



# 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 AGRICULTURE AND ENVIRONMENT**

Tuesday, January 30, 2024  
1:01 PM  
State Capitol, Conference Room 229 and Videoconference

Providing Comments on  
**SB 2768**

## **RELATING TO GREENHOUSE GAS EMISSIONS.**

Chairs DeCoite and Gabbard, Vice Chairs Wakai and Richards, and Members of the Committees, the Hawai'i State Energy Office (HSEO) provide comments on SB 2768, which requires HSEO to adopt rules governing a clean fuel standard for gasoline and diesel in the State.

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 and the analysis completed through the development of the Act 238 Report, Pathways to Decarbonization.<sup>1</sup> Notably, implementing a Clean Fuel Standard, based on lifecycle carbon intensity, was discussed in Chapter 5 of the Decarbonization Report.

The Act 238 report notes:

"Bioenergy, specifically biofuels, and alternative fuels will likely play a significant role in decarbonization.... With the selection of Stage 3 projects alone setting aside over 650 MW nameplate capacity by 2033 for bioenergy.<sup>2</sup> The electric sector is anticipated to require significant biofuel production and feedstock imports.

<sup>1</sup> Hawai'i State Energy Office (2023). Hawai'i Pathways to Decarbonization Report to the 2024 Hawai'i State Legislature. Act 238 (SLH 2022). Available at: [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)

<sup>2</sup> Hawaiian Electric (2023) [Renewable Project Status Board](#).

However, as biofuels exhibit a diverse spectrum of lifecycle emissions, it becomes crucial to establish lifecycle carbon intensity standards which apply to all sectors. At a minimum, these standards should ensure that the carbon footprint throughout a biofuel's lifecycle remains consistently lower than that of fossil fuel. This approach ensures a stringent measure of environmental sustainability across various sectors. A clean fuel standard (CFS), or an adjustment to the RPS to account for the carbon emissions of biofuels [in the electric sector], would require fuel suppliers to gradually reduce the CI of the fuels sold and distributed within the state.

Increasingly stringent CI reduction requirements can serve to decrease the CI of alternative fuels and help ensure that the state prioritizes low carbon fuel imports as they become commercially available.”<sup>3</sup>

Accordingly, a CFS bill should support a lifecycle CI that is high enough to reflect fuels that are currently available while still being lower than the fossil fuel alternatives, low enough to reduce carbon emissions and have the flexibility to have the CI threshold decrease over time to encourage technological improvements and the adoption of cleaner fuels over time.

HSEO welcomes the intent of this bill which encourages measures to help attain Hawai'i's decarbonization goals by providing market mechanisms to lower the carbon intensity of alternative fuels used in the state. However, HSEO recommends a modified approach to ensure the standard can be used to achieve the intent of the bill to widely support the deployment of clean transportation fuel technologies through a methodical reduction of the carbon intensity of fuels used in the state over time.

Specifically, HSEO has the following comments and concerns on the proposed measure in its current form:

#### Scope of the Clean Fuel Standard

SB 2768 covers a narrower scope of transportation fuels than that of other Clean Fuels Standards (“CFS”) and Low-Carbon Fuel Standards (“LCFS”) implemented in other states. Given the core purpose of a CFS is to promote better management of waste and resources, while incentivizing the use of fuels with lower lifecycle carbon

---

<sup>3</sup> Hawai'i State Energy Office (2023). Hawai'i Pathways to Decarbonization Report to the 2024 Hawai'i State Legislature. Act 238 (SLH 2022). Pages 226-229.

intensity, the scope of fuels covered under SB2768 definitions may be too narrow to promote significant levels of decarbonization.

SB 2768 proposes to enforce a CFS on diesel, gasoline, and alternative fuels, the latter of which is defined as “any fuel that is used in transportation and derived from municipal solid waste, agriculture or forestry practices, construction waste, animal or food waste, or other biogenic biomass sources. Section 2 (c) of SB 2768 defines alternative fuel as “any fuel that is used in transportation and derived from municipal solid waste, agriculture or forestry practices, construction waste, animal or food waste, or other biogenic biomass sources.” However, other state fuel standards, such as those in Washington State and Oregon have CFS that apply to gasoline, gasoline substitutes, diesel, and diesel substitutes. California’s LCFS applies more broadly to (1) California reformulated gasoline; (2) California diesel fuel; (3) fossil compressed natural gas or fossil liquefied natural gas; (4) biogas CNG or biogas LNG; (5) electricity; (6) compressed or liquefied hydrogen; (7) a fuel blend containing hydrogen; (8) a fuel blend containing greater than 10 percent ethanol by volume; (9) a fuel blend containing biomass-based diesel; (10) denatured fuel ethanol; (11) neat biomass-based diesel; and (12) any other liquid or non-liquid fuel.<sup>4</sup> The EPA’s Renewable Fuels Standard (“RFS”) Program<sup>5</sup> also covers a broader range of renewable fuels.<sup>6</sup> Hawai’i’s own alternate fuel standard goal, as codified in Hawai’i Revised Statutes section 196-42, uses the federal definition of “alternate fuels,”<sup>7</sup> which also provides a broader definition of alternative fuels than that defined under SB 2768.

