JOSH GREEN, M.D. GOVERNOR | KE KIA'ĂINA

SYLVIA LUKE LIEUTENANT GOVERNOR | KA HOPE KIA'ÄINA





STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES KA 'OIHANA KUMUWAIWAI 'ĀINA

P.O. BOX 621 HONOLULU, HAWAI'I 96809

Testimony of DAWN N. S. CHANG Chairperson

Before the House Committee on ENERGY & ENVIRONMENTAL PROTECTION

Thursday, February 16, 2023 9:15 AM State Capitol, Conference Room 325 & Videoconference

In consideration of HOUSE BILL 1292 RELATING TO WASTE-TO-ENERGY

House Bill 1292 proposes to require the Hawaii State Energy Office (HSEO) to enter into a public-private partnership to develop a waste-to-energy generating facility on land under the jurisdiction of the Department of Land and Natural Resources (Department). The Department offers the following comments this measure.

The Department supports the development of waste-to-energy facilities in the State but notes that available lands under the Department's jurisdiction for such a project are limited. Lands best suited for waste-to-energy facilities are those in the urban core with industrial zoning and the necessary infrastructure (connection to the electrical grid, along with water, sewer, drainage) in place or available for connection nearby. The Department notes that it generally does not have these kinds of lands readily available in its inventory but is nevertheless willing to work with HSEO to identify public lands under the Department's management that could potentially be developed for waste-to-energy projects with a substantial investment in securing land entitlements and necessary infrastructure. Any such lands may be limited to rural areas primarily on the neighbor islands (with little or no infrastructure) as the Department already opened its inventory of unencumbered lands and transferred selected parcels to other departments for various purposes including housing, education, public facilities and agriculture.

Mahalo for the opportunity to comment on this measure.

DAWN N.S. CHANG CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

LAURA H.E. KAAKUA FIRST DEPUTY

M. KALEO MANUEL DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES BOATING AND OCEAN RECREATION BUREAU OF CONVEYANCES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND CASTAL LANDS CONSERVATION AND RESOURCES ENFORCEMENT ENGINEERING FORESTRY AND WILDLIFE HISTORIC PRESERVATION KAHOOLAWE ISLAND RESERVE COMMISSION LAND STATE PARKS

<u>HB-1292</u>

Submitted on: 2/12/2023 10:34:07 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Russell Tsuji	DLNR	Comments	Remotely Via Zoom

Comments:

Request for zoom link to testify on behalf of DLNR. Written testimony submitted on DLNR's Testimony account and additional staff will be present at the hearing. Thank you!

JOSH GREEN, M.D. GOVERNOR



STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I DEPARTMENT OF PUBLIC SAFETY Ka 'Oihana Ho'opalekana Lehulehu 1177 Alakea Street Honolulu, Hawai'i 96813 TOMMY JOHNSON DIRECTOR

> Melanie Martin Deputy Director Administration

Michael J. Hoffman Acting Deputy Director Corrections

> William F. Oku Deputy Director Law Enforcement

No.

TESTIMONY ON HOUSE BILL 1292 RELATING TO WASTE-TO-ENERGY. By Tommy Johnson, Director Department of Public Safety

House Committee on Energy and Environmental Protection Representative Nicole E. Lowen, Chair, Representative Elle Cochran, Vice Chair

Thursday, February 16, 2023; 9:15 a.m. State Capitol, Conference Room 325 and via Video Conference

Chair Lowen and Vice Chair Cochran, and Members of the Committee:

The Department of Public Safety (PSD) would like to offer the following **comments** on House Bill (HB) 1292, which requires the Hawai'i State Energy Office to enter into a public-private partnership to build a waste-to-energy generating facility on land owned by the Department of Land and Natural Resources.

PSD believes that engaging with our private partners to fund a waste-to-energy generating facility positively leverages state resources and facilitates collaboration toward our state's efforts to improve energy efficiency. Further, such a facility would divert solid waste from our landfills thereby preserving our environment and natural resources. This project aligns with the state's energy security and resilience initiatives and the waste-to-energy facility will contribute to ongoing efforts to reduce our dependence on fossil fuels.

However, we would defer to the Department of Land and Natural Resources on whether the state has such lands available in its inventory that could be utilized for such a facility.

Thank you for the opportunity to provide comments on HB1292.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Telephone: Web: CHIEF ENERGY OFFICER (808) 587-3807 energy.hawaii.gov

JOSH GREEN, M.D.

GOVERNOR

Testimony of MARK B. GLICK, Chief Energy Officer

before the HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

> Thursday, February 16, 2023 9:15 AM State Capitol, Conference Room 325 & Videoconference

> > Providing COMMENTS on HB 1292

RELATING TO WASTE-TO-ENERGY.

Chair Lowen, Vice Chair Cochran, and Members of the Committee, the Hawai'i State Energy Office (HSEO) offers the following comments on HB 1292.

HSEO appreciates the contribution waste-to-energy (WTE) technology has made to Hawai'i's renewable energy goals. Hawai'i's only WTE facility, H-POWER in Kapolei, O'ahu, began generating electricity in 1990 and in 2021 generated just under 6% of O'ahu's electricity.¹ HSEO also generally supports the use of state lands for renewable energy projects.

HSEO acknowledges it has limited expertise and experience in public-private partnerships as means to carry out its statutory duties. Building such capacity within HSEO would require additional resources and staffing.

If a WTE project is to provide electricity to the utility grid, the potential developer should be aware that the development of a new utility-scale renewable energy project requires extensive planning and stakeholder coordination. Currently, Hawaiian Electric's Integrated Grid Planning (IGP) process, "working to define the plan for putting together

¹ 2021 Renewable Portfolio Standard Status Report, Hawaiian Electric. <u>DocumentViewer (hawaii.gov)</u>

Hawai'i's clean energy grid²" includes a description of the selection process.³ HSEO recommends discussions for any new WTE facilities within Hawaiian Electric's service territory (O'ahu, Maui Nui, Hawai'i Island) be informed by the IGP process. In addition, a new renewable energy project that proposes to sell electricity to regulated public utilities must go through a competitive bidding (request for proposals) process unless the utility applies for and receives a waiver for a specific project.

Finally, HSEO notes that several recent attempts to develop new WTE facilities have been unsuccessful due to various reasons including lack of sufficient feedstock (waste) for the projects to be cost-effective. The counties of Kaua'i, Hawai'i, and Maui, as well as the City and County of Honolulu, may have additional information on the current and projected amounts and types of waste available.

Thank you for the opportunity to testify.

² Integrated Grid Planning | Hawaiian Electric

³ https://igp.hawaiianelectric.com/images/Board-Grid-Scale-Renewables-4.png

DEPARTMENT OF ENVIRONMENTAL SERVICES

CITY AND COUNTY OF HONOLULU

1000 ULUOHIA STREET, SUITE 308, KAPOLEI, HAWAII 96707 TELEPHONE: (808) 768-3486 • FAX: (808) 768-3487 • WEBSITE: http://envhonolulu.org

RICK BLANGIARDI MAYOR



ROGER BABCOCK, JR., Ph.D., P.E. DIRECTOR

> MICHAEL O'KEEFE DEPUTY DIRECTOR

IN REPLY REFER TO: WAS 23-18

February 13, 2023

The Honorable Nicole E. Lowen, Chair The Honorable Elle Cochran, Vice Chair and Members of the Committee on Energy & Environmental Protection 415 South Beretania Street Honolulu, Hawaii 96813

Dear Chair Lowen and Vice Chair Cochran:

SUBJECT: House Bill 1292 - Relating to Waste-To-Energy

The City and County of Honolulu's Department of Environmental Services submits the following <u>comments</u> to HB 1292, relating to Waste-To-Energy.

