JOSH GREEN, M.D. GOVERNOR

> SYLVIA LUKE LT. GOVERNOR

MARK B. GLICK CHIEF ENERGY OFFICER

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# Testimony of MARK B. GLICK, Chief Energy Officer

# before the SENATE COMMITTEE ON ENERGY AND INTERGOVERNMENTAL AFFAIRS

Tuesday, January 28, 2025 3:15 PM State Capitol, Conference Room 016 and Videoconference

Providing Comments on SB 964

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

Chair Wakai, Vice Chair Chang, and Members of the Committee, the Hawai'i State Energy Office (HSEO) offers comments on SB 964, which would change the governing statute of HSEO to add a sub-paragraph requiring that HSEO 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.

Hawai'i State Energy Office SB 964 - RELATING TO WASTE-TO-ENERGY January 28, 2025 Page 3

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.

#### **COUNTY COUNCIL**

Mel Rapozo, Chair KipuKai Kuali'i, Vice Chair Addison Bulosan Bernard P. Carvalho, Jr. Felicia Cowden Fern Holland Arryl Kaneshiro



### Council Services Division 4396 Rice Street, Suite 209 Līhu'e, Kaua'i, Hawai'i 96766

January 27, 2025

#### OFFICE OF THE COUNTY CLERK

Jade K. Fountain-Tanigawa, County Clerk Lyndon M. Yoshioka, Deputy County Clerk

> Telephone: (808) 241-4188 Facsimile: (808) 241-6349 Email: cokcouncil@kauai.gov

### TESTIMONY OF FERN HOLLAND COUNCILMEMBER, KAUA'I COUNTY COUNCIL ON

SB 964, RELATING TO WASTE-TO-ENERGY Senate Committee on Energy and Intergovernmental Affairs Tuesday, January 28, 2025 3:15 p.m. Conference Room 016 Via Videoconference

Dear Chair Wakai and Members of the Committee:

Thank you for this opportunity to provide testimony in OPPOSITION of SB 964, Relating to Waste-to-Energy. My testimony is submitted in my individual capacity as a Councilmember of the Kaua'i County Council.

SB 964 mandates the Hawai'i State (WTE) Energy Office to create a public-private partnership to develop waste-to-energy generating facilities in counties with populations under 800,000. However, implementing trash-burning incinerators poses significant environmental, economic, and public health risks, as well as conflicts with the state's long-term goals of sustainability and climate responsibility.

Burning trash is one of the most polluting and expensive methods for waste management. Studies have shown that incineration generates more harmful emissions than coal and produces toxic ash that must be landfilled. The H-POWER incinerator in Kapolei, Oʻahu, exemplifies this issue, being one of the state's largest air polluters. A 2021 life cycle analysis for the County of Hawaiʻi concluded that incineration is the most harmful option for health and the environment, whereas recycling and landfilling without burning are far less damaging.

Further, other concerns include the following:

- Environmental and Health Impacts:
  - o Incineration releases 65% more greenhouse gases than coal burning, conflicting with Hawai'i's climate change goals.
  - o It generates toxic ash and air pollution, including dioxins, heavy metals, and other hazardous substances.
  - o Scientific studies link exposure to these pollutants to serious health risks, including respiratory issues and cancer.

Chair Wakai and Members of the Committee Re: SB 964, Relating to Waste-to-Energy January 27, 2025 Page 2

Economic Viability:

- o Incinerators are prohibitively expensive. Miami-Dade County recently abandoned plans for the nation's largest incinerator due to its \$1.5 billion price tag. For smaller islands like Kaua'i, the cost per ton of waste would be even higher, making such projects economically unfeasible.
- o "Put-or-pay" contracts, common in incinerator agreements, financially penalize counties for reducing waste, discouraging Zero Waste strategies.
- Conflict with Zero Waste and Climate Goals:
  - o Incinerators require large volumes of waste to remain operational, undermining efforts to reduce, reuse, and recycle materials.
  - Zero Waste strategies, including composting, recycling, and community education, create significantly more jobs and preserve landfill space without the harmful emissions of incineration.

Specifically for Kaua'i, the Kekaha Landfill will reach capacity by 2030, yet no WTE facility could be operational in time to address this urgency. Instead, the island must focus on Zero Waste strategies to cut waste in half and close the gap until a new landfill is ready. The small scale of waste generation on Kaua'i makes an incinerator economically and logistically impractical.

Trash incineration is not a viable solution for Hawai'i's waste management challenges. It exacerbates environmental harm, contradicts the state's climate goals, and places undue financial burdens on communities. Instead, Hawai'i should prioritize Zero Waste strategies that are more sustainable, cost-effective, and aligned with the constitutional right to a clean and healthful environment.

I respectfully urge the committee to oppose SB 964 and protect our environment, public health, and future generations by rejecting harmful waste-to-energy technologies and investing in sustainable alternatives.

Thank you again for this opportunity to provide testimony in opposition of SB 964. Should you have any questions, please feel free to contact me or Council Services Staff at (808) 241-4188 or via email to cokcouncil@kauai.gov.

Sincerely,

FERN HOLLAND

Milleure

Councilmember, Kaua'i County Council

AAO:mn

# RICHARD T. BISSEN, JR. Mayor

#### JOSIAH K. NISHITA Managing Director





# OFFICE OF THE MAYOR

COUNTY OF MAUI 200 SOUTH HIGH STREET WAILUKU, MAUI, HAWAI'I 96793

www.mauicounty.gov

TO: Senator Angus L.K. McKelvey, Chair

Senator Mike Gabbard, Vice Chair Committee on Government Operations

FROM: Richard T. Bissen, Jr., Mayor

Marcy Martin, Director of Finance

DATE: January 27, 2025

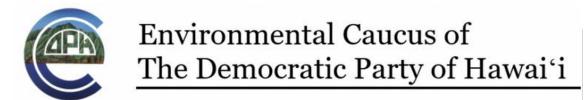
SUBJECT: SUPPORT OF SB383, RELATING TO SMALL PURCHASES

Thank you for the opportunity to testify in **SUPPORT** of this important measure. The Act increases the minimum amount for purchases constituting small purchase procurements from \$25,000 to \$50,000 and requires the state procurement office to submit a report to the legislature on the efficacy of the increased procurement amounts.

