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Testimony of MARK B. GLICK, Chief Energy Officer

# before the SENATE COMMITTEE ON WAYS AND MEANS

Friday, February 28, 2025 10:35 AM State Capitol, Conference Room 211 and Videoconference

Providing Comments on SB 964, SD1

#### RELATING TO WASTE-TO-ENERGY.

Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committee, the Hawai'i State Energy Office (HSEO) offers comments on SB 964, SD1, that authorizes the Hawaii State Energy Office to establish a public-private partnership to develop a waste-to-energy generating facility in each county having a population below 800,000.

HSEO prepared "Hawai'i Statewide Waste-to-Energy Recommendations to the 2025 Legislature" in response to SR 75, SD1, that notes the long history of waste-to-energy (WtE) in Hawai'i. Hawai'i has one operational WtE plant, Honolulu Program of Waste Energy Recovery (H-POWER), that has been operating since 1990 and is located on O'ahu. Recently, several plants have been proposed at the county level across the state, yet only a few of them progressing to the development and operational stages.

Oʻahu also has a pilot WtE project in development, Aloha Carbon, aimed at processing some of the waste that H-POWER cannot, including mostly construction and demolition (C&D) waste. More information on this project can be found at https://alohacarbon.com/. HSEO agrees with the intent to find productive uses for materials that are available in our state, do not have other uses, and cannot be recycled. Organic and combustible materials can often be used, as pointed out in the

bill, to produce energy. HSEO already includes this resource in its work to promote and assist renewable energy technologies, as waste is included in the Renewable Portfolio Standard.

Maui also has a pilot project in the early stages that aims to produce compressed renewable natural gas from municipal solid waste (MSW). Some of the proposed plants that did not make it to development include proposals for a plant on Kaua'i, Maui, and Moloka'i.

In the conclusion to HSEO's WtE report to the legislature, it noted while H-POWER has no room for growth on O'ahu, the other counties could benefit from WtE. For WtE projects to be successful in Hawai'i, Maui, and Kaua'i counties, they need to consider the lessons learned from the previously proposed projects that faced overwhelming opposition, from the benefits and drawbacks of H-POWER, and from the successful projects across Japan and Europe. Proposed WtE plants should not overestimate capacity; they should consider public and stakeholder engagement and involvement to acquire more public support; they should ensure that workforce, environmental, health, and community concerns are all priorities; and they should be accompanied by strong county waste management plans.

Specifically, the Hawai'i State Energy Office (HSEO) recommends no further expansion of WtE on O'ahu, except for projects aimed at waste that cannot be landfilled, as Aloha Carbon is attempting to accomplish. HSEO recommends that Maui, Kaua'i, and Hawai'i counties introduce WtE plants to deal with their waste and their ever-shrinking land and landfill space and to help bring them closer to carbon neutrality.

If Maui were to use all of its combustible MSW that would be 78,104 tons, which would be on the larger end of the WtE plants in Japan, meaning Maui could have a plant that produces between 5-10 MW of energy. If Kaua'i County used all of their combustible waste, that would be around 68,067 tons which would be about a mid-sized WtE plant in Japan, meaning they could likely have a plant producing around 5 MW of energy. Lastly, if Hawai'i County were to use all of its combustible waste this would be 171,426 tons which would be on the large end of Japan's WtE plants producing around 10 MW of energy.

Public-private partnerships may not meaningfully be the solution to enable such WtE opportunities, especially on a statewide basis. In addition to the normal market challenges to finance and develop projects due to economics and scale, the current language overseeing solid waste management in Hawai'i under HRS chapter 342H makes the siting of even small projects in Hawaii involving waste extremely complicated.

In light of these developments, HSEO respectfully suggests that rather than requiring a statutory provision for HSEO to establish public-private partnerships to develop a WtE generating facility in each county having a population below 800,000, the Legislature consider addressing known barriers present in existing law that may increase the potential for success of technically, environmentally, and economically feasible projects. In that endeavor, HSEO stands ready to assist.

Thank you for the opportunity to testify.



# TESTIMONY BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS

# SB 964, SD1 Relating to Waste-to-Energy

February 28, 2025 10:35 AM State Capitol, Conference Room 211

Rebecca Dayhuff Matsushima
Vice President, Resource Procurement
Hawaiian Electric

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

My name is Rebecca Dayhuff Matsushima and I am submitting testimony on behalf of Hawaiian Electric, with comments on SB 964, SD1, Relating to Waste-to-Energy.

This bill proposes to amend HRS Section 196-71, subsection (b) to state, "(b) The Hawaii state energy office: . . . (5) May establish a public-private partnership to develop a waste-to-energy generating facility in each county having a population below 800,000."

Hawaiian Electric is supportive of waste-to-energy technologies, which can contribute to the State's renewable portfolio standards ("RPS") requirement of achieving 100% renewable energy by 2045. If the intent is to sell the energy to Hawaiian Electric, any such project would need to bid into Hawaiian Electric's request for proposals for renewable energy ("RFP"). Hawaiian Electric notes that the RFP process is technology agnostic and waste-to-energy facilities can participate.

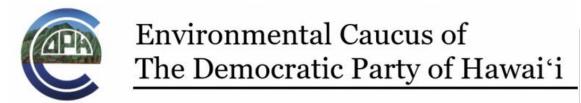
Competitive bidding is required in accordance with the Competitive Bidding Framework

adopted by the Public Utilities Commission and helps ensure that the projects selected to sell renewable energy to the utility will provide the best benefits to customers. If the State desires to incentivize waste-to-energy facilities to meet other important objectives and is concerned about the competitiveness of waste-to-energy projects in an RFP process, the State could consider options such as providing land for such facilities and/or tax incentives that would make them more cost competitive.

Hawaiian Electric notes that any such facilities will need to be properly sized for the amount of available waste on a particular island to ensure a reliable fuel supply and should be developed with technology that is consistent with both the State's RPS requirements as well as the State's net-zero emissions goals.

Hawaiian Electric urges consideration of these factors in the planning and operation of waste-to-energy facilities in the State, and in connection with this bill.

Thank you for this opportunity to comment on SB 964, SD1.



## February 26, 2025

## Testimony in Opposition to SB964 SD1 - RELATING TO WASTE-TO-ENERGY

**To:** Chair Donovan M. Dela Cruz, Vice Chair Sharon Y. Moriwaki, and Members of the Committee on Ways and Means

From: Environmental Caucus of the Democratic Party of Hawaii

**Date:** February 28, 2025

**Subject:** Opposition to SB964 SD1 - Authorizing the Hawaii State Energy Office to Establish a Public-Private Partnership for Waste-to-Energy Generating Facilities

Dear Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committee,

The Environmental Caucus of the Democratic Party of Hawaii respectfully submits this testimony in strong opposition to SB964 SD1, which authorizes the Hawaii State Energy Office to establish a public-private partnership to develop a waste-to-energy generating facility in each county having a population below 800,000.

While we recognize the intent behind this bill to address waste management and energy generation, we have significant concerns regarding the environmental and economic implications of waste-to-energy (WTE) facilities.

#### **Environmental Concerns:**

- 1. **Air Pollution:** WTE facilities are known to emit harmful pollutants, including dioxins, furans, and heavy metals, which pose serious health risks to nearby communities and contribute to air quality degradation. Dioxins and furans are among the most toxic chemicals known to science. Exposure to these pollutants can lead to severe health issues such as asthma, changes in hormone levels, reproductive and developmental problems, immune system damage, and even cancer.
- 2. **Scrubber Efficiency:** If these WTE facilities are maintained like Reworld (formerly known as Covanta) at H-POWER, then the scrubbers may be missing or inefficient. These scrubbers are crucial for filtering out dioxins, furans, and other toxic chemicals before they are emitted into the environment, ensuring that neighboring communities are not exposed to these harmful pollutants.
- 3. **Greenhouse Gas Emissions:** Incinerating waste releases carbon dioxide and other greenhouse gases, undermining Hawaii's commitment to reducing its carbon footprint and combating climate change.

4. **Resource Inefficiency:** WTE facilities discourage recycling and waste reduction efforts by creating a demand for a continuous waste stream, which contradicts the principles of a circular economy and sustainable resource management.

#### **Economic Concerns:**

- 1. **High Costs:** The construction and operation of WTE facilities require substantial financial investments, which may divert funds from more sustainable waste management solutions such as recycling, composting, and waste reduction programs.
- 2. **Long-Term Viability:** The economic viability of WTE facilities is questionable, as they rely on a consistent supply of waste. As Hawaii progresses towards zero waste goals, the availability of waste for incineration will decrease, potentially rendering these facilities obsolete and financially burdensome.

**Alternative Solutions:** We urge the Committee to consider alternative waste management strategies that align with Hawaii's sustainability goals. These include:

- 1. **Enhanced Recycling Programs:** Investing in comprehensive recycling infrastructure and education to increase recycling rates and reduce waste generation.
- 2. **Composting Initiatives:** Promoting and supporting composting programs to divert organic waste from landfills and reduce methane emissions.
- 3. **Waste Reduction Policies:** Implementing policies that encourage waste reduction at the source, such as extended producer responsibility and bans on single-use plastics.

In conclusion, we believe that SB964 SD1 is not in the best interest of Hawaii's environment or economy. We respectfully request that the Committee reject this bill and instead support more sustainable and forward-thinking waste management solutions.

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

Mahalo nui loa,

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

Submitted on: 2/26/2025 1:40:46 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
robert brower	Testifying for Surfrider Foundation Kauai Chapter	Onnose	Written Testimony Only

#### Comments:

Waste to energy is a terrible idea for Kauai. It would totally kill our efforts to move into curb side recycling and a MURF.

THERE IS NO SUCH THING AS CLEAN INCINERATION! Enough particulates in our biosphere already. Besides, our utility co-op is already doing an excellent job in moving into renewables. Incinerating trash is not a renewable source of energy.

Date: February 26, 2025



To: Chair Wakai, Vice Chair Chang, and Members of the Senate Committee on Ways and Means,

From: Hawaii Environmental Change Agents (HECA) - Solid Waste Reduction Task Force Re: SB964 SD1 - RELATING TO WASTE-TO-ENERGY

Aloha Chair Wakai, Vice Chair Chang, and Members of the Senate Committee on Ways and Means,

I am writing to **strongly oppose SB964 SD1**, which would impose trash incinerators on Kaua'i, Maui, and Hawai'i Islands through a state-led public-private partnership. This approach to waste management is not only harmful to our environment and public health but also economically irresponsible and incompatible with Hawai'i's climate and sustainability goals.

## **Key Reasons for Opposition:**

- 1. **Environmental and Health Impacts:** Burning trash and landfilling toxic ash is the most polluting waste management option. Studies show that incineration produces more air pollution and greenhouse gases than coal burning. Toxic emissions disproportionately affect the health of nearby communities, violating the constitutional right to a clean and healthful environment (Article XI, Section 9 of the Hawai'i Constitution).
- 2. **Economic Inefficiency:** Trash incineration is prohibitively expensive, requiring "put-or-pay" contracts that financially penalize counties for reducing waste. Neighbor islands do not generate enough waste to sustain such facilities, making them even more costly and unsustainable.
- 3. **Incompatibility with Zero Waste Goals:** Incinerators undermine efforts to reduce, reuse, recycle, and compost materials, which are far better for both the environment and job creation. A Zero Waste approach would help conserve landfill space and create more local green jobs compared to burning or burying waste.
- 4. **Conflict with Climate Commitments:** Trash incineration is a significant contributor to greenhouse gas emissions and conflicts with Hawai'i's commitment to carbon neutrality and the court-ordered Navahine F. vs. Hawaii Department of Transportation settlement, which requires zero-emission transportation supported by clean energy.

## **Island-Specific Concerns:**

- Kaua'i: The island's waste volume is too low to support a viable incinerator, and landfill space is limited. Zero Waste strategies are a more effective solution.
- Maui: Central Maui Landfill has capacity until 2039, with plans for expansion. A costly incinerator is unnecessary and unsustainable.
- Hawai'i Island: Past incinerator proposals have been rejected due to public opposition and economic infeasibility. The 2023 County of Hawai'i waste solicitation (RFI #4444) explicitly excluded waste combustion proposals.

#### A Proven Path Forward:

Instead of incineration, Hawai'i must invest in Zero Waste strategies that reduce waste at the source, promote recycling and composting, and support local green jobs. These sustainable approaches align with our state's environmental values and economic interests.