Accordingly, HSEO advises that an effective fuel standard would have a broadened scope of the CFS to include electricity and a broader range of alternative

---

<sup>4</sup> ORS Chapter 468A, § 266.

<sup>5</sup> *Approved Pathways for Renewable Fuel*, EPA, <https://www.epa.gov/renewable-fuel-standard-program/approved-pathways-renewable-fuel>.

<sup>6</sup> 10 C.F.R. § 490.2.

<sup>7</sup> “Alternative Fuel” means “methanol, denatured ethanol, and other alcohols; mixtures containing 85 percent or more by volume of methanol, denatured ethanol, and other alcohols with gasoline or other fuels; natural gas, including liquid fuels domestically produced from natural gas; liquefied petroleum gas; hydrogen; coal-derived liquid fuels; fuels (other than alcohol) derived from biological materials (including neat biodiesel); three P-series fuels (specifically known as Pure Regular, Pure Premium and Pure Cold Weather) as described by United States Patent number 5,697,987, dated December 16, 1997, and containing at least 60 percent non-petroleum energy content derived from methyl-tetrahydrofuran, which must be manufactured solely from biological materials, and ethanol, which must be manufactured solely from biological materials; and electricity (including electricity from solar energy).” 10 C.F.R. § 490.2.

fuels. HSEO suggests the definition of covered fuels is consistent with EPA's Renewable Fuel Standard.

#### Clean Air Act Compliance, Federal Preemption, and State Implementation Plans

Under Section 110 of the CAA, states must adopt State Implementation Plan (SIPs) and submit them to the EPA to ensure that they are adequate to meet the statutory requirements of the Clean Air Act. SIPs provide a plan for implementation, maintenance, and enforcement of the National Ambient Air Quality Standards ("NAAQS") in each state.<sup>8</sup>

Title II of the CAA generally preempts states from adopting their own emission standards for new motor vehicles or engines. CAA Section 209(b) provides an exception to federal preemption of state vehicle emission standards:

The [EPA] Administrator shall, after notice and opportunity for public hearing, waive application of this section [the preemption of State emission standards] to any State which has adopted standards (other than crankcase emission standards) for the control of emissions from new motor vehicles or new motor vehicle engines before March 30, 1966, if the State determines that the State standards will be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards.

Only California can qualify for such a preemption waiver because it is the only state that adopted motor vehicle emission standards "prior to March 30, 1966." However, Section 177 of the CAA allows other states to adopt California's stricter motor vehicle emission standards in lieu of federal requirements, but only for non-attainment areas (i.e., areas where pollution levels have not met the NAQQS). Hawai'i consistently receives "attainment" status from the EPA, therefore under Section 177 of the CAA, it is ineligible to adopt California's stricter vehicle emissions standards.<sup>9</sup> Nonetheless, the State of Hawai'i could coordinate with the EPA to have a SIP for fuel standards that comport with the EPA's regulations if the EPA makes a finding that it is necessary to

---

<sup>8</sup> *Basic Information About Air Quality SIPs*, EPA, <https://www.epa.gov/air-quality-implementation-plans/basic-information-about-air-quality-sips>.

<sup>9</sup> See FACT SHEET: Review of Hawaii Status to Adopt a Zero Emission Vehicle Standard, HSEO (Dec. 2018), available at: [https://energy.hawaii.gov/wp-content/uploads/2019/03/Review-of-Hawaii-Status-to-Adopt-a-ZEV-Standard\\_Dec2018.pdf](https://energy.hawaii.gov/wp-content/uploads/2019/03/Review-of-Hawaii-Status-to-Adopt-a-ZEV-Standard_Dec2018.pdf)

help the state achieve a NAAQS standard.<sup>10</sup> Thus, insofar that Hawai'i's CFS is for motor vehicle emission control, Hawai'i will likely have to modify its SIP for EPA approval. The State Department of Health, Clean Air Branch would be the coordinating agency for modifying Hawai'i's SIP.

HSEO recommends this step be incorporated into SB 2768 and be done prior to requiring rule making.

#### Importance of Complementary Policy

While a CFS with a temporally decreasing carbon intensity target is likely needed to meet Hawai'i's emissions target (HRS §225P-5), the state should implement complementary policies that promote alternative fuel production, otherwise, alternative fuel supply may become an issue.