#### We **SUPPORT** this measure for the following reasons:

- 1. This bill will allow the County to more efficiently and quickly obtain smaller-dollar goods, services, and construction using existing, tried-and-tested methods, without increasing turnaround time or the workload on existing staff that would be required if utilizing an electronic system to obtain quotes.
- 2. This bill would still allow for adequate competition, which is already limited given our geographical location. Vendors who already submit both written and verbal quotes for small purchases are typically the same vendors submitting formal bids electronically

Mahalo for your consideration.



January 26, 2025

#### Testimony in Opposition to SB964: Waste-to-Energy Generating Facility

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

My name is Melodie Aduja, and I am testifying on behalf of the Environmental Caucus of the Democratic Party of Hawaii in strong opposition to SB964, which requires the Hawaii State Energy Office to establish a public-private partnership to develop a waste-to-energy generating facility in each county with a population below 800,000.

#### **Key Points of Opposition:**

- 1. **Environmental Concerns**: Waste-to-energy facilities have been shown to produce harmful emissions, including dioxins and furans (the most toxic chemicals known to science), heavy metals, and other pollutants that can negatively impact air quality and public health. These facilities can contribute to environmental degradation and pose risks to nearby communities.
- 2. **Inefficiency and Cost**: Waste-to-energy technology is often inefficient and costly. The high capital and operational costs associated with these facilities can place a significant financial burden on the state and taxpayers. Additionally, the energy produced is often not sufficient to justify the investment.
- Alternative Solutions: There are more sustainable and environmentally friendly alternatives to
  waste-to-energy facilities, such as recycling, composting, and waste reduction programs. These
  alternatives can effectively manage waste while minimizing environmental impact and
  promoting a circular economy.
- 4. **Community Impact**: The development of waste-to-energy facilities can disproportionately affect low-income and marginalized communities, who may be more vulnerable to the negative health and environmental impacts. It is essential to consider the social and environmental justice implications of such projects.

In conclusion, the Environmental Caucus of the Democratic Party of Hawaii strongly opposes SB964 and urges the committee to reject this legislation. We believe that there are more sustainable and equitable solutions to waste management that do not compromise public health or the environment.

Mahalo for the opportunity to testify in opposition to this bill.

Mahalo nui loa,

Melodie Aduja

Co-chair, Environmental Caucus of the Democratic Party of Hawaii



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January 26, 2025

To: Senate Committee on Energy and Intergovernmental Affairs

Senator Glenn Wakai, Chair; Senator Stanley Chang, Vice Chair

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

**Partnerships** 

Hearing: Tuesday, January 28, 2025, 3:15 pm, Conference Room 016 & video

Position: OPPOSITION

Aloha, Chair Wakai, Vice Chair Chang, and Members of the Senate Committee on Energy and Intergovernmental Affairs. As you know, Americans for Democratic Action is a nationwide progressive organization dating back to the late 1940s, devoted to carrying on, and expanding on, the critical achievements of the New Deal that took America out of the Great Depression and won World War II. Hawaii's own U.S. Representative Patsy T. Mink was ADA's national Chairperson from 1978 to 1982.

ADA Hawaii Chapter regrets very much that we must OPPOSE this bill, despite the very good intentions of its introducers. This bill would mandate that the Hawaii State Energy Office establish public-private partnerships to develop waste-to-energy generating facilities in each Neighbor Island county. Unfortunately, all currently existing waste-to-energy facilities generate very dirty air – very serious air pollution that hurts the public and the environment.

We strongly urge you to refer to the following document: <a href="https://energyjustice.net/">https://energyjustice.net/</a>
<a href="mailto:incineration">incineration</a> and its many quotations and attachments. Here are some excerpts: "<a href="Incineration">Incineration</a> is the most expensive and polluting way to make energy or to manage waste. It produces the <a href="fewest">fewest</a>
<a href="mailto:jobs">jobs</a> compared to reuse, recycling and composting the same materials. It is the dirtiest way to manage waste — far more polluting than landfills. <a href="mailto:ltisalso the dirtiest way to produce energy">ltisalso the dirtiest way to produce energy</a> — far more polluting than coal burning." [Underscoring added.]

"Most expensive way to manage waste: According to the waste industry itself, incineration has always been more expensive than landfills. They are inherently more complicated to operate and the cost gap increases over time as the enormous expense of pollution controls keeps incinerators expensive as air regulations gradually tighten. . . ."

"Incineration is not "waste-to-energy" Waste-to-Energy is a PR term. Trash-to-steam is also a lie (there is more in trash than water, thus more in incinerator pollution than water vapor). The reality is that incinerators waste 3–5 times more energy than they recover, if you compare the energy produced through incineration to the embodied energy lost by not recycling and composting those materials, which must then be produced again from raw resources.

"Dirtiest way to manage waste (worse than landfills) The cleaner you make the air (with more pollution controls), the more toxic you make the ash (as the highly toxic fly ash caught in the controls is mixed with the bottom ash before landfilling). For every 100 tons burned in an incinerator, Incineration makes landfills more toxic by dumping highly concentrated toxic ash into the landfill instead of the less-toxic larger volume of unburned waste. Air emissions from incinerators far exceeds air pollution from landfills, and groundwater contamination from ash landfills is likely to be worse than from landfills full of unburned trash due to toxic metals being more available, and due to new pollutants having been created during combustion.

"Dirtiest way to produce energy. To make the same amount of energy as a coal power plant, trash incinerators release 65% more carbon dioxide (CO2), as much carbon monoxide, three times as much nitrogen oxides (NOx), five times as much mercury, nearly six times as much lead and 27 times more hydrochloric acid (HCl).

"Incineration by any name (including various staged incineration or "waste conversion" technologies, such as plasma arc, gasification or pyrolysis) is not clean or safe, despite industry claims. Even with the increased requirements for pollution controls that came into effect since 2000, incinerators are STILL dirtier than coal in terms of air emissions. Incinerators still turn trash into toxic ash and toxic air emissions. This reality is inescapable, as even with the most modern pollution controls, pollution levels still exceed coal by nearly all measures.

"According to the latest EPA data, trash incineration releases <u>65% more greenhouse gas</u> <u>pollution</u> than coal burning per unit of energy produced. Only by erasing over half of an incinerator's CO2 emissions using outdated assumptions about "biogenic" carbon being "carbon neutral," and by making flawed assumptions about most incinerators displacing fossil fuels, can incinerator carbon emissions be manipulated to look lower than landfills.\* Continuing the use of existing trash incinerators or supporting the creation of new ones undermines any effort by a community to "green" itself and to reduce global warming emissions, if they're accounted for properly.