The City's waste-to-energy facility, H-POWER, receives and processes virtually all municipal solid waste (MSW) on Oahu. In 2022, H-POWER processed approximately 730,000 tons of MSW, reducing the volume of that waste by 90%, thereby conserving valuable landfill space, and generating up to 68.5 MW of firm renewable electricity (about 7% of Oahu's grid or enough to power 60,000 homes), helping to further the statewide goal for 100% renewable energy by 2045. H-POWER has the capacity to process 840,000 tons of MSW per year.

H-POWER is also a significant revenue source for the City. H-POWER generates about \$130 million in revenues annually, including electricity sales (\$75 million), disposal fees (\$50 million), and recycled metals (\$5 million).

Please feel free to contact me at (808) 768-3486 with any questions.

Sincerely,

Roger Babcock, Jr., Ph.D., P.E. Director



Environmental Caucus of The Democratic Party of Hawaiʻi

February 12, 2023

To: The Honorable Nicole Lowen, Chair The Honorable Elle Cochran, Vice Chair, and Members of the House Committee on Energy and Environmental Protection

Re: HB 1292 – Relating to Waste-to-Energy

Hearing: Thursday, February 16, 2023, 9:15 am, Room 325 & videoconference

Position: Strong Opposition

Aloha, Chair Lowen, Vice Chair Cochran, and Committee Members:

The Environmental Caucus of the Democratic Party of Hawai'i has 7,500 enrolled members who are politically active and strong supporters of the environment. As Co-chairs of the Caucus, we strongly oppose HB 1292. This bill would amend HRS §196-71(b) to state that "The Hawaii State Energy Office shall ... (5) enter into a public-private partnership to develop a waste-to-energy generating facility on land under the jurisdiction of the Department of Land and Natural Resources."

The Environmental Caucus recognizes the frustration that many Members of the Legislature, as well as the general public, are experiencing because Hawaii is inundated with vast quantities of trash. Some Legislators, and many people in the general public, believe that increasing the burning of trash to generate energy solves two vexatious problems at once: Getting rid of the trash and generating electrical power, seemingly at less cost than importing and burning fossil fuels.

We wish that these twin problems could be resolved so simply and easily. But they can't be. First, burning trash generates more air pollution than burning oil or coal does. Second, mandating that a State agency <u>shall</u> enter into a public-private partnership to do something expensive, such as building a power plant – probably costing something on the order of \$100 million, puts the State further down the path of burning materials, rather than shifting, as we must, to solar and other energy production that is much more environmentally friendly, as well as being better for our health. Third, when a State agency must comply with a firmly stated mandate, it is stuck in an extremely bad negotiating position. One or more companies can



Environmental Caucus of The Democratic Party of Hawaiʻi

Testimony in opposition to HB 1292 - Waste to Energy – EEP Hearing: Thursday, February 16, 2023, 9:15 am, Room 325 Page 2

demand that the State Energy Office must agree to enter into a long-term contract on very disadvantageous terms, and such a company could easily sue the Energy Office to force compliance. We add, also, that public-private partnerships are just a very bad way for a government agency to do business. Far too many such arrangements result in the public agency absorbing great risks, while the private entity reaps the profits.

For these important reasons, we urge you to DEFER this bill. Thank you very much in advance for providing us the opportunity to testify on this bill.

Alan B. Burdick and *Melodie Aduja*, co-chairs Environmental Caucus of the Democratic Party of Hawai'i <u>Burdick808@gmail.com</u> 808-927-1500 <u>legislativepriorities@gmail.com</u> 808-258-8889 February 16, 2023 9:15 am

House Committee on Energy & Environmental Protection

Conference Room 325 & Videoconference State Capitol 415 South Beretania Street

Re: HB 1292 - RELATING TO WASTE-TO-ENERGY.

Aloha Chair Nicole Lowen, Vice Chair Elle Cochran, and Members of the Committee:

We **<u>STRONGLY SUPPORT</u>** the intent of SB1247 which requires the Hawai'i State Energy Office to enter into a public-private partnership to develop a waste-to-energy generating facility on land under the jurisdiction of the Department of Land and Natural Resources.

Increasing processing of solid waste through WTE will decrease our need for landfills and no landfills in our backyard. All four counties are challenged with their solid waste processing and their landfills. Having the state build a WTE facility could lead to statewide coordination of solid waste processing. The proposed WTE facility has the potential to serve the entire state and reduce solid waste going into landfills statewide.

Hawaii has a goal of producing 100% of its electricity from clean renewable sources by 2045. Utilizing WTE, a firm renewable source of energy, will help our state move closer to achieving this important goal.

WTE technology will help to reduce greenhouse gas (GHG) emissions as our state addresses the significant effects of climate change and rising sea levels.

We urge the committee to PASS HB1292.

HB-1292 Submitted on: 2/13/2023 2:11:17 PM

Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
laurel brier	Kauai Climate Action Coalition	Support	Written Testimony Only

Comments:

Waste to Energy degrades our environment and adds to our GHG emissions. The HI legislature has declared a Climate Emergency and legislation needs to reflect sound science. Burning/inceration is stepping backward.

I Mua

<u>HB-1292</u>

Submitted on: 2/13/2023 3:57:16 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Ruta Jordans	Kauai Climate Action Coalition	Oppose	Written Testimony Only

Comments:

Hawaii has declared a climate crisis. No amount of need for energy is worth the Green House Gasses that a waste to energy project would produce. It is time for Hawaii to convert to a circular economy which values what is now called waste. Rather than mining the earth for more rare minerals, fracking to produce more plastic, or burning organics, Hawaii can learn to reuse minerals from discarded products, eliminate single use plastics, and turn organics into composted soil amendment. Please oppose bill HB1292 so that our children and their children may live on a habitable earth.



DATE: February 14, 2023

- TO: Representative Nicole Lowen Chair, Committee on Energy and Environmental Protection
- FROM: Mihoko Ito

RE: H.B. 1292- Relating to Waste-to-Energy Hearing Date: Tuesday, February 16, 2023 at 9:15 a.m. Conference Room: 325

Dear Chair Lowen, Vice Chair Cochran, and Members of the Committee on Energy and Environmental Protection:

We submit this testimony in **opposition** to H.B. 1292 on behalf of Covanta, who is the operator of HPOWER.

Every year, HPOWER processes more than 745,000 tons, or 85% of Oahu's postrecycled municipal solid waste that would otherwise have ended up in the Waimanalo Gulch landfill. In addition to being a source of odor and groundwater contamination, landfills are the third largest source of methane in the U.S. The EPA estimates that for every 1 ton of electricity processed at a waste-to-energy plant rather than sent to a landfill, approximately 1 ton of CO2e is avoided. This negative carbon effect is largely due to avoiding the generation of methane - a GHG that is 84 times more potent than Co2.

