



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

March 11, 2025
9:00 a.m.
State Capitol, Room 430 Videoconference
S.B. 1120 S.D. 1
RELATING TO TRANSPORTATION

House Committee on Transportation

The Hawaii Department of Transportation (HDOT) **supports the intent of S.B. 1120 S.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 establish three to five new positions to be funded by salary savings. 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.



Testimony of the Oahu Metropolitan Planning Organization

Committee on Transportation

03/11/2025 9:00 AM
CR 430 & Videoconference

SB1120 SD1 RELATING TO TRANSPORTATION

Dear Chair Kila, Vice Chair Grandinetti, and Committee Members,

The Oahu Metropolitan Planning Organization (OahuMPO) **supports Measure SB1120 SD1**, which will require the Department of Transportation to adopt rules governing a clean fuel standard for alternative fuels in the State. This approach would not only promote cleaner air and improve public health, but it would also offer economic opportunities by stimulating the development of clean fuel technologies and job creation.

Similar programs in other cities, like California, have reduced their dependence on petroleum-based fuels, while also fostering the growth of renewable fuel sources for cleaner transportation options¹. 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 locations, such as Oregon, British Columbia, and Washington, and considered in Minnesota, New Mexico, and other parts of the Midwest².

This initiative aligns with Hawaii's climate goals by reducing vehicle emissions and encouraging more sustainable fuel options. SB1120 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 management 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 the mobility needs

¹California Air Resources Board. "FAQ: Standardized Regulatory Impact Assessment for the Low Carbon Fuel Standard." California Air Resources Board, <https://shorturl.at/06OVh>.

² Electrification Coalition. Clean Fuel Standards. Electrification Coalition. <https://electrificationcoalition.org/resource/clean-fuel-standards/>.

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](#)).

Mahalo for the opportunity to provide testimony on this measure.



House Committee on Transportation
Representative Darius Kila, Chair
Representative Tina Grandinetti, Vice-Chair

March 11, 2025
9:00 a.m.
Conference Room 430

Thank you for the opportunity to submit testimony in strong support of SB 1120_SD1. 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_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 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_SD1 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_SD1 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.

SB-1120-SD-1

Submitted on: 3/10/2025 5:50:18 AM

Testimony for TRN on 3/11/2025 9:00:00 AM

| 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 support SB 1120.

This bill is an important piece of renewable energy legislation that can help diversify Hawai'i's economy, protect the environment, combat climate change, and strengthen Hawai'i's position as a leader in a national transition to clean fuels. We respectfully request your support of SB 1120. Mahalo for the opportunity to testify.

March 10, 2025

Honorable Darius Kila
Chair
House Committee on Transportation
Hawai'i State Capitol
415 South Beretania St.
Honolulu, HI 96813

RE: Senate Bill 1120

Chairman Kila:

We appreciate the opportunity to provide comments on Senate Bill 1120, which will establish a clean transportation fuel standard for the state of Hawai'i. Growth Energy is the world's largest association of biofuel producers, representing 97 U.S. plants that each year produce 9.5 billion gallons of renewable fuel; 127 businesses associated with the production process; and tens of thousands of biofuel supporters around the country. Together, we are working to bring better and more affordable choices at the fuel pump to consumers, improve air quality, and protect the environment for future generations. We remain committed to helping our country diversify our energy portfolio, grow more green energy jobs, decarbonize our nation's energy mix, sustain family farms, and drive down the costs of transportation fuels for consumers.