I urge the committee to reject SB964 and protect our islands from the economic burden and environmental harm of trash incineration. Let us prioritize solutions that are cleaner, safer, and more sustainable for our communities and future generations.

Mahalo for your time and consideration.

Mahalo nui loa,

217h

~HECA Solid Waste Reduction Task Force

Jennifer Navarra



To: The Senate Committee on Ways and Means (WAM)

From: Sherry Pollack, 350Hawaii.org
Date: Friday, February 28, 2025, 10:35am

#### In strong opposition to SB964 SD1

Aloha Chair Dela Cruz, Vice Chair Moriwaki, and WAM Committee members;

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org **strongly opposes SB964 SD1** that authorizes the Hawai'i State Energy Office to establish a public-private partnership to develop a waste-to-energy generating facility in each county having a population below 800,000.

Waste-to-energy is a greenwashing term used by the industry for waste/trash incineration. Trash incineration is one of the most expensive and polluting ways to make energy or manage waste. It's more polluting than coal (even for the climate) and produces 10 times fewer jobs than reuse, recycling and composting.<sup>1</sup>

Regardless of what is being burned (mixed municipal solid waste, plastic, etc.), waste incineration creates and/or releases harmful chemicals and pollutants into the air. Incinerators are really "trash-to-toxic ash-and-toxic-air-pollution" facilities. Studies have found in communities around incinerators an increase in pre-term babies and babies born with spina bifida or heart defects, as well as cancers, including childhood cancers.<sup>2</sup> Moreover, incinerators do not avoid landfills. For every 100 tons of trash burned, 30 tons become toxic ash that goes to landfills.<sup>3</sup> The other 70 tons become air pollution.

It must be noted that some have suggested that the toxic ash produced by incinerators could be repurposed to build roads. However, this would create a serious environmental threat. The EPA has made clear that incinerator ash, even if it tests "non-hazardous" based on tests that only look at what leaches out of ash, can still be harmful if people are exposed in other ways, including inhalation, ingestion, or physical contact. In short, making roads out of incinerator ash is dangerous and should be prohibited.

<sup>&</sup>lt;sup>1</sup> Tellus Institute, More Jobs, Less Pollution: Growing the Recycling Economy in the United States, 2011. www.recyclingworkscampaign.org.

<sup>&</sup>lt;sup>2</sup> http://www.energyjustice.net/incineration/healthstudies.pdf

<sup>&</sup>lt;sup>3</sup> http://www.energyjustice.net/incineration/ash

We don't need technologies that threaten public health and the environment. Incineration is a false solution that the legislature should firmly reject. Communities on Oahu are already exposed to H-POWER's toxic emissions. We need to move away from these harmful technologies, not towards them. Our money is better spent on true clean power technology with new battery storage. Real solutions must focus on producing less waste, manufacturing less plastic, and using effective and proven methods of recycling—not finding new ways to incinerate these materials.

Thank you for the opportunity to testify.

Sherry Pollack Co-Founder, 350Hawaii.org



# TESTIMONY OF RECYCLE HAWAII RE: OPPOSITION TO SB964

As Hawaii's premier and longest standing environmental organization dedicated to minimizing waste and promoting responsible resource management, we take this opportunity to express our unequivocal opposition to SB964.

In its most simple terms, sustainability is defined as the "ability to maintain processes or states over time, ensuring resource availability for future generations," which makes the destruction of resources to recover an amount of energy significantly less than the amount required to make those resources in the first place a paramount example of an unsustainable practice.

Problems caused by wastefulness can only be addressed by becoming less wasteful. Here in Hawaii, resources worth millions of dollars are sent to landfill every day. Our landfills are filling up beyond capacity simply because the counties have consistently failed over the past several decades to provide opportunities to recover these resources in ways that protect the environment and build wealth.

Developing the infrastructure needed to capture these resources and make them available to entrepreneurs who can return them to the economy is something the counties can all do outside the framework of a public-private partnership. The key to creating an economy that benefits from these resources is establishing a network of covered spaces where clean, well sorted materials can be made available to the public at no or minimal cost.

The cost of developing this infrastructure is orders of magnitude less than the cost of developing a statewide system of waste-to-energy facilities. Given the fact that the former endeavor is a prime example of sustainability and the latter a gross example of unsustainable wastefulness that will rob future generations of the resources they need to thrive, we maintain that no reasonable, responsible person or party can or should support this bill.

Respectfully submitted, Kristine Kubat Executive Director Recycle Hawai'i 808-747-4246

# Comments before February 28, 2025 Senate Committee on Ways and Means

# OPPOSING Senate Bill 964

Relating to Burning Trash on Every Island

# Mike Ewall, Esq. Founder & Director Energy Justice Network

215-436-9511 mike@energyjustice.net www.EnergyJustice.net

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 Kōkua nā 'Āina to address numerous energy and waste issues in the state.

We urge that you oppose SB 964. This bill should be scrapped, as it misses the mark on every level.

We understand the appeal of thinking that there's a magic technology that makes waste go "away," turning it into useful things like energy. Sorry to shatter your illusions, but that technology does not exist and will not exist.

"Waste-to-energy" facilities are normally known as trash incinerators. <u>Burning trash</u> (and landfilling toxic ash) is the most expensive and polluting way to manage waste or to make energy. As demonstrated with the data reported by states and facilities to U.S. EPA databases, <u>trash incineration pollutes more than burning coal</u>, and is <u>worse than simply landfilling trash</u> without burning it first, in part because incinerators need to put toxic ash in landfills, which makes the landfills more hazardous.

There is no such thing as "waste-to-energy." When burned, every 100 tons of trash is turned into about 30 tons of toxic ash. The rest goes up the smokestack, resulting in large amounts of air pollution. There is no "waste-to-energy" technology that violates the laws of physics by turning matter (waste) into energy. Yes, modest amounts of energy can be extracted while burning trash, but recycling and composting the same materials in the waste stream actually saves 3 to 5 times more energy than an incinerator can "create" by destroying these materials. For this reason, some of us call incinerators waste-OF-energy facilities.

So-called "waste-to-energy" includes conventional trash incineration, but could also mean experimental technologies like gasification, pyrolysis, and plasma arc, or various versions of "waste-to-fuels" (WTF) technologies. The multiple-stage types like gasification, pyrolysis, and WTF technologies are demonstrated many times over to be failed technologies that cannot operate continuously, cannot operate at commercial scale, cannot handle heterogeneous waste streams like municipal solid waste, and invariably end up failing technically, economically, or both.

All of these technologies destroy materials, create air pollution, increase toxicity by creating new toxic chemicals like dioxins/furans and polycyclic aromatic hydrocarbons, and spread around existing toxic chemicals like PFAS/PFOA and toxic metals (mercury, lead, arsenic, cadmium, chromium, etc.). Every one of them creates greenhouse gas pollution because there is combustion at some stage of the process if energy is being produced. This is unavoidable, as there are no economically viable methods to capture and sequester the carbon dioxide ( $CO_2$ ). Even after the best pollution controls are used for other pollutants, the emissions of most pollutants are greater than if coal were being burned.

No one has built a commercial-scale trash gasification or pyrolysis facility in the U.S., and despite hundreds of attempts, no trash incinerator has been built at a new site since 1995 due to high costs and community opposition. There is no way any community in the state would accept one.

#### Not enough waste

There is not enough waste produced on islands outside of O'ahu to even support a trash incinerator. In fact, O'ahu does a lousy job of feeding its incinerator, which is only operating at 56% of its capacity, requiring that the City and County of Honolulu satisfy that incinerator's put-or-pay contract by paying Reworld for the shortfall in waste that they county doesn't have to offer them to burn.

On Hawai'i Island, the county already has a put-or-pay contract with WM for West Hawaii Sanitary Landfill. Senator Richards: do you expect the county to pay not to use their landfill under the current contract so that you can pay again for a far more expensive option of burning the trash? And after residents rose up and defeated incinerators twice on Big Island, what community do you think is going to welcome one now?

As Kaua'i County knows, the reality is that no experienced incinerator company will build an incinerator at the tiny sizes needed to serve these counties. Using the latest data from EPA on how much waste was landfilled in the three county landfills in 2022, we're looking at an average of 241 tons/day produced in Kaua'i and going to Kekaha Landfill, 559 tons/day going to Hawai'i County's West Hawaii Sanitary Landfill, and 894 tons/day going to Maui's Central Landfill. If this bill is intended to push incinerators on Maui's less populated islands, that's even more impractical. There are fixed costs with incinerators, and it'll be a financial disaster to build an incinerator that small these days. In fact, new commercial trash incinerators planned in the past decade have often been on the order of 1,500 to 4,000 tons/day, though none have been built because no community will accept one, or can afford one.

The average plant of the sizes you're seeking was built in 1989. None have been built since 1995 unless you count the rebuild of Harrisburg, Pennsylvania's incinerator, which literally bankrupted the city government in 2011, eight years after I warned them that rebuilding the

incinerator would drive the city into bankruptcy. The sizes needed are simply too small to be economical.

It's also terribly polluting to burn trash and landfill ash. Even a modern new trash incinerator built under new regulations would still be a large air polluter, as an analysis just published about Miami-Dade County, Florida shows. When using data from the most modern incinerator in the nation, and assuming even deeper emissions cuts to comply with EPA's draft regulations for large new incinerators, the <u>study</u> shows that such a new incinerator as Miami-Dade County was recently considering would be among the largest industrial air polluters in their county. Of course, these new regulations are for large new incinerators, and you don't make enough waste for those on these islands, so any new incinerator would be dirtier, as weaker regulations would apply to them.

A 2021 <u>life cycle analysis</u> conducted for the County of Hawai'i found that incineration of paper and plastics at the H-POWER incinerator on O'ahu is the most harmful option for health and environment, that landfilling is far less damaging, and that recycling those materials (even after barging them thousands of miles to market) is a huge health and environmental benefit.

Contrary to the misinformation in this bill, burning trash in Hawai'i does not replace fossil fuels. It *is* fossil fuels because much of the energy comes from burning plastics, which are made from oil and gas (fossil fuels), and is very toxic to burn. Because trash incineration counts as renewable energy under state law, it does not replace oil burning, but replaces solar and geothermal by competing within this state renewable energy mandate. After all, it is primarily solar (with storage to make it "firm" energy) being developed by HECO and KIUC to comply with the state's Renewable Portfolio Standard law as their annual reports demonstrate.

The state's only trash burner, the H-POWER incinerator in Kapolei on O'ahu, is a <u>huge air</u> <u>polluter</u>, among the largest in the state.

Incineration conflicts with the state's climate change goals and the peoples' constitutional right to a clean and healthful environment under Article XI, Section 9 of the Hawai'i Constitution. Trash incineration also violates the court-ordered *Navahine F. vs. Hawaii Department of Transportation* settlement which requires zero greenhouse gas emissions from the state's transportation sector, which is only possible with a carbon-free electric grid needed to electrify transportation. Burning trash releases 65% more greenhouse gases than burning coal.

Incineration and other so-called "waste-to-energy" technologies are considered unacceptable in a Zero Waste system, which is the better way to manage materials to preserve landfill space. Zero waste strategies – a variety of local and state policies, programs, and related infrastructure – produce many times more jobs than burning or burying trash or ash.

There is one technology that can appropriately fit under the "waste-to-energy" umbrella that is acceptable in a Zero Waste system, and that is anaerobic digestion (AD). AD is basically like composting within a vessel, so that methane is formed in the absence of oxygen, breaking the

waste down and reducing the weight and volume. Methane gas can then be used for energy without having to burn the waste itself. However, it is only appropriate where dirty feedstocks like sewage sludge or the organic fraction of mixed municipal waste is digested to stabilize it before landfilling the digested material ("digestate"), in order to prevent the formation of gases in the landfill itself. For relatively clean organic materials like food scraps, yard waste, and animal wastes, Zero Waste experts recommend using aerobic composting to return that material to the land without the greater cost of AD, which requires an aerobic composting step to "finish" the digestate, anyway, so that it can be used as soil amendment.

We invite you to do your diligence about "waste-to-energy" technologies. This does not mean simply waving around reports from New York City academics who are funded by the incinerator industry, or nonprofits that take money from the Reworld/Covanta to write a report about how great incinerators are. That sort of thing has long been known as "Tobacco Science." There is good information without the private industry influence, cited to industry and government data, as well as independent academic literature, which makes it clear why the environmental and Zero Waste communities are opposed to incineration. It's not because we love landfills, but because we know that the science shows landfills to be the lesser evil compared to burning waste and landfilling toxic ash. Landfills, once managed better via Zero Waste strategies, can be far less noxious than they currently are, but burning trash is driving in the opposite direction.