The power generated at HPOWER supplies the electricity grid on Oahu with up to 10% of the island's electricity needs. The plant reduces the volume of waste going to Waimanalo Gulch by 90% and recycles various ferrous and non-ferrous metals, resulting in GHG savings of 603,000 tons annually.

H.B. 1292 requires the Hawai'i State Energy Office to enter into a public-private partnership to develop a waste-to-energy generating facility on land under the jurisdiction of the Department of Land and Natural Resources. While we appreciate that this measure makes statements about the benefits of waste-to-energy, we believe that it is completely unnecessary to build a new waste-to-energy plant on DLNR lands, given the existence of HPOWER. We also believe it will be costly to implement this measure and ask that the Committee at a minimum include an appropriation to the measure. Finally, we believe that a full fiscal and overall impact estimate should be done before proceeding to develop any new waste-to-energy facility on Oahu.

For these reasons, Covanta opposes this bill and respectfully requests that it be held. Thank you for the opportunity to submit testimony on this measure.

First Hawaiian Center 999 Bishop Street, Suite 1400 Honolulu, HI 96813

HB-1292 Submitted on: 2/14/2023 2:29:27 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Jennifer Navarra	Zero Waste Hawaii Island	Oppose	Written Testimony Only

Comments:

Dear Committee Members,

Waste-to-energy is not the solution to our waste problems. Not only does it release toxins and greenhouse gasses into the atmosphere, but it is also a waste of precious resources that can be reused, repurposed or recycled. It is frustrating to have to continually spend time fighting these false and dangerous solutions. We need to reduce the amount of waste we generate and recapture those resources. Waste-to-energy also creates ash that still needs to be landfilled and it is full of toxins that leach into the ground.

We are facing landfill capacity issues on every island and must not fall for these false solutions that poison the air and water, while also costing taxpayers way too much money. Zero Waste is the solution, let's put our efforts there!

Jennifer Navarra Program Director Zero Waste Hawai'i Island

HB-1292 Submitted on: 2/14/2023 6:59:35 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Christopher Dean	Recycle Hawaii	Oppose	Written Testimony Only

Comments:

No. Waste to energy is a disaster! We can't take the lazy way. I know recycling has been difficult, but we are moving forward with Extended Producer Responsibility and other initiatives which will greatly reduce the amount of waste. That's what we're trying to do, right? Stop wasting our natural resources? A lot of people think about landfills and pollution when they think of the 3 Rs, Reduce, Reuse, Recycle, but in actuality, the primary purpose for the 3Rs is to stop the exploitation of our dwindling natural world. Waste to energy doesn't just allow the continuation of our linear economy, an economy based on infinite extraction on a finite planet, it doesn't just promote a linear economy, it forces you to be linear, it locks you into a legally binding, suicidal contract. Look at Google Earth Satellite view. Humanity has already taken everything. Maybe you've heard of a movement called 30 X 30? This is an effort to protect 30% of the natural world by 2030. It's too late for that, because we've already destroyed more than 70% of the natural world. 60% of the total number of animals that were alive in 1970 are gone, mostly due to habitat loss. In the Book Of Revelations, it warns that when the apocalypse happens 1/3 of all the animals will disappear. Well, 2/3rds have already disappeared, so the scientific fact is, the apocalypse happened decades ago, now we're just digging our graves deeper. Maybe you don't believe what I'm saying. Well, look for yourself, Google is just a flick of a finger away. Ask Siri. Or Scott Pele on 60 Minutes. You know you're in trouble when the mainstream media tells you that global mass extinction is now inevitable. If you don't kill any and all "Waste to Energy" bills, you're the one destroying life on Earth. That will not look good on your resume when you're trying to enter the Kingdom of Heaven.



To: The Honorable Chair Nicole Lowen, the Honorable Vice Chair Elle Cochran, and Members of the Committee and Energy and Environmental Protection

From: Climate Protectors Hawai'i (by Ted Bohlen)

Re: Hearing HB1292 RELATING TO WASTE-TO-ENERGY.

Hearing: Thursday February 16, 2023, 9:15 a.m., room 325

Aloha Chair Lowen, Vice Chair Cochran, and Members of the Committee on Energy and Environmental Protection:

The Climate Protectors Hawai'i respectfully but STRONGLY OPPOSES HB1292!

At first blush, incinerating trash sounds like a good idea: reduce waste volume and generate electricity. But, in reality it is a very bad idea, harmful to public health, the environment, and your wallet. Incineration is a twice as bad for the climate as landfilling and generally more expensive. Incineration also releases hazardous pollutants into the air and produces toxic ash, which both can harm human health.

Rather than building more polluting incineration, we should produce less trash, reuse, refill and redesign packaging. We should compost organic waste and

recycle trash that has economic value, including construction and demolition waste.

Please hold this bill!

Mahalo!

Climate Protectors Hawaii (by Ted Bohlen)



Environmental Caucus of The Democratic Party of Hawaiʻi

Energy & Climate Action Committee

Thursday, February 16, 2023, 9:15 am

House Committee on Energy and Environmental Protection

HOUSE BILL 1292 - RELATING TO WASTE-TO-ENERGY

Position: Strong Opposition

Me ke Aloha, Chair Lowen, Vice-Chair Cochrane, and members of the House Committee on Energy and Environmental Protection:

HB1292 *Requires* the Hawai'i State Energy Office to enter into a public-private partnership to develop a waste-to-energy generating facility on land under State jurisdiction.

The Energy & Climate Action Committee is surprised to see this misguided bill. It is an old-fashioned approach to a problem, and only compounds the hazards from allowing the proliferation of a wasteful lifestyle. Its specificity suggests that someone thinks they have already made a tentative deal, ready to put on the table, once the Legislature falls for it. It's a private benefit on public lands.

First, a waste incineration plant is the most expensive kind of power plant to construct. It is the most expensive type to maintain. It raises the costs of electricity to rate-payers. Honolulu is losing money by overpromising delivery of waste materials, as hard as that is to believe. Such plants are being closed all across the country. It is no wonder that these companies are desperate for new projects, to operate on a guaranteed income.

Second, our money earns a better return installing clean power technology with new battery storage, and upgrading our old-fashioned grids to accept all power sources. This new way is proving far cheaper than the incineration technology.

Incineration of waste produces more contaminants into the atmosphere than coal, the reverse of what the future requires. The world's climate scientists urge an accelerated reduction of greenhouse gas emissions, saying we don't have ten years to cut them in half if we want to have a chance at regaining control of the climate before it spirals totally beyond a liveable planet. This is no joke and no time for wishful throwbacks to obsolete technology.

Moreover, the residue from incineration is more toxic than the materials going in, thanks to combustion, and are toxic input to landfills, which in their aging state produce leachates into our nearshore waters, threatening our fish and ourselves.

Finally, it is unquestionably a daunting challenge to reduce our waste production. It is shocking to think that our extravagant society product is 30% waste, from extraction to production to consumption. We cannot continue to pursue such a wasteful society – there isn't enough safe space in the atmosphere or on land. We would be far better off spending this money toward more future-friendly solutions.

Encouragingly, materials producers at the national and international level are taking this seriously, and redesigning their production and their materials to be significantly less material-intensive, more safely disposable, and to reorganize how they are delivered, to minimize excess packaging. This has a long way to go, but it is the future. We used to live this way, proudly and comfortably, reusing containers, recycling and repairing materials, and composting what's left. We can do it again.

