JOSH GREEN, M.D. GOVERNOR

> SYLVIA LUKE LT. GOVERNOR

JAMES KUNANE TOKIOKA DIRECTOR

> DANE K. WICKER DEPUTY DIRECTOR



## DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

KA 'OIHANA HO'OMOHALA PĀ'OIHANA, 'IMI WAIWAI A HO'OMĀKA'IKA'I

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### Statement of JAMES KUNANE TOKIOKA Director Department of Business, Economic Development, and Tourism before the HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

Wednesday, March 19, 2025 2:00 PM State Capitol, Conference Room 329

#### In consideration of SB 1269, SD1, HD1 RELATING TO GEOTHERMAL RESOURCES.

Chair Matayoshi, Vice Chair Chun, and Members of the Committee:

DBEDT submits comments on SB 1269, SD1, HD1 and prefers the SD1 version of the bill as it best aligns with the state's long-term strategic direction for geothermal development. The amendments introduced in HD1—which prohibit the use of funds for drilling, exploratory, test, or production wells—will significantly delay the timeline necessary for achieving Hawaii's Renewable Portfolio Standard (RPS) mandate of 100% clean energy by 2045. These restrictions will limit the progress of crucial feasibility studies and exploratory drilling, both of which are essential for the timely commercialization of geothermal energy.

Hawaii's reliance on imported fossil fuels has resulted in some of the highest energy costs in the nation, limiting economic diversification efforts, particularly in manufacturing. The development of geothermal energy is not only vital for achieving energy independence but is also a necessary component in stabilizing energy costs. Without reliable and affordable energy, industries such as advanced manufacturing, data centers, and agribusiness will not be able to scale, resulting in lost opportunities for economic growth and job creation.

DBEDT's roadmap outlines a structured three-phase approach to achieving utility-scale geothermal power production. These phases are essential to validating the commercial viability of geothermal energy in Hawaii. By imposing restrictions on exploration as outlined in HD1, the ability to conduct these assessments in a timely manner will be

DBEDT Testimony SB 1269, SD1, HD1 Page 2 of 2

severely hindered, leading to prolonged delays in achieving the state's clean energy goals.

The Legislature has made a clear commitment to achieving a 100% Renewable Portfolio Standard by 2045. Geothermal energy is one of the few renewable energy sources that provides firm power, ensuring grid stability while complementing intermittent sources like solar and wind. To meet the 2045 mandate, it is imperative that geothermal exploration and feasibility assessments continue unimpeded.

Without stable energy costs, Hawaii will struggle to attract and retain manufacturing and technology industries that are necessary to diversify the economy. The high cost of electricity has been a major deterrent for potential investors, making it critical to advance geothermal development as a means to provide affordable, reliable, and clean energy.

DBEDT urges the Committee to pass SB 1269, SD1 and reconsider the amendments made in HD1, as these restrictions will result in unnecessary delays that hinder Hawaii's ability to achieve energy independence and economic resilience.

Mahalo for your time and consideration.

#### <u>SB-1269-HD-1</u> Submitted on: 3/16/2025 7:46:17 AM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Keoni Shizuma	Hulu Mamo Hawaiian Civic Club	Oppose	Written Testimony Only

Comments:

Aloha Committee members of the House Committee on Consumer Protection and Commerce,

Hulu Mamo Hawaiian Civic Club is testifying in opposition to this bill.

Hulu Mamo Hawaiian Civic Club is focused on Aloha 'Āina and stands in support of our 'āina, the life of the land, and the ability for our people to practice and connect with our 'āina.

We understand the need to find an environmentally friendly alternative to energy production, but we do not think geothermal energy is our answer. Unlike wind, solar, or wave energy generation, geothermal requires permanent damage and descration to the environment.

In Hawaiian culture, the surface of the ground is sometimes seen as a body form of our goddess Papahānaumoku. To drill into the ground would be to desecrate parts of her, while if wind, solar, or even wave energy generation was pursued, all the structures would be temporary and merely sit on the surface (or in the ocean).

We request that out of respect for Hawaiian culture, values, and beliefs, Hawaii not pursue geothermal energy generation.

We live in the perfect environment for innovations in renewable energy technology. Let Hawaii become a leader in new techniques and technologies in this field, push forth the field at the University of Hawaii, and learn from international leaders of energy technology. Being a leader in innovative green energy creation would serve Hawaii as an economic and technological driver, as well as protect our environment and generate energy. With nearly-perfect weather year-round, we have the opportunity to develop new technologies that the world can use.

Another issue with geothermal energy production is that it relies on a centralized energy production facility. The energy will be created in one central location, which will then need to be distributed via high-voltage power lines to communities across the island (or island chain). Centralized energy production results in the dependence on infrastructure that threatens our way of life in Hawaii, and we must move away from that system to protect our future.

In the early 2000s when there was a large earthquake in Hawaii, HECO was hit hard and had to shut off the power to the entire island of Oahu for an extended period of time. If our communities had their own local power grid, or depended less on a central grid and had smaller

scale energy production within them, the entire island of Oahu would not have had to be without power for an extended period of time.

The recent fires in Lahaina have been attributed to issues with power lines sparking a fire in the grass under its transmission lines, which again is an infrastructure dependence that comes with centralized energy production.

Hawaii should learn from and join the clean energy sector by looking to innovations in wind technology as they have in Denmark, where smaller scale wind turbines designed for communities and/or personal use can help to **decentralize our energy grids**, **helping communities to become more sustainable and resilient to natural disasters**.

Smaller-scale energy solutions within communities would lessen the reliance on a central energy production facility, allowing communities to remain supplied with power when the central energy producing facility goes off-line.

Decentralized systems would also diminish the need for high-voltage power lines to carry centrally created electricity across long-distances, which creates a risk for wildfires, as we all know now. Decentralized energy solutions would also lessen the need to bury thousands of miles of existing powerlines into the ground to prevent fire disasters from occurring in high-wind scenarios.

There should be a working group to explore smaller-scale, decentralized energy production technologies that can empower our communities, be an economic driver for Hawaii, and provide us with clean energy to meet our energy goals.

Mahalo for your consideration, Hulu Mamo Hawaiian Civic Club



Email: <a href="mailto:communications@ulupono.com">communications@ulupono.com</a>

#### HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE Wednesday, March 19, 2025 — 2:00 p.m.

# Ulupono Initiative <u>supports the intent</u> of SB 1269 SD 1 HD 1, Relating to Geothermal Resources.

Dear Chair Matayoshi and Members of the Committee:

My name is Micah Munekata, and I am the Director of Government Affairs at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve the quality of life throughout the islands by helping our communities become more resilient and self-sufficient through locally produced food, renewable energy and clean transportation choices, and better management of freshwater resources.