Act 122, Session Laws of Hawai'i 2019 required HSEO to examine the implementation of a carbon pricing policy for Hawai'i. The analysis noted Hawai'i's relatively small market size and limited number of market participants limit the effectiveness of instituting a cap-and-trade policy. One way to bridge the limitation of market size may be for Hawai'i to join existing cap-and-trade policies that exist in other jurisdictions. States like Washington and California have discovered that a combination of LCFS and cap-and-trade help drive long-term investments in renewables and advanced fuels without which meaningful air quality improvements can be achieved in communities that are disproportionately impacted by carbon emissions.

However, for California, researchers have found that the cap-and-trade currently is not stringent enough to drive substantial emission reductions because over time many covered entities and outside investors have banked unused allowances.<sup>11</sup> A carbon tax program could serve a similar purpose if fuels not meeting the CFS are

---

<sup>10</sup> A State may prescribe and enforce, for purposes of motor vehicle emission control, a control or prohibition respecting the use of a fuel or fuel additive in a motor vehicle or motor vehicle engine if an applicable implementation plan for such State under section 7410 of this title so provides. The Administrator may approve such provision in an implementation plan, or promulgate an implementation plan containing such a provision, only if he finds that the State control or prohibition is necessary to achieve the national primary or secondary ambient air quality standard which the plan implements." 42 U.S.C. § 7545(c)(4)(C)(i).

<sup>11</sup> California's Cap-and-Trade Program: Frequently Asked Questions. (2023, October 24). Legislative Analyst's Office.

<https://lao.ca.gov/Publications/Report/4811#:~:text=However%2C%20cap%2Dand%2Dtrade,significant%20number%20of%20unused%20allowances>.

subject to an aggressive surcharge. Further research is needed to determine the appropriate complementary carbon pricing regime.

Standards for Measuring Net Greenhouse Gas Emissions

Section 2 (a) (3) requires the HSEO to adopt rules, which shall include (3) “Standards for measuring net greenhouse gas emissions using Argonne National Lab's GREET model attributable to the production and use of diesel, gasoline, and other alternative fuels throughout their lifecycles, including feedstock production or extraction, fuel production, transportation of raw materials and finished fuels, and greenhouse gas sequestrations;”.

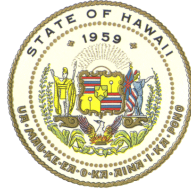
HSEO notes that while the Argonne National Laboratory’s GREET is an ideal model for determining lifecycle carbon emissions, adjustments to the model would be needed, particularly to capture upstream emissions from in-state biofuels and feedstock, as the default feedstock carbon intensity calculator (FD-CIC) does not have Hawai’i-specific land characteristics built-in, these characteristics must be input by the user and can be both subjective and skewed by the user. California adopted its lifecycle models and documentation to overcome this challenge and ensure appropriate system boundaries were applied to the applicant's analysis.<sup>12</sup> Hawai’i would likely need to do the same, additional resources would be needed to assist in the development of a HI-GREET Model.

HSEO thanks the Committee for hearing this bill and respectfully requests your consideration of the recommended modified approach and changes.

Thank you for the opportunity to testify.

---

<sup>12</sup> California Air Resources Board (2023). LCFS Life Cycle Analysis Models and Documentation <https://ww2.arb.ca.gov/resources/documents/lcfs-life-cycle-analysis-models-and-documentation>



STATE OF HAWAII  
HAWAII CLIMATE CHANGE MITIGATION & ADAPTATION  
COMMISSION  
POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

Testimony of  
**Leah Laramee**  
Coordinator, Hawai'i Climate Change Mitigation and Adaptation Commission

**Co-Chairs:**  
Chair, DLNR  
Director, OPSD

**Commissioners:**  
Chair, Senate AEN  
Chair, Senate WTL  
Chair, House EEP  
Chair, House WAL  
Chairperson, HTA  
Chairperson, DOA  
CEO, OHA  
Chairperson, DHHL  
Director, DBEDT  
Director, DOT  
Director, DOH  
Chairperson, DOE  
Director, C+C DPP  
Director, Maui DP  
Director, Hawai'i DP  
Director, Kaua'i DP  
The Adjutant General  
Manager, CZM

Before the Senate Committees on  
**ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM**  
AND  
**AGRICULTURE AND ENVIRONMENT**

Tuesday January 30, 2024  
1:01 PM  
State Capitol, Via Videoconference, Conference Room 229

In support of  
**SENATE Bill 2768**  
**RELATING TO GREENHOUSE GAS EMISSIONS**

Senate Bill 2768 requires the Hawai'i state energy office to adopt rules governing a clean fuel standard for gasoline and diesel in the State. **The Hawai'i Climate Change Mitigation and Adaptation Commission (Commission) supports this measure.**

The Commission is a multi-jurisdictional effort between 20 different State and county departments, and Legislative committees. The Commission believes that it is imperative to adopt clean fuel standards if we are to reach our mandated 2045 carbon emission goals. The transportation sector is the largest source of climate pollution in the state. Timely adoption of fuel standards is essential to protect our communities and advance emissions reduction targets.

