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

April 1, 2025

10:00 A.M.

State Capitol, Room 430 Videoconference

H.C.R 70, H.D. 1 / H.R. 63, H.D. 1

REQUESTING THE DEPARTMENT OF TRANSPORTATION TO FACILITATE AND
ACCELERATE THE ADOPTION OF SUSTAINABLE AVIATION FUELS TO
DECARBONIZE HAWAII'S TRANSPORTATION SECTOR AND SUPPORT THE
STATE'S CLIMATE GOALS

House Committee on Transportation

The Department of Transportation (DOT) **supports** H.C.R 70, H.D. 1 and H.R. 63, H.D. 1, that requests HDOT to work with the Hawaii State Energy Office and industry partners on adoption of Sustainable Aviation Fuel and submit a report to the legislature on the progress made in facilitating the adoption and acceleration of sustainable aviation fuels, including any proposed legislation to further support this effort.

HDOT is currently developing a Greenhouse Gas 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 Greenhouse Gas 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.



P.O. Box 37158, Honolulu, Hawai`i 96837-0158
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COMMITTEE ON TRANSPORTATION
Rep. Darius K. Kila, Chair
Rep. Tina Nakada Grandinetti, Vice Chair

DATE: Tuesday, April 1, 2025
TIME: 10:00 am
PLACE: Conference Room 430

HCR 70 SAF

SUPPORT

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

Life of the Land is Hawai`i's own energy, environmental and community action group advocating for the people and `aina for 55 years. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

Hawai`i is different. The solution for Hawai`i will not be the solution for continents.

Aviation GHG emissions overwhelm other GHG emissions for distant islands with international airports. This is fundamentally different from continents. Depending on what one includes, aviation GHG emissions are 25-60% of all emissions for Hawaii and 2-4% for the world.

Hawaii is dependent upon air travel. The only alternative to transoceanic flights powered by fossil fuel is relying on biofuels.

Sustainable Aviation Fuel is not sustainable nor environmentally friendly, but at present, there are no better alternatives.

Proposed solutions must be evaluated by considering numerous financial, technical, social, and environmental criteria.

Life of the Land supports research and pilot projects.

Mahalo
Henry Curtis
Executive Director



Environmental Caucus of The Democratic Party of Hawai'i

March 30, 2025

TESTIMONY IN OPPOSITION TO HR63, HD1 / HCR70, HD1: REQUESTING THE DEPARTMENT OF TRANSPORTATION TO FACILITATE AND ACCELERATE THE ADOPTION OF SUSTAINABLE AVIATION FUELS

TO: Chair Darius K. Kila, Vice Chair Tina Nakada Grandinetti, Members of the Committee on Transportation

DATE: Tuesday, April 1, 2025 **TIME:** 10:00 a.m.

PLACE: Conference Room 430 and videoconference

FROM: Environmental Caucus of Hawaii

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

We respectfully oppose HR63, HD1 / HCR70, HD1, which requests the Department of Transportation to facilitate and accelerate the adoption of sustainable aviation fuels (SAF) to decarbonize Hawaii's transportation sector and support the State's climate goals. While the goal of reducing aviation emissions aligns with Hawaii's commitment to sustainability, this resolution overlooks critical aspects of Hawaii's unique environmental, social, and economic landscape.

Key Points of Concern:

- 1. Feasibility and Cost:** The adoption of SAF is hindered by its nascent stage and high costs. Hawaii's isolated geography and reliance on tourism exacerbate the financial impact, as airlines and consumers would bear increased costs in an already challenging economic environment.
- 2. Environmental Considerations:** The production of SAF often relies on feedstocks, such as biofuels and waste oils, which can contribute to deforestation, habitat loss, and competition with food production. Hawaii's fragile ecosystems require careful consideration to prevent unintended environmental consequences.
- 3. Social and Equity Impacts:** Hawaii's communities, particularly Native Hawaiian populations and low-income residents, face disproportionate challenges related to climate change and economic inequities. Prioritizing SAF adoption risks sidelining grassroots initiatives and equitable climate solutions, which are more directly aligned with the needs and priorities of local communities.

4. **Economic Context:** Hawaii's economy, heavily reliant on tourism and imports, is particularly vulnerable to disruptions. Investing in SAF may divert resources away from more systemic solutions, such as improving transportation infrastructure, expanding renewable energy sources, and fostering community-led sustainability initiatives.
5. **Long-Term Effectiveness:** SAF represents a transitional technology rather than a definitive solution to aviation emissions. Resources and policies should be directed toward innovations with greater long-term benefits, such as electric or hybrid aircraft, and strategies to reduce aviation dependence overall.

Hawaii's environmental, social, and economic landscape demands thoughtful, holistic approaches to decarbonization that prioritize equity, sustainability, and resilience. While SAF technology may play a role in global aviation's future, adopting it prematurely risks undermining Hawaii's broader climate goals and the well-being of its communities.