**Ulupono** <u>supports the intent</u> of SB 1269 SD 1 HD 1, which appropriates funds to the Department of Business, Economic Development, and Tourism (DBEDT) for continued exploration and identification of geothermal resources and commercial viability for utility-scale geothermal production in counties with a population of less than 300,000.

We commend legislators for recognizing, through this bill, that geothermal energy has great, mostly untapped potential to have a beneficial impact on the daily lives of residents and cost of living issues. However, the current limitation to counties with populations under a certain limit could inadvertently restrict Hawai'i's ability to identify valuable geothermal resources that might exist on multiple islands. A broader scope would align with the state's clean energy goals while still maintaining the bill's strong emphasis on these communities. We believe the bill's core strengths are recognizing DBEDT's crucial leadership role together with comprehensive community engagement, and a statewide scope at this exploration phase would offer more thorough evaluation of geothermal potential across all islands. In addition, such undertakings require significant resources to be successful and, accordingly, should include a budget allocation that addresses this need.

Hawai'i needs all viable forms of renewable energy to meet the 100% renewable portfolio standard by 2045. New data underscores the widespread support among residents for this transition. Between October 2023 and January 2024, Ulupono Initiative partnered with Anthology Research to conduct a statewide public opinion survey on energy in Hawai'i involving 1,985 surveys across all four counties. With a margin of error +/- 2.21%, this is arguably the most extensive and comprehensive study on the topic to date. The findings are compelling.

#### Investing in a Sustainable Hawai'i



A staggering 91% of respondents expressed their support for the expansion of renewable energy resources throughout the islands. Moreover, the importance of developing Hawai'i's own energy resources was emphasized across all counties by the residents. This resounding endorsement from the community validates the strong support for continued investment and advancement in renewable energy solutions to meet our collective energy goals.

Emphasizing and including strong community engagement is essential for building trust and ensuring that local concerns and priorities are considered throughout the program. Collaboration with counties, individuals, and civic organizations allows for the incorporation of valuable insights, ensuring the program aligns with community needs and aspirations. This commitment to collaboration can foster public support, create opportunities for education about renewable energy and carbon sequestration, and pave the way for sustainable resource management. Effective community engagement has been shown to enhance the success of similar initiatives by promoting transparency and inclusivity.

Lastly, the proposed funding represents a positive first step, but we recommend a larger allocation to ensure the program can fully achieve its potential. A more substantial investment would better position Hawai'i to advance its renewable energy and sustainability goals effectively for the benefit of its residents. Robust funding is essential to make certain that the program is adequately supported, enabling Hawai'i to advance its renewable energy and sustainability goals sustainability goals effectively for the benefit of the benefit of its residents.

Thank you for the opportunity to testify.

Respectfully,

Micah Munekata Director of Government Affairs

#### Comments before March 19, 2025 House Committee on Consumer Protection and Commerce

OPPOSING Senate Bill 1269

Relating to Geothermal Expansion

Mike Ewall, Esq. Founder & Executive 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 Kokua na Aina to address numerous energy and waste issues in the state.

#### Please oppose SB 1269.

Geothermal has consistently ranked among the most <u>expensive</u> forms of electric power production, right up there with trash and tree burning and nuclear power. This is based on the latest data from the U.S. Energy Information Administration.<sup>1</sup> Capital cost and fixed operations and maintenance costs (O&M) are among the most expensive options – far more expensive than using solar with storage to meet firm energy needs.

Case No.	Technology	Description	Net Nominal Capacity (kW)	Net Nominal Heat Rate (Btu/kWh)	Capital Cost (\$/kW)	Fixed O&M Cost (\$/kW-year)	Variable O&M Cost (\$/MWh)	Nitrogen Oxide (NOx) (Ib/MMBtu)	Sulfur Dioxide (SO <sub>2</sub> ) (Ib/MMBtu)	Carbon Dioxide (CO <sub>2</sub> ) (Ib/MMBtu)
1	USC Coal without Carbon Capture – Greenfield	1 x 735 MW Gross	650	8,638	\$4,103	\$61.60	\$6.40	0.06	0.09	206
2	USC Coal 95% Carbon Capture	1 x 819 MW Gross	650	12,293	\$7,346	\$86.70	\$13.73	0.06	0.09	10.3
3	Aeroderivative CTs – Simple Cycle	4 x 54 MW Gross	211	9,447	\$1,606	\$9.56	\$5.70	0.0075	0.00	117
4	CTs – Simple Cycle	1 x H-Class	419	9,142	\$836	\$6.87	\$1.24/ MWh, \$23,100/ Start	0.0075	0.00	117
5	CC 2x2x1	2 x 1 H Class	1,227	6,266	\$868	\$12.12	\$3.41	0.0075	0.00	117
6	CC 1x1x1, Single Shaft	1 x 1 H Class SS	627	6,226	\$921	\$15.51	\$3.33	0.0075	0.00	117
7	CC 1x1x1, Single Shaft, with 95% Carbon Capture	1 x 1 H Class SS	543	7,239	\$2,365	\$24.78	\$5.05	0.0075	0.00	6
8	Biomass Plant with 95% Carbon Capture	1 x BFB	50	19,965	\$12,631	\$261.18	\$9.65	0.08	<0.03	10.3
9	Advanced Nuclear (Brownfield)	2 x AP1000	2,156	10,608	\$7,861	\$156.20	\$2.52	0	0	0
10	Small Modular Reactor Nuclear Power Plant	6 x 80 MW Small Modular Reactor	480	10,046	\$8,936	\$121.99	\$3.19	0	0	0
11	Geothermal	Binary Cycle	50	N/A	\$3,963	\$150.60	\$0.00	0	0	0
12	Hydroelectric Power Plant	New Stream Reach Development	100	N/A	\$7,073	\$33.54	\$0.00	0	0	0
13	Onshore Wind – Large Plant Footprint: Great Plains Region	200 MW   2.8 MW WTG	200	N/A	\$1,489	\$33.06	\$0.00	0	0	0
14	Onshore Wind – Repowering/Retrofit	150 MW   1.5 - 1.62 MW WTG	150	N/A	\$1,386	\$38.55	\$0.00	0	0	0
15	Fixed-bottom Offshore Wind: Monopile Foundations	900 MW   15 MW WTG	900	N/A	\$3,689	\$154.00	\$0.00	0	0	0
16	Solar PV with Single-Axis Tracking	150 MW <sub>AC</sub>	150	N/A	\$1,502	\$20.23	\$0.00	0	0	0
17	Solar PV with Single-Axis Tracking and AC-Coupled Battery Storage	150 MW <sub>AC</sub> Solar 50 MW   200 MWh Storage	150	N/A	\$2,175	\$38.39	\$0.00	0	0	0
18	Solar PV with Single-Axis Tracking and DC-Coupled Battery Storage	150 MW <sub>AC</sub> Solar 50 MW   200 MWh Storage	150	N/A	\$2,561	\$39.24	\$0.00	0	0	0
19	BESS	Lithium Ion, 150 MW   600 MWh	150	N/A	\$1,744, (\$436/kWh)	\$40.00	\$0.00	0	0	0

On top of the high cost to ratepayers are the costs to our environment and the community.

