifecycle emissions below that of fossil fuels.' We believe the base value should only be available if the carbon intensity meets an acceptable threshold.
- Modify "first come, first served" mechanism to a pro-rated model to enable more equitable distribution of the credit among multiple producers/importers.
- While we understand the current State budget realities, we believe the aggregate annual cap should be \$100 million. This higher amount will encourage more supply and bring Hawaii closer to its renewable energy goals. If necessary, the higher cap could be phased in over 2-3 years.

Without these modifications, there is reasonable concern that the bill as proposed will not drive the incremental production, importation and uptake of biofuels needed to materially contribute to the state's decarbonization goals.

In addition, it is important to note that biodiesel is not certified for use in commercial airplanes. SAF must be certified to ASTM International D7566 and then blended up to 50% with conventional jet fuel; the blended product must then be certified to ASTM International D1655 before it can be used in a commercial airplane.

Mahalo,

Alanna James
Managing Director, Sustainability Initiatives
Hawaiian Airlines



Hawai'i Forest Industry Association

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Date: 01/30/24

TO: EEP Chair Lowen, EEP Vice Chair Cochran and EEP Committee Members Gates, Kahaloa, Perruso, Woodson, Ward

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

SUBJECT: Testimony in Support of HB2767 Relating to Renewable Energy

Dear Chair Lowen and Committee Members,

The Hawai'i Forest Industry Association (HFIA) is in its 35th year. It 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 HB2767.

Hawaii's unique need to diversify its energy and fuel resources moving forward in order to combat a warming climate can also be viewed as an opportunity. Before us we have the opportunity to harness and utilize various forms of renewable energies including wind, solar, geothermal and the often overlooked biomass. Utilizing invasive, woody weeds and sawmill waste to create clean energy, all while replanting harvested areas with high carbon sequestering species, is a unique opportunity that should not be brushed aside when considering renewable fuels and a tax credit for those who produce them.

The Hawaii Forest Industry Association is in support of extending the credit period from ten to twenty years and increasing the credits allowed. HFIA supports HB2767, but urges the State to also encourage and include the production of biomass fuel in its panel of clean energies qualifying for tax credits.

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



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COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
Rep. Nicole E. Lowen, Chair
Rep. Elle Cochran, Vice Chair

DATE: Thursday, February 1, 2024
TIME: 9:30am
PLACE: Conference Room 325

HB 2767 RELATING TO RENEWABLE FUEL. Please Hold

Aloha Chair Lowen, Vice Chair Cochran, and members of the Committee:

My name is Olivia Chang and I am interning as a climate analyst with Life of the Land, Hawai`i's own energy, environmental and community action group advocating for the people and `aina for 53 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.

The bill provides a tax credit for producing renewable fuels. In order to meaningfully reduce greenhouse gas emissions and ensure a just transition, the following suggestions are offered:

- **Create a minimum threshold of at least 60% for GHG emissions reductions.** To address climate change, only fuels that achieve *meaningful* emissions reductions should be included.
 - For plants entering into operation after January 2026, the EU's RED II requires¹:
 - 60% GHG savings compared to fossil fuels for transport biofuels
 - 70% for transport renewable fuels of non-biological origin
 - 80% for biofuels for producing power, heating, and cooling
 - In addition to a minimum threshold, the bill could implement a tax credit proportional to a given fuel's GHG emissions reduction, similar to California's Low Carbon Fuel Standard.