We are available to address any questions you have about incineration, other "waste-to-energy" technologies, landfills, and Zero Waste solutions.

When it comes to understanding how incinerators compare to landfills, in addition to reviewing the study cited above, commissioned by the County of Hawai'i, we encourage you to review similar studies looking beyond just paper and plastics, but at the full municipal solid waste stream. See: <a href="https://www.energyjustice.net/incineration/DelcoLCA.pdf">https://www.energyjustice.net/incineration/DelcoLCA.pdf</a> for a summary of one of the latest, and links to sources.

Also, please review the materials at <a href="https://www.energyjustice.net/incineration">https://www.energyjustice.net/incineration</a> to get a more complete picture of the industry.

Mahalo for your consideration.





To: The Honorable Senator Donovan DelaCruz, Chair, the Honorable Sharon Moriwaki, Vice Chair, and Members of the Ways and Means Committee.

From: Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i (by Ted Bohlen)

Re: Hearing SB964 SD1 RELATING TO WASTE-TO-ENERGY

Hearing: Friday February 28, 2025 10:35 a.m. CR211

Aloha Chair DelaCruz, Vice Chair Moriwaki, and Members of the Ways and Means Committee!

The Hawai'i Reef and Ocean Coalition (HIROC) is a group of scientists, educators, filmmakers and environmental advocates who have been working since 2017 to protect Hawaii's coral reefs and

ocean. We want to protect Hawai'i's reefs and ocean from toxic air pollution and toxic ash from trash incineration.

The mission of the Climate Protectors Hawai'i is to educate and engage the local community in climate change action. We support measures to reduce climate heating, including avoiding the greenhouse gases and other pollution from burning trash.

Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i appreciate the bill's intent to reduce the volume of solid waste put in landfills, but **respectfully must STRONGLY OPPOSE SB964 SD1!** 

Burning trash and landfilling the toxic ash is the most expensive way to manage trash, even considering the value of electricity generated. Oahu with H-POWER and many cities on the mainland have learned the true financial cost of feeding an incinerator. In addition to the many millions of dollars needed to build the incinerator with expensive air pollution controls (usually paid by the local government taxpayers), long-term costs balloon in part due to ever increasing tipping costs. The experiences of Harrisburg, Pennsylvania, Detroit, Michigan, and multiple incinerators in Florida should inform our decisions about incinerators. A public-private partnership is not the answer either, with risks of even higher costs and less public accountability.

Incineration is also very harmful to public health and the environment. "Waste-to-energy" is more accurately called "trash-to-toxic air and ash pollution."

As demonstrated with the data reported by states and facilities to U.S. EPA databases, trash incineration pollutes more than burning coal and is worse than simply landfilling trash without burning it first, in part because incinerators need to put toxic ash in landfills, which makes the landfills more hazardous.

From both cost and environmental perspectives, burning trash is worse than simply landfilling the trash without burning it at all.

Oahu is over-paying for H-POWER because it does not generate enough waste under the put-or-pay clause. Burning the relatively small volumes of trash on the Neighbor Islands will not be economic and will harm the public health and environment. **This proposal for Neighbor Island incinerators is idea-advised.** 

#### PLEASE HOLD THIS BILL!

Mahalo!

Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i (by Ted Bohlen)

Submitted on: 2/27/2025 8:28:21 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Nicole Larson	Testifying for Circular Hawai'i	Oppose	Written Testimony Only

#### Comments:

Aloha,

My name is Nicole Larson and I represent Circular Hawai'i, providing zero waste consulting and event services for Hawai'i Island. I am working diligently to provide scalable and cost effective waste reduction strategies and solutions for our island and our state. Incineration is not a good idea for Hawai'i Island, or our state.

Beyond the myriad environmental and economic negative impacts our colleagues have brought to your attention, I want to speak about the negative effects that incineration would have on Hawai'i Island.

As a business, incineration is always highly subsidized by government and requires ongoing support from the government to continue. Circular economies are inexpensive and scalable and not only sustain themselves, but also generate profit without the need for government support.

A 2021 <u>life cycle analysis</u> conducted for the County of Hawai'i found that incineration of paper and plastics at the H-POWER incinerator on O'ahu is the most harmful option for health and environment, that landfilling is far less damaging, and that recycling those materials (even after barging them thousands of miles to market) is a huge health and environmental benefit. Similar <u>studies</u> have shown that incineration (and landfilling toxic ash) is 2-3 times more harmful to health and environment than landfilling without burning first.

Hawai'i Island does not produce enough waste to support a new incinerator. Multiple incinerator proposals have been rejected in the past. The county's 2023 waste solicitation for sustainable infrastructure requests (RFI #4444) specifically rejected waste combustion proposals. A new incinerator, which would also require such a "put or pay" contract would lead to a financial disaster for the county that would have to feed both the landfill and a new incinerator or pay them to not use them, as O'ahu has been doing.

It is imperative to focus on the traditional reduce, reuse, recycle and rot (compost) model before we waste any more money on false solutions that come with a high price tag and environmental impact.

Incineration encourages the continued importation of 80% of Hawai'i's consumables.

What is to slow the constant demand for imported goods if there is a perceived way to make the waste "disappear"? This type of solution may very well contribute to the continued dependence on fossil fuel derived products (plastics), which inevitably creates another greenwashing industry, rather than a scalable and sustainable solution.

Bringing stakeholders together to reach a consensus and working together to build sustainable circular systems, this is how we honor and utilize the teachings of Hawaiian knowledge towards a resilient future for Hawai'i and Hawaiians.

Circular Hawai'i urges you to please vote no on SB964. Let's work together to scale reduce, reuse, recycle and rot for the islands first. Mahalo for your time and consideration.

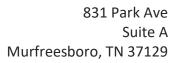
Submitted on: 2/27/2025 8:03:01 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Deborah Winter	Testifying for Sustainable Kohala	Oppose	Written Testimony Only

#### Comments:

Sustainable Kohala opposes this proposal to burn trash on every island. We don't have enough trash, we don't want to use MORE fossil fuels, and we don't want to breathe the resulting toxic fumes. Instead, let's reduce waste by diverting green waste, composting what we can, and finding safer ways to contain solid waste than turning it into air pollution.





#### February 27, 2025

**To**: Senate Committee on Energy and Intergovernmental Affairs Senator Glenn Wakai, Chair;

Senator Stanley Chang, Vice Chair

Re: SB 964 – Waste to Energy Facilities on Neighbor Islands through Public-Private

**Partnerships** 

Hearing: Friday, February 28, 2025, 10:35 am

Position: In SUPPORT of Senate Bill 964 SD1



Dear Chair Wakai, Vice Chair Chang, and Members of the Committee,

On behalf of Heartland, I'd like to offer testimony in strong support for Senate Bill 964 SD1 which authorizes the Hawaii State Energy Office to establish public-private partnerships for developing waste-to-energy (WtE) generating facilities in counties with populations below 800,000. This initiative represents a significant step toward sustainable waste management and energy production in Hawaii. In fact, Heartland views such projects more broadly as "Waste-to-Value" (WtV) opportunities with specific applications for liquid fuels in the immediate local economy.

Heartland is an industry-leading waste solutions provider with nearly two-decades of experience designing, managing, and operating projects. We are strong believers that organic waste streams represent untapped value and the potential for sustainable energy creation. Heartland is enthusiastic about project development opportunities in Hawaii and Senate Bill 964 SD1 offers a pathway that would accommodate a distributed service model such as ours.

In view of the growing challenges with aging landfill infrastructure, we believe we can deploy a scalable and sustainable solution for reliable WtV conversion without the risk of advance capital investment by Hawaii ratepayers. I'd like to offer some compelling examples:

- Heartland is immediately prepared to bring our technology to bear on the management of biosolids generated by local wastewater treatment facilities annually, further supporting organics diversion from landfills and alleviating the pressures on that diminishing capacity. Our novel technologies will further provide the assured destruction of emerging contaminants of concern such as PFAS, microplastics, and others to further drive the highest standards of environmental stewardship and protection of the public's health in Hawaii.
- Heartland's technology can be deployed at landfills and materials recovery facilities (MRFs)
  to capture the currently non-recyclable plastics streams as valuable feedstocks to be
  converted to renewable, refuse derived fuels (RDFs) such as diesel, methanol, and
  sustainable aircraft fuel. Ready markets are in place now seeking these products in quantity
  from local generators.
- Heartland's technology has already been successfully vetted by the Department of Energy as
  an approved methodology for Hydrogen production. Specifically, Heartland's technology
  will be the basis for one of the DoE's ten Hydrogen Hub projects under development
  throughout the US. The ARCH II project in West Virginia will collect food waste and other





organics, anaerobically digest the combined stream, and generate a methane gas to be converted to a certified-Turquoise Hydrogen fuel product. Heartland is proud to have been designated the lowest-cost solution among the methods evaluated by the DoE.

This committee should be pleased to learn that Heartland's technology does not generate dangerous emissions. Our systems are distinguished from incineration and the inherent vacuum design prevents fugitive emissions and odors. Final emissions levels are beneath any air permit thresholds and represent no danger to the surrounding community. Heartland has successfully permitted our technology in other states.

Developed decades ago within the US National Laboratory complex, Heartland's technology is provably effective by virtue of our industry leading Technology Center located in Tennessee. Purpose built for demonstrating our systems as commercial scale, clients are able to witness our technology in operation using their specific feedstock to quantify performance parameters such as materials reduction, energy production, and contaminant destruction. There, Hawaii's leaders can collaborate firsthand with Heartland's management, engineering and operations teams to facilitate responsible and strategic decision-making on behalf of their ratepayers.

Heartland brings a long history of successful project development and implementation experience as demonstrated by the installed base of our award-winning technology throughout the US. Our technology is available exclusively through a build-own-operate commercial model under which Heartland will take responsibility for the operational and financial success of the distributed service contemplated by SB 964 SD1.

Beyond waste reduction, WtV projects present a compelling economic case. The construction and operation of these facilities create high-quality, long-term jobs in engineering, waste management, and energy production, providing an economic boost to local communities. Additionally, leveraging waste as an energy source decreases reliance on costly imported fossil fuels, keeping energy expenditures within the local economy rather than sending them out of state.

Furthermore, WtV aligns with the principles of a circular economy by recovering valuable materials from waste streams. Metals and other recyclable components can be extracted before treatment, creating opportunities for secondary markets and reducing the need for raw material extraction. The residual char from Heartland's processes can be repurposed in construction materials, minimizing landfill dependency and enhancing resource efficiency. By integrating WtV within a broader circular economy strategy, Hawaii can reduce waste generation, optimize resource use, and build a more resilient and self-sufficient economic framework.

In conclusion, Heartland supports SB964 SD1 and encourages its swift passage. In view of Hawaii's stated goal of operating on 100% renewable fuel by 2045, embracing WtV technology will position Hawaii as a leader in sustainable innovation, providing environmental, economic, and societal benefits for its residents.

Thank you for your attention to this important matter.



Submitted on: 2/27/2025 8:12:28 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Henry Curtis	Testifying for Life of the Land	Oppose	Written Testimony Only

## Comments:

Aloha Senators

Every effort must be used to reduce, reuse, and recycle waste. Garbage to energy facilities unacceptible levels of toxics.

Mahalo



# **International Brotherhood of Electrical Workers**

LOCAL UNION NO. 1186 • Affiliated with AFL-CIO

1935 HAU STREET, 5<sup>th</sup> Floor ◆ HONOLULU, HI 96819-5003 TELEPHONE (808) 847-5341 ◆ FAX (808) 847-2224

TO: SENATE COMMITTEE ON WAYS AND MEANS

Hearing on Friday, February 28, 2025 at 10:35 a.m., Conference Room 211

RE: TESTIMONY **SUPPORTING THE INTENT** OF SB 964 SD1

Honorable Chair Donovan M. Dela Cruz, Vice Chair Sharon Y. Moriwaki, and Members of the Committee on Ways and Means:

The International Brotherhood of Electrical Workers Local Union 1186 (IBEW 1186), is comprised of over 3,600 men and women working in electrical construction, telecommunications, Spectrum, civil service employees, and educator and faculty associations.

IBEW 1186 **SUPPORTS THE INTENT** of this bill for the development of an energy generating plant that could result in multiple benefits. We need to explore solutions and alternatives to expansion of existing landfills, and the search for new locations for additional landfills has been a heavily debated matter.