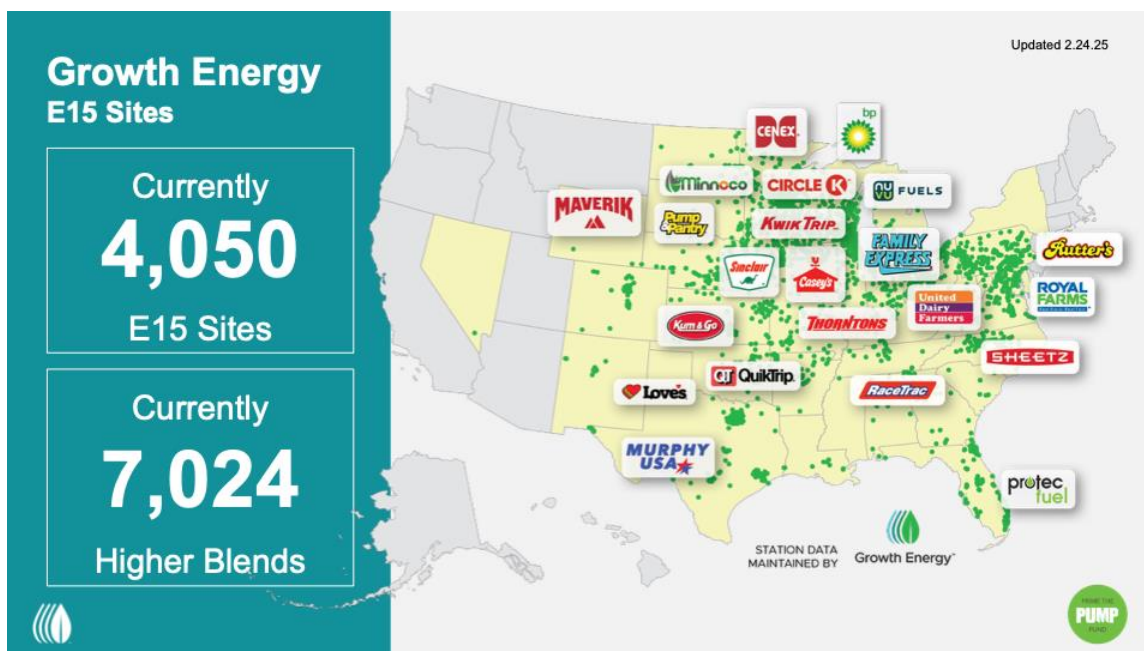
Growth Energy strongly advocates for the role low carbon biofuels and higher biofuel blends can play in Hawai'i's efforts to reduce the carbon intensity of transportation fuels. We urge members of the House Committee on Transportation to consider the ability of bioethanol to help Hawai'i fuel standard's goal of reducing greenhouse gas (GHG) emissions. A primary solution for decarbonizing the liquid transportation fuel supply is the promotion of the additional use of bioethanol.

Today, nearly all gasoline in Hawai'i— and across the United States — is blended with 10 percent ethanol. E15, a blend consisting of 15 percent bioethanol, has been approved for use by the U.S. Environmental Protection Agency (EPA) in all passenger vehicles model year 2001 and newer, more than 96 percent of the vehicles on the road today, and is now for sale at more than 3,700 locations in 33 states.

According to recent data from Environmental Health and Engineering, today's bioethanol reduces GHG by nearly 50 percent compared to gasoline and can provide even further GHG

reductions with additional readily available technologies.¹ Ethanol has a proven history of contributing to GHG reductions in an existing low carbon fuel standard (LCFS): according to the Transportation Energy Institute, ethanol is responsible for 31% of GHG reductions in California's LCFS, the largest percentage among fuel sources.²

The potential for fuels with higher blends of ethanol to reduce GHGs are further illustrated in a national analysis showing more than 62,000 tons in GHG reduction in Hawai'i alone if E10 gasoline was replaced with E15.³ This is the GHG reduction equivalent of removing 13,600 vehicles from the state's private vehicle fleet just by using a higher ethanol-blend fuel, without impacting a single Hawai'i driver. These emissions reductions come with meaningful consumer cost-savings. During the summer of 2023, E15 was sold at 15 cents less per gallon where available on average nationwide. In some locations, we saw E15 selling consistently for as much as 60 cents less per gallon than E10.



Bioethanol's other environmental benefits are also noteworthy. As has been researched by the University of California, Riverside and the University of Illinois at Chicago, the use of more bioethanol and bioethanol-blended fuel reduces harmful particulates and air toxics such as carbon monoxide, and benzene.⁴

¹ <https://iopscience.iop.org/article/10.1088/1748-9326/abde08/pdf>

² https://www.transportationenergy.org/wp-content/uploads/2023/07/Decarbonizing-Combustion-Vehicles_FINAL.pdf

³ <http://www.airimprovement.com/reports/national-e15-analysis-final.pdf>

⁴ University of California Riverside: [Comparison of Exhaust Emissions Between E10 CaRFG and Splash Blended E15](#)


Regarding SB 1120, we applaud the inclusion of provisions requiring the use of the Greenhouse gases, Regulated Emissions, and Energy use in Technologies (GREET) model developed by the U.S. Department of Energy's Argonne National Laboratory. GREET is the most accurate tool to examine the life-cycle greenhouse gas emissions of all fuels and considers a wide range of carbon reduction processes and technologies that bioethanol production can utilize. It is the gold standard for measuring the emissions-reducing power of farm-based feedstocks and biofuels and incorporates up-to-date science that more accurately scores lifecycle carbon intensity (CI) for corn bioethanol and other renewable fuels.