"(\* Discounting the "biogenic" fraction disregards IPCC accounting protocols that advise that such smokestack emissions cannot be assumed to be "carbon neutral." Such discounting also disregards the fact that natural carbon sequestration and storage capacities are significantly diminished, and that trees are not being replanted specifically to offset and store these emissions (rather than being cut back down to supply more paper, crops, etc.). Discounting these emissions assumes that trees and crops instantly suck up the extra pulse of CO2 released by burning paper, food scraps and other organic material in waste instead of taking several decades to do so, as they do in natural ecological cycles. The decades it would take to overcome the CO2 emissions from burning trash and "biomass" is time that we do not have if we are to avoid critical global warming tipping points.)

**"Bad for recycling and composting.** The huge economic resources that need to be put into incineration are better spent on zero waste programs, which can reduce the amount of waste going to

landfill by more than the 70% reduction in tonnage that incinerators accomplish — and can do so at lower cost. Once a incinerator is built, "put-or-pay" contracts discourage recycling and composting by charging local governments the same, even if they produce less waste.

"Trash incinerators are unpopular and declining. No new commercial trash incinerator has been sited, built and operated at a new site in the U.S. since 1995. One large new one, however, was built in West Palm Beach, Florida in 2015, adjacent to an existing large incinerator. Some smaller ones have also been expanded or rebuilt. Despite hundreds of attempts to build new incinerators, community opposition has been the main force preventing them from being built. Overall, the number of operating incinerators in the U.S. has declined. In 1991, there were 187 trash incinerators in the U.S. At the turn of the century, there were 114. As of March 2024, not counting some truly tiny ones, there are just 65, the lowest number since 1980. See our factsheet on incinerator closures." [END QUOTATIONS.]

Too many details, I'm sure. **But the key points should be very clear: burning trash is very bad for human beings and for the environment**. Please do not impose this bill on the Neighbor Islands. For these many reasons, among others, including the risks of public-private partnerships (which invariably seem to benefit the private party, and not the public party), we respectfully request that this bill be deferred.

Very truly yours,

/s/ Alan B. Burdick,
President, Hawaii Chapter
Americans for Democratic Action
Burdick808@gmail.com
808-927-1500



# SENATE COMMITTEE ON ENERGY AND INTERGOVERNMENTAL AFFAIRS

January 28,2025 3:15 PM Conference Room 016

In OPPOSITION to SB964: Relating to Waste-to-Energy

Aloha Chair Wakai, Vice Chair Chang, and Committee Members,

On behalf of our 20,000 members and supporters, the Sierra Club of Hawai'i **OPPOSES** SB964, which mandates the development of waste-to-energy incineration facilities that would risk substantial harm to human health and the environment, while inhibiting our ability to pursue much more sustainable and economical solutions to our energy needs and waste stream challenges.

The Sierra Club appreciates this measure's desire to reduce our islands' solid waste streams and meet their energy needs. However, the mandatory expansion of waste-to-energy throughout Hawai'i may result in public and environmental health and justice issues as well as other unintended consequences that may actually frustrate these overall goals.

For example, the waste-to-energy incineration produces toxic ash and emits large amounts of toxic emissions containing pollutants such as dioxins, lead and other heavy metals, and PFAS. Communities surrounding a new waste-to-energy facility that are exposed to air, soil, and water contamination from such difficult-to contain incinerator ash and emissions may be at heightened and immediate risk of serious and terminal illnesses, including lung and heart diseases, neurological complications, reproductive issues, and cancer. Long-lived toxins such as heavy metals, asbestos, and other difficult-to-destroy chemicals may also migrate across the landscape over time, impacting our island communities as a whole. Newer technologies such as pyrolysis may reduce some hazardous compounds but would not eliminate or mitigate the presence of heavy metals and other toxic contaminants.

In addition, energy production through solid waste incineration has a carbon intensity much higher than that of energy derived even from conventional fossil fuels<sup>1</sup>, exacerbating, rather than relieving, our planetary climate crisis.

Notably, peer reviewed life-cycle assessments of waste management have also shown that three to five times more energy can be saved "through alternative strategies such as waste prevention, reuse, recycling, and composting than can be generated by burning.2" As we have seen with the H-POWER facility on O'ahu, creating a dependency on waste-to-energy facilities can actually disincentivize these latter, true solutions to our waste and energy challenges.

<sup>&</sup>lt;sup>1</sup> https://zerowasteeurope.eu/wp-content/uploads/edd/2019/09/ZWE Policy-briefing The-impact-of-Waste-to-Energy-incineration-on-Climate.pdf

<sup>&</sup>lt;sup>2</sup> https://ilsr.org/wp-content/uploads/2012/02/incinerator\_myths.pdf.

Accordingly, forcing counties to adopt waste-to-energy facilities may prevent them from adopting waste management strategies that can better safeguard public and environmental health, and lock them into less-than-ideal approaches that will also carry significant long term consequences for their residents, including multiple future generations.

Real waste stream solutions must focus on producing less waste and exploring and implementing effective and proven methods of mechanical and organics recycling—rather than kicking the can down the road through incineration facilities that pollute our air, land, and water, potentially for generations to come.

For the above reasons, the Sierra Club of Hawai'i respectfully urges the Committee to **HOLD** SB964. Mahalo nui for the opportunity to testify.

Submitted on: 1/27/2025 10:47:01 AM

Testimony for EIG on 1/28/2025 3:15:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Paul Kuykendall	Testifying for Waihu O Puna Watershed Coalition	Onnose	Written Testimony Only

### Comments:

Burning trash contaminate the air and the water of Hawaii, two of our most precious resources. Haven't we learned from Red Hill? Please vote no on this bill.



To: The Senate Committee on Energy and Intergovernmental Affairs (EIG)

From: Sherry Pollack, 350Hawaii.org
Date: Tuesday, January 28, 2025, 3:15pm

#### In strong opposition to SB964

Aloha Chair Wakai, Vice Chair Chang, and members of the EIG committee,

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** that requires 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.

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.

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

<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

# Comments before January 25, 2025 Senate Committee on Energy and Intergovernmental Affairs

# 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. Burning trash (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, 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.

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/files/incineration/DelcoLCA.pdf">https://www.energyjustice.net/files/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.



