



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 COMMITTEE ON WAYS AND MEANS**

Friday, March 1, 2024
9:55 AM
State Capitol, Conference Room 211 and Videoconference

Providing Comments on
SB 2768, SD1

RELATING TO GREENHOUSE GAS EMISSIONS.

Chair Dela Cruz, Vice Chair Moriwaki, and members of the Committee, the Hawai'i State Energy Office (HSEO) provides comments on SB 2768, SD1, 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 pursuant to HRS §196-71 and HRS §196-72. Our comments are also informed by analysis and findings associated with HSEO's Act 238 report, *Pathways to Decarbonization*,¹ especially the discussion about implementing a Clean Fuel Standard based on lifecycle carbon intensity in Chapter 5 of the report. A relevant passage from the report, below, focuses on the importance of lifecycle emissions and managing carbon intensity over time:

“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

¹ 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

MW nameplate capacity by 2033 for bioenergy.² The electric sector is anticipated to require significant biofuel production and feedstock imports.

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.”³

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 supports and 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. Suggested Ramseyer edits are provided with rationale:

Scope of the Clean Fuel Standard

SB 2768, SD1, 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

² Hawaiian Electric (2023) [Renewable Project Status Board](#).

³ 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.

waste and resources, while incentivizing the use of fuels with lower lifecycle carbon intensity, the scope of fuels covered under SB 2768, SD1, definitions may be too narrow to promote significant levels of decarbonization.

SB 2768, SD1, proposes to enforce a CFS on diesel, gasoline, and alternative fuels. 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.⁴ The EPA's Renewable Fuels Standard ("RFS") Program⁵ also covers a broader range of renewable fuels.⁶ Hawaii's own alternate fuel standard goal, as codified in Hawai'i Revised Statutes section 196-42, uses the federal definition of "alternate fuels,"⁷ which also provides a broader definition of alternative fuels than that defined under SB 2768, SD1.

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 fuels. HSEO suggests the definition of covered fuels is consistent with EPA's Renewable Fuel Standard and 10 C.F.R. § 490.2.

⁴ ORS Chapter 468A, § 266.

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

⁶ 10 C.F.R. § 490.2.

⁷ "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.

Page 9, Lines 7-10

"Alternative fuel" means ~~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.~~ 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; 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)."

HSEO also offers language for carbon intensity thresholds, which HSEO can further refine in rulemaking. HSEO recommends extending the implementation date by at least 1 year, as this is a highly technical subject matter and would require substantial resources to develop a comprehensive CFS program.

Page 3, Lines 14-20; page 4, Lines 1-2.

- (a) The Hawaii state energy office shall adopt rules pursuant to chapter 91, Hawaii Revised Statutes, governing a clean fuel standard for diesel, and gasoline, and alternative fuels in the **State**. The rules shall include:
- 1) A schedule to phase-in the implementation of the clean fuel standard for diesel, gasoline, and alternative fuels in a manner that reduces the average carbon intensity of fuels by at least 15 per cent below 2019 levels by the year 2035, and at least 50% below 2019 levels by the year 2045 including the establishment of annual carbon intensity standards for diesel, gasoline, and alternative fuels;
 - 2) An implementation date for the clean fuel standard for diesel, and gasoline, and alternative fuels on or before January 1, ~~2025~~ 2026;

Standards for Measuring Net Greenhouse Gas Emissions

Section 2 (a) (3) requires the State Energy Office 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.⁸ Hawai'i would likely need to do the same, additional resources would be needed to assist in the development of a HI-GREET Model.

Consistent with EPA guidance, HSEO also recommends removing language around “net” emissions, instead the focus should be on total lifecycle emissions. Sequestration activities not associated with the production of the feedstock should not be included in the lifecycle analysis; assessment of fuel production should not include activities that are unrelated to the fuel lifecycle.⁹

Page 4, Lines 5-11

3) Standards for measuring ~~net~~-lifecycle greenhouse gas emissions, including biogenic emissions, using Argonne National Lab's GREET an appropriate and opensource GHG model attributable to the production and use of diesel,

⁸ 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>

⁹ EPA RPS standard practice <https://www.epa.gov/renewable-fuel-standard-program/lifecycle-analysis-greenhousegas-emissions-under-renewable-fuel>

gasoline, and other alternative fuels throughout their lifecycles, including feedstock production or extraction, fuel production, and the transportation of raw materials and finished fuels,~~and greenhouse gas sequestrations;~~

Allowing for Flexibility in Rulemaking

HSEO recommends line items Section (a) items 9-13 be moved to the section (b), to allow for more flexibility in rulemaking, particularly as it relates to exemptions which may not be appropriate.