Thank you for the opportunity to testify in opposition to this resolution.

Respectfully submitted,

Melodie Aduja and Alan Burdick
Co-Chairs, Environmental Caucus of Hawaii



Testimony of
ALASKA AIRLINES and HAWAIIAN AIRLINES

Before the House Committee on
TRANSPORTATION

Tuesday, April 1, 2025

10:00 A.M.

Hawai'i State Capitol, Room 430

In consideration of

HOUSE RESOLUTION 63 / HOUSE CONCURRENT RESOLUTION 70

REQUESTING THE DEPARTMENT OF TRANSPORTATION TO FACILITATE AND ACCELERATE
THE ADOPTION OF SUSTAINABLE AVIATION FUELS TO DECARBONIZE HAWAI'I'S
TRANSPORTATION SECTOR AND SUPPORT THE STATE'S CLIMATE GOALS.

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

Re: Testimony in Support of HR63/HCR70

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

Alaska Airlines and Hawaiian Airlines appreciate the opportunity to submit testimony in
strong support of HR63 HD1 / HCR70 HD1 requesting the Hawai'i Department of
Transportation (DOT) to facilitate and accelerate the adoption of sustainable aviation fuels
(SAF) in the state.

Commitment to a Sustainable Future

As the two leading airlines serving Hawai'i, we are deeply committed to sustainability and
reducing the environmental impact of air travel. We recognize that aviation is a vital part of

Hawai'i's economy, connecting local communities, supporting tourism, and ensuring essential interisland and transpacific transportation. At the same time, we acknowledge the significant responsibility we bear in addressing greenhouse gas emissions.

SAF is the most immediate and viable solution to decarbonize air travel. Compared to conventional jet fuel, SAF can reduce lifecycle greenhouse gas emissions by up to 80%, depending on the feedstock and production process. Unlike other transportation sectors where electrification is becoming a dominant strategy, long-haul air travel remains dependent on liquid fuels. SAF provides the best near-term pathway to reducing aviation's carbon footprint while maintaining the connectivity that Hawai'i relies on.

Why the Department of Transportation Should Lead the SAF Effort

We strongly believe the Hawai'i Department of Transportation (DOT) is the appropriate agency to lead this effort due to its deep expertise in transportation policy, infrastructure development, and aviation regulations. DOT's leadership, in close collaboration with the Hawai'i State Energy Office, will ensure:

- 1. Alignment with State Transportation and Climate Goals:** DOT has a direct role in implementing the state's broader climate and decarbonization strategies, including those outlined in the Hawai'i Pathways to Decarbonization report and the Greenhouse Gas Reduction Plan required by the Navahine settlement. At the same time, the Hawai'i State Energy Office plays a crucial role in supporting renewable energy and fuel development efforts, making their continued involvement essential to a successful SAF strategy.
- 2. Strategic Coordination Across Stakeholders:** The successful adoption of SAF requires collaboration between airlines, fuel producers, airport authorities, and state energy policymakers. DOT, in partnership with the Hawai'i State Energy Office, is well-positioned to facilitate dialogue and drive policy solutions that integrate both transportation and energy sector priorities.
- 3. Infrastructure and Market Development:** The transition to SAF will require enhancements to existing fuel supply chains, including storage, blending, and distribution infrastructure at Hawai'i's airports. DOT's oversight of airport operations makes it the best agency to coordinate these infrastructure investments while leveraging the Hawai'i State Energy Office's expertise in renewable fuel development.

4. **Policy and Incentives Development:** DOT, in coordination with the Hawai'i State Energy Office, can help design and implement the right mix of incentives, regulatory support, and market mechanisms to encourage the production and use of SAF in Hawai'i. Drawing from lessons learned in other states, they can craft policies that attract SAF investment while ensuring cost-effective implementation for airlines and consumers.

Industry Partnership and Support

Alaska Airlines and Hawaiian Airlines have each made significant investments in SAF development and are actively working with fuel producers, research institutions, and regulatory agencies to scale SAF production and adoption. We are eager to partner with DOT, the Hawai'i State Energy Office, and other stakeholders to establish a long-term SAF strategy for the state.

We encourage the Legislature to pass this resolution and empower DOT to lead this critical initiative in collaboration with the Hawai'i State Energy Office. By accelerating SAF adoption, Hawai'i can become a national leader in aviation sustainability, reduce its dependence on fossil fuels, and move toward achieving its ambitious climate goals.

Mahalo for the opportunity to testify, and we look forward to working collaboratively on this important issue.