Waste-to-energy facilities could help relieve the need for landfill space, while also providing much needed alternative sources of sustainable energy for our businesses and residents. If done properly, considering the concerns of both the environment and the community, could reduce our reliance on imported oil, and stimulate the expansion of a diverse, innovative, and technologically advanced workforce sector.

Thank you for this opportunity to submit this testimony.



Email: office@mrksrecylehawaii.com Fax #: (808) 769-4023

Mr. K's is in strong opposition to SB964. If there were incinerators on outer islands burning all the trash and electronics, we'd be polluting the air with toxic fumes, plastic, finite metals and poisons. For instance, counties have no penalties or regulations against disposing of electronics in landfills, where they may be incinerated if an incinerator is available. The H3 power plant burns whatever they get in their curbside collection including electronics and still don't have enough waste to run the incinerator which would also be true for the outer islands. We're on an island so we cannot bury or burn our waste; we should recycle things instead. Because shipping and freight can be expensive, we need to have Extended Producer Responsibility to take all the waste back. The big companies sending goods to the islands are multibillion dollar companies, so they have the means to fund the recycling of the materials they send into the islands. We need to take care of the environment and burning is not the answer. There are other options for renewable energy instead of building an incinerator.

As a locally owned small business on the Big Island, Mr. K's Recycle and Redemption Center has been responsibly recycling, redeeming, and reusing things that our residents and businesses no longer need for over 14 years. We have a community fundraiser, where people can donate their HI5 money to a favorite charity or organization. We recycle single-use alkaline batteries at cost, a program so popular that people make donations to support. We run a small thrift store, so people can bring in gently used things and other people can buy them at minimal cost. We collect newspapers and resell them to farms, flower sellers, and pet owners. We work with manufacturers to increase our collection of electronic devices for the Electronic Device Recycling Program. The thought of all of this instead going into an incinerator to become toxic ash to poison our air, water, land, and bodies is unacceptable.

Further, the thought of all the funding that could be used to strengthen and expand our recycling and sustainability programs and public education, which we badly need, instead being diverted to building an incinerator on our island is unacceptable.

As a collector and recycler, I urge you to vote AGAINST SB964 SD1.

Mahalo for this opportunity to submit testimony in strong OPPOSITION to SB964 SD1.

Submitted on: 2/26/2025 8:31:21 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Megan Lamson	Testifying for Hawaii Wildlife Fund	Oppose	Written Testimony Only

#### Comments:

Aloha esteemed senators of the Ways and Means Committee,

We strongly oppose this proposed legislation SB964 that would promote any additional waste-to-energy facilities across the pae 'āina. As island residents and environmental stewards, we need to be more mindful of what we produce and import, and genuinely more thoughtful of how we best "dispose" of unwanted products. There are consequences to every action, and in the case of WTE those consequences are what we call "byproducts" and they include things like furans, dioxins and other gnarly pollutants that are released into the air from incineration and / or become part of the land with the toxic fly ash.

We need to move away from such backwards and antiquated waste "solutions" and move towards a truly more sustainable future, by refusing to burn, reducing the inputs, reusing / repurposing what we can locally, recycling what we are able to (if it is feasible), composting, etc.

This bill moves us in the wrong direction and should die at this upcoming WAM hearing. There is simply no rationale for WTE on any island! O'ahu residents are already burdened by HPOWER byproducts and the "put or pay" model that does not make economic sense.

According to a 2021 <u>life cycle analysis</u> conducted for the County of Hawai'i, the authors found that incineration of paper and plastics at the HPOWER incinerator on O'ahu is the most harmful option for health and environment, that landfilling is far less damaging, and that recycling those materials (even after barging them thousands of miles to market) is a huge health and environmental benefit. Similar <u>studies</u> have shown that incineration (and landfilling toxic ash) is 2-3 times more harmful to health and environment than landfilling without burning first.

Hawai'i Wildlife Fund staff and volunteers collect an average of 17 tons of marine debris - aka plastic pollution, aka trash - off the shores of Hawai'i Island annually (and have since 2003). And after extensive research and shipping 13 containers full of nets and lines to HPOWER since 2005, several years ago we decided it was better to landfill locally vs truck / ship our debris to O'ahu for incineration. While we are still investigating local options for reuse and recycling, we stand by our decision to landfill the plastics we collect from the beaches versus shipping them over for such a WTE initiative unless absolutely necessary. The science clearly shows that the harm caused by burning plastics and othe trash is worse than landfilling them, and to us the landfills are just a placeholder until we can do better, and find / implement truly greener solutions. Whereas this bill and what it stands for will essentially turn all our trash into air / land

pollutants, and is more of an act of smoke, mirrors and money-making than a solid, solutions-oriented and educated initiative. Please vote NO on SB964, and hopefully there will still be coral reefs for future generations to enjoy (with this and other climate-conscious decisions), and help Hawai'i stop any more ridiculous initiatives to promote WTE in the islands.

Mahalo for your time and consideration.

Submitted on: 2/26/2025 6:18:48 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
laurel brier	Testifying for Kauai Climate Action Coalition	Unnose	Written Testimony Only

#### Comments:

Incineration is not the silver bullet for dealing with our garbage. Reading the research it is crystal clear why NO one else is building these expensive, polluting incinerators. Why is the State trying to push this on the counties? Incineration is in direct contradiction to the State's Climate goals and constitutional environmental protections. Kill the Bill. STRONG OPPOSITION to SB964

Submitted on: 2/27/2025 8:21:55 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Ruta Jordans	Testifying for Zero Waste Kauai	Oppose	Written Testimony Only

#### Comments:

Except for VOG and H-Power, Hawaii is known for its clean air and clean water. Building "waste to energy," in poverty stricken neighborhoods, as is usual, just does not fit the Hawaiian way of life. Why in the world would we burn greenwaste and used but reusable items when we need them to form a circular economy for Hawaii to become self-sustaining? Please oppose SB964!

Submitted on: 2/26/2025 12:15:10 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Michael I Rice	Individual	Support	Written Testimony Only

#### Comments:

I stand in STRONG SUPPORT of this bill. While I think Oahu's own Waste to Energy system should be expanded, the other islands should most certainly have their own systems as well. The only things going into our landfills should be things we can't burn, and even then we should be looking for other uses for them and potentially even 'mining' existing landfills for combustible material.

Not only that but plastic materials that aren't fit to recycle can be burned at such facilities, if combined with methods to harvest plastics from the ocean and this is a no brainer. Add in green and experimental methods to these systems, such as combining cooling systems for solar panels as a 'pre-heater' for water intended for steam turbines and algae bioreactors to reduce CO2 and other pollutants at the source and we're looking at net positives for the environment.

Submitted on: 2/26/2025 1:42:14 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
chris c.	Individual	Oppose	Written Testimony Only

## Comments:

# Oppose.

It seems that our legislators have given up on reduce or reuse, and would rather fund incinerate. Shouldn't this be a local County decision, rather than a directive from the state?

Submitted on: 2/26/2025 2:07:07 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Catherine Young	Individual	Oppose	Written Testimony Only

#### Comments:

I love clean air. What person does not understand that an incinerator produces toxic ash and air polluntion? Stop the insanity now. Oppose this bill.

Hawaii Island's 2023 waste solicitation for sustainable infrastructure requests *specifically rejected* waste combustion proposals. How many years and ways do we need to say it? We don't want an incinerator. The ecological and finiancial ruin of our island is not desired.

Submitted on: 2/26/2025 3:32:29 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
WhaleSong	Individual	Oppose	Written Testimony Only

#### Comments:

As an environmentalist and citizen of Maui I am DEEPLY OPPOSED to using incinerators to dispose of trash and especially opposed to expanding this practice. It should not be happening at all.

Here are some reasons that burning trash in incinerators is bad for the environment for several reasons:

- 1. **Air Pollution:** Incineration releases harmful pollutants, including carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), particulate matter, heavy metals (like mercury and lead), and toxic compounds like dioxins and furans, which are highly toxic and can harm human health and the environment.
- 2. **Greenhouse Gas Emissions:** Incinerators emit significant amounts of CO<sub>2</sub>, contributing to climate change. When plastics (derived from fossil fuels) are burned, they release even more greenhouse gases.
- 3. **Toxic Ash:** The combustion process generates bottom ash and fly ash, which can contain toxic substances. This ash needs to be disposed of safely, often in landfills, which can still pose contamination risks to soil and groundwater.
- 4. **Resource Waste:** Burning waste destroys potentially recyclable or compostable materials, contributing to the depletion of natural resources and preventing a circular economy approach.
- 5. **Energy Inefficiency:** While incinerators can generate energy, this process is often less efficient and more polluting than using renewable energy sources or focusing on reducing, reusing, and recycling materials.
- 6. **Public Health Risks:** Emissions from incinerators can contribute to respiratory issues, cardiovascular problems, and other health concerns for communities, especially those located near these facilities.

A more sustainable approach involves reducing waste at the source, increasing recycling and composting efforts, and promoting zero-waste initiatives to minimize the need for incineration altogether.

Building trash incinerators on the Hawaiian Islands would be particularly problematic due to:

1. **Air Quality Concerns:** The trade winds and unique climate of Hawaii could lead to air pollution from incinerator emissions, impacting both local communities and the natural

- environment. Pollutants like dioxins, particulate matter, and toxic gases could harm human health and ecosystems.
- 2. **Impact on Ecosystems:** Hawaii is home to many endemic species found nowhere else in the world. Airborne pollutants and toxic ash could threaten fragile ecosystems, including coastal and marine environments.
- 3. **Proximity to Communities:** The islands' limited land area means incinerators would likely be close to residential areas, raising concerns about public health and quality of life.
- 4. **Disposal of Toxic Ash:** Incinerators produce ash that needs safe disposal. On an island with limited landfill space and a sensitive environment, safely managing this ash would be a significant challenge.
- 5. **Climate Change Concerns:** Hawaii is already vulnerable to climate change impacts, including rising sea levels and extreme weather. Incinerators contribute to greenhouse gas emissions, exacerbating climate risks.
- 6. **Resource Management:** Burning waste eliminates opportunities to recycle and compost, clashing with Hawaii's sustainability goals and circular economy initiatives. The islands would benefit more from waste reduction, recycling, and composting strategies.
- 7. **Tourism and Cultural Impact:** Hawaii's natural beauty is a cornerstone of its tourism industry and cultural identity. Incinerators could detract from this image and potentially impact tourism and local cultural practices.

A better approach for Hawaii might include expanding composting programs, improving recycling systems, reducing single-use plastics, and educating the community about waste reduction. Let's expand our recycling program and especially our composting initiatives and stop important so much plastic waste to our islands. We don't need food wrapped in tons of plastic we don't NEED giant jugs of laundry detergent when we can buy powered detergent in paper boxes. There are so many solutions and products geared towards reducing waste and we should be incentivizing stores to stock those products and penalizing them for stocking the wasteful ones. Let's invest in Hawaii farms and grow our food locally so we can rely on ourselves and get out of the consumer reliance chain that we are a slave to.

Thank you for consideration. It's atrocious to me that this is even being considered.

Submitted on: 2/26/2025 3:56:35 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Elizabeth Laliberte	Individual	Oppose	Written Testimony Only

Comments:

Dear Representatives,

I strongly oppose this bill, for a few reasons:

- 1) Burning trash pollutes the air. Would you live downwind from a trash burning factory?
- 2) Burning trash violates Hawaii's climate change goals and the people's right to a clean and healthful environment.
- 3) Trash incinerators, like H-POWER on O'ahu, require "put-or-pay" contracts that promise a minimum amount of waste or the county must pay the private operator as if that waste were provided to burn.
- 4) Hawai'i Island does not produce enough waste to support a new incinerator. Multiple incinerator proposals have been rejected in the past. The county's 2023 waste solicitation for sustainable infrastructure requests (RFI #4444) specifically rejected waste combustion proposals. West Hawaii Sanitary Landfill has room until 2049, is in an area not bothering local residents, and there is plenty of space to expand it.
- 5) Trash burning factories are taxpayer-funded boondoggles.
- 6) Hawaii needs to invest in clean, sustainable renewable energy generating projects like wind and solar.

We WILL NOT ACCEPT A TRASH BURNING FACTORY on our island.