Complementary policies are needed to support zero emission vehicle (ZEV) deployment on our roadways. This includes offering State-level incentives that can be combined with federal tax credits for the purchase and installation of electric vehicle (EV) chargers; leveraging investments through the National Electric Vehicle Infrastructure program to expand public charging availability; working with utilities to expand investments in ZEV infrastructure and otherwise prepare for vehicle electrification; and establishing EV-ready requirements to ensure new housing and parking facilities will accommodate EV charging infrastructure.

Clean fuel standards reduce harmful emissions of nitrogen oxides and fine particulates, improving public health for residents in the state and advancing environmental justice by reducing disproportionate exposure to vehicle pollution in frontline communities.

Mahalo for the opportunity to testify in support of this measure.

Committee on Energy, Economic Development, and Tourism  
Senator Lynn DeCoite, Chair  
Senator Glenn Wakai, Vice Chair

Committee on Agriculture and Environment  
Senator Mike Gabbard, Chair  
Senator Tim Richards, Vice Chair

**January 30, 2024**

**1:01 p.m.**

**Conference Room 229**

Thank you for the opportunity to submit testimony in **strong support of SB 2768**. My name is Cristina Cornejo and I am the Public Affairs Manager for Neste, the world's leading producer of sustainable aviation fuel and renewable diesel.

A Clean Fuel Standard (CFS) for Hawaii is an essential policy that will enable the state to meet its decarbonization goals, while reducing air and water pollution from the use of fossil fuels in our transportation system.

SB 2768 creates the framework for the creation of a clean fuel credit market that exists outside of the state tax base. Similar CFS programs have been implemented in California, Oregon, Washington, and Canada, and currently there are more than 10 additional states considering CFS policies, due to their effectiveness. As an example of this success, over the past 12 years, 77% of all carbon reductions in California have been credited to the CFS that was implemented.

**SB 2768 is NOT a mandate**, nor is it a tax credit, but rather it is an incentive program designed to promote the decarbonization of all transportation fuels. CFS policies drive the adoption of lower-carbon transportation technologies resulting in advanced competition and a diversity of fuel options for consumers. As an example, consumers in CA have gone from 2 fuel types (gasoline and diesel) to more than 7 fuel types (gasoline, diesel, renewable diesel, electric, ethanol, biodiesel, hydrogen, and renewable compressed natural gas). This policy also drives substantial new investments in electric vehicle charging and hydrogen infrastructure at no cost to taxpayers.

One crucial element of a CFS is that it is a technology neutral policy that allows consumers to decide what fuels work best for them and their businesses. All transportation fuels can partake in a clean fuels market and the policy is flexible enough to allow for new technologies that will come online in the future.

Another key component of SB 2768 is that it utilizes a science-based evaluation for all transportation fuels. The policy uses the GREET model, which was created by Argonne National Laboratory and is the worldwide standard methodology to calculate the carbon intensity of a given fuel. This model assesses fuel on a well to wheels basis and considers the full life cycle assessment of a fuel to determine its carbon intensity score. This ensures all fuels are scored on an equal playing field and the winners are those fuels with the lowest possible carbon intensity score.



In conclusion, a clean fuel standard is the most effective policy in reducing carbon emissions from the transportation sector by incentivizing the production and availability of lower carbon fuels. The State of Hawaii deserves access to cleaner fuels and protection of its treasured natural resources. SB 2768 is a significant piece of the decarbonization puzzle and we at Neste are proud to support this pivotal policy.

***Background***

*As the world's leading producer of sustainable aviation fuel and renewable diesel and a forerunner in developing renewable and circular feedstock solutions for polymers and chemicals, Neste helps its customers to reduce their greenhouse gas emissions by at least 20 million tons annually by 2030.*



Committee on Energy, Economic Development, and Tourism  
Senator Lynn DeCoite, Chair  
Senator Glenn Wakai, Vice Chair

Committee on Agriculture and Environment  
Senator Mike Gabbard, Chair  
Senator Tim Richards, Vice Chair

January 30, 2024  
1:01 p.m.  
Conference Room 229

Aloha Chair DeCoite, Vice Chair Wakai, Chair Gabbard, and Vice Chair Richards:

On behalf of Clean Energy, I would like to express **strong support for SB 2768** which would adopt a Clean Fuel Standard (CFS), a program that would decarbonize Hawaii's transportation fuels and aligns with the state's ambitious goal of achieving 100% clean energy by 2045.

