Comments before March 17, 2025 Senate Committee on Water and Land

SUPPORTING Senate Concurrent Resolution 106 & Senate Resolution 87

Relating to Studying Clean Fuels

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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.

We emphatically support SCR 106 and SR 87. These resolutions ask the Office of Planning and Sustainable Development to commission a study of the most cost-effective ways to quickly decarbonize our energy system, looking at all sectors of consumption.

The Navahine F. v. Hawaii Department of Transportation 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.

There are three broad sectors of energy consumption, as organized by the U.S. Energy Information Administration. These break down further into subcategories as follows:

Electricity

- Residential
- Commercial/Institutional
- Industrial

Heating

- Residential (cooking, water heating, and space heating)
- Commercial/Institutional
- Industrial

Transportation

- Air (inter-island and intercontinental)
- Land (private vehicles and mass transit)
- Sea

It is becoming well-accepted that the best way to decarbonize all the sectors is to electrify the heating and transportation sectors and then have the electricity sector addressed through the following hierarchy: conservation, efficiency, solar, wind, and energy storage.

Some of these sectors are easier to electrify than others, with intercontinental air travel and select industrial heating applications being the <u>only</u> sectors where the technology does not yet exist to simply electrify them so that they can run on clean, non-combustion sources.

The question is whether it makes sense to invest state taxpayer funds in subsidizing burnable fuels in sectors that are hardest to solve without first investing in cleaning up the sectors where the technology exists and is increasingly cost-effective.

A good study of this will help inform the legislature so that future policies might focus where taxpayer dollars can be best spent speeding up the clean energy transition, instead of risking them on experimental and polluting combustion sources.

It will also show that intermittent renewables like wind and solar can be as "firm" as needed with appropriate levels of storage capacity, and that combustion technologies are not needed to make energy "firm."

Attached is a resolution adopted by the Democratic Party of Hawaii in 2024 in support of this study.

Mahalo for your support for this important resolution.

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.



Environmental Caucus of The Democratic Party of Hawaiʻi

March 14, 2025

Testimony in Support of SCR106/SR87 REQUESTING THE OFFICE OF PLANNING AND SUSTAINABLE DEVELOPMENT TO COMMISSION A STUDY OF THE DIFFERENT ENERGY CONSUMPTION SECTORS TO DETERMINE WHICH SECTOR CAN BE MOST QUICKLY AND COST-EFFECTIVELY DECARBONIZED THROUGH ADDITIONAL PUBLIC INVESTMENT IN COMBUSTION-FREE ALTERNATIVES

To: Chair Lorraine R. Inouye, Vice Chair Brandon J.C. Elefante, and Members of the Committee on Water and Land

From: Environmental Caucus of the Democratic Party of Hawaii

Date: Monday, March 17, 2025 Time: 1:00 p.m.

Location: Conference Room 229 & Videoconference

Aloha Chair Inouye, Vice Chair Elefante, and Members of the Committee:

The Environmental Caucus of the Democratic Party of Hawaii strongly supports SCR106/SR87, which requests the Office of Planning and Sustainable Development to commission a study of the different energy consumption sectors to determine which sector can be most quickly and cost-effectively decarbonized through additional public investment in combustion-free alternatives.

Key Arguments in Support of SCR106/SR87:

- Decarbonizing Hawaii's energy consumption sectors is critical to achieving the state's climate goals and reducing greenhouse gas emissions.
- Combustion-based energy sources pose significant health and environmental risks, including the release of dioxins and furans, toxic bottom ash, and fly ash that often end up as hazardous waste. These materials are sometimes used as cover material or recycled for construction or road building, exacerbating risks to soil, groundwater, aquifers, and marine ecosystems.
- Transitioning to combustion-free alternatives will protect public health, reduce environmental degradation, and preserve Hawaii's natural resources for future generations.

- A comprehensive study will provide valuable insights into which sectors can transition to combustion-free alternatives most efficiently and cost-effectively, ensuring that public investments yield maximum impact.
- Identifying and prioritizing sectors for decarbonization will enable Hawaii to lead by example in combating climate change and transitioning to a sustainable, clean energy future.
- This measure aligns with Hawaii's commitment to achieving 100% renewable energy and carbon neutrality by 2045.

We urge the Committee to pass SCR106/SR87 to support informed decision-making and accelerate Hawaii's transition to a sustainable energy future while protecting the health of residents and the environment.

Thank you for the opportunity to testify on this important resolution.

Respectfully submitted,

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

<u>SR-87</u> Submitted on: 3/15/2025 11:02:50 AM Testimony for WTL on 3/17/2025 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Ted Bohlen	Testifying for Climate Protectors Hawaii	Support	Written Testimony Only

Comments:

Climate Protectors Hawaii **STRONGLY SUPPORTS** this concurrent resolution and resolution and study of cost-effective decarbonization through combustion-free alternatives.

Please pass them.

Mahalo!

Climate Protectors Hawaii (by Ted Bohlen)

<u>SR-87</u> Submitted on: 3/16/2025 7:30:22 AM Testimony for WTL on 3/17/2025 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Robert Culbertson	Individual	Support	Written Testimony Only

Comments:

Aloha Legislators!

To be brief, it's time to end the burning of fossil fuels (by any other name) and to find a way out of this morass. This study is a step in the right direction.

Please support this resolution and its companion!

Respectfully,

R A Culbertson

Honokaa

<u>SR-87</u> Submitted on: 3/16/2025 8:22:54 AM Testimony for WTL on 3/17/2025 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Susan B Roberts Emery	Testifying for Green Party of Hawai'i	Support	Written Testimony Only

Comments:

Aloha Chair Inouye, Vice Chair Elefante, and Members of Committee,

My name is Susan RobertsEmery, and I am Co Chair of the Green Party of Hawai'i. We are offering our strong support for SR87. We believe a study to find the cleanest source of energy for our Islands is a BIG WIN for the future of Hawai'i. We urge you to pass SR87.

Mahalo, Susan RobertsEmery Greeen Party Hawai'i Paauilo

<u>SR-87</u> Submitted on: 3/16/2025 10:08:12 AM Testimony for WTL on 3/17/2025 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Katherine Fryer	Individual	Support	Written Testimony Only

Comments:

I strongly support SCR106/SR87, which calls on the state to evaluate clean alternatives to incinerator power.

Currently Oahu relies heavily on waste combustion, which is dirtier than coal in terms of both greenhouse gases and localized air pollution. Incinerators emit more carbon dioxide per unit of energy produced than any other source of electricity. They are also major emitters of toxic air pollutants including particulates, lead, mercury, nitrogen and sulfur oxides. The health hazards of exposure to incinerator fumes are well documented, and disproportionately affect vulnerable low-income communities.

Hawaii deserves better. This bill is a meaningful step toward a cleaner, healthier future.



Aloha Chair Inouye, Vice Chair Elefante, and members of the committee,

Strong support for SCR106 and SR87

I fully support the commissioning of a study to determine which type(s) of energy generation offer quick and cost-effective decarbonization.

Economically, it would increase the productivity and the health of Hawai'i.

Respectively submitted,

Keith Neal Waimea