Sincerely,

Liz Laliberte

Hilo, HI

Submitted on: 2/26/2025 5:35:32 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Ellen Okuma	Individual	Oppose	Written Testimony Only

### Comments:

Aloha,

As a long-time resident of Hawaii Island from the Hilo side, I want you to know I OPPOSE SB 964! Waste to energy through incineration is a highly toxic means of producing energy. The cons of incineration are: air pollution as particulate matter, carbon monoxide, & nitrogen oxides, all of which added to our island's natural output of VOG, creates more respiratory problems for residents; and toxic ash, which requires special handling & disposal. Additionally, waste-to-energy incineration is an expensive & technically complex project to build. And, "feeding" the sustem requires more trash than is currently produced on Hawaii Island, and it would duscourage reuse & recycling of solid waste.

Please do NOT allow this bill to be passed to solve Oahu's landfill problems. We don't want waste-to-energy on Moku O Keawe!

Submitted on: 2/26/2025 5:39:16 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Eliel Starbright	Individual	Oppose	Written Testimony Only

# Comments:

Burning trash (and landfilling toxic ash) is the most expensive and polluting way to manage waste or to make energy. It pollutes more than burning coal, and is worse than simply landfilling trash without burning it first. The bill sponsors cannot even get basic facts correct. The bill states that there are 76 trash incinerators operating in the U.S. which has not been true since 2018. 13 have closed since then and we now have 63. No new trash incinerators have been built in this time because no community will accept one.

Submitted on: 2/26/2025 6:07:16 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
David Hunt	Individual	Oppose	Written Testimony Only

### Comments:

These are the FACTS you need to understand regarding SB964:

Burning trash and landfilling the toxic ash waste is the MOST expensive and polluting way to manage waste or to make energy. It pollutes more than burning coal, and is worse than simply landfilling trash without burning it first.

A "modern" new trash incinerator built under new regulations would still be a large air polluter.

There is no such thing as "waste to energy" When burned, waste is turned into toxic ash and air pollution. No company is violating the laws of physics and turning matter into energy.

Burning trash does NOT replace fossil fuels. It IS fossil fuels because much of the energy comes from burning plastics, which are made from oil and gas (fossil fuels), and is very toxic to burn. Because trash incineration counts as renewable energy under state law, it does not replace oil burning, but replaces solar and geothermal by COMPETING within the state renewable energy mandate.

The state's only trash burner, the H-POWER incinerator in Kapolei on Oahu, is a huge air polluter.

A 2021 life cycle analysis conducted for the County of Hawai'i found that incineration of paper and plastics at the H-POWER incinerator on O'ahu is the most harmful option for health and environment, that landfilling is far less damaging, and that recycling those materials (even after barging them thousands of miles to market) is a huge health and environmental benefit. Similar studie have shown that incineration (and landfilling toxic ash) is 2-3 times more harmful to health and the environment than landfilling trash without burning first.

Incineration conflicts with the state's climate change goals and the peoples' constitutional right to a clean and healthful environment under Article XI, Section 9 of the Hawai'i Constitution.

Trash incineration violates the court-ordered Navahine F. vs. Hawaii Department of Transportationsettlement which requires zero greenhouse gas emissions from the state's transportation sector, which is only possible with a carbon-free electric grid needed to electrify transportation. Burning trash releases 65% more greenhouse gases than burning coal.

Incineration and other so-called "waste-to-energy" technologies are considered unacceptable in a Zero Waste system, which is the better way to manage materials to preserve landfill space. Zero waste strategies also produce many times more jobs than burning or burying trash or ash.

No one has built a commercial-scale trash gasification or pyrolysis facility in the U.S., and despite hundreds of attempts, no trash incinerator has been built at a new site since 1995 due to high costs and community opposition. There is no way any community in the state would accept one.

Miami-Dade County just abandoned plans to build the nation's largest trash incinerator. Even with their large economy of scale, it was cost-prohibitive, at a price of at least \$1.5 Billion. The neighbor islands don't produce enough trash to support an incinerator, and would be far more costly per ton to build at such small required sizes.

Incinerators are hungry machines that need to be fed waste. Like H-POWER on O'ahu, they require "put-or-pay" contracts that promise a minimum amount of waste or the county must pay the private operator as if that waste were provided to burn. This financially punishes counties for doing the right thing and reducing waste. In the mid-1990s, 29 towns in New Hampshire filed for bankruptcy because of put-or-pay clauses in their contract with a small incinerator.

The bill sponsors cannot even get basic facts correct. The bill states that there are 76 trash incinerators operating in the U.S. which has not been true since 2018. 13 have closed since then and we now have 63. No new trash incinerators have been built in this time because no community will accept one.

Kaua'i is already exploring "waste-to-energy" options for a second time. Last time, it was apparent that no one would build such a facility so small as the island needs, because it's uneconomical. No "waste-to-energy" solution can happen soon enough to address the landfill space crunch at Kekaha Landfill.

O'ahu is already home to one of the nation's largest incinerators, H-POWER, and does NOT have enough waste to feed it. It is operating at only 56% capacity, and the county PAYS A PENALTY fee for not feeding it enough to burn, which is a disincentive to reduce, reuse, recycle or compost.

Maui does not produce enough waste to support a new incinerator. Central Maui Landfill has room until 2039 and the county is already working on acquiring nearby land for expansion.

Hawai'i Island does not produce enough waste to support a new incinerator. Multiple incinerator proposals have been rejected in the past. The county's 2023 waste solicitation for sustainable infrastructure requests (RFI #4444) specifically rejected waste combustion proposals. West

Hawaii Sanitary Landfill has room until 2049, is in an area not bothering local residents, and there is plenty of space to expand it. The county already has a contract with the landfill operator to promise a minimum amount of trash to it. A new incinerator, which would also require such a "put or pay" contract would lead to a financial DISASTER for the county that would have to feed both the landfill and a new incinerator or pay them to not use them, as Oʻahu has been doing.

Submitted on: 2/26/2025 6:46:58 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Michele Mitsumori	Individual	Oppose	Written Testimony Only

### Comments:

Aloha Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Ways and Means Committee,

I'm writing in strong OPPOSITION to SB 964SD1, which authorizes the Hawai'i State Energy Office to establish a public-private partnership to develop a waste-to-energy generating facility in each county having a population below 800,000.

As a resident of Hawai'i County, we already have a Life Cycle Assessment Technical Memorandum, issued just 2 years ago in 2023. This study found that incineration produced more carbon emissions and had higher environmental cost per ton of material than recycling or landfilling. The study recommended that "based on the data, to reduce overall emissions produced by the solid waste stream would be to **continue investing in improving recycling operations and the promotion of waste reduction in the community.**"

Hawai'i County already has several recycling/reuse options that are underutilized. HI5 collection is at 60%. When an organization I work with has talked with hotels or restaurants, they've said they don't redeem their HI5s because of lack of manpower to sort and prepare the containers. Imagine if the funding to build an incinerator on Hawai'i Island that would produce more carbone emissions than the landfill were instead invested in making HI5 redemption easier and in promoting public education! This would also put redemption fees back into our pockets.

Hawai'i has a successful Electronic Device Recycling Program, and manufacturers are complaining there isn't enough e-waste to recycle 70% of the weight they sell. Electronic devices contain valuable materials including steel and aluminum -- two metals currently targeted for high tariffs -- and many devices can be repaired and reused. Imagine if the funding to bulid an incinerator on Hawai'i Island were instead used to promote recycling/collection events and public education to recycle electronics!

A 2023 County of Hawai'i study has already recommended AGAINST an incinerator. It is wrong to invest scarce state funding, particularly in the uncertainty and hardship caused by loss of federal funding, in burning materials that harms the environment and our health, and some of which could be recycled and reused.

Thank you for the opportunity to submit testimony in STRONG OPPOSITION to SB967 SD1.

Submitted on: 2/26/2025 7:58:31 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Mary True	Individual	Oppose	Written Testimony Only

### Comments:

I strongly oppose SB964 because Hawai'i Island does not produce enough waste to support a new incinerator. Multiple incinerator proposals have been rejected in the past. The county's 2023 waste solicitation for sustainable infrastructure requests (RFI #4444) specifically rejected waste combustion proposals. West Hawaii Sanitary Landfill has room until 2049, is in an area not bothering local residents, and there is plenty of space to expand it. The county already has a contract with the landfill operator to promise a minimum amount of trash to it. A new incinerator, which would also require such a "put or pay" contract would lead to a financial disaster for the county that would have to feed both the landfill and a new incinerator or pay them to not use them, as O'ahu has been doing.

Aloha and mahalo for listening, Mary True, Pepe'ekeo, Hawaii Island

Submitted on: 2/26/2025 8:04:55 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Monica Stone	Individual	Oppose	Written Testimony Only

# Comments:

Mahalo Committee Members for receiving my testimony in strong opposition to SB964.

I oppose "waste-to-energy" incineration in Hawai'i due to the known harmful effects on air and water. The state may be better served by going upstream and enacting Extended Producer Responsibility laws to support the expansion of waste diversion systems across the islands.

With Aloha,

Monica Stone 96740

Submitted on: 2/26/2025 8:33:51 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Robert Culbertson	Individual	Oppose	Written Testimony Only

Comments:

Aloha Senators!

I am strongly opposed to SB 964 SD1. It's really surprising to find out this is even moving. There is now way we should be uplifting such an obsolete set of boundoggles.

All of these technologies destroy materials, create air pollution, increase toxicity by creating new toxic chemicals like dioxins/furans and polycyclic aromatic hydrocarbons, and spread around existing toxic chemicals like PFAS/PFOA and toxic metals (mercury, lead, arsenic, cadmium, chromium, etc.). Every one of them creates greenhouse gas pollution because there is combustion at some stage of the process if energy is being produced. This is unavoidable, as there are no economically viable methods to capture and sequester the carbon dioxide (CO2). Even after the best pollution controls are used for other pollutants, the emissions of most pollutants are greater than if coal were being burned.

The days of 'combustion' are over.

Please HOLD this bill!

R A Culbertson

Honokaa

Submitted on: 2/26/2025 9:02:53 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Victoria Anderson	Individual	Oppose	Written Testimony Only

### Comments:

Re: Hearing SB964 SD1, Friday February 28, 2025 10:35 a.m. CR211

Aloha Hon. Chair DelaCruz, Hon. Vice Chair Moriwaki, and Hon. Members of the Ways and Means Committee,

Please oppose SB964 SD1.

Burning trash is in direct conflict with the state's climate change goals and our constitutional rights to a clean and healthful environment under Article XI, Section 9 of the Hawai'i Constitution. Burning trash (and then landfilling the resulting toxic ash) is extremely harmful to public health and to the environment. It creates more toxic pollution even than burning coal. Currently, the state's only trash burner (H-POWER, Kapolei, Oahu), is simultaneously a terrible polluter and a huge waste of taxpayer money. H-POWER, operating at only 56% capacity, does not have enough waste to feed it, so the county pays a penalty fee for not feeding it enough. This is a disincentive to reduce, reuse, recycle or compost. Even more so, Maui, Kauai, and the Big Island do not produce enough waste to support new incinerators, which would require the same kind of "put or pay" contracts and lead to financial disaster for these communities that would have to feed new incinerators or pay them to not use them, like Oʻahu has been doing. Also note that for Kauaʻi, this is the second time the island is exploring trash burning. Last time, no one wanted to build such a small, uneconomical facility. PLEASE HOLD THIS BILL!

Aloha,

Victoria B. Anderson

Submitted on: 2/27/2025 1:00:44 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
TERI SAVAIINAEA	Individual	Support	Written Testimony Only

# Comments:

# **Testimony in Strong Support of SB964 SD1**

Dear Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committee,

I strongly support SB964 SD1.

Mahalo, Teri Kia Savaiinaea District 45, Wai'anae Resident

Submitted on: 2/27/2025 3:41:56 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Ellie Moss	Individual	Oppose	Written Testimony Only

### Comments:

I oppose incineration or "waste-to-energy" facilities in general because they emit significant pollution and GHGs, and especially on Hawaiian islands because they are not economical and will end up costing counties more and they work directly against source reduction and reuse solutions, which are far more appropriate and effective for the remote island context, with far greater co-benefits.

Kaua'i is already explored "waste-to-energy" once before, and last time it was apparent that no one would build such a facility so small as the island needs, because it's uneconomical.

O'ahu is already home to one of the nation's largest incinerators, H-POWER, and it is a strong cautionary tale! It does not have enough waste to feed it. It is operating at only 56% capacity, and the county pays a penalty fee for not feeding it enough to burn, which is a disincentive to reduce, reuse, recycle or compost.

Maui does not produce enough waste to support a new incinerator. Central Maui Landfill has room until 2039 and the county is already working on acquiring nearby land for expansion.