Mahalo for the opportunity to address this matter.

/s/ Charley Ice & Ted Bohlen, Co-Chairs, Energy and Climate Action Committee Environmental Caucus of the Democratic Party



To:The House Committee on Energy and Environmental Protection (EEP)From:Sherry Pollack, 350Hawaii.orgDate:Thursday, February 16, 2023, 9:15am

In strong opposition to HB1292

Aloha Chair Lowen, Vice Chair Cochran, and Energy and Environmental Protection Committee members,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org **strongly opposes HB1292** that requires the Hawaii State Energy Office to enter into a public-private partnership to develop a waste-to-energy generating facility on land under the jurisdiction of the Department of Land and Natural Resources.

Please don't be duped by false information provided by proponents of this measure who have characterized supposed "waste-to-energy facilities" as a way to "improve energy efficiency" "preserve our environment and natural resources," and worst of all, as a "clean renewable source" of energy. These false claims can not be any further from the truth.

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.¹ Moreover, there is nothing "energy efficient" about it. Incinerators waste large amounts of reusable materials in order to produce only small amounts of energy.

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.² Moreover, incinerators

¹ Tellus Institute, More Jobs, Less Pollution: Growing the Recycling Economy in the United States, 2011. www.recyclingworkscampaign.org.

² http://www.energyjustice.net/incineration/healthstudies.pdf

do not avoid landfills. For every 100 tons of trash burned, 30 tons become toxic ash that goes to landfills.³ The other 70 tons become air pollution.

We don't need dirty 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. If we want to preserve our environment and natural resources, 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

³ http://www.energyjustice.net/incineration/ash



TESTIMONY BEFORE THE HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

H.B. 1292

Relating to Waste-to-Energy

February 16, 2023 9:15 a.m., Agenda Item #2 State Capitol, Conference Room 325

Greg Shimokawa Director, Renewable Acquisition Hawaiian Electric

Chair Lowen, Vice Chair Cochran, and Members of the Committee:

My name is Greg Shimokawa and I am testifying on behalf of Hawaiian Electric commenting with significant concerns on H.B. 1292, Relating to Waste-to-Energy. While we understand the concerns that prompted this bill, without further information we cannot determine if such a bill would indeed address such concerns.

This bill proposes to amend HRS Section 196-71 subsection (b) by adding a subsection to it that would require the Hawaii State Energy Office to enter into a public-private partnership to develop a waste-to-energy generating facility on land under the jurisdiction of the Department of Land and Natural Resources.

While having more renewable energy projects online will help the state meet its 2045 100% renewable energy goal, Hawaiian Electric would like further clarification on the intent of this bill.

Hawaiian Electric purchases power from the 69-megawatt H-POWER waste-toenergy plant owned by the City & County of Honolulu. The plant is capable of burning approximately 3,000 tons of garbage per day to produce steam that drives two steam turbine generators, which provides the electricity that is sold to Hawaiian Electric and distributed to customers. A shortage of trash has hampered the ability of H-POWER to meet its contractual obligations.¹ Increased recycling and reuse efforts could further limit available trash. Hawaiian Electric contemplates whether adding another waste-to-energy facility on O'ahu would be in the best interest of its customers.

H.B. 1292 does not specify how the energy from this waste-to-energy generating facility will be used. It should state if the energy would be sold to a public utility or directly used for or sold to public and/or private entities. If the intent is to sell the capacity and/or energy to Hawaiian Electric, any such project would need to bid into Hawaiian Electric's request for proposals for energy and would not be guaranteed a contract with the utility. Competitive bidding helps ensure that the projects selected to provide energy and capacity to the utility will provide the best benefits to our customers. Hawaiian Electric currently has an open request for proposals that any interested waste-to-energy facility could bid into, without the need for legislation.

Further, the Hawaii State Energy Office has testified that "it has limited expertise and experience in public-private partnerships as means to carry out its statutory duties."

Given the above, Hawaiian Electric has significant concerns regarding whether the plant would have enough fuel or the project would have an off taker.

Thank you for this opportunity to comment on H.B. 1292.

¹ <u>https://www.civilbeat.org/2022/04/a-bill-to-finance-a-new-waste-to-energy-plant-on-oahu-raises-questions/</u>

HB-1292 Submitted on: 2/15/2023 9:02:26 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Sierra Revilla	Hawaii Stevedores Inc.	Support	Written Testimony Only

Comments:

I support this bill.

HB-1292 Submitted on: 2/15/2023 9:04:07 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Dave Mulinix	Our Revolution Hawaii	Oppose	Remotely Via Zoom

Comments:

Aloha Chair Lowen, Vice Chair Cochran, Rep. Gates, Rep. Kahaloa, Rep. Perruso, Rep. Ward, Rep. Woodson,

On behalf of Our Revolution Hawaii's 5,000 members and supporters statewide, we stand in STRONG OPPOSITION to passage of HB1292 that requires the Hawaii State Energy Office to enter into a public-private partnership to develop a waste-to-energy generating facility on land under the jurisdiction of the Department of Land and Natural Resources.

Many jurisdictions in the US are running out of space to dispose of their waste, so they are looking for alternatives to burying their waste in landfills. Some have tried waste-to-energy generation which has proven to be highly inefficient, more polluting than coal-fired plants, and emits carbon dioxide into our atmosphere adding to the growing climate crisis. These results have been well documented in reports by many environmental organizations like the Energy Justice Network and National Toxics Network.

All incinerators, which includes gasification, pyrolysis and plasma arc technologies, are in fact a waste of energy. Due to the relatively low calorific value of waste, incinerators only make small amounts of energy while destroying large amounts of reusable materials.

Burning waste for energy also drives a climate changing cycle of new resources being extracted from the earth, processed and shipped around the world, and then wasted in incinerators.

Burning waste pollutes people and the environment. Mercury, dioxins, lead, and other pollutants come from burning waste. In terms of climate impacts, incinerators emit more carbon dioxide per unit of electricity than coal-fired power plants. Burning waste is dirtier than coal. To make the same amount of energy, burning trash pollutes the air far more than burning coal, even though incinerators are generally newer and have more air pollution controls than coal power plants. Trash incinerators release 28 times as much dioxin air pollution than coal, six times more lead and mercury, three times more nitrogen oxides, twice as much carbon dioxide, twice as much carbon monoxide and 20% more sulfur dioxide.

Energy from incinerators is not renewable. Paper and metals come from finite natural resources and plastics and tires are fossil fuels. Burning these resources creates a demand for 'waste' and discourages real waste management solutions.

According to the IPCC Fourth Assessment report on Climate Change, "Waste minimization, recycling, and re-use represent an important and increasing potential for indirect reduction of Green House Gas emissions through the conservation or raw materials, improved energy and resource efficiency and fossil fuel avoidance."

What's the real solution to our waste challenge? Zero Waste practices such as conservation, redesign, reduce, reuse, recycling and composting which all serve to conserve energy. A Zero Waste strategy creates jobs and saves money It's an essential strategy to combat climate change.

Zero Waste is the conservation of all resources by means of responsible production, consumption, reuse and, recovery of all products, packaging, and materials, without burning them and without discharges to land, water, or air that threaten the <u>environment</u> or human health.