Additionally, we applaud the bill's commitment to technology neutrality within the standard. The ability for all fuels to compete without a program improperly favoring one technology over another is critical to meaningful GHG reductions. Along with technology neutrality must come the ability of biofuels to utilize the wide range of on-farm and biorefinery practices that can drive the carbon intensity (CI) for bioethanol to zero and eventually achieve a net-negative CI score. A recent study by the Energy Futures Initiative (EFI) demonstrated the incredible decarbonization potential of bioethanol.⁵

EFI's study analyzed the lifecycle carbon emissions of corn bioethanol and the opportunities at every stage of its production, including corn production. EFI's research showed that "ready to adopt and relatively low-cost measures" currently available will allow bioethanol to "reach net-zero emissions by midcentury." The range of decarbonization measures and their adoptability and CI reduction potential are below.

On-Farm Decarbonization Measures

| | | CI Reduction Potential | Cost | Feasibility | |
|---|---------------------------------|------------------------|---|---------------------|------------------------|
| | | | | Widespread Adoption | Readiness for Adoption |
| | Corn Yield Improvement | .7% | < zero | High | Near Term |
| Climate Smart Ag Practices | No-Till Farming | 6% | < zero | High | Near Term |
| | 4R Nitrogen Management | 4% | < zero | High | Near Term |
| | Enhanced Efficiency Fertilizers | 4% | < zero | Medium | Near Term |
| | Cover Crops | 45% | \$24 to \$64/tCO ₂ | Medium | Near Term |
| Use Low-Carbon Fertilizers | Blue Ammonia-Based Fertilizers | 10% | \$29 (with 45Q) to \$100/tCO ₂ | Medium | Mid Term |
| | Green Ammonia-Based Fertilizers | 10% | \$0 (with 45Z) to \$526/tCO ₂ | Medium | Mid Term |
| Use Renewable Diesel in Farm Machinery | | <4% | \$127 to 139/tCO ₂ | Medium | Near Term |
| Use Renewable Diesel for Corn Transport | | <2% | \$127 to 139/tCO ₂ | Medium | Near Term |

 Growth Energy™

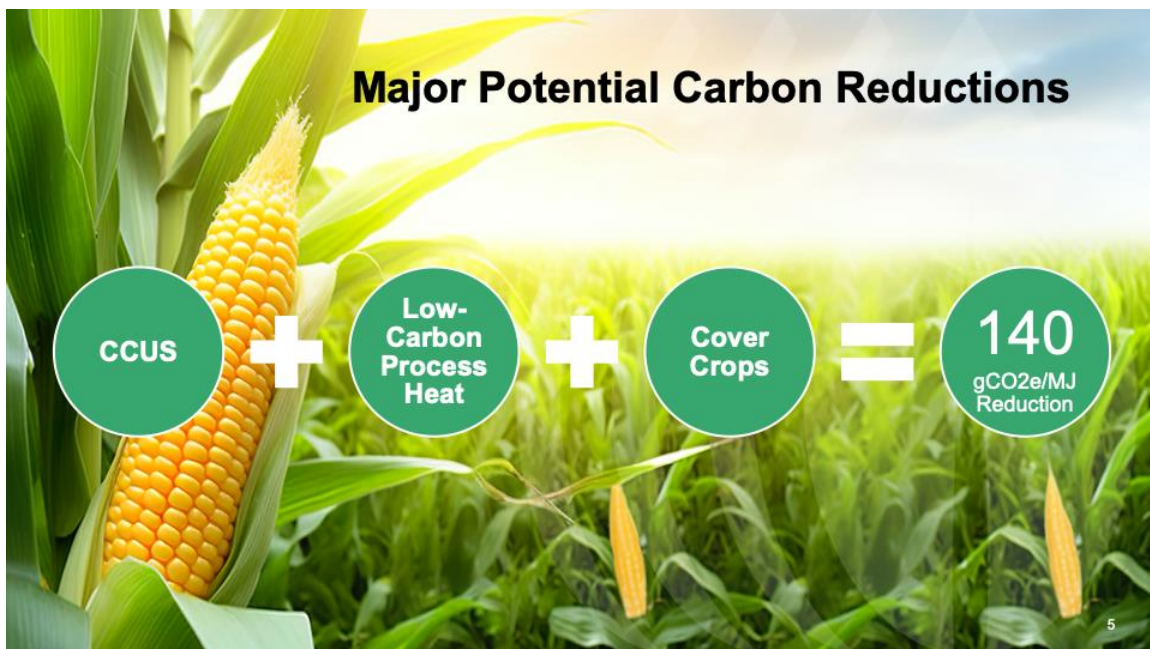
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⁵ <https://efifoundation.org/foundation-reports/a-strategic-roadmap-for-decarbonizing-ethanol-in-the-united-states/>

