LATE *Testimony submitted late may not be considered by the Committee for decision making purposes.

JOSH GREEN, M.D.
GOVERNOR
KE KIA'ĀINA

EDWIN H. SNIFFEN
DIRECTOR
KA LUNA HO'OKELE

Deputy Directors
Nā Hope Luna Ho'okele
DREANALEE K. KALILI
TAMMY L. LEE
CURT T. OTAGURO
ROBIN K. SHISHIDO

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF TRANSPORTATION | KA 'OIHANA ALAKAU
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

March 27, 2025
2:00 p.m.
State Capitol, Room 430 & Videoconference
S.B. 1120 S.D. 1 H.D. 1
RELATING TO TRANSPORTATION

House Committee on Finance

The Hawaii Department of Transportation (HDOT) **supports the** intent S.B. 1120 S.D. 1 H.D. 1, that requires the HDOT to adopt rules governing a clean fuel standard for alternative fuels in the State and suggests amendments.

The HDOT supports a carefully curated and feasible program to govern a clean fuel standard for alternative fuels that reduces the carbon intensity of fuel used in the State while minimizing impacts to cost of living for our residents. If identified as the lead agency to implement the program to establish sustainable, equitable, and economically viable annual carbon intensity standards for alternative fuels, HDOT would work with the legislature to establish three to five new positions to be funded by salary savings from all four HDOT models. The HDOT also recommends an additional year and the implementation date of January 1, 2028, to adopt rules pursuant to chapter 91, Hawaii Revised Statutes, governing a clean fuel standard.

HDOT is currently developing a Greenhouse Gas (GHG) Reduction Plan to identify immediate actions to reduce GHG emissions, a roadmap for transportation in Hawaii to meet the State's net-zero GHG emissions target by 2045, and a long-term plan to reach zero emissions in the transportation sector. Although the specific strategies and benchmarks of HDOT's GHG Reduction Plan are still in development, we expect that increased clean fuels in all sectors will be a significant component of our Plan. For example, based on our initial calculations, it does not appear possible to reach the State's ambitious GHG reduction goals for the Aviation portion of the Transportation Sector without a significant increase in Sustainable Aviation Fuel use.

Thank you for the opportunity to provide testimony.

Joint Testimony of
Twelve Benefit Corporation & **Infinium Operations, LLC**
on
S.B. 1120, S.D. 1, H.D. 1
Relating to Transportation

House Committee on Finance
March 27, 2025; 2:00 P.M.

Twelve Benefit Corporation (Twelve) and Infinium Operations, LLC (Infinium) appreciate the opportunity to provide this joint testimony in support of Senate Bill 1120, S.D. 1, H.D. 1, which would direct the Department of Transportation to adopt rules governing a Clean Fuel Standard (CFS) for diesel, gasoline, and alternative fuels used in Hawaii.

Twelve and Infinium are California-based companies focused on the production of electrofuels.[1, 2] Sometimes referred to as power-to-liquid (PtL) fuels or e-fuels, electrofuels are ultra-low carbon intensity (CI), drop-in liquid fuels made from waste carbon dioxide (e.g., CO_2 captured from an ethanol fermentation plant, refinery, or cement plant), water, and renewable electricity. Compared to their conventional, petroleum-based counterparts, electrofuels – for example, Twelve's E-Jet® and Infinium's eDiesel – reduce lifecycle greenhouse gas (GHG) emissions by up to 90 percent. These innovative fuels conform to the specifications of the relevant ASTM International fuel standards, and importantly, do not present the indirect land use change impacts or feedstock constraints that other types of alternative fuel (e.g., crop-based and waste oil-based fuels) do.

Electrofuels are widely regarded as one of the most promising pathways, if not the most promising pathway, to decarbonization of the transportation sector. The *U.S. National Blueprint for Transportation Decarbonization*, a multi-agency effort released by the federal government two years ago, pointed out that electrofuels represent "a viable pathway" to sustainable, low-carbon transportation fuels,[3] while the International Energy

[1] For more on Twelve and Infinium and our respective technologies and electrofuel products, please visit our company websites at https://www.twelve.co/ and https://www.infiniumco.com/.

[2] Twelve and Infinium previously presented joint testimony in support of S.B. 1120, S.D. 1, H.D. 1 to the House Committee on Energy & Environmental Protection and in support of S.B. 1120, S.D.1 to the House Committee on Transportation, while Twelve previously presented testimony in support of S.B. 1120 to the Senate Committees on Transportation and Culture and the Arts and Agriculture and Environment.

[3] *The U.S. National Blueprint for Transportation Decarbonization: A Joint Strategy to Transform Transportation*, at 55 (Jan. 2023), available at https://www.energy.gov/sites/default/files/2023-01/the-us-

Agency (IEA) has asserted that electrofuels "made from biogenic or air-captured CO_2 can potentially provide full emissions reduction, making them the primary production pathway that is consistent with achieving net zero [aviation, marine, and on-road transport sector] emissions mid-century."[4] In its comprehensive report, the IEA emphasized that "[g]overnments need to take bolder action to stimulate demand for low-emission e-fuels."[5]

It is important to understand that, as the term implies, electrofuels are electricity intensive. For that reason, Twelve, Infinium, and others in the PtL fuels space rely on renewable sources of energy like solar, wind, and hydropower. Indeed, the deep CI reductions that electrofuels achieve result from this reliance on renewable, zero-CI electricity.

With the above background in mind, Twelve and Infinium offer the following comments on S.B. 1120, S.D. 1, H.D. 1.