Zero Waste is focused on <u>waste prevention</u> that encourage redesigning <u>resource</u> life cycles so that all products are repurposed and/or <u>reused</u>. The goal of Zero Waste is to avoid sending trash to <u>landfills</u>, incinerators, the ocean, or any other part of the environment. Currently, only 9% of global <u>plastic is recycled</u>. In a zero waste system, materials are reused until the optimum level of consumption is reached.

Zero Waste is an achievable goal already being successfully implemented in cities around the world in stark contrast to the primitive idea of burning waste under the pretense of producing energy. Just a few of cities that already have zero waste programs include: Austin, Texas; Boulder, Colorado; Minneapolis, Minnesota; San Francisco, California; and San Jose, California.

A Zero Waste program is a much better solution than waste-to-energy projects.

Please vote in oppositon to HB1292 becauce waste-to-energy is a proven very bad idea and there are better solutions to deal with waste like implementing a Zero Waste program.

Mahalo for your kind attention,

Dave Mulinix, Cofounder & Hawaii State Organizer,

Our Revolution Hawaii.



HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

February 16, 2023, 9:15 AM Room 325

TESTIMONY IN OPPOSITION TO HB 1292

Aloha Chair Lowen, Vice Chair Cochran, and Committee members:

Blue Planet Foundation respectfully **opposes HB 1292**, a bill that would require the Hawai'i State Energy Office to enter a public-private partnership to develop a new waste-to-energy facility on lands under the jurisdiction of the Department of Land and Natural Resources.

While Blue Planet supports Hawai'i's goal to produce 100% renewable energy by 2045 (Act 97 of 2015), we advise against the construction of a new waste-to-energy facility in our islands to help us meet this target. There are other truly clean and renewable energy resources we should prioritize to help meet Hawai'i's renewable portfolio standards, beyond creating additional waste-to-energy infrastructure.

Building a new waste-to-energy facility could undermine Hawai'i's goal to be carbon-negative by 2045 (Act 15 of 2018). The International Panel on Climate Change estimates that for every ton of trash incinerated, between 0.7-1.2 tons of carbon emissions are released. Additionally, "biogenic" carbon emissions, which are created from burning paper, food waste, natural textiles, sewage, and other municipal solid waste, are not counted toward a facility's total carbon emissions.¹ As a result, the U.S. Environmental Protection Agency underestimates the total waste-to-energy emissions and only considers around 40 percent of the emissions coming from a waste-to-energy facility.² Trash incineration is not a climate-friendly solution.

Lastly, the City and County of Honolulu already holds a contract with Covanta for H-power, a waste-to-energy facility in Kapolei, O'ahu. The City's "put or pay" contract requires the city to produce 800,000 tons of municipal solid waste annually– a trash quota that O'ahu consistently does not meet. Therefore, in addition to being misaligned with our clean energy and climate change goals, we believe that HB 835 is unnecessary due to existing, additional capacity in Hawai'i's current waste-to-energy facility. Thank you for the opportunity to provide testimony.

¹ "Stop, Sort, Burn, Bury - incineration in the waste hierarchy: independent review" *Government of Scotland*. May 2022 (https://www.gov.scot/publications/stop-sort-burn-bury-independent-review-role-incineration-waste-hierarchy-scotland/pages/10/)

² "Recycle or Burn: What's The Carbon Footprint of Honolulu's Trash?" *Honolulu Civil Beat.* November 2019. (https://www.civilbeat.org/2019/11/recycle-or-burn-whats-the-carbon-impact-of-honolulus-trash/)

HB-1292 Submitted on: 2/15/2023 9:38:30 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Mike Ewall	Energy Justice Network	Oppose	Remotely Via Zoom

Comments:

Trash incineration is the most expensive and polluting way to manage waste or to make energy. There is not enough waste generated on islands other than O'ahu to support an incinerator, which is why these costly facilities have not been pursued in the other counties. On O'ahu, H-POWER already doesn't have enough waste to support the 3,000 ton/day facility (3rd largest waste incinerator in the nation). It makes no sense to pursue new incinerators, even if H-POWER were not in existence. Incineration (and dumping the toxic ash in landfills) is twice as bad for the climate as landfilling directly, and is more than three times as harmful when factoring in other health and environmental harm from incinerator emissions.

In the senate hearing, plasma-style incinerators were mentioned by one speaker advocating for the bill. This is an experimental type of incineration that is even more expensive than normal ones and is not proved to work at commercial scale. They fail technically and economically.

Even conventional trash incinerators are politically impossible to site. No new incinerator has been built at a new site in the U.S. since 1995 despite hundreds of attempts. If the economics don't stop them, public opposition will. Every time.

There is much more to be said on this, and I hope that you'll take the time to learn more than what incinerator pushers are telling you. We do a lot of science-based work documenting the health and environmental harms with incineration, and also consult with counties working to move away from incineration and adopt Zero Waste Plans. Incineration is forbidden in a Zero Waste system, as is evident in the internationally peer-reviewed definition of Zero Waste and the Zero Waste Hierarchy, both available at http://www.zwia.org/zwh

Please take the time to review some of the following documents if you'd like to learn the other side of the story. We and others have documented that incineration (which is the more accurate name for the public relations term, "waste-to-energy") is the worst option in terms of public health, climate, environment, jobs, and cost. We'd be happy to be a resource to you as you learn about these issues, and welcome questions seeking more documentation on any claims we have made, or documented refutations of any claims made by incinerator advocates.

Here are some links I'd encourage you to review:

http://www.energyjustice.net/incineration/2022CEQletter.pdf - 17 groups from Hawai'i were among the 274 organizations that supported this 2022 letter to the White House on incineration

http://www.energyjustice.net/incineration/ - several factsheets and reports available at the top section, including on health, emissions, and more

http://www.energyjustice.net/md/moco - detailed and well-documented report documenting how a county-owned, Covanta-run incinerator in Maryland is more harmful than landfilling

Sincerely,

Mike Ewall, Esq. Executive Director Energy Justice Network 215-436-9511 mike@energyjustice.net http://www.energyjustice.net

<u>HB-1292</u>

Submitted on: 2/15/2023 11:58:01 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Lisa Hallett	Kokua Na Aina	Oppose	Written Testimony Only

Comments:

Aloha!

Waste to energy is the most expensive and the most polluting of methods to produce energy. For every ton of trash burned, about one ton of greenhouse gases is released from incineration. About half that from landfilling. This is documented in the life cycle assessment we did for Montgomery County, MD. See <u>http://www.energyjustice.net/md/moco</u> - see pages 8 and 61 for a summary table and chart and chapter 3 for far more details.

Some shorter summaries are here:

<u>https://www.energyjustice.net/incineration/climate</u> http://www.energyjustice.net/files/incineration/incineration_vs_landfills.pdf

All of the carbon going into an incinerator is immediately injected into the air. Much of the carbon going into a landfill stays put, especially more durable materials like plastics and wood. Food scraps and yard waste break down fast and make landfill gas, which is about half methane, so the solution is to compost that instead. However, in a landfill, some of that still stays put, and the gas which about half methane and half CO2 is mostly collected and burned, turning the methane into CO2, so it's not like it's just raw methane going everywhere.