Biorefinery Decarbonization Measures

| | | | Feasibility | | |
|--|----------------------------|------------------------|--|---------------------|------------------------|
| | | CI Reduction Potential | Cost | Widespread Adoption | Readiness for Adoption |
| Ethanol Yield Improvement | | 6% | < zero | High | Near Term |
| Fermentation CCUS | | 57% | -\$48 (with 45Q) to \$37/ton CO ₂ | High | Near Term |
| Carbon-Free Electricity Use | | 6% | -\$49 (PPAs) to \$180/ton CO ₂ (RECs) | High | Near Term |
| Use Low-Carbon Fertilizers | Fuel Switching to Hydrogen | 37% | \$124 (with 45V) to \$412/ton CO ₂ | Medium | Long Term |
| | Fuel Switching to RNG | 32-160% | \$76 to \$220/tCO ₂ | Medium | Mid Term |
| | Biomass CHP | 37% | < zero | Medium | Mid Term |
| | Hydrogen CHP | 37% | \$71 (with 45V) to \$376/tCO ₂ | Medium | Long Term |
| | RNG CHP | 32-160% | \$57 to 201/tCO ₂ | Medium | Mid Term |
| CCUS - Thermal Energy Generation | | 37% | \$21 (with 45Q) to 106/tCO ₂ | Medium | Mid Term |
| Renewable Diesel Use in Ethanol Delivery | | <2% | \$127 to 139/tCO ₂ | Medium | Near Term |

Among these measures are carbon capture, utilization and storage (CCUS), replacing process heat at the biorefinery with low-carbon process fuels, and planting cover crops on corn farms. EFI's data indicates that these three practices alone can account for up to 140gCO₂e/MJ reduction in CI for corn bioethanol. With the average CI for bioethanol being 53.6gCO₂e/MJ, implementation of those three practices could result in a CI score of -86.4gCO₂e/MJ.



The consideration of biofuels, particularly bioethanol, is a crucial component to a clean fuel standard, one which can have an immediate impact on carbon emissions reductions as future decarbonization technologies are developed. We hope the committee recognizes the role bioethanol can play in reducing GHGs, providing a more cost-effective option for consumers, and help Hawai'i meet its ambitious decarbonization goals. Thank you and we look forward to any questions you may have.

Sincerely

A handwritten signature in blue ink, appearing to read "Christopher D. Bliley". The signature is fluid and cursive, with the first name "Christopher" written in a larger, more prominent script than the last name "Bliley".

Chris Bliley
Senior Vice President of Regulatory Affairs
Growth Energy



March 11, 2025

TESTIMONY PROVIDING COMMENTS TO SB 1120 SD1

RELATING TO TRANSPORTATION

House Committee on Transportation
The Honorable Darius K. Kila, Chair
The Honorable Tina Nakada Grandinetti, Vice Chair

Tuesday, March 11, 2025, 9:00 a.m.
Conference Room 430 & Videoconference

Chair Kila, Vice Chair Grandinetti, and members of the Committee,

Thank you for this opportunity to submit written testimony offering comments on SB 1120 SD1, Relating to Transportation. 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 1120 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 1120 SD1:

- Implementing and administering a clean fuel standard (CFS) is a significant undertaking. It is important that a broad range of stakeholders are heard from and consulted to avoid unintended consequences of this legislation.
- Hawaii's energy landscape is significantly different than that of mainland states. We have much higher demands for aviation fuel and liquid fuels for power generation. It is important that a Hawaii CFS take into account the unique needs of our state.