Comments before
April 1, 2025 House Committee on
Transportation

OPPOSING

**House Concurrent Resolution 70 and
House Resolution 63**

Relating to Studying “Clean Fuels” Subsidies

Mike Ewall, Esq.
Founder & Executive Director
Energy Justice Network
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Aloha Honorable Committee members. Energy Justice Network is a national organization supporting grassroots groups working to transition their communities from polluting and harmful energy and waste management practices to clean energy and zero waste solutions. In Hawai‘i, we’ve been working with residents who first sought our support in 2015. Since mid-2022, we have supported residents in forming the Hawai‘i Clean Power Task Force and Kokua na Aina to address numerous energy and waste issues in the state.

Please oppose HCR 70 and HR 63.

These resolutions would have the Department of Transportation violate the legal settlement in *Navahine F. v. Hawaii Department of Transportation*. This settlement requires that the State establish a Greenhouse Gas Reduction Plan that can achieve a goal of zero greenhouse gas emissions across all transportation modes within the State, including ground transportation and sea and air interisland transportation no later than 2045. This is not possible if biofuels or waste-based fuels are part of the mix, as they are not carbon free.

Calling it “clean fuel” or “sustainable aviation fuel” (SAF) does not make it clean. There is [not enough land and water](#) to grow a significant amount of biofuels in-state. The biotech industry keeps [testifying](#) in favor of biofuels bills because they know genetically modified enzymes and crops will be involved, risking biosecurity if grown or processed in-state. It is clear that most of this “clean fuel” will be [imported](#) big ag monocrop (mostly GMO) biofuels from the Americas, and that much of what would come from in-state is from toxic waste-to-fuels schemes like Aloha Carbon’s plan to try to gasify construction and demolition waste in Campbell Industrial Park on O‘ahu... using wood that the Hawaii Natural Energy Institute [documented](#) to have 200 times as much arsenic as clean wood.

HBC 70 and HR 63 focus on the one sector (aviation fuels) where there are no green alternatives for intercontinental flights and where inter-island flights can best be decarbonized by switching to a combination of electric ferries and electric sea-gliders which can be powered by clean electricity sources like wind and solar. There is no need to be building infrastructure for differently dirty fuels that will involve companies that later lobby to prevent the transition to clean options we can start adopting now.

Production will not be local: As was discussed in the 1/29/2025 Joint Hearing on SB 995 before the Senate Energy and Intergovernmental Affairs and Agriculture and Environment Committees, the Department of Agriculture [testified](#) to the fact that there simply is not sufficient land or water to have a significant biofuels production industry within the state. This means that most of the production will come from the continent, predominantly the Midwestern states, and from South America, defeating the goal of these resolutions to “support the production, distribution, and use of sustainable aviation fuels in the State.”

Competition with food: The same Senate hearing exposed how growing crops for biofuels in Hawai‘i would take up land and water needed for the state’s own food security goals to have more food grown in-state.

Genetic engineering: The Biotechnology Industry Organization regularly submits testimony in favor of biofuels bills, yet fails to be transparent about their motivation. Clearly, they expect to have genetically engineered

crops and/or enzymes used for the production of supposedly “sustainable” aviation fuels. This raises many biosecurity concerns, as well as concerns over increased herbicide spraying, since most genetically modified food crops are modified to withstand increased herbicide use.

Toxic waste streams as feedstocks: At least two companies are pursuing goals of producing fuels in the state using contaminated waste streams like construction and demolition waste. This is terribly polluting and even if the toxic metals and dioxins/furans do not end up in the fuel, they’ll end up in the air, water, and/or waste byproducts at the in-state production facilities being proposed. More on the toxics concerns below.

Finances: The rather costly fuels are not competitive and are inherently quite expensive. If they were truly clean, one could argue that the expense is worth it, but a state mandate would have to be stacked with multiple federal subsidies to make it remotely feasible. However, those [federal subsidies](#) are vanishing as we speak under the Trump administration and [cannot be expected](#) to carry the day.

Faulty Greenhouse Gas (GHG) accounting: Biofuels look like a climate solution only because of biases in carbon accounting systems and life cycle assessments. There is a long-standing controversy over whether biofuels production uses more energy than it produces. The incredible amount of fossil fuel resources, land, water, fertilizer, chemicals, and other production systems needed to replace fossil fuels is enough to raise the question over whether it even makes sense to replace fossil fuels with biofuels – fuels that, are still carbon based and will still release GHGs when burned.

The incentives would be based on assessing the fuels for their “lifecycle greenhouse gas emissions.” There are many flaws and biases in greenhouse gas (GHG) accounting that cause plant-based (biomass/biofuels) and waste-based feedstocks to be assumed to be “carbon neutral,” even though there is a credible scientific debate over this controversy going for over two decades. Some of the science shows biofuels such as corn-based ethanol to consume more fossil fuels than they displace. The very existence of a debate over this shows that the “net energy” of biofuels are close enough to 1:1 that there can even be a scientific dispute over it. If biofuels require about as much fossil fuel (to grow, process, and transport) as they displace, there is no point subsidizing them and building new infrastructure to support a system that is not really an improvement.