Our company was a foundation stakeholder since a CFS was conceived in the respective California, Oregon and Washington processes. Each of these states has been a success and we believe it will be a success in Hawaii as well. As North America's largest provider of renewable natural gas (RNG) transportation fuel with over twenty-seven years of leading industry experience, Clean Energy provides construction, operation and maintenance services for refueling stations nationwide. We have a deep understanding of the growing marketplace, as our portfolio includes over 600 stations in 43 states and we deliver liquified natural gas to Hawaii's utility and built a fuel station in Honolulu.

Already used as a clean, low carbon source of energy around the world, RNG is proven to be a cost-saving alternative fuel to diesel and gasoline. RNG for transportation fuel strengthens our economy with lower fuel costs, increases our energy security, and significantly benefits our environment by reducing carbon emissions and smog-forming NOx emissions by up to 300% and 99%, respectively, relative to diesel fuel.

The CFS is a critical tool not only to effectively meet carbon emission reduction targets, but also as a mechanism that fosters technological innovation, supports a robust market for alternative fuels, provides long-term investment certainty and stimulates job creation and investment.

In addition, the CFS could provide compliance flexibility to producers of high carbon intensity transportation fuels to either invest in low carbon alternative fuels or to purchase credits from low carbon fuel producers. This market-based program enables regulated parties to make their own choice as to

whether to invest in low carbon fuels directly or to continue to sell purely high carbon emitting fuels.

For example, California's LCFS is working: it's helping deliver clean air, good jobs and clean energy choices to all Californians and has strengthened the demand for low carbon fuels. California is the fifth-largest economy in the world: we can have clean fuels and grow our economy. The CFS is a powerful tool for supporting the commercialization of the fastest broad-market transitions to clean and low-carbon technologies.

Our company is a prime example of success from clean fuel standards and we look forward to continuing this success in Hawaii. **Please support SB 2768.**

Sincerely,

A handwritten signature in blue ink, appearing to read "Ryan Kenny". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Ryan Kenny  
Senior Public Policy & Regulatory Affairs Advisor – Western U.S.  
Clean Energy



January 29, 2024

The Honorable Lynn DeCoite, Chair  
Committee on Energy, Economic Development and Tourism  
Hawaii Senate  
Honolulu, HI

The Honorable Mike Gabbard, Chair  
Committee on Agriculture and Environment  
Hawaii Senate  
Honolulu, HI

**Re: Vote “Yes” on SB 2768 – Implements a Clean Fuel Standard for Hawaii**

Dear Chairs DeCoite & Gabbard & Members of the EET & AEN Committees,

I write on behalf of the Biotechnology Innovation Organization (BIO) – the world’s largest biotechnology focused trade group with members that produce agricultural, environmental, industrial, and health care products - to express strong support for Senate Bill 2768, legislation implementing a clean fuel standard (CFS) for Hawaii.

The transportation sector currently accounts for a substantial 60% of Hawaii's CO<sub>2</sub> emissions, making it imperative to adopt effective measures to reduce the state’s carbon footprint. A Hawaii CFS, however, will reduce the environmental impact of the state’s transportation sector by reducing harmful emissions. Indeed, the CFS, utilizing a science-based "carbon intensity" metric to assess the life cycle of greenhouse gases, has proven successful in states like Washington, Oregon, California, and across Canada.

California’s CFS has helped displace over 25 billion gallons of petroleum fuel since the state’s CTFS went into effect in 2011. Moreover, the volume of cleaner, low-carbon fuels supplied for use in the state has nearly tripled and, as of 2023, California’s current diesel fuel supply is over 50 percent bio-mass-based. Meanwhile, Oregon cut approximately 3.1 million tons of greenhouse gasses in the first three years of its CFS.

It is important to note that the CFS is not a mandate but rather an incentive program designed to encourage emission reduction in all transportation fuels. The program's flexibility allows producers to choose how they reduce emissions—whether through the use of renewable fuels or the acquisition of credits—it empowers the market to drive innovation.

Page Two

The Honorable Lynn DeCoite & Mike Gabbard

January 29, 2024

The program's technology-neutral stance further encourages the introduction of new and diverse renewable fuels to the market. Furthermore, SB 2768 will spur investments in clean fuel technology in the state, generating new businesses, creating jobs, and growing the state's economy.

In a nutshell, SB 2768 is an important piece of legislation that can diversify Hawaii's economy, protect the environment, combat climate change, and establish Hawaii as a leader in a national transition to clean fuels. **For these and many other reasons BIO strongly supports SB 2768 and respectfully asks that you vote "yes" on bill.**

I appreciate your time and urge you to contact me at [gharrington@bio.org](mailto:gharrington@bio.org) or 202-365-6436 if you have any questions.