First, we applaud the broad definition of "alternative fuel" in section 3(c) of the bill. In particular, we strongly support the express inclusion of fuels from carbon capture and utilization and electrofuels (as well as sustainable aviation fuel). This clear language would leave no doubt that the liquid fuels produced by our companies (and, of course, other PtL fuel producers) are encompassed within the definition and, hence, are eligible to generate credits under the CFS.

Second, notwithstanding the unmistakable legislative intent set forth in section 1 and the directives contained in section 3(a)(2) and other provisions within section 3(a), we suggest that the introductory text on lines 7-11 of page 4 be revised to read as follows (<u>underline</u> indicates additions):

> No later than January 1, 2028, the department of transportation shall adopt rules pursuant to chapter 91, Hawaii Revised Statutes, governing a clean fuel standard for <u>diesel, gasoline, and</u> alternative fuels in the State. The rules shall include:

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national-blueprint-for-transportation-decarbonization.pdf.

[4] IEA, *The Role of E-Fuels in Decarbonising Transport*, at 10, 24 (Jan. 2024), available at https://iea.blob.core.windows.net/assets/a24ed363-523f-421b-b34f-0df6a58b2e12/TheRoleofE-fuelsinDecarbonisingTransport.pdf.

[5] *Id.* at 9.

We similarly suggest on lines 15 and 17 of page 3 and also on line 1 of page 4 that "diesel, gasoline, and" be inserted immediately before "alternative fuels." Together, these revisions would eliminate any ambiguity and make it crystal clear that the CFS rules shall apply to diesel, gasoline, and alternative fuels, not just the latter.

Finally, and perhaps most importantly, we recommend that a new clause be added to section 3(b), providing as follows:

> (13) Mechanisms whereby electrofuel producers can utilize indirect accounting to lower the carbon intensity of electricity used in the fuel production process through the retirement of renewable energy certificates.

By adding this provision to the bill, the Hawaii State Legislature would be incentivizing the production and in-state use of innovative, ultra-low CI electrofuels like Twelve's E-Jet and Infinium's eDiesel. This is because the State would be affording electrofuel producers like Twelve and Infinium the flexibility to source the zero-CI electricity needed for the fuel production process through renewable energy certificates (RECs). The ability to rely on RECs associated with off-site renewable electricity in lieu of needing to have a direct, behind-the-meter connection to a renewable energy source, in turn, would enable the generation of credits under the CFS in those instances when a direct connection is simply not feasible, thus incentivizing the production and use of electrofuels throughout the State.[6] This, of course, would yield tremendous GHG reduction benefits for Hawaii and its residents.

In short, Twelve and Infinium strongly encourage the Legislature to heed the IEA's call, as referenced above, and authorize the Department of Transportation to include in the CFS rules indirect accounting mechanisms for the renewable electricity that is integral to the production of electrofuels. Doing so, it bears emphasizing, would be consistent with and make truly consequential the inclusion of electrofuels within the CFS definition of "alternative fuel."

* * *

Twelve and Infinium thank you again for the opportunity to submit this joint testimony.

[6] For a host of reasons, co-locating an electrofuel production facility with, or otherwise ensuring that it has a direct, behind-the-meter connection to, a renewable power source is often infeasible and impractical (and in the case of hydropower, difficult or physically impossible to accomplish).

March 27, 2025

TESTIMONY IN SUPPORT TO
SENATE BILL 1120 SD1 HD1
RELATING TO TRANSPORTATION

House Committee on Finance
The Honorable Kyle Yamashita, Chair
The Honorable Jenna Takenouchi, Vice Chair

Thursday, March 27, 2025, 2:00 pm
VIA VIDEOCONFERENCE
Conference Room 308
State Capitol
415 South Beretania Street

Chair Yamashita, Vice Chair Takenouchi and members of the Committee,

Island Energy Services, LLC ("IES") offers the following testimony in SUPPORT to SB 1120 SD1 HD1, which proposes the implementation of a Clean Fuel Standard (CFS) for Hawai'i. 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. IES offers the following testimony:

- CFS programs have already been adopted in Washington, Oregon, California, New Mexico and all of Canada, with many other states considering implementing CFS programs. CFS is an incentive program designed to promote the lowering of emissions in all transportation fuels. It can also be a benefit to the maritime, aviation, and drayage industries for those wanting access to sustainable aviation fuels and other renewable fuels as well as creating opportunities for individuals looking to enter the renewable sector job market.
- The CFS program's flexibility is a key factor in its potential success. By allowing producers to choose how they reduce emissions, whether using 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.
- The CFS program treats both local renewable production and renewable fuel imports equitably when considering the carbon intensity. We very much support in-state

production of biofuels, however imports will need to be part of the fuel solution to enable Hawaii to meet its long range decarbonization goals and this CFS program allows imports that to be possible.

- Hawaii should be aligning carbon regulations with the other western states and Canada (CA, OR, WA, BC) given its geographic location and market dynamics to create a level commercial playing field. Hawai'i will be in direct competition with the U.S. West Coast states and British Columbia for renewable fuels and without a carbon pricing or similar CFS program, Hawai'i will be at a distinct commercial disadvantage to attract renewable fuels.
- The CFS program is an equitable way to drive carbon intensity down across end-users. IES believes that CFS programs are a more equitable way to drive carbon intensity down rather than tax-based programs. CFS programs burdens the users of the fuel rather than unfairly burdening the taxpayers of Hawaii.