Sustainable Aviation Fuel does not exist: There is no clean or sustainable way to produce a burnable fuel from raw resources and turn it into air pollution when burned. It is inherently not sustainable or circular. There is one approach that comes close to being sustainable or circular, and that is the approach advanced by Feather Fuels and by Twelve Benefit Corporation, one of the companies testifying in favor of “clean fuels” bills. That involves using wind or solar electricity to pull carbon dioxide out of the air, and to also electrolyze water to obtain hydrogen, then use Fischer-Tropsch gas-to-liquids technology to turn the carbon dioxide and hydrogen into a burnable hydrocarbon fuel. This combination of very expensive and energy intensive technologies is rather experimental and has not been done at scale. It could be good to experiment with and prove up as a technology that could make sense in 20 years, but it makes no sense to use clean wind and solar energy on this approach, when wind and solar can decarbonize things much faster and more efficiently if used to replace the burning of oil, biofuels, trash, and trees in the state’s electric grid, and then to eliminate oil and gas in transportation by electrifying that sector. More on this not being the right time below.

Toxicity concerns

The resolutions explicitly talk up “agricultural waste, used cooking oils, and algae” as feedstocks, but these are impractical and unaffordable in-state. The main efforts to make “sustainable” aviation fuel in the state involve waste-based fuels. There are plans to gasify construction and demolition debris to make burnable aviation fuels on O’ahu. This is part of an array of experimental incinerator-like technologies that aim to convert waste into fuels. These waste-to-fuels (WTF) technologies usually start with pyrolysis or gasification – technologies that, when the resulting gases are burned, are [defined and regulated](#) by EPA as municipal waste combustors (waste incinerators). Typically, these two-stage technologies will replace the second stage (burning the gases) with a liquefaction stage, to make liquid fuels to be burned elsewhere. This is known as Fischer-Tropsch gas-to-liquids technology, named after the two German scientists who developed the ability to make oil from coal by gasifying, then liquefying it.

These are toxic and dangerous technologies that are experimental and often fail both technically and economically. When fuels are burned off-site in land vehicles or for air travel, they are not subject to the sorts of air pollution controls that can be applied to a centralized facility with a single smokestack. Even when such a facility burns the gasified waste on-site with the full complement of air pollution control devices, waste incineration is still [dirtier](#) than burning coal for the climate as well as for most other air pollutants. This is even *with* all four air pollution control systems that waste incinerators should have (note that H-POWER’s two older burners are missing half of these four control systems, though their third burner has all four).

Unlike coal, construction and demolition (C&D) waste is very heterogenous, which can be comprised of steel, concrete, brick, lumber, plaster, empty paint cans, asphalt, wire, shingles, and much more. Pyrolysis and gasification technologies do not work well on heterogenous fuels. They break down constantly and operate only in batches. These finicky technologies require very homogenous fuels. Even those trying to process scrap tires fail repeatedly, because tires are not homogenous enough for pyrolysis. Even the nation’s top cheerleader for tire burning, a spokesperson for the Rubber Manufacturers Association, once stated that “scores of start-ups have tried and failed to make money from tire pyrolysis. The road is littered with the carnage of people who were trying to make this technology viable.”

These technologies have been unable to operate at commercial scale, and typically are garage-scale pilot projects that go nowhere. This trend has led the nation’s leading incinerator-promoting solid waste consulting outfit, GBB, to [classify](#) the technology as “high” risk due to “previous failures at scale, uncertain commercial potential; no operating experience with large-scale operations” (pyrolysis) and “limited operating experience at only small scale; subject to scale-up issues” (gasification).

Hawai’i has been targeted in recent years by quite a few fly-by-night companies aiming to cash in on state and federal subsidies to satisfy the desire for sustainable aviation fuels while making waste streams go “away.” Companies like Aloha Carbon and Yummet prey upon uninformed public officials who don’t have time to research the track record of this industry, the toxic hazards associated with it, or the better alternatives.

Regarding toxic hazards, please see this heavily-cited (92 footnotes) six-page overview I wrote on the [toxic pollution issues associated with construction and demolition \(C&D\) waste incineration](#). While the paper focuses on direct incineration, many of the same principles apply, as the high temperature processes used in WTF technologies still release toxic metals while producing new toxic pollutants such as [dioxins and furans](#), the most toxic chemicals known to science.