# TESTIMONY BEFORE THE SENATE COMMITTEE ON ENERGY AND INTERGOVERNMENTAL AFFAIRS

# SB 964 Relating to Waste-to-Energy

January 28, 2025 3:15 p.m. State Capitol, Conference Room 016

Rebecca Dayhuff Matsushima
Vice President, Resource Procurement
Hawaiian Electric

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

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

This bill proposes to amend HRS Section 196-71 subsection to state, "(b) The Hawaii state energy office shall: . . . (5) 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"). The Company notes that the RFP process is technology agnostic and waste-to energy 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 our 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.



Submitted on: 1/27/2025 3:18:16 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Kristine Kubat	Testifying for Recycle Hawaii	Oppose	Written Testimony Only

Comments:

Kristine Kubat

**Executive Director** 

Recycle Hawai'i

808-747-4246



Submitted on: 1/27/2025 7:26:28 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Christopher Dean	Testifying for Recycle Hawaii, Clean The Pacific	Oppose	Remotely Via Zoom

#### Comments:

Why are we even thinking about waste to energy, a euphemism for incineration? I'll tell you, we're lazy and frightened. I know it's a big job to restructure the entire global economy from a linear model to a circular model, but every big job has to start somewhere, and this is it, this is the start, saying no to the perpetuation of the linear economy. Hawai'i is actually in a perfect situation to start a big project like this. Hawai'i is a metaphor for planet Earth, they're both islands. Everyone knows that Earth is a finite sphere, but no one acts like it is. We all just keep moving in a linear direction, extract, consume, discard, repeat. With over 8 billion people in the world exploiting every square inch of this planet, there is no hope of survival with a linear economy. This isn't hyperbole, this is a scientific fact. There are many scientific papers on ecological overshoot. There's a lot of talk about the climate crisis, which has the potential to turn this planet into an inferno if we keep going in the direction we're going in. The climate crisis however, is not the leading cause of mass extinction, yet. The leading cause of extinction right now is habitat loss, a rather abstract concept that doesn't offer any context for how or why natural plant and animal habitat is disappearing. People hear the phrase habitat loss, but they don't know what it means or why it happens.

The reason for habitat loss is the linear economy, extract, consume, dispose, repeat. Our forests are not animal habitat, they are tree plantations. Land for drilling, mining, logging, factories, warehouses, transportation infrastructure, housing, farming, cities and everything humans build displaces animals. Over 70% of the entire base load of animals that were alive in 1970 are gone. Less than 30% of the animals remain because of our behavior. 96% of mammals on Earth are humans and their livestock. The point is, we cannot continue to live like this. We can't survive without these animals, despite what the techno futurists say.

There's a lot of stuff that goes into our landfills, but one place we can start is single use plastic packaging. The reuse economy may sound old fashioned, it was the economy that our parents used. When I was a child, water was free. It didn't come in plastic bottles, it came out of water fountains that were everywhere. Where did they go? capitalists saw an opportunity to make money selling water. Coke a Cola makes more money selling water without sugar and flavoring than they do with it. The water companies created this myth that water from water fountains wasn't safe. Don't tell my Dad, he live to be 98 and drank NYC tap water and unfiltered water his whole life. This is the place to start, stopping this plan to build incinerators.

Once you build these incinerators, you will create demand for waste, and every atom that goes up in smoke, came at the cost of nature, the destruction of nature, the beauty of life on this

planet. Building these incinerators would directly cause the destruction of life on Earth. It's so simple to understand, that even a child can understand this situation, so I know you understand. If you vote yes on the proposal, it means you understand the situation, but you don't care and that's something you'll have to live with. You have to draw a line in the sand and this is it. No incinerators. Instead, draft legislation demanding that goods coming into the State of Hawai'i be shipped and marketed in reusable containers. It's far from the end of the problem, but it's a start.

NIH paper on ecological overshoot:

https://pmc.ncbi.nlm.nih.gov/articles/PMC10515534/pdf/10.1177\_00368504231201372.pdf

Submitted on: 1/27/2025 2:22:29 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

### Comments:

We strongly oppose this measure. Waste management is a County issue and Kauai should not be told how to manage our waste. There is no such thing as clean emmisions from waste to energy plants. Just like there is no such thing as "clean" coal.

Thank you.





Date: January 27, 2025

To: Dear Chair Wakai, Vice Chair Chang, and Members of the Senate Committee on Energy and Intergovernmental Affairs,

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

Aloha Chair Wakai, Vice Chair Chang, and Members of the Senate Committee on Energy and Intergovernmental Affairs,

I am writing to **strongly oppose SB964**, 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,

~HECA Solid Waste Reduction Task Force Jennifer Navarra

<u>SB-964</u> Submitted on: 1/24/2025 4:23:55 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Nicholas Winters	Individual	Support	Written Testimony Only

Comments:

yes.

Submitted on: 1/26/2025 9:26:06 AM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

#### Comments:

Aloha Senators,

I urge you to vote NO on SB974 which would build trash incinerators on the Island of Hawai'i. Burning trash for energy is an expensive, wasteful, and environmental damaging way to deal with our trash. Studies have shown that incinerators - even the more modern ones - release more polluting gases even than just dumping trash in a landfill.

On Hawai'i Island we have the opportunity to explore more environmentally friendly options for dealing with trash than these old polluting ways. Please consider the fragility of our island's air and oceans.

Thank you,

Ramona Hussey

Hilo, Hawai'i

Submitted on: 1/26/2025 12:43:42 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

# Comments:

This bill actually propels us backwards as far as moving towards a clean environment. Incinerators only release more toxins into the air and surrounding environment. Not a good use of biomass.

The incinerators are a waste of taxpayer money.

William South

Submitted on: 1/26/2025 1:21:21 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

Comments: Hawaii still has a long way to go to reaching its 100% renewable source mandate by 2045 and reducing its carbon footprints. Biomass energy can help Hawaii fulfill that mandate. Please support SB964

Submitted on: 1/26/2025 4:34:05 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

#### Comments:

Dear Chairman Wakai, Vice Chairman Chang and members of the Committee,

I strongly oppose SB964

Waste to Fuel (WTF) schemes are awful. Few of the WTF plants comply with air, soil, and health standards, and often need compliance wavers to operate. Burning rubbish is not an answer and further distracts from important solutions of resource conservation and recycling.

The dark side of WTF contracts is the necessity the municipality deliver a contracted amount of waste. Should the public utility under-deliver the municipality (taxpayer) is assessed a penalty charge. Creating enough waste for a private company to profit from is the wrong direction we need to be going here in Hawaii. We need to be thinking about the thoughtful use and repurposing materials.