Sincerely,

Gene Harrington

Senior Director, State Government Affairs, Agriculture & Environment

DATE: January 30, 2024

TO: Senator Lynn DeCoite  
Chair, Committee on Energy, Economic Development and Tourism

Senator Mike Gabbard  
Chair, Committee on Agriculture and Environment

*Submitted Via Capitol Website*

FROM: Tiffany Yajima

RE: **SB 2768 – Relating to Greenhouse Gas Emissions**  
**Hearing Date: Tuesday, January 30, 2024 at 1:01 p.m.**  
**Conference Room: 229**

---

Dear Chair Wakai, Chair Gabbard, and Members of the Joint Committees:

The Alliance for Automotive Innovation (“Auto Innovators”) submits this testimony providing **comments** in support of S.B. 2768, which requires the state energy office to adopt rules governing a clean fuel standard for gasoline and diesel in the state.

The Alliance for Automotive Innovation represents the full auto industry, a sector supporting 10 million American jobs and five percent of the economy. From the manufacturers producing most vehicles sold in the U.S. to autonomous vehicle innovators to equipment suppliers, battery producers and semiconductor makers – the association is committed to a cleaner, safer and smarter personal transportation future.

Auto Innovators support the intent of this measure and would ask the committee for an amendment on page 8 at line 7 to include “electricity” in the definition of “alternative fuel” as follows:

"Alternative fuel" means any fuel that is used in transportation ~~and~~ **including electricity, hydrogen, and fuels** derived from municipal solid waste, agriculture or forestry practices, construction waste, animal or food waste, or other biogenic biomass sources.

Electric vehicles, which includes battery electric, plug-in hybrid electric, and fuel cell electric vehicles, use alternative fuels like electricity and hydrogen for power.

Auto Innovators support efforts to reduce vehicle greenhouse gas (“GHG”) emissions, conserve energy, and transition vehicles to electric vehicles, and has worked with the federal government and state governments to establish fuel intensity standards in California, Oregon and Washington. This partnership has helped states to reduce the carbon intensity of transportation fuels while also encouraging the use of clean fuels and zero-emission vehicles.

As Hawaii moves forward on efforts to establish clean fuel standards for diesel and gasoline in the state, Auto Innovators are ready and willing to serve as a resource on carbon reductions and baseline measurements for alternative fuels used in the transportation sector.

Thank you for the opportunity to submit this testimony.



# Environmental Caucus of The Democratic Party of Hawai‘i

---

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

Senate Committee on Agriculture and the Environment  
Hon. Mike Gabbard, Chair  
Hon. Herbert M. “Tim” Richards, III, Vice Chair

Re: SB 2768 RELATING TO GREENHOUSE GAS EMISSIONS

Hearing: Tuesday, January 30, 2024, 1:01 p.m., Room 229 & videoconference

Position: Opposition

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

The Environmental Caucus of the Democratic Party of Hawai‘i (DPH) opposes SB 2768. This bill would require the Hawaii state energy office to adopt rules governing a clean fuel standard for gasoline and diesel in the State, including alternative fuels.

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

## ENVIRONMENT AND ENERGY

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

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



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

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

The DPH Environmental Caucus opposes this measure because there are too many toxic chemicals involved in using municipal solid waste and constructing and demolition waste to energy systems. See <https://beyondburning.org/pdf/cdincineration.pdf> for the latter.

Likewise, with wood and other biofuels, there are all sorts of problems with contaminants, GMOs, net energy, soil depletion, water use, and more.

The problem with aviation fuels is that currently, there are no good non-burn solutions available for long-distance air travel, therefore, we should first focus where we do have good alternatives:

- 1) We need to end combustion in the electricity sector, which is mostly oil in Hawaii, but also some burning of trash, trees, and biofuels; and replace them with conservation, efficiency, solar, wind, and energy storage;
- 2) We need to end combustion use for land-based vehicles by reducing vehicle use, having better (and fare-free) electrified public transit, and electrifying other land vehicles;
- 3) We need to electrify any heating needs, most in the industrial sector, but to the extent that anyone is cooking or heating spaces with combustible fuels (mainly gas made from oil) in the residential or commercial sectors;
- 4) We should replace inter-island air travel with electric sea gliders; and
- 5) We should electrify shipping which is currently available.

For all these compelling reasons, logic and science dictate that we absolutely must not require the Hawaii state energy office to adopt rules governing a clean fuel standard for gasoline and diesel in the State as it pertains to alternative fuels as defined in this measure.

*Melodie Ateja* [legislativepriorities@gmail.com](mailto:legislativepriorities@gmail.com)

*Alan B. Burdick* [burdick808@gmail.com](mailto:burdick808@gmail.com)

Co-Chairs, Environmental Caucus of the  
Democratic Party of Hawai'i



**Hawaiian  
Electric**

**TESTIMONY BEFORE THE ENERGY DEVELOPMENT, AND TOURISM COMMITTEE  
AND AGRICULTURE AND ENVIRONMENT COMMITTEE**

**SB 2768**

**Relating to Greenhouse Gas Emissions**

January 30, 2024

1:01 PM, Agenda Item #5

State Capitol, Conference Room 229

Nicholas O. Paslay

Director, Power Supply Fuels Division

Hawaiian Electric

Chair DeCoite and Chair Gabbard, Vice Chair Wakai and Vice Chair Richards and Members of the Committees,

My name is Nicholas O. Paslay and I am testifying on behalf of Hawaiian Electric regarding SB 2768, Relating to Greenhouse Gas Emissions.