On increased toxicity, the metals in waste become more available to eat/drink/breathe when burning. Ash can blow off of trucks and off the landfill when used as daily cover material. The higher surface area of ash means that rainwater can leach toxic chemicals out more readily. It's like coffee beans vs. coffee grounds. You don't get coffee with beans, but grind them up and the insides are now more available. All this plus, the process of burning creates new toxic chemicals that weren't there to start, like dioxins/furans, PAHs, and acid gases. Much of the dioxins end up in the ash -- at least from the new unit at H-POWER which uses activated carbon injection to move dioxins from the air to the ash. The older two units lack that control system.

Nothing disappears. When you burn waste (plasma or otherwise), every ton going in comes out - at ash or air emissions... always some of each. Technically, more tons come out than go in because the background air combined and forms some of the air emissions that are pollutants, like nitrogen oxides and CO2. It's impossible that you put in a ton of waste and less than a ton comes out. It's just that we pretend that the approx. 70% of the tonnage that shoots out of a smokestack doesn't exist

Thank you for taking our testimony.

Imua aloha, Lisa Hallett



Phone: 927-0709 henry.lifeoftheland@gmail.com

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION Rep. Nicole E. Lowen, Chair Rep. Elle Cochran, Vice Chair

DATE: Tuesday, February 16, 2023 TIME: 9:15 A.M. PLACE: Conference Room 325

HB 1292 RELATING TO WASTE-TO-ENERGY CONCERNS

Aloha Chair Lowen, Vice Chair Cochran, and Members of the Committee

Life of the Land is Hawai`i's own energy, environmental and community action group advocating for the people and `aina for 52 years. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

The State Energy Office is currently tasked with advancing state energy goals though data collection and reaching out to the executive branch, the public sector, the private sector, and the community.

This bill proposes that the State Energy Office should promote one type of energy.

The proposed waste-to-energy project will need to go before the Board of Land and Natural Resources and the Public Utilities Commission.

There will be opposition. The Zero Waste community and the climate change community favor an aggressive approach to limit waste in the first place.

The State Energy Office would have to take positions at regulatory agencies that are unpopular with a significant sector of the climate and energy communities.

Additional funds will be needed if this bill passes.

Mahalo

Henry Curtis

Executive Director

LATE *Testimony submitted late may not be considered by the Committee for decision making purposes.



HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

February 16, 2023 9:15 AM Conference Room 325

In OPPOSITION to HB1292: Relating to Waste-to-Energy

Aloha Chair Lowen, Vice Chair Cochran, and Committee members,

On behalf of our 20,000 members and supporters, the Sierra Club of Hawai'i **OPPOSES** HB1292, which mandates the development of a solid waste incineration plant 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 expansion of waste-to-energy in Hawai'i may result in severe unintended consequences that may actually frustrate these overall goals.

For example, the incineration of solid waste in waste-to-energy facilities has been shown to both produce toxic ash and emit large amounts of toxic emissions containing pollutants such as dioxin, lead and other heavy metals, and PFAS. Communities surrounding a new wasteto-energy facility that are exposed to air, soil, and water contamination from such difficult-tocontain incinerator ash and emissions may therefore be at heightened risk of serious and terminal illnesses, including lung and heart diseases, neurological complications, reproductive issues, and cancer.

In addition, energy production through solid waste incineration has a carbon intensity much higher than that of energy derived even from conventional fossil fuels, 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." 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.

Accordingly, this measure's mandate to expand of waste-to-energy strategies in Hawai'i may only lead to significant harms to our communities and our environment, while potentially preventing us from realizing much more effective solutions to reducing our solid waste streams.

For the above reasons, the Sierra Club of Hawai'i respectfully urges the Committee to **HOLD** HB1292. Mahalo nui for the opportunity to testify.

<u>HB-1292</u>

Submitted on: 2/16/2023 8:34:22 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Rafael Bergstrom	Sustainable Coastlines Hawaii	Oppose	Written Testimony Only

Comments:

Aloha members of the committee,

Waste to energy is the epitome of greenwashing. In this bill it states that waste to energy is a meaningful way to reduce solid waste streams. This continues to be a reactive narrative formed by those who want to keep consumption levels at the status quo. The true way to reduce solid waste is to stop wasting so much. This state and this country continue to shy away from doing meaningful reform on production and consumption and instead propose pollution-heavy, industrial, and centralized systems that provide nothing more than a band-aid with their own damaging consequences. Burning something to create energy is quite literally the definition of unsustainable and unrenewable, and that the narrative around waste to energy continues to be "sustainable" or "renewable" demonstrates a continued infiltration of rhetoric from industry that wants our communities to continue on a destructive path of overconsumption.

Around the globe waste to energy facilities are being shut down because of toxic emissions and extremely high costs. Currently, HPOWER on O'ahu produces double the emissions of burning oil for energy and is the most expensive form of energy production in the state. Please help us move forward in our understanding of proactive solutions and stop this reactive measure from continuing on.

Mahalo for your time.

HB-1292 Submitted on: 2/8/2023 7:22:14 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Andrew Crossland	Individual	Oppose	Written Testimony Only

Comments:

I oppose this Bill.

<u>HB-1292</u>

Submitted on: 2/8/2023 8:52:31 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Cory Harden	Individual	Oppose	Written Testimony Only

Comments:

Aloha legislators,

Burning trash is one of the worst things you can do for the environment. And on DLNR land too? Please trash this bill!

mahalo, Cory Harden

<u>HB-1292</u>

Submitted on: 2/9/2023 11:00:13 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Regina Gregory	Individual	Support	Written Testimony Only

Comments:

Not clear if this is for neighbor islands? Oahu already has HPOWER.

HB-1292 Submitted on: 2/9/2023 12:17:48 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Caroline Azelski	Individual	Support	Written Testimony Only

Comments:

Support. Thank you.

HB-1292 Submitted on: 2/12/2023 5:44:45 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
David Hunt	Individual	Oppose	Written Testimony Only

Comments:

REQUIRE? Who does this benefit. Not taxpayers who pay your salaries.

It is PAST time to stop kicking the can down the road for the next generation to suffer and try to undo.

We can not change our over-consumptive, irresponsible single-use, throw-away waste problem bu burning it and putting the consequences into our air, lungs, and blood.

Neither can we transition our energy production to clean, renewable, carbon-free energy with incineration. Burning (all fuel types) is exactly what has brought us to the precipice of possibly making the earth unlivable for all life.

HB1292 is outdated thinking for our present, urgent problems.

"We will end up where we are headed if we don't change direction."

HB1292 will not solve a problem / it will create more, bigger problems. Time is running out to mitigate the coming apocalypse. Please "kick this can" into the recycle bin.

Submitted on: 2/12/2023 8:28:28 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Ruta Jordans	Individual	Oppose	Written Testimony Only

Comments:

Waste to energy is wasted energy. Please watch the video at <u>https://vimeo.com/784482464</u> about the solid waste problems and solutions in Hawaii. The Hawaii legislature has declared we are in a climate emergency. Burning, or by any other name such as incineration, causes emission of green house gasses, intensifying all the climate crisis effects. If you love your children and grandchildren, please vote against this bill!

Submitted on: 2/14/2023 3:31:31 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Mark A. Koppel	Individual	Oppose	Written Testimony Only

Comments:

My name is Mark Koppel, P O Box 283, Hakalau, HI

I am testifying in strong opposition to HB1292.

In spite of sneaky strategies to promote this bill, it is completely wrong for Hawaii.

It will be a disaster.

You can read all the reasons from other brave testifiers.