Waste to Fuel (WTF) schemes are toxic, and expensive proposals that have been opposed many times. Recycling and producer responsibility are actual solutions, not simply burning. During Hawaii island tenure of mayor Billy Kenoi a Waste to Fuel scheme was successfully quashed.

Responsible disposition of municipal waste that has been pre-sorted for recoverable items is burial in a certified sanitary landfill..

The age of combustion is over, should we continue, we do so at our collective peril.

Respectfully submitted,

Keith Neal

Waimea

Submitted on: 1/26/2025 6:44:39 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

#### Comments:

Chair Wakai, Vice Chair Chang and Members of the Energy and Intergovernmental Affairs Committee.

I am a voter who lives in Hilo. I am testifying in **strong opposition** to SB 964 RELATING TO WASTE-TO-ENERGY. This bill "Requires 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." Yes, we have a huge solid waste management problem, but

#### This is a terrible idea.

Hawai`i County seriously considered the idea of a waste-to-energy generating facility decades ago, when Bobbie Jean Leithead Todd was responsible for solid waste management. The County finally rejected the idea because "the numbers weren't there," i.e., there was not enough solid waste to make the facility worth its cost. In addition, of course, it would be adding to our problems of CO2 emissions and toxic residue.

In Honolulu, "the city pays hundreds of thousands of dollars in penalties each year because it can't provide enough trash to feed the existing H-POWER garbage-to-energy plant." (By Kevin Dayton, *Civil Beat /* April 14, 2022).

I urge you to **reject SB 964 RELATING TO WASTE-TO-ENERGY** look for other solutions to our solid waste management problems

Thank you for the opportunity to submit testimony. Thank you for your service to the people of Hawai`i.

Submitted on: 1/27/2025 4:57:23 AM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

### Comments:

Clean air is one of our most precious and valuable resources. Burning garbage is one of the worst, if not the worst, way to destroy it. Thank you in advance for taking a stance to protect Hawai'i.

Submitted on: 1/27/2025 7:12:23 AM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

#### Comments:

Aloha,

While I acknowledge the need fir renewable energy, I am opposing the Bill as written for two reasons.

- 1. Requiring all the outer islands to do this is where I have an issue. Encouraging and funding an alternatives study with a six month time limit to provide an alternative solution for example, or the Bill passes, would be more palatable.
- 2. In line with my reticence is that I may have missed where the State has looked at other solutions and found that this is the best one. I would love to see the scope, resources needed, and timeline for 3 alternatives if already done. If those results clearly show this solution is best, then I would support and my first objection would also be nullified.

Without that, the State is not following best practices and this Bill should not move forward.

Thanks and Aloha! Len Gambla

Submitted on: 1/27/2025 8:35:35 AM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

#### Comments:

I'm a Kaua'i resident and professional in the solid waste technology and farming spaces.

Clean air is a human right and our government should not expose citizens to hazardous air quality against their will. Further, this is an environmental injustice against the communities who do not have the financial means to relocate out of range of the incernation site.

Incineration is not the answer to the waste crisis in our state with all the negative human and environmental health risks that it poses (review the risks here: https://www.nrdc.org/bio/daniel-rosenberg/burned-why-waste-incineration-harmful).

Given the Kekaha landfill is projected to reach full capacity in the next two years, I believe the County of Kaua'i should build a municipal composting facility and offer curbside organics recycling to divert organic waste from the landfill. According to the County's 2016 Waste Characterization Study, about a third of the waste that is sent to the landfill is organic material. This investment would reflect the County's commitment to environmental stewardship of our aina and help grow a lasting circular economy for generations to come.

Aside from prolonging the life of the landfill by reducing incoming waste significantly, there are other positive effects that would result from diverting organic material. One such benefit would be the reduction of very potent greenhouse gasses emitted by the landfill. Greenhouse gasses like methane are produced when garbage, specifically organic waste, breaks down in a landfill over long periods of time.

Additionally, municipal composting would bolster the island's circular economy and resource resiliency for local food growers. There is a high demand for compost from local farmers and landscapers, who would buy the compost material back from the County, thereby offsetting some of the operating costs of the facility and pickup fleet. As a bonus, the County would also have access to free compost for any government projects that might require organic compost, like landscaping public parks or around government buildings.

<u>SB-964</u> Submitted on: 1/27/2025 8:42:13 AM Testimony for EIG on 1/28/2025 3:15:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Alyssa a Moreau	Individual	Oppose	Written Testimony Only

Comments:

Oppose

<u>SB-964</u> Submitted on: 1/27/2025 8:53:58 AM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

### Comments:

I love clean air. Please, no incineration! Keep Hawaii safe!

# SENATE COMMITTEE ON ENERGY AND INTERGOVERNMENTAL AFFAIRS Hearing on Jan. 28, 2025 at 3:15 pm

### **OPPOSING SB 964**

My name is John Kawamoto, and I oppose this SB964.

This bill requires the State Energy Office to develop public-private partnerships for waste-to-energy facilities for the Neighbor Island counties. It should be noted that "waste-to-energy" is not a completely accurate description of the process that occurs in those facilities because waste isn't completely turned into energy.

It's true that energy is produced, but so is a lot of toxic ash, along with air pollution. For example, the H-POWER "waste-to-energy" facility on Oahu produces 20 to 30 tons of toxic ash daily, on average, and emits more than 1,000 tons of carbon dioxide into the atmosphere daily. More accurately, those facilities should be called municipal solid waste incinerators.

Incineration and landfilling the toxic ash that is produced is the most expensive and polluting way to manage waste. Incineration pollutes more than burning coal. From an environmental perspective, it is worse than simply landfilling the trash without burning it at all.

Hawaii has set a goal of net negative greenhouse gas emissions by 2045, but, unfortunately, Hawaii is on a path that would miss the goal. Incineration emits a large quantity of greenhouse gases, so this bill would put Hawaii even further off the mark.

The H-POWER municipal solid waste incinerator on Oahu is a typical one, requiring continuous huge amounts of trash to remain financially viable. That required minimum has the effect of restraining environmental efforts to "reduce, reuse, and recycle" because they reduce the amount of trash that H-POWER can incinerate.

Several studies verify that municipal solid waste incineration would be problematic for the Neighbor Islands. It's a bad idea that should not be exported from Oahu.