<sup>&</sup>lt;sup>1</sup> U.S. Energy Information Administration, "Capital Cost and Performance Characteristics for Utility-Scale Electric Power Generating Technologies," January 2024, Table 1-2 (page 24). <u>https://www.eia.gov/analysis/studies/powerplants/capitalcost/pdf/capital\_cost\_AEO2025.pdf</u>

Geothermal is only used in the state in Puna by <u>Puna Geothermal Ventures</u> (PGV), an Israeli company (Ormat) that has run an inconsistent and harmful operation in Puna with numerous environmental <u>violations</u>. While many support it as a renewable energy source, the lived experience of those living near the facility raises many concerns.

Puna residents have been speaking up for many years with concerns about air releases of hydrogen sulfide and other chemicals brought up in the process (toxic metals, radon...), <u>health impacts</u> when the community has been exposed to these gases, drilling impacts (noise, well blowouts, underground fracturing, not plugging wells), reinjection of toxic chemicals into the group (PGV claims they're "closed loop" but that is not true), <u>cultural concerns</u>, and the challenges when a lava flow risked igniting 60,000 gallons of pentane stored on-site, which needed help from the governor's emergency order to <u>evacuate</u> the chemicals from the danger zone.

If geothermal can be done in a closed-loop fashion, and further from residents, that would alleviate some concerns, but would make it even more expensive and it is likely that solar with energy storage can meet energy needs more safely and at least four times cheaper.

The bill would have the Department of Business, Economic Development and Tourism explore and identify geothermal resources and commercial viability for utility scale geothermal production in Hawai'i, Maui, and Kaua'i Counties, but not within 15 miles of PGV. This Department lacks the expertise in this, as one commenter <u>pointed out</u>, and would have to do this exploration without actually drilling. We're glad for the lack of exploratory drilling, but this seems inappropriate, hiring the wrong people for the wrong job.

Submitted on: 3/17/2025 2:27:47 PM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Ryan Matsumoto	Waika Consulting	Support	Written Testimony Only

Comments:

Chair Matayoshi and the members of the Committee,

Waikā Consulting, LLC submits this testimony in strong support of SB1269, which, under the leadership of DBEDT, is a vital measure to advance Hawai'i's energy security and resilence through the responsible and equitable development of geothermal energy, a clean, firm, renewable technology indigenous to Hawaii. This would be a major effort at satisfying the requirements of the Hawaii Clean Energy Initiative (HCEI).

As a Native Hawaiian-owned company, Waikā and its family of companies has advocated for a Native-to-Native model for over two decades, ensuring a commitment to Indigenous leadership and values in resource management. Our mission is to ensure geothermal energy development in Hawaii benefits Native Hawaiians, uplifts local communities, and contributes to a sustainable,self-reliant future for Hawai'i beyond what is currently required by law.

#### <u>SB-1269-HD-1</u> Submitted on: 3/17/2025 2:38:51 PM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Al Hackbarth	Innovations Development Group (IDG)	Support	Written Testimony Only

#### Comments:

I, Al Hackbarth, on behalf of Innovations Development Group (IDG), submit this testimony in strong support of SB1269 SD1 HD1. IDG is a Hawaii based, native Hawaiian owned renewable energy development corporation created to facilitate the development of renewable energy resources of native people in a manner that is culturally appropriate, environmentally sustainable & clean, socially responsible and economically equitable. Since a 2011 presentation to the Hawaii State Legislative committees on Energy and Land, IDG has been working to promote the responsible development of Geothermal in Hawaii.

#### Hawai'i's Energy Crisis and the Need for Indigenous Leadership

Hawai'i remains the most oil-dependent state in the U.S., with high energy costs and reliance on imported fossil fuels. With climate change exacerbating natural disasters, our state faces growing urgency to transition to renewable energy sources. Hawai'i has set ambitious goals to achieve 100% renewable energy by 2045, with a target for neighbor islands to reach 100% by 2035. To achieve energy sovereignty, we must rely on firm, reliable power sources, and geothermal energy offers that solution.

#### **Geothermal as a Public Trust Resource**

Geothermal, like other natural resources in Hawai'i, is governed by the public land trust, established by the Hawai'i Admission Act of 1959. This trust mandates that the State develop these resources for the betterment of Native Hawaiians and the general public. Given Hawai'i's high electricity costs, prioritizing geothermal development as a public trust resource can provide much-needed relief to residents and businesses while reducing dependence on costly imported fuels.

To fulfill the public trust's obligations to Native Hawaiians, it is crucial to involve Native Hawaiians in the management of geothermal energy, ensuring that energy development aligns with

#### Honoring Pele, Protecting Cultural Integrity, and Strengthening Hawai'i's Future

Geothermal energy is a sacred resource in Hawai'i, and its development must be approached with cultural sensitivity and respect for Traditional Ecological Knowledge (TEK). Pele, the

goddess of fire and creation, is deeply revered, and any geothermal development must honor her legacy and the Native Hawaiian families who descend from her.

The impact of SB1269 SD1 HD1 will go way beyond energy. Thank you for your time and we ask for your consideration to support this measure.

Submitted on: 3/17/2025 2:45:37 PM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Roberta Cabral	Innovations Development Group (IDG)	Support	Written Testimony Only

Comments:

Good Afternoon Chair Matayoshi and the members of the Committee,

Today's hearing is a big leap forward towards realizing our ambition for Hawaii to be on 100% renewable energy by 2045. For the Neighbor Islands, the Governor has just made that goal even more urgent, moving the target date to 2035.

I am here to urge you to pass SB1269 SD1 HD1 because what this bill says is that we are finally taking serious action to get off our terrible, costly addiction to fossil fuels.