C&D waste contains many toxic ingredients. There are chlorine sources in wood treatment chemicals like pentachlorophenol, and in PVC plastics in C&D waste. Painted wood can contain lead and mercury, while treated wood can contain other toxic metals, namely arsenic, chromium, and copper. [Testimony](#) on House Bill 976 from the Hawaii Natural Energy Institute (on pages 43-44 of the testimony packet), affirms high levels of arsenic, chromium and lead in C&D waste, with arsenic concentrations 200 times higher than clean wood. Their research also shows high levels of hydrochloric acid, copper and zinc from C&D waste, but doesn't point out a significant conclusion about this – that numerous [published studies](#) show that copper and zinc serve as catalysts for dioxin formation. [Dioxins](#) are the most toxic chemicals known to science and are formed in processes like those used to make these “sustainable” aviation fuels, where you have hydrocarbons, halogens like chlorine, and medium-high temperatures that are perfect for dioxin formation. These ultratoxic chemicals rapidly bioaccumulate and concentrate in meat and dairy products where 92% of human exposure comes from. Even if these emissions are blown out to sea, they concentrate and come back in the form of seafood.

Not the right time

Prioritizing Conservation and Efficiency

Transportation fuels should first be tackled by prioritizing a reduction in the need for unnecessary travel, then more efficient transportation. After prioritizing these, electrifying transportation is the best solution so that combustible fuels can be avoided entirely. Any system that relies on extraction of resources, burning them up, polluting the air, and having to dispose of wastes is not sustainable. For long-distance flights where electrification may not become possible, perhaps hydrogen has a role, but not until the electric grid is cleaned up and we have *extra* wind and solar available for truly green hydrogen production.

No Such Thing as Transition Fuels

Burnable fuels are not a long-term option, as they are not clean or sustainable, no matter whether they're “biofuels” or waste-based. Any such move is in-between the present and the arrival of clean, non-burn options. Such fuels are often called “transition” fuels. However, the concept of a transition fuel is that we can go from A to B to C, as if B helps us get to C. However, transition fuels have different infrastructure and their own economic weight that causes them to stand in the way of a future transition to clean options.

By the time we finish transitioning the energy sectors that we have clean, non-burn solutions for, long-distance air travel will probably have viable solutions we can focus on to complete the job. However, investments in “differently bad” fuels are an economic investment dead-end, requiring another transition later, wasting time and money needed to do the proper transitions in other energy sectors. In fact, the notion of “transition” fuels is a false one, since it entails investing in infrastructure that could last for 30+ years. No company developing so-called “transition” infrastructure, and trying to amortize their investment, is going to step aside in 5-10 years when something cleaner comes along. They're going to fight to stop the transition to cleaner options to protect their investment. In this sense, it's dangerous to steer resources into false solutions such as waste-based burnable transportation fuels.

Prioritizing the Energy Sectors That Have Clean Alternatives

There are [three sectors of energy consumption](#): electricity, transportation, and heating. Transportation can be broken down into land, sea, and air. Heating is broken down in federal energy reporting as industrial, residential, and commercial/institutional sectors of use.

Just as there are preferable non-burn solutions for every waste management need, there are clean non-burn solutions for nearly every energy sector, though long-distance commercial passenger aviation is not there yet.

Cleaning up these energy sectors should start with solutions we already have, without trying to solve the most unsolvable sector by replacing one type of burnable fuel (petroleum-based aviation fuel) with differently bad burnable fuels (crop-based biofuels) or even more hazardous types of burnable fuels (waste-based fuels).

Since the way to clean up the transportation and heating sectors is to electrify them so that they can run on wind and solar without burning anything, it's critical to clean up the electricity sector first, and faster, since electricity demand will grow as the other energy sectors are electrified. Electricity production is easiest to fully transition to non-burn technologies – mainly solar and wind with energy storage, which are becoming the cheapest options over time. The state's renewable portfolio standard (RPS) aims to transition the electricity sector to "renewable" sources by 2045, but still counts some combustion sources as renewable – the worst of them being solid fuel combustion (burning of trash and trees). [SB 680](#) aimed to clean up the RPS starting by removing solid fuel combustion sources, which will speed up the implementation of solar, wind, and energy storage.

The heating sector is dominated by industrial heating, which is increasingly possible to electrify, while residential and commercial space heating and cooking needs are easily electrified. Electric stoves and heat pumps for space heating can be incentivized.

The transportation sector is easily electrified for land-based travel. International shipping is now possible with [electric ships](#) (see also [here](#) and [here](#)). The hardest sector to make non-burn is long-distance air travel, though inter-island air travel can now be electrified with [sea gliders](#), as Hawaiian Airlines has been exploring.

While waiting for good non-burn solutions to powering long-distance air travel, let's focus where we have good alternatives:

- 1) end combustion in the electricity sector, which is mostly oil in Hawai'i, but also some burning of trash, trees, and biofuels; replace with conservation, efficiency, solar, wind, and energy storage.
- 2) electrify any heating needs... most use is industrial sector, but also help transition residential or commercial sectors where cooking and space heating is done with combustible fuels (mainly gas made from oil).
- 3) end combustion use for land-based vehicles by reducing vehicle use, having better (and fare-free) electrified public transit, and electrifying other land vehicles.
- 4) replace inter-island air travel with electric sea gliders, and electrify shipping, which is now possible.