I urge the committee to vote "no" on this bill.

Submitted on: 1/27/2025 9:10:22 AM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

### Comments:

Aloha Senators,

I oppose the incineration of municipal waste (trash) by any means, including the failed technology called pyrolysis. The incineration of municipal waste is a no-win approach because it pollutes our air and land, and burdens taxpayers and state and local governments with high costs for decades. Don't be fooled by for the false promises hyped by incinerator industry salemen.

#### **Incinerators Pollute our Environment**

Burning municipal waste 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. There is no such thing as "waste-to-energy." When burned, waste is turned into toxic ash and air pollution. Soil is also contaminated when toxic particles in the air that fall to the ground. The amount of toxic generated ranges from 15-25% by weight of the MSW processed and from 5-15% of the volume of the MSW processed. What will be done with the toxic ash?

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.

### Taxpayers and State and Local Governments Saddled with High Overhead Costs

Gasification and pyrolysis are incinerators rebranded to give them the luster of a new technology. Both gasification and pyrolysis have been touted for decades as the answer to municipal waste, but technical failures caused efforts for commercial-scale trash gasification or pyrolysis facility in the U.S. to be abandoned after incurring high development costs. 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.

Hawai'i County does not produce enough waste to support a new incinerator. The current contract with the company managing the landfill requires a minimum tonnage of trash. The amount of trash generated is far lower than the tonnage needed to feed the landfill and an incinerator. Many cities on the mainland have learned the true financial cost of feeding an

incinerator. In addition to \$100 million plus costs of building the incinerator 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.

In Hawai'i County, multiple incinerator proposals have been rejected in the past. Last year's waste solicitation for sustainable infrastructure requests specifically rejected waste combustion proposals. West Hawaii Sanitary Landfill has room until 2050, is in an area not bothering local residents, and there is plenty of space to expand it.

Please stop this effort to contaminate our precious environment and financially burden our local and state governments!

Respectfully Submitted,

Mary Kathryn Afable, Hilo

Submitted on: 1/27/2025 9:12:00 AM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

### Comments:

Aloha Chair, Vice Chair, and Committee Members,

As a resident of Hawai'i Island I am in strong opposition to this proposal. As any one who lives on island has experienced in the last few weeks, our air quality is significantly diminished when Pele begins smoking and spewing again. Anything burning contributes to lowered air quality. Our air quality is something we must work to protect at all costs and adding additional toxins to it by buring trash is not something we should do. There are so many ways we can work to address our landfill issues, with reducing waste and EPR mandates, and diverting compost and other recyclable materials. Please focus on those solutions before encouraging air polluters to invest in costly infrastructure that the majority of our residents who enjoy breathing clean air do not want.

Mahalo,

Shannon M.

Hawai'i Island Residents

<u>SB-964</u> Submitted on: 1/27/2025 10:31:26 AM Testimony for EIG on 1/28/2025 3:15:00 PM

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

### Comments:

I want the air to be clean for me and my family.

Submitted on: 1/27/2025 11:06:51 AM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

### Comments:

Burning trash is TOXIC. Harmful to the environment and thus, people. This is not a good option. I oppose this bill completely. Come up with better options.

Submitted on: 1/27/2025 11:06:20 AM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

### Comments:

Honorable Senate Members.

I am writing to ask that you oppose SB964.

Burning trash 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 courtordered 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.

Thank you for your attention and consideration of this request.

# Melissa Barker Kapaa, HI

Submitted on: 1/27/2025 11:24:53 AM

Testimony for EIG on 1/28/2025 3:15:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Banner Fanene	Individual	Support	Written Testimony Only

### Comments:

Aloha

Waste to Energy is an absolute must for Pacific Islanders where Landfills are the absolute worst option.

Please move this Bill through Committees on through Passage. Please do this "For Our Keiki"

Mahalo

Submitted on: 1/27/2025 12:03:26 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

#### Comments:

Dear EIG Committee,

Please oppose SB964. Burning trash is expensive, polluting, and unsustainable. Here's why:

- 1. **It's the Worst Option for Waste Management** Trash incineration creates more pollution than coal and costs more than landfilling or recycling.
- 2. **Pollution Persists, Even with New Technology** Even "modern" incinerators release harmful emissions.
- 3. "Waste-to-Energy" is Misleading. Burning trash creates toxic ash and air pollution—it doesn't magically turn waste into clean energy.
- 4. **Burning Plastics is Burning Fossil Fuels.** Plastics, made from oil and gas, release toxic pollutants when burned.
- 5. **H-POWER's Example** O'ahu's H-POWER incinerator is a significant air polluter.
- 6. **Recycling is Better** A 2021 study showed recycling's health and environmental benefits far outweigh incineration, even with long-distance transport.
- 7. **It Conflicts with Climate Goals** Incineration undermines Hawai'i's zero-emissions targets and the constitutional right to a clean environment.
- 8. **Zero Waste Works** Zero Waste strategies reduce landfill use, create jobs, and minimize harm.
- 9. **Incinerators are Unpopular and Costly** No new U.S. incinerators have been built since 1995 due to opposition and high costs.
- 10. **Kaua'i Needs Immediate Solutions** With Kekaha Landfill nearing capacity, Zero Waste strategies are critical to avoiding a crisis.

Incineration is not the answer. Zero Waste is a smarter, cleaner, and more equitable path forward. Please reject SB964.

Thank you for your time.

Sincerely, Ben Narwold

Submitted on: 1/27/2025 12:12:44 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

#### Comments:

I oppose SB964 as I underestand it may impact Kauai and forestall the goal of a resource recovery center, as well as forcing a more conservative packaging and products delivery system that is more environentally responsible. Some of the objections follow:

- \* <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.
- \* The state's only trash burner, the H-POWER incinerator in Kapolei on O'ahu, is a <u>huge air</u> polluter.
- \* 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 <u>Zero Waste</u> 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. At the current rate, Kekaha Landfill will be full by 2030 even with a vertical expansion, and the new landfill won't be ready until about 2033. No "waste-to-energy" solution can happen soon enough to avoid the need to cut waste in half with Zero Waste strategies to close this gap and avoid a crisis.

pН

Submitted on: 1/27/2025 12:33:35 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

### Comments:

I STRONGLY oppose SB964.

NO trash incinerator has been built at a new site in the US since 1995 due to high costs and community opposition (despite hundreds of attempts). There is no way any community in the state would accept one.