Page 5, Lines 7-19

- 7) Mechanisms that allow credits to be traded and to be banked for future compliance periods;
- 8) A mechanism that requires diesel, gasoline, or other alternative fuel that is exported from the State to retire any associated credit or debit;
- 9) Exemptions for diesel, gasoline, and alternative fuel that are used in volumes below thresholds established by the Hawaii state energy office;
- 10) Exemptions for diesel, gasoline, or other fuels used by aircraft, railroad locomotives, military vehicles, and interstate waterborne vessels; (13) Procedures for verifying the validity of credits and deficits generated under the clean fuel standard.

Revising Definitions, Section 2 (c)

HSEO recommends biogenic be redefined to accurately reflect the definition more broadly used by the EPA.

Page 8, Lines 11-13

"Biogenic Emissions" means emissions related to the natural carbon cycle, as well as those resulting from the combustion, harvest, digestion, fermentation, decomposition, or processing of biologically based materials produced within the past one hundred years, not inclusive of fossil emissions. ~~from any carbon or hydrogen absorbed by plants or trees from the atmosphere through photosynthesis within the past one hundred years.~~

HSEO recommends the definition be broadened as megajoules may not be the most appropriate unit of measurement. HSEO appreciates the flexibility in rulemaking.

Page 8, Lines 14-16

"Carbon intensity" means that quantity of lifecycle greenhouse gas emissions per unit of fuel energy, expressed in grams of carbon dioxide equivalent per megajoule. Unit of energy produced.

Additional Considerations

Finally, HSEO would like to provide additional edits for consistency, clarity, and accuracy for consideration by the committee.

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.¹⁰

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

¹⁰ *Basic Information About Air Quality SIPs*, EPA, <https://www.epa.gov/air-quality-implementation-plans/basic-information-about-air-quality-sips>.

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.¹¹ This may be an insurmountable hurdle in Hawai'i pursuing vehicle emissions standards. However, the State of Hawai'i could make a request to EPA to gauge the remote possibility of preparing a SIP for fuel standards that is not currently required by law, but would be advantageous to Hawai'i air quality and health such that the EPA Administrator makes a finding that such a SIP and potential emissions standard would be necessary to help the state achieve a NAAQS standard.¹² 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 in a totally novel manner relative to other states. The State Department of Health, Clean Air Branch would be the coordinating agency for making the request to EPA and ultimately modifying Hawai'i's SIP based on EPA's guidance.

HSEO recommends this step be incorporated into the SB 2768, SD1, and be done as an important next step and certainly prior to preparing and finalizing rules.

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

¹¹ 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

¹² 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).

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.¹³ A carbon tax program could serve a similar purpose if fuels not meeting the CFS are subject to an aggressive surcharge. Further research is needed to determine the appropriate complementary carbon pricing regime.

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.

¹³ 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>.



Committee on Ways and Means
Senator Donovan M. Dela Cruz, Chair
Senator Sharon Y. Moriwaki, Vice Chair

March 1, 2024
9:55 a.m.
Conference Room 211

Aloha Chair Dela Cruz and Vice Chair Moriwaki:

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", with a long horizontal flourish extending to the right.

Ryan Kenny
Policy Director – Western U.S.
Clean Energy



Committee on Ways and Means
Senator Donovan M. Dela Cruz, Chair
Senator Sharon Y. Moriwaki, Vice Chair

March 1, 2024
9:55 a.m.
Conference Room 211

Thank you for the opportunity to submit testimony in **strong support of SB 2768_SD1**. 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_SD1 creates the framework for the creation of a clean fuel credit market. 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_SD1 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_SD1 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_SD1 is a significant piece of the decarbonization puzzle and we at Neste are proud to support this pivotal policy.

Neste Background

Neste creates solutions for combating climate change and accelerating a shift to a circular economy. The company refines waste, residues and innovative raw materials into renewable fuels and sustainable feedstock for plastics and other materials.

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.