Although in favor of the bill, IES advocates the following considerations to modify the bill:

- Allow intrastate marine fuel to opt in to the program. As written, the current bill allows for exemptions for diesel, gasoline, or other fuels used by aircraft, railroad locomotives, military vehicles, and interstate waterborne vessels. IES feels that local marine traffic should be able to opt in to the program as well.

In conclusion, SB 1120 SD1 HD1 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 House Finance Committee for hearing this bill and thank you for the opportunity to testify.

Albert D.K. Chee, Jr.
Vice President
Island Energy Services, LLC

Clean Energy
Ryan.Kenny@cleanenergyfuels.com

www.cleanenergyfuels.com

Ryan Kenny
Policy Director – Western U.S.

Committee on Finance
Representative Kyle Yamashita, Chair
Representative Jenna Takenouchi, Vice Chair

March 27, 2025
2:00pm
Conference Room 308

Aloha Chair Yamashita and Vice Chair Takenouchi:

On behalf of Clean Energy, I would like to express **strong support for SB 1120** which would require the Department of Transportation to adopt rules governing a clean fuel standard for alternative fuels in the state of Hawaii.

Our company was a foundation stakeholder since a CFS was conceived in the respective California, Oregon, New Mexico 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-eight 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.

As we have seen in California, this approach will not significantly raise fuel prices. Recent analyses show that retail fossil fuel prices are strongly influenced by many factors (e.g., global events, holiday weekends, seasonal fluctuations, refinery disruptions and decisions about production that affect supply, refinery pricing decisions, seasonal fuel blends, and taxes) and fossil fuel producer pricing strategies are complex, reflecting local and regional market conditions. **As the California Air Resources Board has noted: "The reality is that the actual cost pass-through from LCFS to retail gasoline or diesel prices is uncertain, that there is no correlation between historical LCFS credit prices and gasoline prices, and that the LCFS is not a major driver of overall retail fuel prices in California."**

The CFS is a cost-effective 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 1120.**

Sincerely,

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

Testimony of the Oahu Metropolitan Planning Organization

Committee on Finance

March 27, 2025 at 2:00 PM
State Capitol CR 308 & Videoconference

SB 1120 SD 1 HD 1
Relating to Transportation

Dear Chair Yamashita, Vice Chair Takenouchi, and Committee Members,

The Oahu Metropolitan Planning Organization (OahuMPO) **supports SB 1120 SD 1 HD 1**, which would require the Department of Transportation to conduct a feasibility study on implementing a clean fuel standard for alternative fuels in the State and require no later than 1/1/2028, the Department of Transportation to adopt rules governing a clean fuel standard for alternative fuels in the State.

Similar programs in other locations, like California, have reduced their dependence on petroleum-based fuels, while also fostering the growth of renewable fuel sources for cleaner transportation options[1]. As the sector moves toward zero emissions, these efforts have contributed to clean air improvements that bring public health and climate benefits for local communities. The efforts modeled by California have since been mirrored in other states including Oregon, British Columbia, and Washington, and considered in Minnesota, New Mexico, and other parts of the Midwest[2].

This initiative aligns with Hawaii's climate goals by reducing vehicle emissions and encouraging more sustainable fuel options. SB 1120 SD 1 HD 1 is in alignment with the vision and goals of the Oahu Regional Transportation Plan (ORTP), reinforcing both state and county commitments to environmental sustainability and public health in the investments and operation of the transportation system.

The OahuMPO is the federally designated Metropolitan Planning Organization (MPO) on the island of Oahu responsible for carrying out a multimodal transportation planning process, including the development of a long-range (25-year horizon) metropolitan transportation plan, referred to as the Oahu Regional Transportation Plan (ORTP), which encourages and promotes a safe, efficient, and resilient transportation system that serves

[1]California Air Resources Board. "FAQ: Standardized Regulatory Impact Assessment for the Low Carbon Fuel Standard." California Air Resources Board, https:// https://shorturl.at/06OVh.
[2] Electrification Coalition. Clean Fuel Standards. Electrification Coalition. https://electrificationcoalition.org/resource/clean-fuel-standards/.

Oahu Metropolitan Planning Organization
707 Richards Street, Suite 200 Honolulu, Hawaii 96813
Telephone: (808) 587-2015 | Fax: (808) 587-2018
www.oahumpo.org

the mobility needs of all people and freight (including walkways, bicycles, and transit), fosters economic growth and development, while minimizing fuel consumption and air pollution (23 CFR 450.300).

OahuMPO notes the amendments and comments by the Hawaii State Energy Office and respectfully requests the Committee consider them.

Mahalo for the opportunity to provide testimony on this measure.

Oahu Metropolitan Planning Organization
707 Richards Street, Suite 200 Honolulu, Hawaii 96813
Telephone: (808) 587-2015 | Fax: (808) 587-2018
www.OahuMPO.org

House Committee on Finance
Representative Kyle T. Yamashita, Chair
Representative Jenna Takenouchi, Vice-Chair

March 27, 2025
2:00 p.m.
Conference Room 308

Thank you for the opportunity to submit testimony in strong support of SB 1120_HD1. My name is Cristina Cornejo and I am the Sr. 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. Similar CFS programs have been implemented in California, Oregon, Washington, and Canada. Most recently, New Mexico enacted a CFS in March 2024 that begins in 2026. In addition, there are currently more than 10 additional states considering CFS policies, due to their effectiveness.

SB 1120_HD1 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 California 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, such as algae from the Pacific Ocean.

Another key component of SB 1120_HD1 is that it utilizes an independent third-party, 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-wheel basis and considers the full life cycle of a fuel to determine its carbon intensity (CI) score. This ensures that all fuels are scored on an equal playing field and the winners are those fuels with the lowest possible carbon intensity score. It incentivizes cleaner fuels while letting technologies compete.