Mahalo

Mark Koppel

Submitted on: 2/14/2023 5:45:27 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Deborah Ward	Individual	Oppose	Written Testimony Only

Comments:

Aloha,

Waste to Energy might be an option, but to make it a requirement is a dangerous and misguided approach to public policy. I am particularly concerned about the vaguenss regarding land under the jurisdiction of DLNR. DLNR has responsibility as a Trustee of land held in trust for the benefit of Native Hawaiians. Much of this land is in the Conservation District. To mandate a polluting enterprise on "ceeded"land is not in the interest of the beneficiaries. Please do not move this bill forward. Thank you, Deborah J Ward

Submitted on: 2/14/2023 9:07:06 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Elizabeth Hansen	Individual	Oppose	Written Testimony Only

Comments:

Aloha - This is not an appropriate bill for our beloved Hawaii.

Please oppose this bill.

Mahalo,

Elizabeth Hansen, Hakalau HI 96710

HB-1292

Submitted on: 2/14/2023 9:13:35 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Rodger Hansen	Individual	Oppose	Written Testimony Only

Comments:

Aloha - This is not an appropriate bill for our beloved Hawaii.

Please oppose this bill.

Mahalo,

Rodger Hansen, Hakalau HI 96710

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION Hearing on Feb. 16, 2023 at 9:15 am

OPPOSING HB 1292

My name is John Kawamoto, and I oppose HB 1292 because it would result in unnecessary emissions of greenhouse gases, which are warming the Earth and causing climate change.

The bill requires the State Energy Office to enter into a public-private partnership to develop a waste-to-energy generating facility. That facility would burn municipal solid waste to produce electricity. Each ton of municipal solid waste that is burned releases between 0.7 tons and 1.7 tons of carbon dioxide. It is considered to be dirty energy.

Waste-to-energy generating facilities are typically intended to last for 20 to 30 years. As such, the facility would delay the urgent transition to lower carbon-intensive power generation, such as wind and solar, which are not only cleaner, but also less expensive.

In addition, a waste-to-energy generating facility would undermine the move to lowercarbon options for waste management, such as composting organic waste and recycling other waste.

This bill requires the State Energy Office to take an action that contradicts its mission, which, according to HRS 196-71, is "to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient clean energy economy." Furthermore, this bill will make it nearly impossible to achieve Hawaii's net-negative emissions goal by 2045 that was set by the Legislature and codified in HRS 225P-5(a).

Instead, Hawaii should be taking a multi-pronged approach to advance as quickly as possible toward a 100% clean, renewable energy future.

HB-1292 Submitted on: 2/15/2023 8:03:07 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Lynda Williams	Individual	Oppose	Written Testimony Only

Comments:

I strongly oppose this bill, creating another powerplant using garbage to generate electricity. Waste energy plants **produce toxic waste, air pollution and contributes to climate change.** Burning garbage is not a solution to either the waste or power problems in Hawaii. What I find especially ironic and disturbing is that in the same hearing you have a bill that makes it illegal for citizens to use gas appliances under the roofs of zero emission, climate change and yet you have this bill that's going to burn garbage that produces greenhouse, gases, and poisons the environment and the people who live in it. Both of those bills should be deferred or voted down because neither will meet the requirements for zero emission or mitigating the climate crisis. I also find it very disturbing that you would put such a public-private project in the hands of DLNR who should not be in the business of running businesses. Thank you.

HB-1292 Submitted on: 2/15/2023 8:58:25 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
David Chew	Individual	Support	Written Testimony Only

Comments:

I am in strong support of HB1292. Thank you

HB-1292 Submitted on: 2/15/2023 8:59:28 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
kainalu paikai	Individual	Support	Written Testimony Only

Comments:

I support

HB-1292 Submitted on: 2/15/2023 8:59:29 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Gabriel	Individual	Support	Written Testimony Only

Comments:

I strongly support HB1292

HB-1292 Submitted on: 2/15/2023 8:59:59 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
John Rabanal	Individual	Support	Written Testimony Only

Comments:

I support this Bill

HB-1292 Submitted on: 2/15/2023 9:00:48 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Dave Teriirere	Individual	Support	Written Testimony Only

Comments:

Strongly support

HB-1292 Submitted on: 2/15/2023 9:01:09 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Jordon kapu	Individual	Support	Written Testimony Only

Comments:

I support bill HB1292

HB-1292 Submitted on: 2/15/2023 9:01:29 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Christopher	Individual	Support	Written Testimony Only

Comments:

Support!

HB-1292 Submitted on: 2/15/2023 9:01:44 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Alana Kaili	Individual	Support	Written Testimony Only

Comments:

I support HB1292

HB-1292 Submitted on: 2/15/2023 9:03:02 AM Testimony for EEP on 2/16/2023 9:15:00 AM

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

Comments:

Strongly support HB1292

Submitted on: 2/15/2023 9:03:13 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Keoni Mendiola	Individual	Support	Written Testimony Only

Comments:

I Keoni Mendiola, is in strong support of Bill HB1292.

HB-1292 Submitted on: 2/15/2023 9:03:36 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Jeremy Inferrera	Individual	Oppose	Written Testimony Only

Comments:

I oppose bill HB1292

HB-1292 Submitted on: 2/15/2023 9:04:03 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Kekoa Bruhn	Individual	Oppose	Written Testimony Only

Comments:

I oppose bill hb1292

HB-1292 Submitted on: 2/15/2023 9:04:54 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Ka'ehu Hironaka	Individual	Support	Written Testimony Only

Comments:

I support this

HB-1292 Submitted on: 2/15/2023 9:04:57 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Ka'ena Paikai	Individual	Support	Written Testimony Only

Comments:

I support

HB-1292 Submitted on: 2/15/2023 9:04:58 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Hubert Pruett	Individual	Support	Written Testimony Only

Comments:

I support

HB-1292 Submitted on: 2/15/2023 9:05:06 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Collin Mansanas	Individual	Support	Written Testimony Only

Comments:

In strong support

HB-1292 Submitted on: 2/15/2023 9:05:13 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Dane Kaluhiwa	Individual	Support	Written Testimony Only

Comments:

Support

HB-1292 Submitted on: 2/15/2023 9:05:28 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Conan K Donahue	Individual	Support	Written Testimony Only

Comments:

I support HB1292

HB-1292 Submitted on: 2/15/2023 9:05:40 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
William Campbell	Individual	Oppose	Written Testimony Only

Comments:

I oppose bill HB1292

HB-1292 Submitted on: 2/15/2023 9:05:48 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
noah	Individual	Support	Written Testimony Only

Comments:

I support this bill.

HB-1292 Submitted on: 2/15/2023 9:05:52 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Trey	Individual	Oppose	Written Testimony Only

Comments:

I oppose.

HB-1292 Submitted on: 2/15/2023 9:05:52 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Blair Nahale	Individual	Support	Written Testimony Only

Comments:

I support HB1292

HB-1292 Submitted on: 2/15/2023 9:06:05 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Pomai Kalama	Individual	Support	Written Testimony Only

Comments:

I support HB1292!

HB-1292 Submitted on: 2/15/2023 9:06:35 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Jonovan Tuinei	Individual	Support	Written Testimony Only

Comments:

I support hb1292.