That addiction has made life intolerably expensive for the people of Hawaii and especially the people of Hawaii island. They should not be paying the highest costs for electricity in the nation. It's tragic, because Hawaii island has the resources to get off fossil fuels-- if we have the will to do so.

It appears we now have the will to move away from fossil fuels.

I am here as the founder of Innovations Development Group or IDG. In 2010 we began the effort to assess whether we indeed had the resources to replace fossil fuels. And the answer is YES, WE DO.

We are all familiar with the power of Tutu Pele. She is so central to Hawaiian tradition and cultural practice. We needed to get community understanding that we were acting respectfully in trying to draw out the gifts of Tutu Pele. Our outreach efforts raised public awareness and understanding. I believe that we now have a community that understands the appropriateness of respectfully tapping Tutu Pele's gifts to her people.

The public wants and needs what geothermal can give them. With the help of geothermal energy as the firm power baseload, the people of Hawaii island can look forward to lower prices for electricity. Homes, schools, community centers, businesses all need energy to run and thrive. That energy must be affordable. We clearly have market demand. We clearly have need. People would not be fleeing our island homes if they could afford to live here.

IDG saw that market demand and need. We responded to HECO's RFI in 2011 and its RFP in 2013. We provided a roadmap for the development of a power plant. We were shortlisted! But no award was made. That's why this bill more than 10 years later is so welcome.

The need has only become more urgent. That's why IDG formed Waika Consulting. We want to deliver power FOR the people. SB1269 SD1 will help us do that. We were selected to advise DBEDT on geothermal development because we have a proven track record. We have done in New Zealand what this bill will make possible here in Hawaii.

This bill does not just point to exploration for geothermal resources. We already know that geothermal resources exist in abundance on Hawaii island. This bill allows us to refine the exploratory work done so far and move in phases to the building of a 50-100MW power plant.

We have developed a roadmap that shows what will happen in each phase. You, as policy-makers will have transparency and measurable outcomes.

We can do this because we have already done it elsewhere. We can do this because our team has access to the best in the business. We already have relationships with top tier experts at the globally recognized University of Auckland Geosciences Department.

As you know from the testimony of others, we went to Aotearoa at the invitation of the Maori Queen to develop the geothermal resources of the Maori Trusts. The model we developed with the guidance of Mililani Trask, who co-authored the United Nations Declaration of the Rights of Indigenous Peoples (UNDRIP), was one that respects Maori culture and ensures that they benefit long term from the prosperity that their geothermal resources create. Our native-to-native model put indigenous people at the table, making decisions about the resource that they own in Aotearoa. We will adapt and replicate that model here. We have seen it work. Geothermal energy is already feeding New Zealand's grid. It can do the same here.

And that will dramatically change everything.

As Native Hawaiians we are deeply committed to ensuring that the community which has been hurting for too long, sees their lives and livelihoods improve, thanks to the goodness of Tutu Pele's gift.

We truly believe we are unique in what we can offer the state. No other entity has the depth of geothermal expertise that our group has in educating the community. We want to put that experience and expertise to work for Hawaii. We can make a really big contribution to transforming our energy landscape and moving us closer to energy independence. And that is what DBEDT needs to help spur economic development.

Waika's goal is to deliver power FOR the people. Please move this bill forward.



## Environmental Caucus of The Democratic Party of Hawaiʻi

March 18, 2025

### Testimony in Opposition to SB1269 SD1 HD1 - GEOTHERMAL

**Submitted to:** Chair Scot Z. Matayoshi, Vice Chair Cory M. Chun, and Members of the Committee on Consumer Protection & Commerce

Date: Wednesday, March 19, 2025, Time: 2:00 p.m.

Place: Conference Room 329 and via videoconference

Aloha Chair Matayoshi, Vice Chair Chun, and Members of the Committee,

As Co-chairs of the Environmental Caucus of the Democratic Party of Hawaii, we respectfully submit this testimony in opposition to SB1269 SD1 HD1, which appropriates funds to the Department of Business, Economic Development, and Tourism for the continued exploration and identification of geothermal resources and commercial viability for utility-scale geothermal production in counties with a population of less than 300,000.

While we appreciate the intent of exploring renewable energy sources to meet Hawaii's clean energy goals, we have concerns about the implications of this measure:

- 1. **Environmental and Cultural Concerns**: Geothermal energy development poses potential risks to Hawaii's unique ecosystems and culturally significant sites. Historically, geothermal projects have raised concerns among Native Hawaiian communities about environmental degradation and cultural insensitivity, which this bill does not adequately address.
- 2. Lack of Stakeholder Engagement: The bill does not specify how it will ensure meaningful engagement with local communities, particularly Native Hawaiians, who may be directly affected by geothermal exploration and development.
- 3. Economic Viability and Prioritization: Utility-scale geothermal production in counties with smaller populations may not prove economically viable or beneficial in the near term. These funds might be better allocated toward renewable energy projects that are more immediately impactful and equitable.

We urge the Committee to reconsider the approach outlined in SB1269 SD1 HD1. Instead, we recommend further research and community consultation to address the environmental, cultural, and economic concerns surrounding geothermal development. A more inclusive and deliberate process is necessary to ensure that Hawaii's renewable energy strategy is both sustainable and respectful of the land and its people.

Thank you for the opportunity to provide testimony.

Mahalo nui loa,

Melodie Aduja and Alan Burdick

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

Submitted on: 3/18/2025 7:48:22 AM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Susan B Roberts Emery	Green Party Hawai'i	Oppose	Written Testimony Only

Comments:

Aloha Chair Matayoshi, Vice Chair Chun, and Members of Committee,

My name is Susan RobertsEmeryGreen Party, I am co chair of the Green Party of Hawai'i . We are STRONGLY OPPOSED to SB1269 SD1. The costs of geothermal, the cultural concerns, the health impacts all point to this being a ridiculous source of energy on an Island with an active volcano. Puna Geothermal Ventures has had environmental violations and I would like to point out that we should be following the money on this bill. This is a waste of taxpayer dollars and your time.

We, the Green Party of Hawai'i, urges a HOLD on SB1269 SD1.

Sincerely,

Susan RobertsEmery Green Party Hawai'i Paauilo



Sustainable Energy Hawai'i

sustainableenergyhawaii.org info@sustainableenergyhawaii.org

March 18, 2025

#### COMMENTS for SB1269 SD1 HD1 - RELATING TO GEOTHERMAL RESOURCES

Dear Chair Matayoshi, Vice Chair Chun, and members of the Committee,

I'm offering COMMENTS on behalf of Sustainable Energy Hawai'i (SEH) for SB1269 SD1 HD1 which "appropriates funds to the Department of Business, Economic Development, and Tourism for continued exploration and identification of geothermal resources and commercial viability for utility-scale geothermal production in counties with a population of less than 300,000."