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 1120_HD1 is a significant piece of the decarbonization puzzle and we at Neste are proud to support this pivotal policy.

Cristina Cornejo, Sr. Public Affairs Manager, Neste

Phone: (361) 701-9922

Email: cristina.cornejo@neste.com

Neste Background

Neste uses science and innovative technology to transform waste and other resources into renewable fuels and circular raw materials. The company creates solutions for mitigating climate change and accelerating a shift to a circular economy. Being the world's leading producer of sustainable aviation fuel (SAF) and renewable diesel and a forerunner in developing renewable and circular feedstock solutions for polymers and chemicals, the company aims to help its customers to reduce their greenhouse gas emissions by at least 20 million tons annually by 2030.

Neste is committed to reaching carbon-neutral production by 2035 and will reduce the carbon emission intensity of sold products by 50% by 2040. Neste has also set high standards for biodiversity, human rights and the supply chain. The company has consistently been included in the CDP and the DJSI lists of the world's most sustainable companies.

SanHi
GOVERNMENT STRATEGIES
A LIMITED LIABILITY LAW PARTNERSHIP

DATE: March 26, 2025

TO: Representative Kyle Yamashita
Chair, Committee on Finance

Representative Jenna Takenouchi
Vice Chair, Committee on Finance

FROM: Mihoko Ito

RE: **S.B. 1120, SD1, HD1 - Relating to Transportation**

Hearing Date: Thursday, March 27, 2025 at 2:00 p.m.
Conference Room: 308

Dear Chair Yamashita, Vice Chair Takenouchi, and Members of the Committee on Finance:

On behalf of Amazon, we submit this testimony **supporting the intent** of S.B. 1120, SD1, HD1, and the effort to establish a Low Carbon Fuel Standard (LCFS) to create a clean fuel standard for alternative transportation fuels in Hawaii. Amazon supports a LCFS as a cost-effective strategy to accelerate the transition to lower carbon vehicles and fuels for consumers and companies.

In 2019, Amazon co-founded The Climate Pledge, a commitment to be net-zero carbon by 2040—10 years ahead of the Paris Agreement. Amazon is making bold investments to meet this goal by reducing transportation-related emissions through improved fulfillment network efficiencies and optimizing their supply chain.

Additionally, Amazon is transitioning to all-electric delivery vans by 2030 to avoid millions of metric tons of carbon per year and have installed over 12,000 EV chargers at more than 100 Amazon delivery stations across the US. Amazon is also buying more sustainable aviation fuel than any other company that moves cargo and is excited about the promise of green hydrogen.

After launching The Climate Pledge, Amazon invited other companies to join and now has more than 450 signatories across 41 countries around the world. Amazon believes the LCFS will accelerate the transition to sustainable fuels and vehicles and enable Hawai'i to serve as a national leader in transportation decarbonization.

Partnership will be required across all sectors to continue to meet the transformation required in infrastructure, products, and services. Amazon looks forward to continued collaboration to achieve shared goals to drive climate progress and economic growth.

First Hawaiian Center
999 Bishop Street, Suite 1400
Honolulu, HI 96813

T 808-539-0400
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NXTCLEAN FUELS

Decarbonizing Transportation

March 27, 2025

Senate Finance Committee
Public Comment
SB 1120, Relating to Transportation

Position: Support

NXTClean Fuels, Inc. ("NXT") will be a large-scale producer of clean transportations fuels such as Renewable Diesel ("RD") and Sustainable Aviation Fuel ("SAF"). We strongly support SB1120 and urge the Senate Finance Committee to vote in favor.

Our facility in Oregon is based at a deep-water port and will be well suited to supply Hawaii with large volume of low Carbon Intensity ("CI") fuels in support of the state's decarbonization goals while leading to economic development and without tapping into the state's budget.

Clean Fuel Programs such as proposed in SB 1120 create market mechanisms that allow clean, drop in replacement fuels such as RD and SAF to supply markets at, and sometime below, prevailing market prices while also offering major climate and health benefits, including little to no NOx and SOx pollutants and virtually no PM 2.5 particulate emissions.

In addition, and as has been seen in states such as California and Oregon, clean fuels such as Renewable Diesel offer the most straight forward path to meaningfully decarbonize heavy transport.

Thank you for your time and consideration.

Sincerely,

Christopher Efird
Chairperson and CEO
NXTClean Fuels, Inc.

Low Carbon Fuels Coalition

Senate Finance Committee

March 27, 2025

SB 1120, relating to transportation

Position: Support

The Low Carbon Fuels Coalition is a non-profit industry trade association with diverse membership of companies that produce clean fuels and clean technologies, and that provide services to the clean fuels industry. Our members include some of the leading companies and organizations that produce, provide and/or represent liquid, gaseous and electric fuels for all transportation sectors including on-road, aviation and marine, as well as large end users of these fuels.

The Coalition can attest to the effectiveness of existing similar programs in California, Oregon and Washington, and therefore, supports SB 1120 in Hawaii. Real-world data shows that these programs not only support significant economic development through private investments, but do so without driving fuel prices or tapping into state budgets.

The data shows no correlation between retail gasoline prices and credit prices in these programs. On the contrary. For one example, renewable diesel as a direct substitute for petroleum diesel has often been cheaper for consumers as a result of fuel market competition.

Due to the demonstrated success of similar programs in other states, we are in strong support of SB 1120.