Hawai'i Island does not produce enough waste to support a new incinerator. Multiple incinerator proposals have been rejected in the past. The county's 2023 waste solicitation for sustainable infrastructure requests (RFI #4444) specifically rejected waste combustion proposals. West Hawaii Sanitary Landfill has room until 2049, is in an area not bothering local residents, and there is plenty of space to expand it. The county already has a contract with the landfill operator to promise a minimum amount of trash to it. A new incinerator, which would also require such a "put or pay" contract would lead to a financial disaster for the county that would have to feed both the landfill and a new incinerator or pay them to not use them, as O'ahu has been doing. Hawai'i Island already has strong reuse programs operating and in development, which are better solutions, but if a waste to energy plant needed the tonnage or the county would have to pay a penalty, these solutions would be undermined.

In conclusion, I strongly oppose any incineration or waste to energy facilities in Hawai'i.

Submitted on: 2/27/2025 7:20:42 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
John Lyle	Individual	Oppose	Written Testimony Only

# Comments:

Aloha, our family is opposed to this bill on the grounds that it will actually increase pollution at different points and levels (air, water, soil). Most of the materials proposed for burning are plastics, which when burned will emit dangerous contaminants into air, water and soil. Please oppose this. Thank you. Lyle Ohana in Volcano

Submitted on: 2/27/2025 7:31:55 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Brooke Nasby	Individual	Oppose	Written Testimony Only

### Comments:

My name is Brooke Nasby and I oppose SB964 SD1. Building trash incinerators throws us all back seven decades to when I was growing up on Oahu. It is environmentally toxic and does not conform to the State, Country and Global environmental and clean air goals of today. Plastics and other toxic materials in our trash would pollute the air. The resulting incinerated toxic ash would be buried in our soil. As a Island State, let's bring ourselves into the environmentally conscious 21st Century, be proactive using better options, including creating better public educational campaigns and public incentives for handling non-recyclable plastic jugs and wraps, and easier, more efficient collection procedures to rid our landfills of toxic materials all together to create space for more compostable items that go into our fills. Please VOTE NO.

Submitted on: 2/26/2025 7:07:22 PM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Diane Ware	Individual	Oppose	Written Testimony Only

### Comments:

Dear WAM Chair and Committee Members,

Burning trash does not replace fossil fuels. It IS fossil fuels because much of the energy comes from burning plastics, which are made from oil and gas (fossil fuels), and is very toxic to burn. Because trash incineration counts as <u>renewable energy</u> under state law, it does not replace oil burning, but replaces solar and geothermal by competing within this state renewable energy mandate.

- \* The state's only trash burner, the H-POWER incinerator in Kapolei on O†ahu, is a <u>huge air polluter</u>.
- \* A 2021 <u>life cycle analysis</u> conducted for the County of Hawai'i found that incineration of paper and plastics at the H-POWER incinerator on O'ahu is the most harmful option for health and environment, that landfilling is far less damaging, and that recycling those materials (even after barging them thousands of miles to market) is a huge health and environmental benefit. Similar <u>studies</u>have shown that incineration (and landfilling toxic ash) is 2-3 times more harmful to health and environment than landfilling without burning first.
- \* Incineration conflicts with the state's climate change goals and the peoples' constitutional right to a clean and healthful environment under Article XI, Section 9 of the Hawai'i Constitution.

I urge you to hold this and malama pono,

Sincerely,

Diane Ware, Volcano HI 96785

Submitted on: 2/27/2025 7:57:45 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Cody Sula	Individual	Support	Written Testimony Only

### Comments:

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

Comments Regarding SB 964, SD1 Relating to Waste-to-Energy

Friday, February 28, 2025, 10:35 AM; Conference Room 211 & Videoconference

I'm Cliff Laboy and I support the intent of SB 964, SD1, which is to authorize the Hawaii State Energy Office to establish a public-private partnership to develop a waste-to-energy generating facility in each county having a population below 800,000, thereby contributing to the State's renewable portfolio standards requirement of achieving 100% renewable energy by 2045 and reducing Hawaii's carbon footprint. I agree with the Legislature's understanding that waste-to-energy technology is a promising strategy for reducing the State's solid waste stream and increasing energy production.

Despite concerns relating to the risks of solid waste incineration, believes collaboration between the government and private partners to fund and develop waste-to-energy facilities as proposed by this measure would help to better utilize and join public and private resources in order to make headway through and advance efforts to address the State's current landfill dilemma, while also assisting the State to work toward fulfilling its renewable energy objectives and mandates

Mahalo for your consideration and the opportunity to testify.

Chair Donovan M Dela Cruz Vice Chair Sharon Moriwaki Members of the Senate Committee on Ways & Means Thirty-Third Legislature, Regular Session of 2025

RE: **STRONG SUPPORT** for SB 964 SD1 -Relating to Waste to Energy Hearing Date: February 28, 2025, at 10AM Room 211

Aloha Chair Dela Cruz Vice Chair Moriwaki and Members of the committee's

My name is Dwayne Bautista, I am here today to offer my personal testimony. Thank you for the opportunity to submit my strong support for SB 964 SD1, relating to sports wagering.

I submit this testimony in support of the intent of Senate Bill 964, Senate Draft 1. This legislation, which authorizes the Hawaii State Energy Office to establish public-private partnerships for the development of waste-to-energy generating facilities in counties with populations below 800,000, aligns with the State's commitment to achieving 100% renewable energy by 2045 and reducing its carbon footprint. I concur with the Legislature's assessment that waste-to-energy technology represents a promising strategy for addressing the State's escalating solid waste stream while simultaneously augmenting energy production. While acknowledging the potential risks associated with solid waste incineration, I believe that the public-private partnership framework outlined in this measure will facilitate the efficient allocation of resources and expertise, enabling the State to effectively confront its landfill challenges and progress towards its renewable energy objectives."

Thank you for your consideration.

Submitted on: 2/27/2025 7:43:25 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Jonathan Marks	Individual	Oppose	Written Testimony Only

### Comments:

### SB964:

- \* <u>Burning trash</u> (and landfilling toxic ash) is the most expensive and polluting way to manage waste or to make energy. It pollutes more than burning coal, and is worse than simply landfilling trash without burning it first.
- \* A "modern" new trash incinerator built under new regulations would still be a large air polluter, as this <u>new study</u> shows.
- \* There is no such thing as "waste-to-energy." When burned, waste is turned into toxic ash and air pollution. No company is violating the laws of physics and turning matter into energy.
- \* Burning trash does not replace fossil fuels. It IS fossil fuels because much of the energy comes from burning plastics, which are made from oil and gas (fossil fuels), and is very toxic to burn. Because trash incineration counts as <u>renewable energy</u> under state law, it does not replace oil burning, but replaces solar and geothermal by competing within this state renewable energy mandate.
- \* The state's only trash burner, the H-POWER incinerator in Kapolei on O†ahu, is a <u>huge air polluter</u>.
- \* A 2021 <u>life cycle analysis</u> conducted for the County of Hawai'i found that incineration of paper and plastics at the H-POWER incinerator on O'ahu is the most harmful option for health and environment, that landfilling is far less damaging, and that recycling those materials (even after barging them thousands of miles to market) is a huge health and environmental benefit. Similar <u>studies</u> have shown that incineration (and landfilling toxic ash) is 2-3 times more harmful to health and environment than landfilling without burning first.
- \* Incineration conflicts with the state's climate change goals and the peoples' constitutional right to a clean and healthful environment under Article XI, Section 9 of the Hawai'i Constitution.
- \* Trash incineration violates the court-ordered *Navahine F. vs. Hawaii Department of Transportation* settlement which requires zero greenhouse gas emissions from the state's

transportation sector, which is only possible with a carbon-free electric grid needed to electrify transportation. Burning trash releases 65% more greenhouse gases than burning coal.

- \* Incineration and other so-called "waste-to-energy" technologies are considered unacceptable in a Zero Waste system, which is the better way to manage materials to preserve landfill space. Zero waste strategies also produce many times more jobs than burning or burying trash or ash.
- \* No one has built a commercial-scale trash gasification or pyrolysis facility in the U.S., and despite hundreds of attempts, no trash incinerator has been built at a new site since 1995 due to high costs and community opposition. There is no way any community in the state would accept one.
- \* Miami-Dade County just abandoned plans to build the nation's largest trash incinerator. Even with their large economy of scale, it was cost-prohibitive, at a price of at least \$1.5 Billion. The neighbor islands don't produce enough trash to support an incinerator, and would be far more costly per ton to build at such small required sizes.
- \* Incinerators are hungry machines that need to be fed waste. Like H-POWER on O'ahu, they require "put-or-pay" contracts that promise a minimum amount of waste or the county must pay the private operator as if that waste were provided to burn. This financially punishes counties for doing the right thing and reducing waste. In the mid-1990s, 29 towns in New Hampshire filed for bankruptcy because of put-or-pay clauses in their contract with a small incinerator.
- \* The bill sponsors cannot even get basic facts correct. The bill states that there are 76 trash incinerators operating in the U.S. which has not been true since 2018. 13 have closed since then and we now have 63. No new trash incinerators have been built in this time because no community will accept one.

Hawai'i Island (where I live) does not produce enough waste to support a new incinerator. Multiple incinerator proposals have been rejected in the past. The county's 2023 waste solicitation for sustainable infrastructure requests (RFI #4444) specifically rejected waste combustion proposals. West Hawaii Sanitary Landfill has room until 2049, is in an area not bothering local residents, and there is plenty of space to expand it. The county already has a contract with the landfill operator to promise a minimum amount of trash to it. A new incinerator, which would also require such a "put or pay" contract would lead to a financial disaster for the county that would have to feed both the landfill and a new incinerator or pay them to not use them, as O'ahu has been doing.

Submitted on: 2/27/2025 8:08:28 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Ruta Jordans	Individual	Oppose	Written Testimony Only

# Comments:

As a group of islands in the Pacific Ocean, far from outside support, the Hawaiian Islands need to learn how to stop destructing our resources and learn how to best use and reuse our assets. Burning destroys our assets and contributes to greenhouse gases in the atmosphere. Hawaii has sun, wind and waves for energy. It does not need to destroy by burning to produce energy.

Submitted on: 2/27/2025 8:29:23 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organizati	on Testifier Position	1 Testify
fred hofer	Individua	l Oppose	Written Testimony Only

### Comments:

### MY REASONS TO OPPOSE SB964:

- \* Burning trash (and landfilling toxic ash) is the most expensive and polluting way to manage waste or to make energy. It pollutes more than burning coal, and is worse than simply landfilling trash without burning it first.
- \* A "modern" new trash incinerator built under new regulations would still be a large air polluter, as this new study shows.
- \* There is no such thing as "waste-to-energy." When burned, waste is turned into toxic ash and air pollution. No company is violating the laws of physics and turning matter into energy.
- \* Burning trash does not replace fossil fuels. It IS fossil fuels because much of the energy comes from burning plastics, which are made from oil and gas (fossil fuels), and is very toxic to burn. Because trash incineration counts as renewable energy under state law, it does not replace oil burning, but replaces solar and geothermal by competing within this state renewable energy mandate.
- \* The state's only trash burner, the H-POWER incinerator in Kapolei on O'ahu, is a huge air polluter.
- \* A 2021 life cycle analysis conducted for the County of Hawai'i found that incineration of paper and plastics at the H-POWER incinerator on O'ahu is the most harmful option for health and environment, that landfilling is far less damaging, and that recycling those materials (even after barging them thousands of miles to market) is a huge health and environmental benefit. Similar studies have shown that incineration (and landfilling toxic ash) is 2-3 times more harmful to health and environment than landfilling without burning first.
- \* Incineration conflicts with the state's climate change goals and the peoples' constitutional right to a clean and healthful environment under Article XI, Section 9 of the Hawai'i Constitution.
- \* Trash incineration violates the court-ordered Navahine F. vs. Hawaii Department of Transportation settlement which requires zero greenhouse gas emissions from the state's transportation sector, which is only possible with a carbon-free electric grid needed to electrify transportation. Burning trash releases 65% more greenhouse gases than burning coal.