- **Require that fuels meet a robust set of sustainability criteria such that imported feedstock is not being produced through forced labor, child labor, or other human rights abuses².**
 - A producer would still receive a tax credit for producing biofuels from imported feedstocks. This could incentivize importing palm oil, a common feedstock associated with devastating social and environmental consequences.
- Some renewable fuels, like palm oil, can appear to have low GHG emissions, but when indirect emissions from ILUC and displacement are factored in, result in GHG emissions that are sometimes *even worse* than fossil fuels³.
 - **Specify that GHG emissions includes displacement risk emissions.** Displacement effects occur when biofuel policies incentivize the diversion of a feedstock away from its existing uses and that feedstock needs to be replaced by substitutes.
 - **Specify that GHG emissions includes induced land-use change (ILUC) emissions.** When high carbon-stock forests, natural lands, or pastures are converted to agriculture to grow energy crops, the disturbed biomass and soil creates indirect emissions.
- **Create incentives for e-fuels to be produced using a minimum threshold of additional, renewable electricity, not grid-standard electricity.** E-fuels like hydrogen only provide GHG reductions when produced with renewable energy that does not displace demand for renewables from other sectors.
- **Create incentives for the use of certified low ILUC-risk biofuels, and create caps on the use of high ILUC-risk biofuels.** The EU has already put this in practice with RED II, setting limits on high ILUC-risk biofuels, bioliquids and biomass fuels with a significant expansion in land with high carbon stock⁴.
- **Create stringent safeguards against passing off 1st-generation feedstocks as waste.** Palm fatty acid distillates (PFAD) is often classified as a residue, even though it is used by oleochemical industry in soap, cosmetics, candles, rubber, plastic. Since PFAD use for biofuels is displacing other demand, it is not truly a residue⁵.
- **Close loopholes in the definition of “locally grown”.** If a producer chopped down trees in another state or country, then turned them into wood chips in Hawai'i, would that count as being “collected” in Hawai'i—thus qualifying as a “locally grown” feedstock?

References

1. <https://www.transportpolicy.net/standard/eu-fuels-biofuel-policy/>
2. <https://www.edf.org/sites/default/files/2022-08/EDF%20HIGH-INTEGRITY%20SAF%20HANDBOOK.pdf>
3. <https://theicct.org/sites/default/files/publications/Alternative-aviation-fuel-sustainability-mar2021.pdf>
4. <https://www.transportpolicy.net/standard/eu-fuels-biofuel-policy/>
5. <https://www.biofuelwatch.org.uk/wp-content/uploads/Aviation-biofuels-report.pdf>



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January 31, 2024

TESTIMONY ON HB 2767, RELATING TO RENEWABLE FUEL

SUPPORT

Representative Nicole E. Lowen, Chair
Representative Elle Cochran, Vice Chair
Committee on Energy & Environmental Protection
Hearing: February 1, 2024, at 9:30AM, Conf Room 325

Aloha Chair Lowen, Vice Chair Cochran and Members of the Committee,

Pacific Biodiesel supports HB 2767 which updates the renewable fuels production tax credit.

I. Bill highlights.

- A. New investments are needed to incentivize existing producers to increase production of firm renewable energy and to encourage new producers to begin production. The production tax credit gives a very important incentive to invest further in firm renewable fuel production in Hawaii. Past investments in the renewable fuels production tax credit succeeded in promoting local investments in cleaner fuels and moving us closer to energy independence and security. Continuing this credit sends the correct signal for new and continued investments in this firm renewable energy.
- Amends Subsection 235-110.32(a), Hawaii Revised Statutes, to raise the tax credit from 20 cents to 35 cents per seventy-six thousand British thermal units of renewable fuels using the lower heating value sold for distribution in the State.
 - Amends Subsection 235-110.32(f), Hawaii Revised Statutes, to raise the total amount of tax credits allowed under this section from \$20,000,000 to \$80,000,000.
 - Amend Subsection 235-110.32(a), Hawaii Revised Statutes, to provided that taxpayers who have previously claimed credits under this chapter shall be reset for tax years beginning after December 31, 2023.
- B. We believe that increased incentives must be justified by increased benefits to the State. Therefore, we support the creation of a tiered system of tax credits that incentivizes: 1) renewable fuels produced from renewable feedstock **locally grown or recycled in the State of Hawaii** and 2) renewable fuels produced with lifecycle greenhouse gas emissions at least **75% below that of fossil fuels**.
- Amends Subsection 235-110.32(a), Hawaii Revised Statutes, to provide an additional credit value of \$1.00 per gallon for renewable fuels produced from renewable feedstock locally grown or recycled in the State of Hawaii.

renewable • sustainable • community-based

- Amends Subsection 235-110.32(a), Hawaii Revised Statutes, to provide an additional credit value of \$1.00 per gallon for renewable fuels produced with lifecycle greenhouse gas emissions at least 75 per cent below that of fossil fuels.