March 26, 2024

Hawai'i House Finance Committee Members
415 South Beretania St.
Honolulu, HI 96813

Dear Members of the Hawai'i House Finance Committee,

EcoEngineers appreciates the opportunity to comment on SB1120 for a clean fuel standard in the state of Hawai'i. EcoEngineers is one of the nation's leading auditing, verification, and consulting firms for renewable fuel and clean energy technologies. We are accredited under the Oregon Clean Fuels Program (OR-CFP), Washington Clean Fuel Standard (WA-CFS), and the California Low Carbon Fuel Standard (CA-LCFS), in addition to the federal Renewable Fuel Standard (RFS) and the Canada Clean Fuel Regulations (CFR). We write in support of SB1120's passage.

EcoEngineers has experienced first-hand the positive benefits of clean fuel standards for our environment and communities. Implementation of clean fuel standards prompt investments, efficiency efforts, and jobs in the energy sector. Promoting the use of clean fuels also allows for the efficient utilization of energy sources that are already available, such as methane from landfills or agricultural waste biomass. Adoption of this bill would allow Hawai'i to increase its domestic energy independence and reap the benefits other states' programs have already seen.

Additionally, we would like to address potential effects on gas prices due to a clean fuel standard. It has been shown from other programs, including the CA-LCFS, that gas prices are affected minimally. Rather, fluctuations are primarily driven by global petroleum markets. As we continue to transition to cleaner fuels, prompted in part by clean fuel standards, any initial cost concerns will be further mitigated.

Finally, Hawai'i has the immense opportunity to base regulations on what has been shown to work in states like California, Oregon, and Washington. The state can use these best practices to accelerate program development while also tailoring the program to meet local needs. By doing so, Hawai'i can create a more efficient, effective, and sustainable regulatory framework that supports both environmental and economic goals.

We thank you again for the opportunity to comment on this bill and we look forward to seeing its development. Please reach out if you have any questions.

Sincerely,

Lisa Hanke
Director of Regulatory Engagement
lhanke@ecoengineers.us

Par Hawaii

COMMENTS ON SB 1120 SD1 HD1
RELATING TO TRANSPORTATION

House Committee on Finance
Representative Kyle T. Yamashita, Chair
Representative Jenna Takenouchi, Vice Chair

Thursday, March 27, 2025, 2:00 p.m.
Conference Room 308 & Videoconference

Dear Chair Yamashita, Vice Chair Takenouchi, and members of the Committee,

Thank you for the opportunity to submit testimony offering **comments** on SB 1120 SD1 HD1, Relating to Transportation. My name is Eric Wright and I serve as President of Par Hawaii. Par Hawaii is the largest local supplier of fuels, including various grades of utility fuels, as well as diesel, jet fuel, gasoline and propane.

SB 1120 SD1 HD1 would require the Department of Transportation to adopt rules governing a clean fuel standard fuel 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 1120 SD1 HD1:

- **Section 2 requires the completion of a feasibility study of clean fuel standards (CFS). Implementing and administering a clean fuel standard 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. We strongly support the idea of a study that considers fuel price impacts of a clean fuel standard, and potential impacts to fuel supply, among other factors.**

- 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-1120-HD-1
Submitted on: 3/26/2025 11:38:58 AM
Testimony for FIN on 3/27/2025 2:00:00 PM

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

Comments:

The Biotechnology Innovation Organization (BIO) is the world's largest trade association representing biotechnology companies, academic institutions, state biotechnology centers and related organizations across the United States and in more than 30 other nations. Our key areas of focus are health biotechnology, industrial and environmental biotechnology, and food and agriculture biotechnology. We are in strong support of SB 1120.

845 15th ST, SUITE 103 #49216, SAN DIEGO, CA 92101
619.255.9361 WWW.OBERONFUELS.COM

March 27, 2025

Dear House Finance Committee,

I am writing on behalf of Oberon Fuels to express our support for SB 1120 in Hawaii. Oberon Fuels (Oberon) is an innovative company that has focused for over ten years on dimethyl ether (DME) transportation fuel made from renewable biomass feedstock.

Oberon Fuels supports Clean Fuel Standard (CFS) programs because they can enable the regions where the feedstock is located to benefit from the emissions reductions of local renewable fuel consumption as well as the creation of local, family-wage, clean energy jobs.

A clean fuel standard for alternative fuels in the State will provide the framework needed to support the State's renewable energy goals. Wide reaching impacts of a clean transportation fuel standard include economic growth and environmental improvement.

Retail gasoline price data from the mainland U.S. West Coast has shown no correlation between retail gasoline prices and credit prices in clean fuel programs. Retail gasoline prices in neighboring states without CFS programs have moved in the same direction and at the same time as prices in states with CFS programs, indicating that like in other parts of the U.S. retail gasoline prices are primarily influenced by petroleum prices.

In contrast, renewable diesel often sells at a discount compared to petroleum diesel due to competition in the fuel market.

We support the passage of SB 1120 and encourage House Finance Committee members to vote in favor. We look forward to continuing to work with the state of Hawaii and its local entities to evaluate the opportunity to reduce emissions, create low-carbon or carbon-negative fuels, and create good-paying jobs.

Sincerely,

Cristin Reno
Manager, Regulatory Affairs
Oberon Fuels

HOUSE COMMITTEE ON FINANCE
March 27, 2025, 2:00 P.M.
Conference Room 308 and videoconference

TESTIMONY IN SUPPORT OF SB 1120 SD1 HD1

Aloha Chair Yamashita, Vice Chair Takenouchi, and Members of the Finance Committee,

Blue Planet Foundation strongly supports SB 1120 SD1 HD1, with amendments, which requires the Department of Transportation to adopt rules for a Clean Fuel Standard (CFS) that will reduce the carbon intensity of Hawai'i's transportation fuels and help our state meet its climate and clean energy goals.