SEH is a 501(c)3 non-profit dedicated to improving the quality of life for Hawai'i Island residents. Our mission is to enable an economic, social, and environmental revival in Hawai'i through a just transition to sustainable, 100% locally sourced renewable energy.

SEH appreciates and supports the intent of SB1269 SD1 HD1. We recommend that this measure ultimately results in the funding of qualified geophysical and geothermal research entities to sufficiently document our geothermal resources. This will allow us to effectively frame development efforts.

Additionally, we recommend amending this bill to remove the population threshold ("... in counties with a population of less than 300,000.") Geothermal resources may very well exist on Oahu, and it will be prudent to not rule out the potential for geothermal power generation in the county with the lion's share of our energy demand.

Hawai'i has geothermal resources available statewide. According to the Hawai'i Groundwater and Geothermal Resource center (HGGRC) at UH Manoa, the characterization of its subsurface geology remains virtually unknown outside of the East Rift Zone on Hawai'i Island due to lack of funding. It is essential our state expedite the research and confirmation of viable geothermal sites to facilitate development of this much needed resource. SB1269 SD1 HD1 is critical step in funding this activity.

Thank you for this opportunity to testify.

Respectfully, Keith Neal Policy Lead Sustainable Energy Hawaiʻi



#### HOUSE COMMITTEE ON ONSUMER PROTECTION AND COMMERCE

#### MARCH 19, 2025

#### SB 1269, SD1, HD1, RELATING TO GEOTHERMAL RESOURCES

#### **POSITION: SUPPORT**

Coalition Earth <u>supports</u> SB 1269, SD1, HD1, relating to geothermal resources, which appropriates funds to the Department of Business, Economic Development, and Tourism for continued exploration and identification of geothermal resources and commercial viability for utility-scale geothermal production in counties with a population of less than 300,000.

According to a report produced by the Hawai'i Climate Change Mitigation and Adaptation Commission, global sea levels could rise more than three feet by 2100, with more recent projections showing this occurring as early as 2060. In turn, over the next 30 to 70 years, approximately 6,500 structures and 19,800 people statewide will be exposed to chronic flooding. Additionally, an estimated \$19 billion in economic loss would result from chronic flooding of land and structures located in exposure areas. Finally, approximately 38 miles of coastal roads and 550 cultural sites would be chronically flooded, on top of the 13 miles of beaches that have already been lost on Kaua'i, O'ahu, and Maui to erosion fronting shoreline armoring.

As we work to reduce carbon emissions and stave off the worst consequences of climate change, we must begin preparing for the adverse impact of sea level rise on our shores. We are now quantifying the speed at which we must act. We cannot continue to develop the 25,800-acre statewide sea level rise exposure area–one-third of which is designated for urban use–without risking massive structural damage and, potentially, great loss of life.

Just two years ago, we witnessed the impact of the climate emergency on our shores. On August 8, 2023, wildfires swept across Maui and killed at least 100 people, making it one of the nation's deadliest natural disasters. The spread of the fires has been attributed to climate change conditions, such as unusually dry landscapes and the confluence of a strong high-pressure system to the north and Hurricane Dora to the south. The wildfires destroyed over 2,200 structures,

including numerous residential buildings, historic landmarks, and school facilities. In September 2023, a report from the United States Department of Commerce estimated the total economic damage of the wildfires to be roughly \$5.5 billion. Investing in renewable energy generation could not be more urgent, given the growing threat of climate catastrophes to our island home.

Therefore, our state should take steps to hasten our transition to a clean energy economy and continue our fight against climate change, including by investing in the potential of geothermal resources, a nearly unlimited source of renewable energy. The Earth's inner core is as hot as the surface of the sun. As that heat radiates, it heats the rocks and water just beneath the Earth's surface and the steam that process generates can be used to generate heat and electricity. Harnessing geothermal energy can be accomplished at any time, since geothermal resources are reliably available 24 hours a day, 365 days a year.

The United States leads the world in geothermal electricity capacity and generation. Yet, the U.S. has tapped less than 0.6 percent of its available geothermal electricity resources. The National Renewable Energy Laboratory estimates that there is enough geothermal potential under our nation's grounds to constantly produce 4,248,879 megawatts of energy. Notably, geothermal energy presents an opening for an almost seamless transition of investment, technology, and personnel away from fossil fuels. While the needed capital investment for geothermal ranges from \$3,000 to \$6,000 per kilowatt–as compared to solar and terrestrial wind, which run just \$1,700 to \$2,100 per kilowatt–this cost is declining as investments in new technology are being made. In terms of both economic and clean energy generation, we cannot afford to miss out on these opportunities.

This bill establishes a framework for expanding geothermal exploration and the development of utility-scale geothermal initiatives, goals that can be further accelerated through partnerships with research institutions like the University of Hawai'i's Groundwater and Geothermal Resources Center. This can, in turn, stimulate further possibilities for public funding and private sector investment for geothermal power generation. Geothermal energy was also identified as both a near-term and mid-term decarbonization pathway in the Hawai'i State Energy Office's Hawai'i Pathways to Decarbonization Report, released in 2024.

We must take steps to avoid environmental risks when exploring geothermal energy. Relatedly, we should not engage in any geothermal expansion on Hawaiian homelands without beneficiary support. This measure would allow DBEDT to explore geothermal potential in any space outside of Honolulu. As the World Resources Institute has stated, "Next-generation geothermal as a promising path to a zero-carbon power grid. It's a clean, cost-effective way to fill supply gaps when solar and wind aren't available." In that way, geothermal has the capacity to play a major role in strengthening energy independence and resilience for our island home.

Coalition Earth is a nongovernmental organization that works to preserve the well-being of people and our planet. We champion policies that advance climate resilience, clean energy, public health, and economic fairness for working families. **Contact us at info@coalitionearth.org.** 



#### TESTIMONY BEFORE THE HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

#### SB 1269 SD1, HD1 Relating to Geothermal Resources

Wednesday, March 19, 2025 2:00 PM State Capitol, Conference Room 329

Greg Shimokawa Director of Renewable Acquisition Hawaiian Electric

Dear Chair Matayoshi, Vice Chair Chun, and Members of the Committee,

My name is Greg Shimokawa and I am submitting written testimony on behalf of Hawaiian Electric in support of SB 1269 SD1, HD1, which appropriates funds for the exploration and identification of geothermal resources and commercial viability for utilityscale geothermal production.