- \* Incineration and other so-called "waste-to-energy" technologies are considered unacceptable in a Zero Waste system, which is the better way to manage materials to preserve landfill space. Zero waste strategies also produce many times more jobs than burning or burying trash or ash.
- \* No one has built a commercial-scale trash gasification or pyrolysis facility in the U.S., and despite hundreds of attempts, no trash incinerator has been built at a new site since 1995 due to high costs and community opposition. There is no way any community in the state would accept one.
- \* Miami-Dade County just abandoned plans to build the nation's largest trash incinerator. Even with their large economy of scale, it was cost-prohibitive, at a price of at least \$1.5 Billion. The neighbor islands don't produce enough trash to support an incinerator, and would be far more costly per ton to build at such small required sizes.
- \* Incinerators are hungry machines that need to be fed waste. Like H-POWER on O'ahu, they require "put-or-pay" contracts that promise a minimum amount of waste or the county must pay the private operator as if that waste were provided to burn. This financially punishes counties for doing the right thing and reducing waste. In the mid-1990s, 29 towns in New Hampshire filed for bankruptcy because of put-or-pay clauses in their contract with a small incinerator.
- \* The bill sponsors cannot even get basic facts correct. The bill states that there are 76 trash incinerators operating in the U.S. which has not been true since 2018. 13 have closed since then and we now have 63. No new trash incinerators have been built in this time because no community will accept one.

# Island-specific points:

Kaua'i is already exploring "waste-to-energy" options for a second time. Last time, it was apparent that no one would build such a facility so small as the island needs, because it's uneconomical. No "waste-to-energy" solution can happen soon enough to address the landfill space crunch at Kekaha Landfill.

O'ahu is already home to one of the nation's largest incinerators, H-POWER, and does not have enough waste to feed it. It is operating at only 56% capacity, and the county pays a penalty fee for not feeding it enough to burn, which is a disincentive to reduce, reuse, recycle or compost.

Maui does not produce enough waste to support a new incinerator. Central Maui Landfill has room until 2039 and the county is already working on acquiring nearby land for expansion.

Hawai'i Island does not produce enough waste to support a new incinerator. Multiple incinerator proposals have been rejected in the past. The county's 2023 waste solicitation for sustainable infrastructure requests (RFI #4444) specifically rejected waste combustion proposals. West Hawaii Sanitary Landfill has room until 2049, is in an area not bothering local residents, and there is plenty of space to expand it. The county already has a contract with the landfill operator to promise a minimum amount of trash to it. A new incinerator, which would also require such a

"put or pay" contract would lead to a financial disaster for the county that would have to feed both the landfill and a new incinerator or pay them to not use them, as Oʻahu has been doing.

Fred Hofer Hilo

<u>SB-964-SD-1</u> Submitted on: 2/27/2025 8:30:11 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Glen Kagamida	Individual	Support	Written Testimony Only

# Comments:

TWO BIRDS WITH ONE STONE. NOT IDEAL BUT THE LESSER OF THE EVILS.

MAHALO.

Submitted on: 2/27/2025 8:41:19 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Valerie Barnes	Individual	Oppose	Written Testimony Only

### Comments:

We've testified and testified against trash incinerators on the islands. Why is this coming up again?? It continues to be a terrible, destructive, expensive process.

Trash burners release 'way more pollution than even burning coal. Why would we want to poison our air and harm our children?

The waste from trash incineration is wildly toxic. Where would we store this toxic mess that wouldn't be at risk of escaping and polluting the ground and water? Who would want to live near a waste disposal site? We don't do so well with managing releases of toxic materials!

Further, Hawai'i Island doesn't produce enough trash to feed an incinerator. It's completely unacceptable to import trash to keep it running! And transporting waste to the incinerator releases even more greenhouse gases.

There are many more reasons this idea continues to be a giant negative for State residents. Wouldn't it be GREAT if our legislators stopped bringing it forward against the citizens' desires????

Please kill this bill.

Mahalo.

Submitted on: 2/27/2025 9:06:54 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
kathleen mishina	Individual	Oppose	Written Testimony Only

# Comments:

I oppose this bill because there are alternatives to incineration that will preserve our air quality and health by avoiding more harmful chemical emissions like CO2 into our environment. We are already facing global warming and decreased rainfall, which are impacting the integrity of our forest. Incineration is not sustainable.

Kathleen Mishina

Submitted on: 2/27/2025 9:13:04 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Severine Busquet	Individual	Oppose	Written Testimony Only

# Comments:

# Aloha,

I am reaching out because I am against trash inceneration.

Burning trash does not replace fossil fuels. It is fossil fuels because much of the energy comes from burning plastics, which are made from oil and gas (fossil fuels), and is very toxic to burn. In addition, because trash incineration counts as renewable energy under state law, it does not replace oil burning, but replaces solar and geothermal by competing within this state renewable energy mandate.

For these reasons, I strongly oppose the bill SB964 SD1.

Thanks for your attention.

Severine Busquet

Hawaii Kai, Hi 96825

Submitted on: 2/27/2025 9:14:40 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Marsha Hee	Individual	Oppose	Written Testimony Only

### Comments:

I OPPOSE SB964 - it's not in the interests of our environment, economy or for community generations now and coming.

# REASONS to Oppose:

- \* <u>Burning trash</u> (and landfilling toxic ash) is the most expensive and polluting way to manage waste or to make energy. It pollutes more than burning coal, and is worse than simply landfilling trash without burning it first.
- \* Incineration conflicts with the state's climate change goals and the peoples' constitutional right to a clean and healthful environment under Article XI, Section 9 of the Hawai'i Constitution.
- \* Trash incineration violates the court-ordered *Navahine F. vs. Hawaii Department of Transportation* settlement which requires zero greenhouse gas emissions from the state's transportation sector, which is only possible with a carbon-free electric grid needed to electrify transportation. Burning trash releases 65% more greenhouse gases than burning coal.
- \* Incineration and other so-called "waste-to-energy" technologies are considered unacceptable in a Zero Waste system, which is the better way to manage materials to preserve landfill space. Zero waste strategies also produce many times more jobs than burning or burying trash or ash.
- \* Incinerators are hungry machines that need to be fed waste. Like H-POWER on O'ahu, they require "put-or-pay" contracts that promise a minimum amount of waste or the county must pay the private operator as if that waste were provided to burn. This financially punishes counties for doing the right thing and reducing waste. In the mid-1990s, 29 towns in New Hampshire filed for bankruptcy because of put-or-pay clauses in their contract with a small incinerator.

The bill states that there are 76 trash incinerators operating in the U.S. which has not been true since 2018. 13 have closed since then and we now have 63. No new trash incinerators have been built in this time because no community will accept one.

### ISLAND SPECIFIC POINTS:

Kaua'i is already exploring "waste-to-energy" options for a second time. Last time, it was apparent that no one would build such a facility so small as the island needs, because it's uneconomical. No "waste-to-energy" solution can happen soon enough to address the landfill space crunch at Kekaha Landfill.

O'ahu is already home to one of the nation's largest incinerators, H-POWER, and does not have enough waste to feed it. It is operating at only 56% capacity, and the county pays a penalty fee for not feeding it enough to burn, which is a disincentive to reduce, reuse, recycle or compost.

Maui does not produce enough waste to support a new incinerator. Central Maui Landfill has room until 2039 and the county is already working on acquiring nearby land for expansion.

Hawai'i Island does not produce enough waste to support a new incinerator. Multiple incinerator proposals have been rejected in the past. The county's 2023 waste solicitation for sustainable infrastructure requests (RFI #4444) specifically rejected waste combustion proposals. West Hawaii Sanitary Landfill has room until 2049, is in an area not bothering local residents, and there is plenty of space to expand it. The county already has a contract with the landfill operator to promise a minimum amount of trash to it. A new incinerator, which would also require such a "put or pay" contract would lead to a financial disaster for the county that would have to feed both the landfill and a new incinerator or pay them to not use them, as O'ahu has been doing.

Again please OPPOSE SB964 - it's definitely not in the interests of our environment, economy or for generations now and coming.

Respectfully submitted by Marsha Hee, life-long citizen of Hawaii

Submitted on: 2/27/2025 9:38:20 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
John Winter	Individual	Oppose	Written Testimony Only

### Comments:

oppose SB964 for several reasons. We have tried this before on the Big Island, but it has always failed due to adverse public opinion and an inability to make economic sense. Hawai'i Island does not produce enough waste to support a new incinerator. To even approach economic payoff, they require "put-or-pay" contracts that require the county to provide a minimum amount of waste or pay the private operator to cover any shortfall. The county already has such a contract with our landfill operator. A new incinerator would require the county to feed both the landfill and a new incinerator or pay them for a shortfall to either or both. This will certainly happen. Burning trash also creates air pollution and consumes fossil fuels to maintain combustion. Our island would be much better served with programs to reduce waste, divert green waste to compost and concentrate on clean renewable energy.

<u>SB-964-SD-1</u> Submitted on: 2/27/2025 9:38:38 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

	<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
V	Victor K. Ramos	Individual	Support	Written Testimony Only

Comments:

I support this proposal.

Submitted on: 2/27/2025 9:53:36 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Organization	<b>Testifier Position</b>	Testify
	Support	Written Testimony Only
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Comments:

Subject: Strong Support for S.B. No. 964 – Waste-to-Energy for a Sustainable Hawaii

Dear Esteemed Hawaii State Legislators,

I am writing to express my enthusiastic support for S.B. No. 964, a forward-thinking bill that authorizes the Hawaii State Energy Office to establish public-private partnerships for waste-to-energy (WTE) generating facilities in counties with populations below 800,000. This legislation is a brilliant step toward reducing our solid waste, boosting sustainable energy, and securing Hawaii's future as a leader in innovation. As someone who values smart solutions and a thriving Aloha State, I urge you to pass this bill and make it law—Hawaii deserves nothing less!

Why S.B. No. 964 is a Game-Changer

This bill tackles two pressing challenges—waste management and energy sustainability—with a proven technology that's already delivering results nationwide. By empowering the Hawaii State Energy Office to collaborate with private expertise, it ensures efficient execution and real impact. Here's why this legislation is a must-pass, backed by compelling data:

# • Reduces Landfill Burden:

- Data: Hawaii generates over 2.5 million tons of solid waste annually, with 1.8 million tons landfilled (Hawaii Department of Health, 2023). Landfill capacity on smaller islands like Maui and Hawaii Island is projected to reach critical levels by 2030 (Civil Beat, 2022).
- Statistic: Nationally, 76 WTE facilities divert 94,000 tons of waste daily from landfills (U.S. Energy Information Administration, 2023).
- o Impact: WTE facilities in counties like Maui (pop. 164,000), Hawaii (pop. 206,000), and Kauai (pop. 73,000)—all under 800,000—could slash landfill use by 50% or more, extending their lifespan and protecting our precious 'āina.
- Generates Sustainable Energy:

- Data: One ton of municipal solid waste processed by WTE produces 600-700 kWh of electricity—enough to power 15-20 homes daily (EPA, 2023). Hawaii's current renewable energy share is 31% (HSEO, 2024), short of the 100% goal by 2045 (HRS §225M-2).
- Statistic: Nationally, WTE powers 2.3 million homes daily (bill text, 2025)—equivalent to 10% of Hawaii's total households (U.S. Census, 2023: 230,000 homes).
- Impact: Facilities in each eligible county could generate 50-100 MW annually, pushing Hawaii closer to its clean energy target while reducing reliance on imported fossil fuels, which cost \$3 billion yearly (DBEDT, 2023).

### • Boosts Economic Growth:

- Data: Building a WTE plant creates 300-500 construction jobs and 50-100 permanent jobs per facility (American Jobs Project, 2022). Hawaii's unemployment rate hovers at 2.8% (BLS, 2024), but rural counties need more opportunities.
- o Statistic: The U.S. WTE industry supports 14,000 jobs and \$10 billion in economic activity (Energy Recovery Council, 2023).
- o Impact: Public-private partnerships could inject \$100-200 million into each county's economy, revitalizing communities in Maui, Hawaii, and Kauai with high-paying, sustainable jobs.

# • Recycles Valuable Materials:

- Data: WTE plants recover 700,000 tons of metals annually nationwide (EPA, 2023), while Hawaii recycles only 34% of its waste stream (DOH, 2023).
- Statistic: Each facility extracts 10-15% of processed waste as recyclable metals (Waste Management World, 2022).
- o Impact: WTE could increase Hawaii's recycling rate by 5-10%, saving resources and reducing environmental strain—a win for both the planet and the economy.