While Hawai'i has made solid progress on its renewable electricity targets, transportation carbon emissions remain stubbornly flat. Transportation is the state's largest source of lifecycle greenhouse gas emissions. A Clean Fuel Standard is an effective, market-based policy to reduce emissions in this sector—while also improving air quality, supporting local economies, and accelerating the transition to a healthier and more resilient Hawai'i.

To ensure that Hawaii's CFS delivers the maximum benefit to our communities and our climate, however, we respectfully offer the following amendments to strengthen and align this policy with our state's net-negative emissions target and our values of equity, resilience, and innovation.

RECOMMENDED AMENDMENTS TO STRENGTHEN SB 1120

1. **More Ambitious Carbon Intensity Targets**
   Increase the carbon intensity reduction goal to at least 30% below 2019 levels by 2035, and 90% below by 2045 to better align with Hawaii's net-negative emissions goals. These goals would be similar to those set by California's Low Carbon Fuel Standard.

2. **Add Interim Benchmarks & Accountability Mechanisms**
   Require a biennial review and progress report to ensure the program remains on track. Include authority to tighten standards if reductions lag behind schedule.

3. **Add Explicit Alignment with Net-Negative Goal**
   Clarify that the CFS is a tool to help Hawai'i become carbon-negative by 2045.

4. **Equity and Environmental Justice Provisions**

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Include requirements for meaningful consultation with impacted communities and allocate a portion of program revenues or credits to support low-income households, rural communities, Native Hawaiian communities, and those most burdened by pollution.

5. **Incentivize Community Benefit Projects**
   Establish a mechanism to direct a share of program-generated credit revenues into a Community Clean Transportation Fund to support access to EVs, charging infrastructure, public transit electrification, and local workforce development.

6. **Lifecycle Emissions Transparency**
   Supplement GREET model assessments with Hawaii-specific lifecycle data and review methodologies every three years to ensure comprehensive emissions accounting, including land use change, upstream methane leakage, and Scope 3 emissions.

7. **Promote Local, Circular Economy Solutions**
   Add bonus credit multipliers for alternative fuels produced and consumed in Hawai‘i, and for fuels derived from waste or invasive species that otherwise have no beneficial use.

8. **Electrofuel & Carbon Removal Integration**
   Codify eligibility for carbon-negative fuels (e.g., electrofuels from direct air capture and renewable electricity) and integrate carbon sequestration projects, such as biochar or regenerative agriculture, into the credit system.

9. **Opt-in Provisions for Maritime and Aviation Fuels**
   Encourage decarbonization in aviation and marine sectors through optional participation pathways, especially for interisland and intrastate operators.

10. **Prioritize Non-Combustion Solutions**
    Ensure the CFS does not over-incentivize combustion-based fuels at the expense of truly zero-emission pathways, such as electrification and hydrogen.

WHY THIS MATTERS NOW

Hawai‘i needs new tools to rapidly decarbonize its transportation sector. Programs like California’s Low Carbon Fuel Standard have catalyzed billions in clean infrastructure and fuel investments while avoiding significant price impacts at the pump. But we also must learn from other states' experiences and ensure that Hawai‘i’s CFS does not inadvertently lock in burnable biofuels or extractive feedstocks that harm communities or ecosystems. We must prioritize electrification, circular economy solutions, and deep decarbonization pathways—especially those that align with community priorities and support local resilience.

Blue Planet Foundation urges this Committee to pass SB 1120 with the amendments outlined above to ensure that Hawaii’s Clean Fuel Standard is not just effective—but equitable, future-ready, and climate-aligned.

Thank you for the opportunity to provide testimony.

Testimony of
ALASKA AIRLINES and HAWAIIAN AIRLINES

Before the House Committee on
FINANCE

Thursday, March 27, 2025
2:00 P.M.
Hawai‘i State Capitol, Room 308

In consideration of
SENATE BILL 1120 SD1 HD1
RELATING TO TRANSPORTATION

The Honorable Kyle Yamashita, Chair
The Honorable Jenna Takenouchi Vice Chair
Members of the Committee on Finance

Re: **Comments on Senate Bill 1120 SD1, Relating To Transportation**

Aloha Chair Yamashita, Vice Chair Takenouchi and members of the Committee on Finance,

Alaska Airlines and Hawaiian Airlines appreciate the opportunity to submit comments on Senate Bill 1120 SD1 HD1 (SB1120), which proposes the establishment of a Clean Fuel Standard (LCFS) in Hawai‘i. As the largest airlines serving the state, we are deeply committed to supporting efforts that reduce greenhouse gas emissions and contribute to a more sustainable future for Hawai‘i’s transportation sector.

Support for Sustainable Aviation Fuel (SAF) Inclusion

While federal law preempts state and local regulation of aviation fuel, we fully support the voluntary inclusion of sustainable aviation fuel (SAF) in a Hawai‘i clean fuels program. Allowing fuel producers and/or distributors to opt into the program and generate credits for SAF sold in Hawai‘i would create incentives for increased production and usage of SAF without overstepping federal jurisdiction. By promoting the voluntary production and use of SAF, the state would not only advance its decarbonization goals but also support our industry’s commitment to achieving net-zero carbon emissions.