- C. A 20-year plan ensures that Hawaii’s firm energy needs can be met with firm renewable energy by 2045. To ensure sustainable inventories of locally sourced firm renewable energy for electric utility companies' renewable portfolio standards, long term planning that includes incentives, are essential for investment and development of locally sourced firm, renewable energy production. With twenty years remaining to reach the mandate that one hundred percent of our electricity be generated by renewable sources of energy by 2045, **we must update the renewable fuels production tax credit with a 20-year plan to ensure that our firm energy needs can be met with renewable firm energy by 2045.**

- Amend Subsection 235-110.32(o), Hawaii Revised Statutes, to define the credit period as twenty consecutive years instead of ten consecutive years.

- D. The individual cap should be raised to encourage increased production while also protecting smaller producers.

- Amend Subsection 235-110.32(a), Hawaii Revised Statutes, to change the individual tax credit limit from \$3,500,000 to 75% of the total tax credit amount.

II. Response to issues raised at Tuesday’s hearing for HB 2296.

- A. We appreciate the Attorney General’s concern regarding incentives related to local feedstock and the commerce clause. However, we believe the proposed law could stand up to the increased scrutiny due to health and safety concerns related to the climate crisis this bill seeks to address. The history of commerce clause jurisprudence evidences a distinct difference in approach where the state is seeking to exercise its public health and safety powers, on the one hand, as opposed to attempting to regulate the flow of commerce. Hawaii has well established health and safety concerns related to sea level rise, ozone layer depletion, and global warming.
 - A solution to the Attorney General’s concern may be to expressly mention these health and safety concerns as a justification for the bill.
 - Another solution would be to change the proposed 2-tiered system by deleting the additional incentive related to the use of local feedstock. Then, replace it with a 2-tiered system that provides an (1) additional incentive for renewable fuels produced with lifecycle greenhouse gas emissions at least 40% below that of fossil fuels and an (1) additional incentive for renewable fuels produced with lifecycle greenhouse gas emissions at least 75% below that of fossil fuels.

- B. Some testifiers expressed concerns about land use changes such as that associated with deforestation for palm oil. We believe this bill does not raise those same concerns. Pacific Biodiesel produces 2nd Generation Biodiesel from used cooking oil and cover crops. We also believe in a food then fuel model that also alleviates these concerns.
 - If concerns still exist, a possible solution would be to change the proposed 2-tiered system by deleting the additional incentive related to the use of local feedstock.

Then, replace it with a 2-tiered system that provides an (1) additional incentive for renewable fuels produced that qualify as 2nd Generation Biofuels and an (2) additional incentive for renewable fuels produced with lifecycle greenhouse gas emissions at least 75% below that of fossil fuels.

- C. The Hawaii State Energy Office expressed concerns with HB 2296 and its new import tax credit and SAF tax credit. Those credits are not included in this bill. They also raised concerns with expanding certification deadlines from 30 to 60 days. We agree that 30 days is appropriate considering the tax deadlines raised.
 - The solution is to leave the deadline at 30 days.
- D. The Tax Foundation of Hawaii raised concerns about the uncertainty of the amount of the investment by the State. The point of the bill is to encourage local production of renewable energy, and the legislature can determine how much the State should invest by setting the total amount of the tax credit at an appropriate level. Again, major investments are needed in firm renewable energy to meet Hawaii's mandate to reach 100% renewable energy by 2045. (see below for more on this issue).

III. Major investments are needed in firm renewable energy to meet Hawaii's mandate to reach 100% renewable energy by 2045.