Further, despite what YUMMET and others may be (self)-promoting NO one has built a commercial-scale trash "gasification or pyrolysis" facility in the U.S. Hawaii and our citizens must not be a lab rat for those seeking such an unproven project.

Even a "modern" new trash incinerator built under new regulations would still be a large air polluter, as this <u>new study</u> shows.

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.

When burned, waste is turned into toxic ash and air pollution. It is impossible to defy the laws of physics and turn "matter into energy." "Waste to Energy" is a greenwash title. What waste incineration does is simply to convert waste into different / more concentrated waste (toxic ash, air pollution, and water pollution). Our land, air, water, and public health are the sacrificed in this unsound, unhealthy, unsustainable process.

Burning trash releases 65% more greenhouse gases than burning coal.

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

Burning trash does not replace fossil fuels. Trash essentially IS fossil fuel because much of the energy comes from burning plastics, which are made from oil and gas (fossil fuels), which are very toxic to burn.

Because trash incineration (incorrectly) 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.

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.

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. At the current rate, Kekaha Landfill will be full by 2030 even with a vertical expansion, and the new landfill won't be ready until about 2033. No "waste-to-energy" solution can happen soon enough to avoid the need to cut waste in half with Zero Waste strategies to close this gap and avoid a crisis.

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.

Simple FACT: 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. This fact has been repeatedly proven.

Why are Senators Fevela, Richards, and Wakai (and others who refuse to underrstand this simple fact) attempting to FORCE this on other islands?

SB964 is, itself, simply waste that deserves to be shredded. Please oppose SB964

Testimony in OPPOSITION TO <u>Senate Bill 964</u> From John Harder, dumpdoctor@gmail.com

#### Aloha

Incinerating our refuse and landfilling the 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.

There is no such thing as "Waste-to-Energy." Rather it should be called "Wasted Energy"! When burned, valuable and costly resources are 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, because much of the energy comes from burning plastics, which are made from oil and gas (fossil fuels), and is very toxic to burn.

The state's only trash burner, the H-POWER incinerator in Kapolei on O'ahu, is a <u>huge air</u> <u>polluter</u>, and a major cost to the General Public.

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.

Burning trash releases 65% more greenhouse gases than burning coal.

Attempting to approve and permit the construction of a Waste Incinerator is a waste of time and money. In spite hundreds of attempts, no trash incinerator has been built at a new site in the United States since 1995 due to high costs and community opposition. There is no way any community in the state would accept one.

Incinerators are hungry machines that need to be fed waste. 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.

<u>Kaua'i</u> is 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.

Oʻahu 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, "put-or-pay", for not feeding it enough to burn, which is a disincentive to reduce, reuse, recycle or compost.

<u>Maui</u> 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.

<u>Hawai'i Island</u> 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 (<u>RFI #44444</u>) specifically rejected waste combustion proposals.

Mahalo

Submitted on: 1/27/2025 1:48:41 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

<b>Submitted By</b>	Organization	<b>Testifier Position</b>	Testify
Ted Bohlen	Individual	Oppose	In Person

### Comments:

Burning solid waste is very expensive even when you consider electric generation benefits! It also produces toxic air emissions and toxic ash. Counties should not pursue this option. Please hold this bill!

Mahalo!

Submitted on: 1/27/2025 2:37:34 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

### Comments:

Aloha Chair, Vice Chair, and Esteemed Members of the Legislature,

I oppose SB964, a bill that seeks to impose harmful trash incinerators on Kaua'i, Maui, and Hawai'i Island through a public-private partnership.

Trash incineration is costly and toxic. It pollutes more than burning coal, creates dangerous ash, and does not replace fossil fuels—it is fossil fuels, as much of the energy comes from burning plastics made from oil.

Here's why SB964 should be rejected:

- Environmental harm: Incineration pollutes more than landfilling waste.
- Waste-to-energy myth: Incineration produces toxic ash, not usable energy.
- Economic burden: Incineration is expensive and inefficient.
- Climate conflict: It increases greenhouse gases, undermining our climate goals.
- Waste volume issues: Hawai'i's islands don't produce enough waste to support incinerators.

Island-specific facts show incinerators are unfeasible:

- Kaua'i needs Zero Waste strategies, not incineration.
- O'ahu's H-POWER operates at just 56% capacity.
- Maui and Hawai'i Island don't have enough waste to support incinerators.

Let's focus on clean, sustainable solutions, not a harmful, outdated approach. I urge you to oppose this bill.

Mahalo, Maki Morinoue Holualoa, HI 96725



Submitted on: 1/27/2025 4:02:00 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

### Comments:

I am very opposed to SB964 Here are just a few reasons.

- -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.
- -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 by 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 are 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.

- -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 the 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 the environment than landfilling without burning first.
- -Incineration conflicts with the state's climate change goals and the people's constitutional right to a clean and healthful environment under Article XI, Section 9 of the Hawai'i Constitution.

Hawai'i Island does not produce enough waste to support a new incinerator, and 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 that does not bother local residents, and has plenty of space to expand.

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.

These are just a few of the many reasons to not build an incinerator.

Mahalo for your time, Jim Scancella

<u>SB-964</u> Submitted on: 1/27/2025 4:13:11 PM

Testimony for EIG on 1/28/2025 3:15:00 PM



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

Comments:

Strongly oppose. Whatever happened to home/County rule?

Submitted on: 1/27/2025 4:37:59 PM

Testimony for EIG on 1/28/2025 3:15:00 PM



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

### Comments:

I strongly oppose.. it is the lazy man's way to deal with our garbage.. then we have to breathe the garbage.. the wildlife eat the residue etc.,stop it.

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



Submitted on: 1/27/2025 7:23:00 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

### Comments:

Aloha committee members, mahalo for receiving my testimony in *STRONG OPPOSITION* to this bill and waste-to-energy incineration in Hawai'i!

Mahalo,

Monica Stone 96740



Submitted on: 1/27/2025 10:22:30 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Koohan Paik-Mander	Individual	Oppose	Written Testimony Only

### Comments:

Dear Senators,

Thank you for the opportunity to explain my opposition to this bill.

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

Thank you.

Koohan Paik-Mander



Submitted on: 1/27/2025 10:23:29 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

### Comments:

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

My name is Michele Mitsumori, and I'm writing to **OPPOSE SB964**, which would require 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.