Hawaiian Electric supports the exploration of geothermal resources as a means to help accelerate the development of renewable energy projects, achieve the State's Renewable Portfolio Standards requirements, reduce reliance on imported fossil fuels, help stabilize customers' bills, and reduce greenhouse gas emissions.

Hawaiian Electric supports the intent of identifying and developing the State's geothermal resources and renewable energy potential, but defers to policy makers on the appropriateness of funding allocations stipulated in the bill.

Thank you for this opportunity to submit written testimony in support of SB 1269 SD1, HD1.

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

#### SB-1269-HD-1

Submitted on: 3/18/2025 4:02:37 PM Testimony for CPC on 3/19/2025 2:00:00 PM



Submitted By	Organization	<b>Testifier Position</b>	Testify
Jacelyn Auna	Mala Hanai Pua LLC	Oppose	Written Testimony Only

Comments:

My name is Jacelyn Auna, the owner of Mala Hanai Pua LLC. I am from Moku o Keawe in the Hawaiian homesteads of Keaukaha. I am in opposition of SB1269 SD1 HD1.

STOP funding projects that will not only desecrate our Moku o Keawe, it will take away its spirit and beauty. If you know this Moku, there's still parts untouched by humans. Geothermal will destroy the Moku.

Drilling holes and testing will not go away. Can't control the noises and devastation it leaves. Geothermal energy is not a solution, it's a problem and will be a bigger problem.

Use the millions of dollars in other ways to better the humanity of our Hawai'i Island instead of funding something not worth it.

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

#### SB-1269-HD-1

Submitted on: 3/18/2025 7:26:37 PM Testimony for CPC on 3/19/2025 2:00:00 PM



Submitted By	Organization	<b>Testifier Position</b>	Testify
Jim Albertini	Malu 'Aina Center for Non-violent Education & Action	Oppose	Written Testimony Only

Comments:

Aloha Legislators,

Our organization is strongly opposed to SB 1269 and more geothermal development in Hawaii. Our organization was the hub for the Big Island Rainforest Action Group that worked closely with the Pele Defense Fund to stop the 500 megawatt geothermal project in the Wai O Kele O Puna Rainforest. That opposition included one of the largest non-violent civil disobedience actions in Hawaii's history. We stopped that project. Had it gone forward and the 500 Megawatts of power was exported to Oahu as planned, Pele lava flow of 2018 would have destroyed the power plant and cut that power to Oahu. How come we never received even 1 mahalo letter from Oahu. We help save Oahu from going dark.

The moral of the story is respect the sacred. No Geothermal!

Jim Albertini, president of Malu 'Aina

March 18, 2025

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

#### SB-1269-HD-1

Submitted on: 3/18/2025 11:03:33 PM Testimony for CPC on 3/19/2025 2:00:00 PM



Submitted By	Organization	<b>Testifier Position</b>	Testify
Donna Fischer	La'akea permaculture farm	Oppose	Written Testimony Only

Comments:

Geothermal is not sustainable and only harms those people and other living beings (animals, fish, birds, plants, reptiles) that live near it. Please put the welfare of your constituents first!

Submitted on: 3/15/2025 11:23:41 AM Testimony for CPC on 3/19/2025 2:00:00 PM

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

Comments:

I support commercial geothermal resource development and appreciate the intent of SB1269. Furthermore, the Hawaii Groundwater and Geothermal Resources Center (HGGRC) should execute the geothermal resource characterization. Through this University of Hawaii research unit, the State of Hawaii's most prominent earth scientists are researching Hawaii's groundwater resources. HGGRC obtained land access for research from dozens of landowners across the state. For research equipment, HGGRC has access to \$1 million worth of geophysical equipment and a \$3 million drill rig (Notably, Puna Geothermal Venture is the only other geothermal-focused organization in Hawaii that has a suitable drill rig). The State can further benefit from HGGRC and UH's research, expertise, and resources.

<u>SB-1269-HD-1</u> Submitted on: 3/16/2025 3:29:06 PM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Douglas Perrine	Individual	Support	Written Testimony Only

Comments:

Geothermal is the key renewable energy resource that can provide affordable firm power for the state of Hawaii. I strongly support SB1269.

Submitted on: 3/16/2025 7:14:31 PM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Jacob Wiencek	Individual	Support	Written Testimony Only

Comments:

Aloha Committee Members,

Geothermal energy is a key component of our clean energy future. It's already a proven way to sustainably power our existing communities. Let's keep this legislation moving forward!

I urge this Committee to SUPPORT this bill!

Submitted on: 3/16/2025 9:20:22 PM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Mavis Oliveira-Medeiros	Individual	Oppose	Written Testimony Only

Comments:

Aloha State Representatives,

I am writing to strongly oppose HB 1269. DHHL or anyone else for that matter, shouldn't be harming our aina and messing with Mother Nature to explore geothermal as a resource for electricity. Our Tutu's taught us "if you play with fire, you'll get burned." DHHL should only be spending or applying for money to open up more Hawaiian Home lands. 27,000 on the waitlist, myself included & they want to explore? Please DHHL does need funds, but please fund them for infrastructure for HHL. Nothing else should be considered before that. Subdivide, build infrastructure & award! Hawaiians are dying on the list.

Mahalo,

Mavis Oliveira-Medeiros

(808)866-7409

Submitted on: 3/17/2025 8:19:20 AM Testimony for CPC on 3/19/2025 2:00:00 PM

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

Comments:

Aloha,

I opppose this bll as a resident of the Island of Hawai'i and as a Native Hawaiian, Kanaka 'Ōiwi. I dont think enough has been studied about the impacts of geothermal on the land, the water and the people of Puna and before we go "exploring" and expanding geothermal, lets address the complaints and concerns of the people directly impacted by geothermal right now.

<u>SB-1269-HD-1</u> Submitted on: 3/17/2025 9:17:17 AM Testimony for CPC on 3/19/2025 2:00:00 PM

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

Comments:

Oppose.

Submitted on: 3/17/2025 9:45:22 AM Testimony for CPC on 3/19/2025 2:00:00 PM

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

Comments:

DearL legislators,

We oppose Bill HB 1269 and urge you to support solar energy and win energy and there is a lot of data to support the fact that geothermal exploration is not healthy for us or the land. Please do your research and your homework.

With solar, there is no need for evacuation plans, no sinkholes or earthquakes, no contaminated wastewater, no blowouts or emergency venting, no dangerous hydrogen sulfide, Pentane, or other hazardous chemicals, no industrial noise, no enhanced geothermal fracturing. Solar. is Cleaner, cheaper, healthier, and more benefiial to all of us.