Considerations for Implementing a Clean Fuel Standard in Hawai‘i

We recognize that implementing and administering a LCFS is a significant undertaking. To ensure a successful and effective program, it is crucial that the state engage a broad range of stakeholders—including airlines, fuel producers, fuel distributors, utilities, and transportation sector representatives—to avoid unintended consequences.
Hawai‘i’s energy landscape is unique compared to mainland states that have implemented clean fuel programs. Given the state’s heavy reliance on aviation fuel and liquid fuels for power generation, a Hawai‘i LCFS must take these distinct factors into account.

Additionally, Hawai‘i’s small market means there would be only a limited number of obligated parties under the clean fuels program, potentially creating challenging market dynamics.

Support for a Feasibility Study on Clean Fuel Standards

As part of the state’s broader clean energy transition, we support the requirement to conduct a feasibility study on implementing clean fuel standards for alternative fuels. A comprehensive study would provide critical insights into the potential benefits, challenges, and economic impacts of a LCFS in Hawai‘i.

This study should assess the viability of integrating SAF and other renewable fuels into the program, analyze the implications for fuel availability and cost, and ensure that policy decisions are informed by data-driven analysis. By taking this step, the state can develop a well-informed, practical approach to clean fuel implementation that aligns with Hawai‘i’s unique energy landscape.

Cost Considerations and Need for Additional Incentives

The cost of producing renewable transportation fuels is significantly higher than that of traditional fossil fuels. While federal programs help to bridge some of the cost gap, state-level incentives are necessary to make renewable fuels more competitive.

We strongly encourage pairing the LCFS with an expansion of the Hawai‘i Renewable Fuels Production Tax Credit (HRS 235-110.32) to ensure that local renewable fuel production is supported and incentivized. This is particularly important because clean fuel credit markets often take years to develop before they become an effective long-term incentive for renewable fuels.

Additionally, consumers will bear the costs of a clean fuels program. It is essential that the state estimate the financial impact on Hawai‘i’s drivers, particularly low-income families who rely on older, less fuel-efficient vehicles and may not have the means to transition to electric vehicles. Without proper mitigation measures, these households could disproportionately bear the costs of a LCFS.

Conclusion

Alaska Airlines and Hawaiian Airlines remain committed to supporting Hawai‘i’s decarbonization efforts and recognize the potential benefits of a well-structured clean fuels program. However, we urge the legislature to ensure that the program:

- **Incorporates voluntary incentives for SAF** to promote sustainable aviation without conflicting with federal law.
- **Considers Hawai‘i’s unique energy needs and market size** to prevent unintended economic and operational challenges.
- **Pairs the LCFS with expanded state-level tax incentives** to accelerate the production and affordability of renewable fuels.
- **Assesses the financial impacts on consumers,** particularly lower-income families who may face increased fuel costs.
- **Conducts a feasibility study** to analyze the implementation of clean fuel standards for alternative fuels and ensure informed policy decisions.

We appreciate the opportunity to provide these comments and look forward to continued discussions on how we can collectively advance clean energy goals while ensuring a balanced and feasible approach for all stakeholders.

Mahalo for your consideration.

HOUSE COMMITTEE ON FINANCE

MARCH 27, 2025

SB 1120, SD1, HD1, RELATING TO TRANSPORTATION

POSITION: COMMENTS

Coalition Earth **provides the following comments** on SB 1120, SD1, HD1, relating to transportation, which requires the Department of Transportation to conduct a feasibility study on implementing a clean fuel standard for alternative fuels in the State and requires, no later than 1/1/2028, the Department of Transportation to adopt rules governing a clean fuel standard for alternative fuels in the state.

According to a report produced by the Hawai'i Climate Change Mitigation and Adaptation Commission, global sea levels could rise more than three feet by 2100, with more recent projections showing this occurring as early as 2060. In turn, over the next 30 to 70 years, approximately 6,500 structures and 19,800 people statewide will be exposed to chronic flooding. Additionally, an estimated $19 billion in economic loss would result from chronic flooding of land and structures located in exposure areas. Finally, approximately 38 miles of coastal roads and 550 cultural sites would be chronically flooded, on top of the 13 miles of beaches that have already been lost on Kaua'i, O'ahu, and Maui to erosion fronting shoreline armoring.

As we work to reduce carbon emissions and stave off the worst consequences of climate change, we must begin preparing for the adverse impact of sea level rise on our shores. We are now quantifying the speed at which we must act. We cannot continue to develop the 25,800-acre statewide sea level rise exposure area–one-third of which is designated for urban use–without risking massive structural damage and, potentially, great loss of life.

Just two years ago, we witnessed the impact of the climate emergency on our shores. On August 8, 2023, wildfires swept across Maui and killed at least 100 people, making it one of the nation's deadliest natural disasters. The spread of the fires has been attributed to climate change conditions, such as unusually dry landscapes and the confluence of a strong high-pressure system

to the north and Hurricane Dora to the south. The wildfires destroyed over 2,200 structures, including numerous residential buildings, historic landmarks, and school facilities. In September 2023, a report from the United States Department of Commerce estimated the total economic damage of the wildfires to be roughly $5.5 billion. Investing in renewable energy generation could not be more urgent, given the growing threat of climate catastrophes to our island home.

Therefore, **our state should take steps to accelerate our transition to a clean energy economy and continue our fight against climate change, including by hastening our transition to a clean transportation network.** Transportation is our state's largest source of lifecycle greenhouse gas emissions, a fact that is exacerbated by our economic reliance on visitor-related travel. Development of a clean fuel standard is intended to reduce the state's direct and indirect greenhouse gas emissions, while also protecting Hawai'i's financial security, public health, and natural resources.