- The cost to produce renewable fuels for transportation is well above that of fossil fuels. While there are Federal programs in place to partially bridge the gap, state level incentives are also required to make renewable fuels competitive with fossil fuels. We believe that a clean fuel standard should be paired with an expansion of the Hawaii renewable fuels production tax credit (HRS 235-110.32). This is particularly important because it can take years for the CFS credit market to develop to the point where it serves as an effective long-term incentive for renewable fuels.

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

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

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



I N F I N I U M™

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

House Committee on Transportation
March 11, 2025; 9:00 A.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, 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., CO₂ 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 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 CO₂ 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 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.

First, we applaud the broad definition of “alternative fuel” in section 2(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 2(a)(2) and other provisions within section 2(a), we suggest that the introductory text on lines 15-18 of page 3 be revised to read as follows (underline indicates additions):

The department of transportation shall adopt rules pursuant to chapter 91, Hawaii Revised Statutes, governing a clean fuel standard for diesel, gasoline, and alternative fuels in the State. The rules shall include:

[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 in line 14 that “diesel, gasoline, and” be inserted immediately before “alternative fuels in the State.” 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 2(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 having 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).



SanHi

GOVERNMENT STRATEGIES

A LIMITED LIABILITY LAW PARTNERSHIP

DATE: March 10, 2025

TO: Representative Darius Kila
Chair, Committee on Transportation

Representative Tina Grandinetti
Vice Chair, Committee on Transportation

FROM: Mihoko Ito

RE: **S.B. 1120, SD1 - Relating to Transportation**
Hearing Date: Tuesday, March 11, 2025 at 9:00 a.m.
Conference Room: 430

Dear Chair Kila, Vice Chair Grandinetti, and Members of the Committee on Transportation:

On behalf of Amazon, we submit this testimony **supporting the intent** of S.B. 1120, SD1, 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.



**Hawaiian
Electric**

TESTIMONY BEFORE THE HOUSE COMMITTEE ON TRANSPORTATION

SB 1120, SD1 Relating to Transportation

Tuesday, March 11, 2025
9:00 AM
State Capitol, Conference Room 430

Nicholas O. Paslay
Director, Power Supply Fuels Division
Hawaiian Electric

Aloha Chair Kila, Vice Chair Grandinetti, and Members of the Committee,

My name is Nicholas O. Paslay and I am testifying on behalf of Hawaiian Electric with **comments and offering amendments** to SB 1120, SD1, Relating to Transportation.

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

- On page 5 lines 12-14 (see underscored and ~~strikethrough~~ for amendments) Exemptions for diesel, gasoline, or other fuels used by aircraft, railroad locomotives, military vehicles, power generation and interstate waterborne vessels;
- On page 6 lines 15-19 (see underscored and ~~strikethrough~~ for amendments)

Mechanisms whereby alternative fuel can opt in to the clean fuel program to generate credits when it displaces the combustion of gasoline or diesel in off-road, heating, cooling, and ~~temporary~~ power generation;

- On page 8 lines 10-15 (see underscored and strikethrough for amendments) "Alternative fuel" means any fuel that is not gasoline or diesel and is used for transportation or power generation purposes, including but not limited to ethanol, biomass-based diesel, renewable diesel, sustainable aviation fuel, electricity, biomethane, biogasoline, renewable natural gas, fuels from carbon capture and utilization, electrofuels, and hydrogen.

Accordingly, Hawaiian Electric request that the Committee consider adopting the above amendments. Thank you for this opportunity to submit testimony.



HOUSE COMMITTEE ON TRANSPORTATION

MARCH 11, 2025

SB 1120, SD1, RELATING TO TRANSPORTATION

POSITION: SUPPORT

Coalition Earth **supports** SB 1120, SD1, relating to transportation, which requires 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 central to reducing 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 reduce the carbon footprint of their transportation fuels. To ensure that our local carbon emissions reduction targets are achieved on a timescale that aligns with our clean economy goals, we should establish a clean fuel standard that strengthens community resilience and sustainability, spurs green growth and development, maximizes the potential of emerging clean energy technologies, follows the regenerative principles of a circular economy, and amplifies our carbon reduction efforts.

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.