#

Submitted on: 3/17/2025 10:42:57 AM Testimony for CPC on 3/19/2025 2:00:00 PM

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

Comments:

Aloha,

Today I write in opposition of SB1269. As a native Hawaiian who has lived in Puna for over 2 decades (where our current geothermal plant is located) and has witnessed the lava break in Leilani Estates, I urge you to use common sense when voting on a measure that would drill enormous holes into our already fragile and active landscape. To do so could put our community at risk for many things such as increased earthquakes, further lava breaches, the poisoning of our water table, etc. Furthermore the type of activity proposed in this bill will disturb and threaten our already fragile ecosystem. As a Native Hawaiian that has lived and raised her family on Hawaii Island for the past 44 years I implore you to think about how such an invasive practice will negatively impact the safety of our community and the vitality of our aina. I urge you to vote no to SB1269.

Mahalo.

<u>SB-1269-HD-1</u> Submitted on: 3/17/2025 11:32:03 AM Testimony for CPC on 3/19/2025 2:00:00 PM

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

Comments:

Aloha 'āina,

'A'ole, oppose SB1269.

'Āina Aloha,

Momi Wheeler

Kea'au, HI

Submitted on: 3/17/2025 2:10:57 PM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Janice Palma-Glennie	Individual	Oppose	Written Testimony Only

Comments:

aloha,

i ask that you oppose this bill for all of the reasons i stated regarding HCR58/HR54.

mahalo for voting "NO" on SB1269 SD1 HD1.

sincerley,

janice palma-glennie

kailua-kona

#### <u>SB-1269-HD-1</u> Submitted on: 3/17/2025 2:35:24 PM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Mililani Trask	Individual	Support	Written Testimony Only

Comments:

Chair Matayoshi and the members of the committee,

Aloha mai kākou,

I am here to testify in strong support of SB1269 SD1 HD1. I testify as a Pele practitioner, as a lawyer who understands indigenous rights, as a Native Hawaiian who lives on Hawai'i island and as an owner of the geothermal resources of our state. In Hawai'i, geothermal is a mineral by definition and under our Statehood Act it belongs to Native and native Hawaiians.

I have seen up close how the high cost of energy –the highest in the nation—has stifled economic growth and limited opportunities for the next generation. It's no wonder so many are fleeing our island homes for the continent. They have been priced out of paradise. This bill is a chance to reverse this trend by making life in Hawai'i more affordable and secure. We owe it to future generations to responsibly steward the gifts of Tutu Pele. Developing geothermal energy can lift up the community by lowering energy costs and creating opportunities for new businesses and education.

I'm here today to ask you to move SB1269 SD1 HD1 forward in the name of economic sustainability. I am an advisor to Waikā Consulting, formed by IDG, in response to the state's initiative to, not just locate geothermal energy, but to tap and develop it for use by residents and businesses.

Energy fuels the economy. DBEDT exists to further economic development for Hawai'i's growth and diversification. Waikā was chosen to advise DBEDT because DBEDT recognizes that this is a Hawai'i-based, Native Hawaiian company that has already worked with global experts to not just identify the best places to tap geothermal energy: It has actually developed geothermal projects for the Maori Trusts in Aoteoroa.

If we are to reach the new goal of 100% renewable energy by 2035 for the Neighbor Islands, we cannot approach geothermal development as if we are looking for a needle in a haystack! We have to be strategic in how we use the dedicated funds to deliver practical solutions. That means building on what we have already learned about the geothermal resources on Hawai'i island to deliver real benefits to people who are hurting.

In 2011, IDG was short-listed for the final award of a 25MW geothermal power plant by HELCO/HECO. But no award was made. If you review the Hu'ena Power/IDG PUC docket, you can assess our capacity. We are comprised of Hawaiians working with others in & outside Hawai'i. Our team provided extensive analysis in that PUC docket including a Road Map for geothermal development as the primary source of baseload energy for the state. Our team knows how to deliver community benefits because it has done so in Aotearoa and has been working in Hawai'i to explore geothermal development for 15 years.

Our model for developing indigenous resources in a culturally respectful way has its roots in my relationship with the late Maori Queen while working at the United Nations on the Declaration for Indigenous Human Rights. I had the honor of advising the Maori Trusts in New Zealand at the request of their late Queen, Te Arikinui Dame Te Atairangikaahu.

This year marks the 25th anniversary of the creation and use of our native-to-native model. It prioritizes long term benefits to the community over limited short-term payouts. Too often outside developers have been free to exploit the indigenous owners of geothermal resources. The Hawaiian and Maori people have many shared cultural values. One critical cultural difference is that geothermal for Hawaiians is sacred to the Goddess Pele. The Native Hawaiian-owned IDG Group got involved with several projects from the planning and consultation stages right through to development. Each project reflected our native-to-native approach: shared profits, low environmental impact, cultural protections and long-term benefits to the host communities.

IDG has kept abreast of the latest developments in both the science AND economics of geothermal development. We bring the same business acumen, legal and scientific expertise and cultural sensitivity that we applied In New Zealand to deliver for the people of Hawai'i. We will support the kind of economic development DBEDT is dedicated to promoting. Waika Consulting, under the umbrella of the IDG Group, has already identified leading global experts in the field of geothermal energy. Far from doing research just for the sake of research, SB1269 SD1 will allow for the commercial development of geothermal. That includes supporting community-centered projects that are socially responsible, environmentally sustainable, culturally appropriate and economically feasible.

As a Pele practitioner, I truly believe tapping the gifts of Tūtū Pele for the benefit of the people is an act of homage to her abundant generosity. The people of Hawai'i island—and eventually all of Hawai'i-- will benefit. Our indigenous geothermal resources, which are owned by Indigenous Hawaiians and the public, can and should be a firm power alternative to destructive fossil fuels that have cost us too much already. And they threaten to cost us billions more in damage to our coastal infrastructure. We have a firm power alternative right here in our back yard. Let's tap it.

For the sake of economic growth and opportunities for future generations, please move SB1269 SD1 HD1 forward. Mahalo.

Submitted on: 3/17/2025 5:57:08 PM Testimony for CPC on 3/19/2025 2:00:00 PM

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

Comments:

Aloha,

I strongly oppose SB1269 especially on DHHL lands. Commercial users of DHHL are notorious for never cleaning up and restoring the lands to the same state as when acquired.