As our nation expands its use of zero-emission vehicles, other states like California, Oregon, and Washington have implemented clean fuel standards and aligned programs that seek to reduce the carbon footprint of their transportation fuels. California's Low Carbon Fuel Standard (LCFS) is designed to decrease the carbon intensity of the state's transportation fuel pool and support a range of low-carbon and renewable alternatives to reduce petroleum dependency, achieve air quality benefits, and amplify energy resilience.

According to the Kleinman Center for Energy Policy, California's Low Carbon Fuel Standard is a prominent part of the state's climate mitigation strategy. The LCFS requires the carbon intensity of transportation fuels sold in California to decline every year. To comply, bulk fuel sellers must either reduce emissions within their own supply chains or procure credits from companies that sell lower-carbon fuels, all based on life cycle carbon intensity calculations overseen by the state climate regulator.

Notably, however, the value of LCFS credits issued since 2013 in California equates to approximately $22.1 billion, about 80 percent of which has gone to combustion-based biofuel producers. While the primary justification for supporting biofuels in the LCFS is that the state expects a prolonged process of replacing combustion-powered vehicles with clean transportation models (especially when it comes to heavy duty vehicles), that transition needs investment in fast-charging infrastructure and vehicle rebates. **Therefore, the LCFS runs the risk of undermining California's clean transportation transition goals by funneling capital toward replacing fossil diesel with biofuels, rather than toward funding electrification.**

Additionally, the fastest-growing category of biofuels credited under California's LCFS, renewable diesel, is primarily made from food crops like soybean and canola oil. Crop-based biofuels compete with food production and increase land-use impacts, including deforestation, that may not be accurately captured by the LCFS program's carbon intensity scores. The Kleinman Center and other energy experts have noted that California's LCFS is "likely leading to 'resource shuffling' of renewable diesel made to comply with national production mandates. **To the extent that those fuels reduce pollution relative to fossil alternatives, they would do so with or**

without the LCFS." Finally, there are growing technical and environmental justice concerns about biomethane projects credited under the LCFS that claim to avoid methane emissions from dairies, landfills, and other sources**. Notably, biomethane projects earn LCFS credits even when they don't deliver fuel to California**, a policy that further destabilizes the in-state carbon reduction implications of the program and that could be even more problematic if applied in Hawai'i.

To ensure that our local carbon reduction targets are achieved on a timescale that aligns with our clean economy goals, we should establish clean transportation strategies that strengthen community resilience and sustainability, spur green growth and development, maximize the potential of emerging clean energy technologies, follow the regenerative principles of a circular economy, and bolster our carbon reduction efforts. Any clean fuel standard adopted by our state must embrace those core values.

Coalition Earth is a nongovernmental organization that works to preserve the well-being of people and our planet. We champion policies that advance climate resilience, clean energy, public health, and economic fairness for working families. ***Contact us at info@coalitionearth.org.***

House Committee on Energy & Environmental Protection

Representative Lowen, Chair

Representative Perruso, Vice Chair

March 18, 2025

9:20 AM

Committee Room 325

Thank you for the opportunity to submit testimony in strong support of SB1120. We are writing from the Pump Cleaner Fuels HI Coalition, a diverse group of business and community stakeholders in Hawaii, aimed at expanding access to renewable and low carbon fuels in the state.

The Clean Fuel Standard is critical, proven policy that support the decarbonization effort of the transportation system. It currently is in place throughout all of Canada, Washington State, Oregon, and California. Recently, New Mexico passed similar legislation which will be implemented in 2026. This policy has been essential scaffolding for a successful decarbonization effort in light, medium, and heavy duty, difficult-to-decarbonize sectors. It is responsible for the reduction of just shy of 200MMT CO2e from the transportation sector and over $1 billion into transportation electrification.

This program opens a market for renewables including electricity, hydrogen, renewable diesel, sustainable aviation fuel, critical fuels, and supports further innovation. Opening this market in Hawaii not only allows for decarbonization of difficult-to-abate sectors like aviation but also unlocks connection for renewable fuels between Asia and the West Cost of the United States. Due to the technology neutral aspect of the program, it allows for consumers and users to choose the best option rather than facing strict mandates.

The Clean Fuel Standard is not only credited with reduction in harmful pollutants, but health savings estimated to reach $80M/year and between $1.8 and $3.8 billion in Oregon and Washington State, respectively. Further, California estimates over 550MMT CO2e reduction in greenhouse gas emissions through 2046 as well as 4,281 tons of PM2.5 and 25,586 tons of NOx reduction compared to baseline.

Utilizing the science-based, third party, technology neutral GREET model developed by the Argonne National Lab ensures effective lifecycle decarbonization. The Clean Fuel Standard is the number one environmental policy credited with directly reducing fossil fuel usage in the transportation sector and our coalition urges strong support for this policy.

Liat Carlyle, Clean Fuel HI Coalition

Phone: (206) 979 1501

Email: liat@earthfinance.com

Clean Fuel HI Background
Clean Fuel HI is invested in reducing greenhouse gas emissions from Hawaii's highest-emitting sector: Transportation. The coalition represents a diverse group of stakeholders in Hawaii including renewable fuel producers and distributors, electric vehicle charging companies, nonprofit organizations, social justice advocates, automakers, aviation, businesses, trade associations, labor unions and renewable energy companies advocating for a just transition away from fossil fuels while ensuring economic prosperity for all.

SB-1120-HD-1
Submitted on: 3/26/2025 9:30:01 PM
Testimony for FIN on 3/27/2025 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Alika Valdez	Individual	Support	Written Testimony Only

Comments:

I support this bill for me and my community.