The 2024 *Navahine F. vs. Hawaii Department of Transportation* settlement requires that the state come up with a plan to reach zero emissions in the transportation sector, which requires doing the same in the electricity sector. This bill would violate that requirement by advancing carbon-based fuels instead of investing in the transition needed in the electricity and (certain) transportation sectors to decarbonize properly and in the right order.

Attached is a resolution adopted by the Democratic Party of Hawaii in 2024 in support of an alternatives study, called for in [SCR106](#) / [SR87](#), which would look at non-burn alternatives for the transportation and other energy sectors. Such a study would be more appropriate and in line with the state's greenhouse gas (GHG) reduction goals and legal requirements.

Democratic Party of Hawai'i Resolution [Adopted](#) May 18, 2024

2024-15: Urging the Hawai'i State Energy Office to Study Non-Burn Alternatives to Combustible Fuels

Whereas, It is important to use Hawai'i state taxpayer funds wisely to create the most good without speculative investments, unnecessary subsidies, or promotion of energy technologies or fuels that conflict with the state's climate change goals, or the peoples' constitutional right to a clean and healthful environment under Article XI, Section 9 of the Hawai'i State Constitution; and

Whereas, Energy consumption sectors tracked by the U.S. Energy Information Administration are electricity, transportation, and industrial, commercial and residential heating; and

Whereas, Technology exists to meet the needs of the electricity sector using conservation, efficiency, solar, wind, and energy storage, which can be made as firm as needed with added storage capacity; and

Whereas, Residential and commercial cooking space and water heating needs are easily electrified with existing technology, including ground- and air-source heat pumps and hybrid electric water heaters; and

Whereas, Industrial heating needs are increasingly possible to meet through a combination of concentrated solar, electricity, and—if necessary—green hydrogen sources from wind and solar; and

Whereas, Land-based transportation, even heavy trucking, can now be fully electrified and powered on clean, non-burn, electricity sources; and

Whereas, Ocean-based transportation is now possible to fully electrify, including international cargo ships with batteries, and some with stationary wind masts; and

Whereas, Interisland air travel is possible with electric sea gliders, as Hawaiian Airlines is exploring, while intercontinental air travel is the one sector that is hardest to convert to clean energy, though Airbus aims to bring to market the world's first hydrogen-powered commercial aircraft by 2035; and

Whereas, Combustible carbon-based fuels release greenhouse gasses as well as other harmful air pollutants, and the production of burnable fuels has many other environmental implications, including the use of land for fuel instead of food, water and soil depletion, spread of genetically modified organisms, and—if using waste streams to make fuel— toxic chemical releases and solid waste byproducts; and

Whereas, Technologies to turn waste into fuels are highly speculative, controversial and polluting, and typically fail to operate at a commercial scale, usually falling apart technically, economically, or both; and

Whereas, Climate impacts of biomass and waste-based biofuels can be close to or greater than those from fossil fuels, especially where trees are cleared to grow bioenergy crops; and

Whereas, Investing in "transition" fuels only builds up an economic interest that makes it harder, politically and economically, to move to the next step where burnable fuels are ultimately replaced; and

Whereas, It is wise to spend public funding first on clean, combustion-free solutions that already exist, focusing on energy sectors where those solutions are not yet fully implemented; therefore be it

Resolved, That the Democratic Party of Hawai'i urges the Hawai'i State Energy Office to conduct a study of the different energy consumption sectors to determine which can be most quickly and cost-effectively decarbonized through additional public investment in combustion-free alternatives; and be it

Ordered, That copies of this resolution shall be transmitted to the offices of the Governor and Lieutenant Governor of the State of Hawai'i, the Hawai'i Chief Energy Officer, and all members of the Hawai'i State Legislature who Democrats.



**SUPPORT OF HCR 70 HD1 / HR 63 HD1
REQUESTING THE DEPARTMENT OF TRANSPORTATION TO FACILITATE
AND ACCELERATE THE ADOPTION OF SUSTAINABLE AVIATION FUELS TO
DECARBONIZE HAWAII'S TRANSPORTATION SECTOR AND SUPPORT THE
STATE'S CLIMATE GOALS.**

House Committee on Transportation

Representative Darius K. Kila, Chair
Representative Tina Nakada Grandinetti, Vice Chair

Tuesday, April 1, 2025, 10:00 a.m.
Conference Room 430 & Videoconference

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

Thank you for the opportunity to submit testimony expressing our support of HCR 70 HD1/HR 63 HD1. 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.

We recognize the importance of charting a clean energy future for Hawai'i. As the local producer of fuels for Hawai'i's consumers, we are committed to a part of this future by investing over \$90 million to develop Hawai'i'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.