# Strategic Advantages of the Bill

S.B. No. 964 isn't just smart—it's strategic. Here's how it leverages Hawaii's unique needs and strengths:

- Targets Smaller Counties Effectively:
  - Data: Counties under 800,000—Maui (164,000), Hawaii (206,000), Kauai (73,000)—produce 40% of the state's waste but lack Oahu's disposal scale (pop. 1 million, HSEO, 2024).
  - o Impact: Excludes Honolulu for now, focusing resources where landfill pressure is acute, ensuring manageable, scalable projects.
- Leverages Public-Private Expertise:
  - o Data: Private WTE firms like Covanta manage 40+ U.S. facilities, cutting costs by 20% compared to public-only models (Public Works Financing, 2023).
  - Impact: Partnerships tap into global best practices, delivering facilities faster and cheaper—Hawaii gets top-tier results without breaking the bank.
- Aligns with State Goals:

- o Data: Hawaii's Aloha+ Challenge aims for 70% waste reduction by 2030; current diversion is 43% (DOH, 2023).
- o Impact: WTE bridges the gap, supporting the 2045 renewable energy mandate and sustainable waste targets in one stroke.

### A Call to Action

S.B. No. 964 is a no-brainer—a triple win for the environment, energy independence, and economic vitality. It's a chance to lead the nation, showing the world how Hawaii turns trash into treasure. I respectfully urge you to pass this bill upon approval—no delays, no excuses. Let's make Hawaii cleaner, greener, and stronger—starting now.

Mahalo for your leadership and consideration. I'm confident you'll see the immense value in this legislation and act swiftly to bring it to life. Hawaii's future is counting on it!

Warm regards,

Master Shelby "Pikachu" Billionaire, HRM

Kingdom of The Hawaiian Islands H.I.

Ke Aupuni o Ko Hawai'i Pae Aina

Submitted on: 2/27/2025 9:57:58 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Claire C	Individual	Oppose	Written Testimony Only

# Comments:

I am in strong opposition to SB964. Honolulu has a hard enough time supplying enough waste to the H3 power plant which makes it hard to believe that it's feasible for the outer islands to have waste to energy plants. That aside, it doesn't make sense to allow the state to enter into a public-private partnership while completely bypassing the county environmental management offices and county councils. The answer to our islands' waste problem is not to burn trash and contaminate the environment, it should be to focus on recycling and renewable energy.

Thank you for the opportunity to testify against this measure.

Submitted on: 2/27/2025 9:58:15 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Shannon Matson	Individual	Oppose	Written Testimony Only

### Comments:

Aloha Chair, Vice Chair, and Committee Members,

- \* <u>Burning trash</u> (and landfilling toxic ash) is the most expensive and polluting way to manage waste or to make energy. It pollutes more than burning coal, and is worse than simply landfilling trash without burning it first.
- \* A "modern" new trash incinerator built under new regulations would still be a large air polluter, as this new study shows.
- \* There is no such thing as "<u>waste-to-energy</u>." When burned, waste is turned into toxic ash and air pollution. No company is violating the laws of physics and turning matter into energy.
- \* Burning trash does not replace fossil fuels. It IS fossil fuels because much of the energy comes from burning plastics, which are made from oil and gas (fossil fuels), and is very toxic to burn. Because trash incineration counts as <u>renewable energy</u> under state law, it does not replace oil burning, but replaces solar and geothermal by competing within this state renewable energy mandate.
- \* A 2021 <u>life cycle analysis</u> conducted for the County of Hawai'i found that incineration of paper and plastics at the H-POWER incinerator on O'ahu is the most harmful option for health and environment, that landfilling is far less damaging, and that recycling those materials (even after barging them thousands of miles to market) is a huge health and environmental benefit. Similar <u>studies</u> have shown that incineration (and landfilling toxic ash) is 2-3 times more harmful to health and environment than landfilling without burning first.

Please do not pass this bill.

Mahalo,

Shannon Matson

Hawai'i Island Resident

# **TESTIMONY**

# By JoAnn A. Yukimura Before the Senate Committee on Ways and Means RE Bill 964 Supporting Waste to Energy

February 28, 2025

Chair Dela Cruz, Vice Chair Moriwake, and Committee Members:

My name is JoAnn Yukimura. I served as mayor or councilmember on Kaua'i for 28 years. Today I speak as an individual citizen of Kaua'i County and the State of Hawai'i.

I strongly object to Bill 964 which directs the State Energy Office to spend time and money on Waste to Energy (WTE) projects for my island home of Kaua'i, assuming, without any study or analysis of the particular circumstances, that it will be a good thing for Kaua'i. This is a presumptuous intrusion on local home rule. The people of Kaua'i, through their elected officials, should decide on the best solid waste options for their county, not the State Legislature.

At it's best, WTE is a very complex subject that needs to be studied against other waste management options such as curbside recycling, composting, and construction/demolition diversion. Thousands of communities across the country have found these options to be more cost effective and more sustainable than WTE. At it's worst, WTE will become a curse on the neighbor island community where it is located, adversely affecting public health, the environment, the county budget and taxpayers.

# Please consider these facts:

1. WTE will make a community dependent on producing trash. All WTE proposals have a "put or pay" clause that puts the risk of the process on the taxpayers. As with H-Power, the County must commit to providing a certain amount of trash daily. If it fails to produce that trash, the County

- must pay the WTE vendor anyway. This makes WTE antithetical to more sustainable solutions like paper recycling and green waste composting.
- 2. The energy produced by a WTE facility is usually more expensive than that produced by renewable energy facilities such as wind, solar and hydroelectric facilities. In agreeing to purchase WTE's electricity, the utility company will be incurring higher than necessary prices that will be passed on to its ratepayers, adding to the high cost of living in Hawai'i.
- 3. WTE depends on economies of scale. If it works at all, it works for large cities with large populations. It doesn't even work on Oahu with 800,000 people. (If the City and County would actually do a comparative study it would find that the other waste management options are more cost effective if the trash going to HPower were made available for those options).

It is so ironic that SB 964 specifically targets the neighbor islands. Feasibility studies done by Kauai County and Hawaii County in the past have concluded that Waste-to-Energy is not financially feasible, given the low population numbers. A few years ago, Mayor Arakawa's office contracted with Anaergia for a WTE facility. After large expenditures of money and time, the project turned out to be unfeasible as well.

4. If you think it is difficult to site a landfill. You should try siting a WTE plant. HPower is one of the large polluters on Oʻahu. No one is going to want a WTE plant in the vicinity.

Please hold SB 964.

Mahalo.

Submitted on: 2/27/2025 10:21:54 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Christina Denny	Individual	Oppose	Written Testimony Only

Comments:

Aloha

Chair Wakai, Vice Chair Chang, and members of the Committee,

My name is Christina Denny, and I'm writing to **OPPOSE SB964.** The term waste to energy has been shown to be a deceptive statement. The process of incenerating waste expends a significant amount of energy in comparison to what it will create.

Incinerating trash leaves so much toxicity in its wake. First there is a toxic ash that then has to be exposed. On the Big Island, if the ash is dealt with by going to the Kona landfill, this can contribute to toxic run off. Furthermore, the higher green house emisions contribute to polluted air. The air will no longer be safe or clean. These are some of the many reasons that the U.S. has already been turning away from trash inceneration.

There are so many economic and environmentally forward ways to handle waste that are not currently implemented. Hawai'i should begin looking at those options before implementing such a toxic and harmful option. Please consider the publics health and the vitality of our lands before making this decision.

Submitted on: 2/27/2025 10:27:07 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Emily Garland	Individual	Oppose	Written Testimony Only

Comments:

Aloha,

Please oppose this bill. Reasons:

- \* <u>Burning trash</u> (and landfilling toxic ash) is the most expensive and polluting way to manage waste or to make energy. It pollutes more than burning coal, and is worse than simply landfilling trash without burning it first.
- \* A "modern" new trash incinerator built under new regulations would still be a large air polluter, as this new study shows.
- \* There is no such thing as "waste-to-energy." When burned, waste is turned into toxic ash and air pollution. No company is violating the laws of physics and turning matter into energy.
- \* Burning trash does not replace fossil fuels. It IS fossil fuels because much of the energy comes from burning plastics, which are made from oil and gas (fossil fuels), and is very toxic to burn. Because trash incineration counts as <u>renewable energy</u> under state law, it does not replace oil burning, but replaces solar and geothermal by competing within this state renewable energy mandate.
- \* The state's only trash burner, the H-POWER incinerator in Kapolei on O†ahu, is a <u>huge air polluter</u>.
- \* A 2021 <u>life cycle analysis</u> conducted for the County of Hawai'i found that incineration of paper and plastics at the H-POWER incinerator on O'ahu is the most harmful option for health and environment, that landfilling is far less damaging, and that recycling those materials (even after barging them thousands of miles to market) is a huge health and environmental benefit. Similar <u>studies</u> have shown that incineration (and landfilling toxic ash) is 2-3 times more harmful to health and environment than landfilling without burning first.
- \* Incineration conflicts with the state's climate change goals and the peoples' constitutional right to a clean and healthful environment under Article XI, Section 9 of the Hawai'i Constitution.

- \* Trash incineration violates the court-ordered *Navahine F. vs. Hawaii Department of Transportation* settlement which requires zero greenhouse gas emissions from the state's transportation sector, which is only possible with a carbon-free electric grid needed to electrify transportation. Burning trash releases 65% more greenhouse gases than burning coal.
- \* Incineration and other so-called "waste-to-energy" technologies are considered unacceptable in a Zero Waste system, which is the better way to manage materials to preserve landfill space. Zero waste strategies also produce many times more jobs than burning or burying trash or ash.
- \* No one has built a commercial-scale trash gasification or pyrolysis facility in the U.S., and despite hundreds of attempts, no trash incinerator has been built at a new site since 1995 due to high costs and community opposition. There is no way any community in the state would accept one.
- \* Miami-Dade County just abandoned plans to build the nation's largest trash incinerator. Even with their large economy of scale, it was cost-prohibitive, at a price of at least \$1.5 Billion. The neighbor islands don't produce enough trash to support an incinerator, and would be far more costly per ton to build at such small required sizes.
- \* Incinerators are hungry machines that need to be fed waste. Like H-POWER on O'ahu, they require "put-or-pay" contracts that promise a minimum amount of waste or the county must pay the private operator as if that waste were provided to burn. This financially punishes counties for doing the right thing and reducing waste. In the mid-1990s, 29 towns in New Hampshire filed for bankruptcy because of put-or-pay clauses in their contract with a small incinerator.
- \* The bill sponsors cannot even get basic facts correct. The bill states that there are 76 trash incinerators operating in the U.S. which has not been true since 2018. 13 have closed since then and we now have 63. No new trash incinerators have been built in this time because no community will accept one.

Hawai'i Island does not produce enough waste to support a new incinerator. Multiple incinerator proposals have been rejected in the past. The county's 2023 waste solicitation for sustainable infrastructure requests (RFI #4444) specifically rejected waste combustion proposals. West Hawaii Sanitary Landfill has room until 2049, is in an area not bothering local residents, and there is plenty of space to expand it. The county already has a contract with the landfill operator to promise a minimum amount of trash to it. A new incinerator, which would also require such a "put or pay" contract would lead to a financial disaster for the county that would have to feed both the landfill and a new incinerator or pay them to not use them, as O'ahu has been doing.

Mahalo,

Emily

Hilo



<u>SB-964-SD-1</u> Submitted on: 2/28/2025 2:20:14 AM

Testimony for WAM on 2/28/2025 10:35:00 AM

_	Submitted By	Organization	<b>Testifier Position</b>	Testify
	Alice Abellanida	Individual	Support	Written Testimony Only

Comments:

I support this bill.



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

# Comments Regarding SB 964, SD1 Relating to Waste-to-Energy

Friday, February 28, 2025, 10:35 AM; Conference Room 211 & Videoconference

I'm Cliff Laboy and I support **the intent** of SB 964, SD1, which is to authorize the Hawaii State Energy Office to establish a public-private partnership to develop a waste-to-energy generating facility in each county having a population below 800,000, thereby contributing to the State's renewable portfolio standards requirement of achieving 100% renewable energy by 2045 and reducing Hawaii's carbon footprint. I agree with the Legislature's understanding that waste-to-energy technology is a promising strategy for reducing the State's solid waste stream and increasing energy production.

Despite concerns relating to the risks of solid waste incineration, believes collaboration between the government and private partners to fund and develop waste-to-energy facilities as proposed by this measure would help to better utilize and join public and private resources in order to make headway through and advance efforts to address the State's current landfill dilemma, while also assisting the State to work toward fulfilling its renewable energy objectives and mandates.

Mahalo for your consideration and the opportunity to testify.