The company supports a clean fuel standard; however, the bill as written doesn't clearly state if renewable fuel used for power generation is including in the fuel standard and doesn't exempt diesel fuel used for power generation. The company is concerned that if passed as written the result will be higher electric rates for the company's customers. The company respectfully offers the amendments below for the committee's consideration so that renewable fuel used for power generation is also included in the clean fuel standard and diesel used for power generation is exempt to minimize impacts to electric rates.

On page 5 lines 15-17 (see underscored and strikethrough for amendments)  
Exemptions for diesel, gasoline, or other fuels used  
by aircraft, railroad locomotives, military vehicles, power generation  
and interstate waterborne vessels;

On page 6 lines 17-21 (see underscoring and strikethrough for amendments)  
Mechanisms whereby alternative fuel can opt in to the  
clean fuel program to generate credits when it  
displaces the combustion of gasoline or diesel in  
off-road, heating, cooling, and ~~temporary~~ power  
generation;

On page 8 lines 7-10 (see underscoring and strikethrough for amendments)  
"Alternative fuel" means any fuel that is used in  
transportation or power generation and derived from municipal solid waste,  
agriculture or forestry practices, construction waste, animal or  
food waste, or other biogenic biomass sources.

Accordingly, Hawaiian Electric recommends the above amendments to SB 2768.

Thank you for this opportunity to testify.



January 30, 2024

**TESTIMONY PROVIDING COMMENTS TO SENATE BILL 2768  
RELATING TO GREENHOUSE GAS EMISSIONS**

Senate Committee on Energy, Economic Development, and Tourism  
The Honorable Lynn DeCoite, Chair  
The Honorable Glenn Wakai, Vice Chair

Senate Committee on Agriculture and Environment  
The Honorable Mike Gabbard, Chair  
The Honorable Herbert M. "Tim" Richards, III, Vice Chair

Tuesday, January 30, 2024, 1:01 pm  
Conference Room 329 & Videoconference

Chairs DeCoite and Gabbard, Vice Chair Gabbard and Richards, and members of the Committees,

Thank you for this opportunity to submit written testimony offering comments on SB 2768, Relating to Greenhouse Gas Emissions. My name is Eric Wright and I serve as President of Par Hawaii. Par Hawaii is the state's only local producer of petroleum products, including transportation fuels.

SB 2768 would require the Hawaii State Energy Office (HSEO) to adopt rules governing a clean fuel standard for gasoline and diesel in the State. The bill would be similar to policies in West Coast jurisdictions, including California, Washington, and Oregon.

We recognize the importance of charting a clean energy future for Hawaii. As the local producer of fuels for Hawaii's consumers, we are committed to a part of this future by investing \$90 million to develop Hawaii's largest liquid renewable fuels manufacturing facility at its Kapolei refinery. The project — to be commissioned in 2025 — is expected to produce approximately 61 million gallons each year of renewable diesel, sustainable aviation fuel, renewable naphtha and liquified petroleum gases using renewable feedstock.

We have three principal comments on SB 2768:

- Implementing and administering a clean fuel standard (CFS) is a significant undertaking. It is important that a broad range of stakeholders are heard from and consulted to avoid unintended consequences of this legislation.

- Hawaii's energy landscape is significantly different than that of mainland states. We have much higher demands for aviation fuel and liquid fuels for power generation. It is important that a Hawaii CFS take into account the unique needs of our state.
- The cost to produce renewable fuels for transportation is well above that of fossil fuels. While there are Federal programs in place to partially bridge the gap, state level incentives are also required to make renewable fuels competitive with fossil fuels. We believe that a clean fuel standard should be paired with an expansion of the Hawaii renewable fuels production tax credit (HRS 235-110.32). This is particularly important because it can take years for the CFS credit market to develop to the point where it serves as an effective long-term incentive for renewable fuels.

We believe it is possible to produce significant amounts of renewable fuel here in Hawaii, and in a way that supports the local agriculture sector. Par Hawaii has partnered with Pono Pacific, a land management and conservation company, to develop locally grown, oil-yielding crops that will contribute to Hawaii's clean energy future.

In summary, we believe it is important to proceed cautiously and thoughtfully on a Hawaii CFS. We look forward to participating in this dialogue.

Thank you for allowing Par Hawaii the opportunity to present these comments for the Committee's consideration.