HCR 70 HD1 / HR 63 HD1 are critical for fulfilling Hawai'i's climate and energy commitments, including the goal of achieving net-zero emissions by 2045. The resolutions urge the Department of Transportation to collaborate with key stakeholders to develop policies and incentives promoting SAF production, distribution, and adoption. By supporting local SAF production, Hawai'i can enhance its energy security, reduce reliance on imported fossil fuels, and position itself as a leader in sustainable aviation.

We view this as another step towards a cleaner, more sustainable future for Hawai'i's aviation sector. We believe it is possible to produce significant amounts of renewable fuel here in Hawai'i, 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 Hawai'i's clean energy future.

Thank you for allowing Par Hawaii the opportunity to support the resolutions.



April 1, 2025

**TESTIMONY IN SUPPORT TO
HCR 70 HD1/HR 63 HD1
REQUESTING THE DEPARTMENT OF TRANSPORTATION
TO FACILITATE AND ACCELERATE THE ADOPTION OF
SUSTAINABLE AVIATION FUELS TO DECARBONIZE
HAWAI'I'S TRANSPORTATION SECTOR AND SUPPORT THE
STATE'S CLIMATE GOALS.**

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

Tuesday, April 1, 2025, 10:00 am

VIA VIDEOCONFERENCE
Conference Room 430
State Capitol
415 South Beretania Street

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

Island Energy Services supports a collaborative effort to integrate sustainable aviation fuel adoption into the Greenhouse Gas Reduction Plan required by the Navahine v. Hawai'i Department of Transportation settlement as directed by HCR 70 HD1/HR 63 HD1. Furthermore, in recognizing that importation of sustainable aviation fuel will be required to meet Hawaii's present and growing demand for aviation fuel, entities that import fuel will play a significant role, and therefore should be specifically named and included in HCR 70/HR63 (please see requested addition to page 2 of HCR 70 HD1/HR 63 HD1 below):

30 BE IT FURTHER RESOLVED that the Department of
31 Transportation is requested to work in collaboration with the
32 Hawai'i State Energy Office, major airlines serving Hawai'i, fuel
33 producers, fuel importers, and other stakeholders to establish policies,

34 incentives, and infrastructure to support the production,
35 distribution, and use of sustainable aviation fuels in the
36 State; and

From integrity, active community support, and protecting our 'āina, we are championing Hawaii's energy future in a way that is sensitive to our community. Island Energy Services delivers fuel to O'ahu, Maui, Hawai'i Island and Kaua'i distributed through a network of branded retail locations and product distribution terminals statewide.

Mahalo for the opportunity to testify.

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

**TESTIMONY IN SUPPORT OF HCR 70 HD1 / HR 63 HD1 REQUESTING THE DEPARTMENT OF
TRANSPORTATION TO FACILITATE AND ACCELERATE THE ADOPTION OF SUSTAINABLE
AVIATION FUELS TO DECARBONIZE HAWAII'S TRANSPORTATION SECTOR AND SUPPORT THE
STATE'S CLIMATE GOALS.**

Aloha Chair Darius Kila, Vice Chair Tina Grandinetti, and Members of the House Committee on Transportation,

My name is Nahelani Parsons, and I am the Executive Director of the Hawai'i Renewable Fuels Coalition (HRFC). Mahalo for the opportunity to testify in **support** of HCR 70 HD1 / HR 63 HD1, which urges the Department of Transportation to facilitate and accelerate the adoption of sustainable aviation fuels (SAF) to decarbonize Hawai'i's transportation sector and support the state's climate goals. We have provided some suggested edits that we worked with the Hawai'i Department of Transportation on.

The HRFC is a diverse alliance of stakeholders working to achieve Hawai'i's renewable energy goals. Our founding members include:

- **Hawaiian/Alaska Airlines:** Leaders in adopting Sustainable Aviation Fuel (SAF) to decarbonize the aviation sector.
- **Pono Pacific:** Hawai'i's largest natural resource conservation company, advancing oil crop feedstock cultivation to support renewable fuel production.
- **Par Hawai'i:** The state's largest energy supplier, investing over \$90 million in renewable fuel production technology to strengthen energy security and sustainability.

In addition to these partners, HRFC collaborates with:

Pacific Biodiesel, a local producer of biodiesel. The Hawai'i Farm Bureau, representing 1,800 farm families statewide, to support renewable feedstock cultivation and enhance food and energy security. Ranchers, dairy farmers, and conservationists, such as Meadow Gold and Haleakalā Ranch, contributing to Hawai'i's resilience and self-sufficiency. Airlines for America, which advocates for SAF adoption nationwide to reduce aviation emissions.