The state's existing trash burner, the H-POWER incinerator in Kapolei, accounts for 24% of mercury and 95% of hydrochloric acid pollution on O'ahu. Emissions of particulate matter, fine particulate matter, carbon monoxide, and cadmium significantly increased from 2020 to 2021.

The phrase "waste to energy" is misleading: when burned, waste is turned into toxic ash and air pollution. Further, because trash incineration counts as renewable energy under state law, it replaces not oil burning, but cleaner energies like solar and geothermal by competing within this state renewable energy mandate. Worse, burning trash releases 65% more greenhouse gases than burning coal.

The evidence is available and clear that burning trash and landfilling toxic ash is the most expensive and polluting way to manage waste or make energy. I respectfully urge the Committee to **vote against SB964**.

Thank you for the opportunity to submit testimony in opposition to SB964.

Michele Mitsumori, Hilo



Submitted on: 1/27/2025 11:10:09 PM

Testimony for EIG on 1/28/2025 3:15:00 PM

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

### Comments:

I disagree with burning trash on the islands. Recently the last coal fueled power facility in Hawaii was decommissioned. Even the thought of shipping coal to hawaii is embarrassing when there are so many other options. I believe that burning rubbish on the islands is taking a step backward and this should not be allowed to happen. Please for the health of the people and the future of the islands do not allow the incineration of trash become an option.

Submitted on: 1/27/2025 11:23:04 PM

Testimony for EIG on 1/28/2025 3:15:00 PM



Submitted By	Organization	Testifier Position	Testify
Jennifer Tanaka	Individual	Oppose	Written Testimony Only

### Comments:

I oppose waste incineration in Hawaii - any and all islands. This method has been used on the mainland and Oahu and has proven to be cost prohibitive. Oahu has the highest population density and still doesn't generate enough waste to avoid low-usage penalties. Waste incineration to meet a quota is a disincentive to "reduce, reuse, recycle". Most importantly, the process creates toxic air pollution and solid waste (ash) that is even more toxic than the original waste. The small amount of energy that may be generated comes at a high cost, in terms of dollars, environmental damage, and our health.

Waste incineration is not a well-thought-out solution for Hawaii's waste problem. In the grander scheme of what is important to Hawaii and what makes Hawaii so special, this idea makes no sense. This is not pono.

Submitted on: 1/28/2025 7:00:49 AM

Testimony for EIG on 1/28/2025 3:15:00 PM



Submitted By	Organization	Testifier Position	Testify
Darlene Scancella	Individual	Oppose	Written Testimony Only

### Comments:

This is a filthy way to deal with waste. It's more harmful to the environment than burning coal. I am so shocked that the sponsers of this bill think so little of our Islands that they would want to allow this to happen. We have an environment here in Hawaii that is fragile with all the indiginous flora and sealife and it is our duty to protect it, not desimate it. Shame on those that are behind this bill. We need to do better.



To the Honorable Chair and Members of the Committee:

My name is Tahan Bapna, and I am a sophomore in high school. Even as a student, I can see the immense value of SB964 in addressing two critical challenges for Hawaii: reducing solid waste and increasing sustainable energy production. This bill represents a forward-thinking solution to transform waste management into an opportunity for energy generation, aligning with Hawaii's goals for sustainability and environmental stewardship.

Hawaii faces a growing issue with limited landfill capacity and the environmental consequences of waste disposal. Waste-to-energy technology offers a viable path to divert waste from landfills while simultaneously producing energy and recovering valuable recyclable materials. Nationally, waste-to-energy facilities process up to 94,000 tons of solid waste per day, generating enough electricity to power 2.3 million homes. By requiring the Hawaii State Energy Office to establish public-private partnerships to develop waste-to-energy facilities in counties with populations below 800,000, this bill addresses both waste reduction and energy generation, making Hawaii more resilient and less reliant on imported energy.

One particularly compelling reason to support S.B. 964 is its focus on smaller counties. These areas often lack the resources to develop large-scale waste management infrastructure, making landfills their primary option. Waste-to-energy facilities can provide a sustainable and scalable alternative, reducing landfill dependence and creating local jobs while generating electricity for the community.

Additionally, the public-private partnership model ensures that the financial and technical expertise of the private sector is leveraged to make these projects successful, while still aligning with state energy goals. This collaborative approach reduces the financial burden on taxpayers and accelerates project implementation.

S.B. 964 also aligns with Hawaii's broader clean energy and climate goals. By utilizing waste as a resource, this bill reduces greenhouse gas emissions from landfills and contributes to Hawaii's renewable energy portfolio. It's a practical and impactful way to address multiple environmental challenges at once, ensuring a cleaner and more sustainable future for our islands.

As a young person concerned about the world I will inherit, I strongly believe that we need to prioritize solutions like this that balance environmental, economic, and social benefits. S.B. 964 is an opportunity for Hawaii to lead by example in creating innovative waste management solutions that benefit all residents.

Thank you for the opportunity to testify in strong support of S.B. 964. I urge you to pass this important bill to advance Hawaii's sustainability goals and secure a cleaner, greener future for our state.

Sincerely, Tahan Bapna



Submitted on: 1/28/2025 9:37:15 AM

Testimony for EIG on 1/28/2025 3:15:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Alexander White	Individual	Support	Written Testimony Only

### Comments:

Aloha Chair and Members of the Committee,

I strongly support this bill to establish waste-to-energy facilities as a critical step toward reducing Hawai'i's solid waste stream and extending the life of our landfills. With the Hawai'i Island landfill projected to reach capacity in approximately 15 years and the cost of developing a new landfill at \$300 million, it is essential to explore innovative solutions to divert waste.

Waste-to-energy technology not only reduces landfill waste but also provides a sustainable energy source, helping Hawai'i achieve its renewable energy goals. By creating public-private partnerships, this bill fosters collaboration to develop efficient and cost-effective facilities that benefit our environment, economy, and future generations.

This is a pivotal opportunity to address both our solid waste and energy challenges while avoiding the significant financial and environmental costs of a new landfill.

Mahalo for your consideration.



Submitted on: 1/28/2025 10:51:21 AM

Testimony for EIG on 1/28/2025 3:15:00 PM



Submitted By	Organization	Testifier Position	Testify
Rebekah S LaPlante	Individual	Oppose	Written Testimony Only

### Comments:

NOT FOR HAWAII ISLAND Reduce waste, recycle more and keep the Plastic from being burned and polluting the air!

- \* 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. Other 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.