February 28, 2024

The Honorable Donavan Dela Cruz, Chair
Committee on Ways and Means
Hawaii Senate
Honolulu, HI

Re: Vote “Yes” on SB 2768_SD1 – Implements a Clean Fuel Standard for Hawaii

Dear Chair Dela Cruz & Members of the WAM Committee,

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_SD1, legislation implementing a clean fuel standard (CFS) for Hawaii.

The transportation sector currently accounts for a substantial 60% of Hawaii's CO2 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.

The program's technology-neutral stance further encourages the introduction of new and diverse renewable fuels to the market. Furthermore, SB 2768_SD1 will spur investments in clean fuel technology in the state, generating new businesses, creating jobs, and growing the state’s economy.

Page Two
The Honorable Donovan Dela Cruz
February 28, 2024

In a nutshell, SB 2768_SD1 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_SD1 and respectfully asks that you vote "yes" on bill.**

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

Sincerely,

Gene Harrington
Senior Director, State Government Affairs, Agriculture & Environment



March 1, 2024

Committee on Ways and Means
Senator Donovan M. Dela Cruz, Chair
Senator Sharon Y. Moriwaki, Vice Chair

Thank you for the opportunity to submit testimony in **strong support of SB 2768_SD1**.

We are strong supporters of Clean Fuels Standard (CFS). These programs have significantly reduced the amount of fossil fuels used in states that have already implement these programs and have documented improvements to air quality as a result of using less fossil fuel.

These programs have been implemented along the West Coast in California, Oregon, and Washington and just last week, New Mexico passed their own CFS. British Columbia and all of Canada have also implemented similar CFS programs. Today 14 other state legislatures are working to implement CFS programs as a way to reduce transportation emissions and to reach state goals for greenhouse gas reductions.

The fact that the CFS is NOT a mandate, but rather an incentive program designed to promote the lowering of emissions in all transportation fuels, can be a great benefit to those needing access to EV's and EV infrastructure, industries that are difficult to decarbonize (i.e. maritime and drayage), business and commercial airline seeking access to sustainable aviation fuels, and individuals seeking employment in the renewable sector.

A clean fuels standard is a technology neutral, science-based policy mechanism that incentivizes all low carbon fuels used in transportation. Electrification, biodiesel, renewable diesel, hydrogen, sustainable aviation fuels, and existing fossil fuels all compete to manufacture the lowest carbon intensity fuel possible. The program also incentivizes the conversion and adoption of cleaner refining technology so that traditional fossil fuel refining can produce lower carbon fuels for transportation.

Finally, the flexibility of the CFS program is a key component to its success. It allows producers to decide how they want to reduce emissions, by either choosing to use renewable fuels or by purchasing credits.

We appreciate the opportunity to submit our written testimony and we ask for your **support for SB 2768_SD1**.

Thank you,

Tim Zenk
Clean Fuel Hawaii



SanHi

GOVERNMENT STRATEGIES

A LIMITED LIABILITY LAW PARTNERSHIP

DATE: March 1, 2024

TO: Senator Donovan M. Dela Cruz
Chair, Committee on Ways and Means

FROM: Tiffany Yajima

RE: **S.B. 2768, SD1 – Relating to Greenhouse Gas Emissions**
Hearing Date: Friday, March 1, 2024 at 9:55 a.m.
Conference Room: 211

Dear Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committee on Ways and Means:

The Alliance for Automotive Innovation (“Auto Innovators”) submits this testimony providing **comments** on S.B. 2768, SD1, 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 a clarifying 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 states including 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.



March 1, 2024

**TESTIMONY PROVIDING COMMENTS TO SENATE BILL 2768, SD1
RELATING TO GREENHOUSE GAS EMISSIONS**

Senate Committee Ways and Means
The Honorable Donovan M. Dela Cruz, Chair
The Honorable Sharon Y. Moriwaki, Vice Chair

Friday, March 1, 2024, 9:55 AM
Conference Room 211 & Videoconference
Hawaii State Capitol; 415 South Beretania Street

Chair Dela Cruz, Vice Chair Moriwaki and members of the Committee,

Thank you for this opportunity to submit written testimony offering comments on SB 2768, SD1, 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, SD1 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, SD1:

- 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.
- 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.

- The cost to produce renewable fuels 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.