HB-1292 Submitted on: 2/15/2023 9:06:36 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Ted Scott	Individual	Oppose	Written Testimony Only

Comments:

I oppose bill HB1292

HB-1292 Submitted on: 2/15/2023 9:06:59 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Kelsey Beck	Individual	Support	Written Testimony Only

Comments:

I SUPPORT!

HB-1292 Submitted on: 2/15/2023 9:07:29 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Zorich Palimoo	Individual	Support	Written Testimony Only

Comments:

I support HB1292

HB-1292 Submitted on: 2/15/2023 9:07:41 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Montgomery Meyer	Individual	Support	Written Testimony Only

Comments:

In support

HB-1292 Submitted on: 2/15/2023 9:08:46 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Wade Terlep	Individual	Support	Written Testimony Only

Comments:

In strong support

HB-1292 Submitted on: 2/15/2023 9:09:14 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Kekoa masutani	Individual	Oppose	Written Testimony Only

Comments:

I oppose this bill.

HB-1292 Submitted on: 2/15/2023 9:09:52 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Kaleo Buck	Individual	Support	Written Testimony Only

Comments:

I support bill HB1292

HB-1292 Submitted on: 2/15/2023 9:21:47 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Bhansen	Individual	Support	Written Testimony Only

Comments:

I support HB1292

HB-1292 Submitted on: 2/15/2023 9:22:17 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
joshua demello	Individual	Support	Written Testimony Only

Comments:

I am in full support. ALOHA

HB-1292 Submitted on: 2/15/2023 9:26:56 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Cisco Valeho	Individual	Support	Written Testimony Only

Comments:

I strongly support HB1292

HB-1292 Submitted on: 2/15/2023 9:39:15 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Manny Kulukulualani	Individual	Support	Written Testimony Only

Comments:

I strongly support HB1292

HB-1292 Submitted on: 2/15/2023 9:43:29 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
anthony padilla	Individual	Support	Written Testimony Only

Comments:

Support hb1292

<u>HB-1292</u>

Submitted on: 2/15/2023 9:49:27 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Phaethon Keeney	Individual	Oppose	Written Testimony Only

Comments:

Please oppose HB1292. Waste to energy is not a good solution for our island communities, it releases toxins into the environment in smoke and concentrates them into porous ash that releases into our island aquifers, often next to the most vulnerable communities. Waste to energy also locks us into wasteful practices, preventing circular economies, and is the most expensive form of energy per kilowatt hour. Please push for a better future for our island communities, thank you.

Phaethon Keeney

Honokaa Hawaii 96727

HB-1292 Submitted on: 2/15/2023 11:09:51 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Pita Hiko	Individual	Support	Written Testimony Only

Comments:

Strongly support the bill of SB1292

HB-1292 Submitted on: 2/15/2023 11:13:23 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Noah Campbell	Individual	Support	Written Testimony Only

Comments:

Supporting

HB-1292 Submitted on: 2/15/2023 11:15:30 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Noah Campbell	Individual	Support	Written Testimony Only

Comments:

Supporting

HB-1292 Submitted on: 2/15/2023 11:22:47 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Tyler Yuu	Individual	Support	Written Testimony Only

Comments:

Support

HB-1292 Submitted on: 2/15/2023 11:35:32 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Micah Kahumoku	Individual	Support	Written Testimony Only

Comments:

I support HB1292.

HB-1292 Submitted on: 2/15/2023 11:41:15 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Ashkhon Kuhaulua	Individual	Support	Written Testimony Only

Comments:

I support HB1292!

HB-1292 Submitted on: 2/15/2023 12:11:33 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Shannon Matson	Individual	Oppose	Written Testimony Only

Comments:

Aloha Chair, Vice Chair, and Committee Members,

I am strongly opposed to this bill and any bill that requires burning anything to generate energy. It is not sustainable and any one who tells you otherwise is someone who has invested money into this extremely toxic form of green-washing. There is no clean or environmentally friendly way yet developed to burn trash. Until one exists I will be fighting against any burning schemes to protect the air that you and I must breathe to live.

Mahalo,

Shannon Matson

Hawai'i Island Resident

HB-1292 Submitted on: 2/15/2023 12:30:30 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Clinton Blackman	Individual	Oppose	Written Testimony Only

Comments:

I oppose HB1292

<u>HB-1292</u>

Submitted on: 2/15/2023 1:38:23 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Walter Walker	Individual	Oppose	Written Testimony Only

Comments:

Oppose

<u>HB-1292</u>

Submitted on: 2/15/2023 1:41:30 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Chaz Bajet	Individual	Oppose	Written Testimony Only

Comments:

I oppose

<u>HB-1292</u>

Submitted on: 2/15/2023 1:58:10 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Adrian Kaleo Nakashima	Individual	Oppose	Written Testimony Only

Comments:

I opposes HB 1292.

<u>HB-1292</u>

Submitted on: 2/15/2023 1:58:25 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Chad Amasiu	Individual	Oppose	Written Testimony Only

Comments:

I oppose HB1292

<u>HB-1292</u>

Submitted on: 2/15/2023 1:58:47 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Chad Amasiu	Individual	Oppose	Written Testimony Only

Comments:

I oppose HB1292

<u>HB-1292</u>

Submitted on: 2/15/2023 1:59:38 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Paquito KHD Capillan	Individual	Oppose	Written Testimony Only

Comments:

Opposite

<u>HB-1292</u>

Submitted on: 2/15/2023 2:04:04 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Edward Klaneski	Individual	Support	Written Testimony Only

Comments:

I support this Bill

<u>HB-1292</u>

Submitted on: 2/15/2023 2:16:20 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Levi Archuleta	Individual	Support	Written Testimony Only

Comments:

I support this bill.

<u>HB-1292</u>

Submitted on: 2/15/2023 2:17:13 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Clayton Glass	Individual	Support	Written Testimony Only

Comments:

I support

<u>HB-1292</u>

Submitted on: 2/15/2023 3:12:21 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Hunter Makoa Morton	Individual	Support	Written Testimony Only

Comments:

I support this because I feel the national guard deserves better retirement plans.

<u>HB-1292</u>

Submitted on: 2/15/2023 5:23:53 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Hopena Pokipala	Individual	Support	Written Testimony Only

Comments:

I strongly support HB1292

<u>HB-1292</u>

Submitted on: 2/15/2023 5:25:17 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Alfred Horner	Individual	Support	Written Testimony Only

Comments:

I Alfred Horner support HB1292

<u>HB-1292</u>

Submitted on: 2/15/2023 6:13:45 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Shannon Rudolph	Individual	Oppose	Written Testimony Only

Comments:

Oppose

<u>HB-1292</u>

Submitted on: 2/15/2023 6:30:25 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
DANIEL ORTIZ	Individual	Support	Written Testimony Only

Comments:

In support of Bill HB1292

<u>HB-1292</u>

Submitted on: 2/15/2023 7:02:45 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Louis Mansanas jr	Individual	Support	Written Testimony Only

Comments:

I support this bill

<u>HB-1292</u>

Submitted on: 2/15/2023 8:37:27 PM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Seth Holck	Individual	Support	Written Testimony Only

Comments:

In support HB1292

<u>HB-1292</u>

Submitted on: 2/16/2023 9:14:14 AM Testimony for EEP on 2/16/2023 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Aaron Miyashiro	Individual	Support	Written Testimony Only

Comments:

Support HB1292