**SB-2768**

Submitted on: 1/29/2024 12:56:52 PM

Testimony for EET on 1/30/2024 1:01:00 PM

Submitted By	Organization	Testifier Position	Testify
Sherry Pollack	Testifying for 350Hawaii	Comments	Written Testimony Only

Comments:

Aloha Chairs DeCoite and Gabbard, Vice Chairs Wakai and Richards, and members of the EET and AEN committees,

In this measure it specifies that the Hawaii state energy office shall adopt rules that include mechanisms that allow credits to be traded and to be banked for future compliance periods. These type of emissions trading schemes are a serious concern. Businesses have been found to use these schemes for corporate greenwashing.

Furthermore, the definition for “alternative fuel” is problematic. In this measure, *"Alternative fuel" means any fuel that is used in transportation and derived from municipal solid waste, agriculture or forestry practices, construction waste, animal or food waste, or other biogenic biomass sources.* It is important to remember that burning biomass has a significant impact on air quality, human health, and climate change.

We cannot afford missteps or distractions from our efforts to decarbonize.

Mahalo for the opportunity to provide these comments.

**SB-2768**

Submitted on: 1/27/2024 11:44:36 AM

Testimony for EET on 1/30/2024 1:01:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Sunny Savage	Individual	Support	Written Testimony Only

Comments:

In support

**SB-2768**

Submitted on: 1/28/2024 2:24:00 PM

Testimony for EET on 1/30/2024 1:01:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Keith Neal	Individual	Support	Written Testimony Only

Comments:

Aloha Chair DeCoite, Chair Gabbard, and members of the EET and AEN committees.

I am concerned that such a policy would be overly focused on the creation of exemptions and ‘carbon credits’ than actual emission reductions.

I support the intent of the legislature to deploy cleaner fuel technologies through carefully designed polices that reduces the carbon intensity and to capture hydrocarbons that would otherwise escape into the environment.

I support public health and environmental actions that increase sustainability and encourage a circular economy.

Examples of ‘clean fuel’ standards are:

\*Technologies and uses for captured Greenhouse gases from landfills.

\*Technologies and uses for captured Greenhouse gases from waste water plants.

Sincerely,

Keith Neal



**SB-2768**

Submitted on: 1/27/2024 9:32:48 PM

Testimony for EET on 1/30/2024 1:01:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Andrew Crossland	Individual	Oppose	Written Testimony Only

Comments:

I **oppose** this Bill.



*Restore the Commons*

Tuesday, January 30, 2024, 1:01 pm

Senate Committee on Energy, Economic Development, and Tourism  
SENATE BILL 2768 – RELATING TO GREENHOUSE GAS EMISSIONS

Position: Strong Opposition

Me ke Aloha, Chair DeCoite, Vice-Chair Wakai, and Members of the Senate Committee on Energy, Economic Development, and Tourism

SB2768 requires the Energy Office to adopt rules governing a clean fuel standard for gasoline and diesel.

While clean fuel standards certainly sound like a good idea, the plain fact is that gasoline and diesel are not clean fuels. What does this bill actually mean? After years of advanced research by the gasoline and diesel producing industries to produce efficient and relatively non-polluting fuels, what has not been done? What is the real problem we face?

Fossil fuel combustion, in transportation or any other use, emits greenhouse gases to the atmosphere, causing climate change. We have been accelerating their use with serious consequences in recent years. Scientists are cranking up the sirens to warn us of continuing to bake in increasingly catastrophic climate change. We are begged to drastically reduce carbon combustion by any means necessary before the world becomes uninhabitable.

We recognize that a transition to truly clean means of generating power requires some continued use of carbon-based fuels, but the alternatives are already cheaper and receiving massive investments. This is where our focus should be, not on marginal improvements to the obsolete, dangerous, and necessarily polluting gasoline and diesel fuels. Smart investment of time and money could not more clearly side with combustion-free power generation. This detailed bill appears to indulge in wishful thinking or obfuscatory greenwashing. Expensive and artful science to prolong rather than curtail the use of combustion-based power seems a desperate, unwarranted, fiscally unsound substitute. Some marginal improvement in the fraction of emissions that are polluting the atmosphere is not a solution to the dire and immediate need to completely replace carbon combustion fuels as rapidly as possible.

The bill also seems confused in posing municipal solid waste and construction and demolition waste as candidates for producing gasoline or diesel transportation fuels. This seems quite fanciful.

There are more direct, less imaginative pathways to accomplish Hawaii's multiple goals leading to greater economic resilience and security, and they include smart investments in alternative energy, regenerating our depleted soils, and restoring our nearshore waters to health and good nutrition.

Mahalo for the opportunity to address this issue,  
/s/ Charley Ice, Hoa'āina

**Building the new normal with People and Land: Food Security Health Care Public Banking  
Regenerating Soils Cutting Waste Eliminating GHG emissions**