March 1, 2024

**TESTIMONY IN SUPPORT TO SENATE BILL 2768 SD1
RELATING TO GREENHOUSE GAS EMISSIONS**

Senate Committee on Ways & Means
The Honorable Donovan Dela Cruz, Chair
The Honorable Sharon Moriwaki, Vice Chair
Friday, March 1, 2024, 9:55 am
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State Capitol
415 South Beretania Street

Chair Dela Cruz, Vice Chair Moriwaki and members of the Committee,

Island Energy Services, LLC ("IES") offers the following testimony in SUPPORT to SB 2768 SD1 which proposes the implementation of a Clean Fuel Standard (CFS) for Hawai'i.

IES is a locally managed and headquartered integrated logistics and retail fuel supplier providing over 20% of the liquid energy needs of the State of Hawai'i. Our operations extend across all islands with major assets on Oahu, Maui, Kauai, and Hawaii Island. At IES, our local workforce of 285 employees takes tremendous pride in serving our customers safely, environmentally responsibly, reliably, efficiently with cost competitive products and services. Whether you and or your goods are moving by air, land, or sea, IES is there to support island residents now and into the future. As for the future, IES is collaborating with other partners to transition Hawai'i's energy supply to ever cleaner sources of power including, energy efficient operations, PV solar, hydrogen and biofuels such as renewable fuels for electrical power generation, ground and marine transportation and sustainable aviation fuel (SAF) for airplanes.

IES is in favor of this bill as it provides the means to provide market forces to encourage lowering the carbon intensity of transportation fuels used in the state. This measure is critical in addressing the environmental challenges associated with using fossil fuels in our transportation sector and aligns with the state's goal of achieving 100% clean energy by 2045.

The CFS program's flexibility is a key factor in its potential success. By allowing 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. The program's technology-neutral stance further encourages the introduction of new and diverse renewable fuels to the market.

Although in favor of the bill, IES also supports the comments and recommendations of the Hawaii State Energy Office to broaden the definition of fuels to be included in the program:

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.” 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 LCFS program is even more broad. IES suggests that a broaden scope of the definition of “alternative fuels” in the CFS include electricity and a broader range of alternative fuels.

In conclusion, SB2768 SD1 represents a crucial step towards achieving Hawaii's clean energy goals and addressing the carbon emissions from the transportation sector. We support this legislation, recognizing its potential to promote innovation, create employment opportunities, and contribute to a cleaner and more sustainable future for the state.

We thank the Senate Ways & Means Committee for hearing this bill and thank you for the opportunity to testify.

Albert D.K. Chee, Jr.

Vice President

THE SENATE
THE THIRTY-FIRST LEGISLATURE SESSION OF 2024
TESTIMONY ON SENATE BILL NO. 2768, RELATING TO GREENHOUSE GAS EMISSIONS
Position: **Support with Comments**

To the Honorable Donovan M.Dela Cruz, Chair, Senator Sharon Moriwaki, Vice Chair and Members of the Committee:

We support this bill because it is a market-based measure that incentivizes use of renewable fuel without relying on appropriations from the general fund. As a local company developing a project to produce renewable fuel from waste, we strongly support how the mechanisms in this policy value this fuel based on its ability to reduce greenhouse gas emissions compared to the fossil fuels used in the state today.

Sincerely,



Marie-Joelle Simonpietri
President

[About Simonpietri Enterprises](#)

Simonpietri Enterprises LLC is a Kailua-based woman and veteran-owned small business developing innovative industrial processes and projects to manufacture renewable fuel, organic fertilizer, and sustainable building materials. Our focus is on fuel and products for local use inside Hawaii, made from waste stream generated inside Hawaii, and displace both imports of fossil fuels and exports of greenhouse gas emissions. Our Aloha Carbon, Aloha Sustainable Materials Recycling and Fertilizer Facility (Aloha SMRFF), and Aloha Fertilizer manufacturing facility under development in Campbell Industrial Park in Kapolei will divert over 500 tons per day of waste that is currently going into the state's only C&D landfill, and displace over 10,000 tons per year of imported fossil fuels and building materials. Simonpietri Enterprises serves as an industry advisory committee member of the Federal Aviation Administration's Aviation Sustainability Center of Excellence on renewable aviation fuel production and certification (www.ascent.aero). Simonpietri Enterprises' executive members have participated in the strategy, planning, design, financing, development, construction, and renovation for over \$40 million in new renewable and first-of-kind sustainable fuel projects over the past 15 years.