Testimony of
ALASKA AIRLINES and HAWAIIAN AIRLINES

Before the House Committee on
TRANSPORTATION

**Tuesday, March 11, 2025 at 9:00
A.M.
Hawai'i State Capitol, Room 430**

In consideration of
**SENATE BILL 1120 SD1
RELATING TO TRANSPORTATION**

The Honorable Darius Kila, Chair
The Honorable Tina Nakada Grandinetti, Vice Chair
Members of the Committee on Transportation

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

Aloha Chair Kila, Vice Chair Grandinetti, and members of the Committee Transportation,

Alaska Airlines and Hawaiian Airlines appreciate the opportunity to submit comments on Senate Bill 1120 SD1 (SB1120), which proposes the establishment of a Clean Fuel Standard (CFS) in Hawai'i. As the largest airline 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 CFS 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 CFS 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.

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 CFS 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. Before entering into a program like this, the state must fully consider how it will affect the cost of living for these households and whether any measures can be implemented to prevent disproportionate financial burdens.

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:

1. Incorporates voluntary incentives for SAF to promote sustainable aviation without conflicting with federal law.
2. Considers Hawai'i's unique energy needs and market size to prevent unintended economic and operational challenges.
3. Pairs the CFS with expanded state-level tax incentives to accelerate the production and affordability of renewable fuels.
4. Assesses the financial impacts on consumers, particularly lower-income families who may face increased fuel costs.

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.

SB-1120-SD-1

Submitted on: 3/10/2025 2:44:33 PM

Testimony for TRN on 3/11/2025 9:00:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|-------------------------------|---------------|--------------------|---------------------------|
| Jackie Moore-Andresen, PHR | Fair Wind Inc | Support | Written Testimony Only |

Comments:

Aloha Chair Kila, Vice Chair Grandinetti, and members of the Transportation Committee,

Fair Wind Cruises, a 3rd generation, Hawaii owned and operated company for over 50 years, supports the intent of S.B. 1120, S.D.1, that requires the HDOT to adopt rules governing a clean fuel standard for alternative fuels in the State.

We are committed to supporting efforts that reduce greenhouse gas emissions and contribute to a more sustainable future for Hawai‘i’s transportation sector.

Thank you for the opportunity to support SB1120 SD1

Jackie Moore-Andresen, PHR on behalf of Fair Wind Cruises

78-6775 Makenawai Box A

Kailua-Kona, HI 96740



March 11, 2025

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

House Committee on Transportation
The Honorable Darius Kila, Chair
The Honorable Tina Grandinetti, Vice Chair

Tuesday, March 11, 2025, 9:00 am
VIA VIDEOCONFERENCE
Conference Room 430
State Capitol
415 South Beretania Street

Chair Kila, Vice Chair Grandinetti and members of the Committee,

Island Energy Services, LLC ("IES") offers the following testimony in SUPPORT to SB 1120 SD1, 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 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 and Means Committee for hearing this bill and thank you for the opportunity to testify.

Albert D.K. Chee, Jr.

Vice President

Island Energy Services, LLC



March 11, 2025

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

House Committee on Transportation
The Honorable Darius Kila, Chair
The Honorable Tina Grandinetti, Vice Chair

Tuesday, March 11, 2025, 9:00 am
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We thank the House Transportation Committee for hearing this bill and thank you for the opportunity to testify.

Albert D.K. Chee, Jr.

Vice President

Island Energy Services, LLC

SB-1120-SD-1

Submitted on: 3/9/2025 7:27:37 PM

Testimony for TRN on 3/11/2025 9:00:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|-----------------|--------------|--------------------|---------------------------|
| B.A. McClintock | Individual | Support | Written Testimony Only |

Comments:

Please support this important bill. Mahalo.

SB-1120-SD-1

Submitted on: 3/9/2025 11:46:20 PM

Testimony for TRN on 3/11/2025 9:00:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|--------------|--------------|--------------------|---------------------------|
| TIM REIMER | Individual | Oppose | Written Testimony Only |

Comments:

Define Clean Fuel Standard For Alternative Fuel ..Electric Vehicles do not use fuel and we have no alternative fuel cars being used in Hawai'i . No propane cars, Hydrogen cars, no cars that use water as fuel. Actually there is no standard to refer to in Hawai'i ,,We only depend on gas. It would be Wasteful to spend funds on a survey to establish a Clean Fuel Standard with only gas or diesel as our two choices. My Testimony is voting Negative on this proposal.

SB-1120-SD-1

Submitted on: 3/11/2025 6:52:36 AM

Testimony for TRN on 3/11/2025 9:00:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------|--------------|--------------------|---------------------------|
| Frank Schultz | Individual | Oppose | Written Testimony Only |

Comments:

I oppose this initiative.