Hawai'i Renewable Fuels Coalition members in alphabetical order:

Airlines for America	Alaska Airlines	Haleakala Ranch
Hawaii Farm Bureau	Hawaii Fuelling Facilities Corp	Hawaiian Airlines
Hawaiian Electric	ITOCHU Corporation	Japan Airlines
Kuilima Farm	Meadow Gold Hawaii	Pacific Biodiesel
Par Hawaii	Pono Pacific	United Steelworkers

The Importance of Sustainable Aviation Fuels in Hawai'i

Hawai'i's transportation sector is the largest contributor to the state's greenhouse gas (GHG) emissions, accounting for 48% of total emissions, significantly higher than the 30% national average. Within this sector, aviation is a major source of emissions, yet it is also one of the most challenging to decarbonize due to technological and infrastructure constraints.

Sustainable aviation fuels (SAF) offer an immediate and viable solution to significantly reduce aviation emissions. Produced from renewable feedstocks such as agricultural waste, used cooking oil, and algae, SAF can reduce lifecycle greenhouse gas emissions by up to 80% compared to conventional jet fuel. Moreover, SAF is a drop-in fuel, meaning it is compatible with existing aircraft and fueling infrastructure, allowing for immediate adoption without costly modifications.

Hawai'i has an unparalleled opportunity to lead in SAF adoption. Several states, including California, Washington, Oregon, Minnesota, and Illinois, have already established incentives and policies to promote SAF production and use. Hawai'i must act swiftly to remain competitive and attract investment in renewable fuel infrastructure.

HCR 70 HD1 /HR 63 HD1 Aligns with Hawai'i's Climate and Energy Goals

Hawai'i has already committed to achieving net-zero emissions by 2045 under the Hawai'i Clean Energy Initiative and has enacted zero-emission transportation goals under Act 226 (2023). Additionally, the Navahine v. Hawai'i Department of Transportation settlement agreement recognizes the constitutional right of Hawai'i's youth to a life-sustaining climate and requires the state to develop a comprehensive Greenhouse Gas Reduction Plan within one year.

HCR 70 HD1 / HR 63 HD1 is critical to fulfilling these commitments. By urging the Department of Transportation to collaborate with key stakeholders—including the Hawai'i State Energy Office, major airlines, and fuel producers—this resolution lays the groundwork for:

- Developing policies and incentives to promote SAF production, distribution, and adoption.
- Integrating SAF into the state's Greenhouse Gas Reduction Plan to ensure aviation plays a role in decarbonization.
- Enhancing energy security and economic resilience by supporting local SAF production and reducing reliance on imported fossil fuels.

The adoption of sustainable aviation fuels is not just an environmental imperative, it is an economic and strategic necessity for Hawai'i. Without strong state support, Hawai'i risks falling behind other states that have already enacted SAF incentives. HCR 70 / HR 63 is a crucial first step in ensuring our aviation sector transitions toward a cleaner, more sustainable future while protecting our environment, supporting local businesses, and strengthening our energy security.

HRFC strongly supports HCR 70 HD1/ HR 63 HD1 and urges the Committee to advance this resolution adopting the proposed amendments as attached.

Mahalo for your time, consideration, and commitment to Hawai'i's clean energy future.



HOUSE COMMITTEE ON TRANSPORTATION

APRIL 1, 2025

HCR 70/HR 63, HD1, REQUESTING THE DEPARTMENT OF TRANSPORTATION TO FACILITATE AND ACCELERATE THE ADOPTION OF SUSTAINABLE AVIATION FUELS TO DECARBONIZE HAWAII'S TRANSPORTATION SECTOR AND SUPPORT THE STATE'S CLIMATE GOALS

POSITION: SUPPORT

Coalition Earth supports HCR 70/HR 63, HD1, which requests the Department of Transportation to facilitate and accelerate the adoption of sustainable aviation fuels to decarbonize Hawai'i's transportation sector and support the state's climate goals.

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 prioritizing the use of sustainable aviation fuel.** This is especially important in light of the islands' carbon-intensive visitor industry. In 2019, for example, Civil Beat reported that flights to and from Hawai'i from all over the world produced approximately 6.3 million tons of carbon, which is the equivalent of the CO₂ produced by generating electricity for almost 1.1 million homes in a year.

As an island state that is heavily reliant on air transportation and a robust tourist economy, we need to take action to ensure that air travel related to our state aligns with our goal of reducing our economy's carbon footprint. Jet fuel consumption for the islands is 17 million barrels—or 740 million gallons—per year between civilian and military consumption. To reduce our reliance on fossil fuels, we should seize the opportunity to invest in local sustainable fuel production, which can be derived from both plant and animal materials, ranging from cooking oil and plant oils to agricultural residues as well as municipal waste and waste gases.

While the cost of producing sustainable aviation fuel is currently higher than the cost of conventional fuels, the long-term benefit of transitioning to a clean economy outweighs the price of transforming the energy systems that power our carbon-intensive visitor industry. Moreover, we cannot simply rely on industrial incentives to buttress positive environmental outcomes. Instead, such incentives must always be coupled with mandates that ensure commercial entities will take actions that firmly align with our state's overall climate resilience goals.

*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.***