- A. Hawaii's utility companies rely on and need more of Pacific Biodiesel's locally produced firm renewable energy. HRS section 269-92(a) requires each electric utility company that sells electricity for consumption in the State to establish a renewable portfolio standard of forty percent of its net electricity sales by December 31, 2030, seventy percent of its net electricity sales by December 31, 2040, and one hundred percent of its net electricity sales by December 31, 2045. In order for electric utility companies to meet the required renewable portfolio standards by 2045, an indispensable component of the electric utility companies' renewable portfolio standard must include sufficient locally sourced firm renewable energy sources to offset the intermittent nature of wind and solar power renewable energy.
- B. Speaking for the liquid biofuels industry, it is well known that the cost to move from 70% to 100% renewables will be extremely expensive using any other technology. Biodiesel can cost effectively optimize battery sizing by providing firm renewable power, quickly dispatched at any time. Fast-start, efficient diesel engines – when fueled with clean biodiesel – are enabling higher penetration of intermittent PV and wind assets while maintaining grid stability. Biodiesel allows for an immediate reduction of greenhouse gas emissions. Our biodiesel is a 100% renewable Advanced Biofuel that is a crucially important firm renewable power source in Hawaii to back up other renewables on the grid. And, more importantly now than ever, Hawaii's locally produced biodiesel is supporting energy security in our island state and reducing reliance on imported fossil fuel. **It is a direct replacement for petroleum diesel fuel that can be used right now in any diesel engine without modification, helping to reduce greenhouse gas emissions by 86% compared to petroleum diesel.** The diesel engine is NOT the problem. Petroleum diesel FUEL – fossil fuel – used in efficient diesel engines is the problem.

Biodiesel has one of the lowest carbon footprints of any fuel. A California Air Resources Board (CARB) report* shared findings that total greenhouse gas (GHG) reductions from biomass-based diesel were three times the total reductions from electric vehicles. In Hawaii, where the carbon intensity of our electricity grid is significantly higher than the US average, the assumption would be an even greater GHG reduction with the use of 100% biodiesel compared to EVs charged by an electricity grid that is currently only 30% powered by renewables.


- C. Unfortunately, Hawaii is rushing to support electrification while ignoring the many environmental and economic benefits of biofuels. We cannot and should not sit back and wait for a 100% zero emission future. The State must get serious, soon, about requiring a lifecycle GHG reduction analysis on its “zero emission” strategies before Hawaii spends millions on electrification.

Our locally produced 2nd Generation biodiesel is produced from recycled used cooking oil from Hawaii and recycled used cooking oil from the mainland. Increasing production using locally grown or recycled feedstock is our goal, and that goal is becoming reality at our new project on Kauai. Pacific Biodiesel and other companies need this incentive to increase local production with from local feedstock over the next 20 years. That is how we achieve energy independence.

The further we move towards our goal of 100% renewable, the more critical firm energy like liquid biofuel sources will be. At Pacific Biodiesel’s refinery on Hawaii Island, we produce 6 million gallons per year of premium distilled biodiesel – the equivalent of 220 MWh per DAY of 100% renewable energy for Hawaii. **But, building up the supply is a long process. We must accelerate implementation and support additional local production now to meet expanding demand in the future and to ensure that our firm energy needs can be met with firm renewable energy by 2045.**

Mahalo,

Sincerely,



Robert A. King, President
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February 1, 2024

HEARING BEFORE THE
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

TESTIMONY ON HB 2767
RELATING TO RENEWABLE FUEL

Conference Room 325 & Videoconference
9:30 AM

Aloha Chair Lowen, Vice-Chair Cochran, and Members of the Committee:

I am Brian Miyamoto, Executive Director of the Hawai'i Farm Bureau (HFB). Organized since 1948, the HFB is comprised of 1,800 farm family members statewide and serves as Hawai'i's voice of agriculture to protect, advocate, and advance the social, economic, and educational interests of our diverse agricultural community.

The Hawai'i Farm Bureau supports HB 2767, which updates the Renewable Fuels Production Tax Credit to incentivize locally grown, produced, generated, or collected renewable fuel, extends the credit period from ten to twenty consecutive years, and increases the total amount of tax credits allowed to \$80,000,000 in any calendar year.

Renewable energy is important to the State's energy goals. Biofuels can play a critical role in helping Hawai'i reach the goal of one hundred percent renewable energy by 2045, help to diversify Hawai'i's economy and agricultural sector, reduce greenhouse gas emissions, and reduce our dependence on imported oil.

HFB supports the production of dedicated energy crops, crop residues, and agricultural wastes into economically and environmentally sustainable biofuels and value-added by-products such as livestock feed. The renewable fuels production tax credit is an important incentive for the production of locally grown renewable fuels and supports the state's clean energy and carbon reduction goals.

Thank you for this opportunity to testify on this important subject.