Secondly PV is the most environmentally safe method of generation. The ESM technology is improving and new technologies are safer and less prone or totally eliminate run away thermal events.

As a DHHL lease holder I strongly oppose geothermal.
<u>SB-1269-HD-1</u> Submitted on: 3/17/2025 6:11:56 PM Testimony for CPC on 3/19/2025 2:00:00 PM

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

Comments:

I strongly oppose this bill, stop wasting taxpayers money!

<u>SB-1269-HD-1</u> Submitted on: 3/17/2025 7:34:51 PM Testimony for CPC on 3/19/2025 2:00:00 PM

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

Comments:

## STRONG SUPPORT!

Can lead to increased and diversified power generation.

Can lead to green hydrogen energy production.

Mahalo!

Submitted on: 3/17/2025 10:24:33 PM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Ann Chung	Individual	Support	In Person

Comments:

This is a program already in progress and a roadmap has been completed with the goal of developing the first utility

scale 50- to 100-megawatt power station on Hawai'i island.

funding originally allocated by this Legislature should be restored to continue the work that has been started.

DBEDT is the proper agency & the Big Island holds the most promise.

Please support this bill.

Mahalo

Ann Chung

Submitted on: 3/18/2025 7:10:45 AM Testimony for CPC on 3/19/2025 2:00:00 PM

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

Comments:

This would be a big waste of money that would be far better spent on solar as a safer/cleaner/cheaper option - please DO NOT PASS this bill! Mahalo, JW

Submitted on: 3/18/2025 9:18:45 AM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Tara Rojas	Individual	Oppose	Remotely Via Zoom

Comments:

### I STRONGLY AND ADAMANTLY OPPOSE!!

GASSING AND POISONING PUNA COMMUNITY FOR 40+ YEARS AND ALL ITS NEGATIVE HEALTH EFFECTS NEEDS TO STOP NOW.

NO TO GEOTHERMAL IN HAWAI'I NEI.

Submitted on: 3/18/2025 9:49:50 AM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Todd Reilly Sr	Individual	Oppose	Written Testimony Only

Comments:

Aloha

Living next to PGV is a horrible experience with 24hr drilling and toxic releases. This is not harmless. It is fracking with explosives (pentane) & wastewater. Do not pollute out islands any further with this dangerous energy source. There id no safe geothermal fracking. Mahalo

Todd Reilly Sr

State of Hawai'i Legislature

CPC Committee RE: SB1269 Relating to Geothermal Resources

Dear State of Hawai'i Legislators of the CPC Committee

My name is Terri L. Napeahi of Hawai'i Island. I OPPOSE SB 1269

#### PLEASE WATCH THIS VIDEO BEFORE READING MY TESTIMONY.

#### https://www.youtube.com/watch?v=a4SlddW8xwQ&pp=ygUNUGVsZSdzIGFwcGVhbA%3D%3D

I am a member of the **Pele Defense Fund** organization and OPPOSE GEOTHERMAL DEVELOPMENT BEING PROPOSED FOR EXPLORATORY DRILLING on MOKU 'O KEAWE. This organization has for many years fought the DESECRATING ACT OF DRILLING, and will continue to challenge the decisions you (LEGISLATOR'S) make while on OAHU. I have been following your presentations by the developers of DBEDT, and heard that you desire to build Geothermal Plants all over the Island of Hawai'i, to pump PELE's RESOURCE AND ENERGY for OAHU via UNDER SEA CABLES. We are preparing for your developers to follow DUE PROCESS, if you AGREE to FUND THIS PROJECT! Hawaiian Home Lands House Bill HB1307, was fast tracked to the SENATE, regardless of the testimonies of the people of MOKU 'O KEAWE in OPPOSITION. Our testimonies in OPPOSITION out- numbered those in support, and you still decided to push it through. BILL HB1307 was amended to do and **EIS** before any EXPLORATORY DRILLING CAN BE DONE.

Putting you all on notice that we are prepared for the JUDICIAL CHALLENGE!

GEOTHERMAL IS NOT RENEWABLE & HAZARDOUS - Geothermal research started on Hawai'i Island in 1961 when the Hawai'i Thermal Power Co. drilled four privately owned wells in Kilauea's east rift zone. The State and the National Science Foundation continued to research geothermal possibilities for Hawai'i The Hawai'i Geothermal Project Well-A (HGP-A) was constructed in 1975-76 and a 3 MW geothermal generator operated from 1981-1989. I lived less than a quarter mile away from this facility, and remember well the continuous odor of gas leaks when living in Leilani Estates. My in-laws lived on Leilani Blvd, only a few steps away from HGP-A. They have endured so much of the leaky gases since the inception of the drilling well. They eventually sold their home and relocated to a safer place in Puna. There was a major BLOW-OUT that vented hydrogen sulfide all over our community residents. We were evacuated, because it was very hazardous and dangerous. It took them several hours for them to cap the well. When it blew, it sounded like a 747 airplane landed in our front yard. In 1991 PGV had a blow-out that vented more than 2,200 pounds of hydrogen sulfide over a 30 hour period, killing animals and forcing the evacuation of many residents. The most recent lava flow by TUTU PELE, surrounded PGV, but changed the subsurface resource below. PGV is **not** currently producing the proposed energy they were contracted to produce for Hawaiian Electric Company. Hawai'i Public Utilities Commission (HPUC) approved two final amendments. There is a lawsuit filed currently against PGV (Hawai'i Intermediate Court of Appeals).

<u>HISTORY OF STATE PUSH FOR GEOTHERMAL DEVELOPMENT IN PUNA</u> – "In 1992 case of Pele Defense Fund v. Paty, Hawai'i Supreme Court rendered a landmark decision which broadly held that native Hawaiian rights protected by article XII, section 7 of Hawai'i Constitution "may extend beyond the ahupua'a in which a native Hawaiian resides where such rights have been customarily and traditionally exercised in this manner." This controversial decision abolished over 100 years of Hawai'i Supreme Court precedent which restricted native tenant gathering rights to the ahupua'a of residency. The ahupua'a residency requirement had been judicially imposed since at least 1858 in Oni v. Meek, and reaffirmed as recently as 1982 in the case of Kalipi v. Hawaiian Trust Co. Further, the Oni and Kalipi decisions were predicted upon the Kilauea Act of 1850 and its modern day successor, Hawai'i Revised Statutes section 7-1. Both sources limit the practice of customary and traditional rights to tenants residing within the ahupua'a in which they seek to exercise the rights." Written by Henry Curtis.

The first initiative to do exactly what DBEDT developers are presenting, FAILED and the STATE LOST 80 MILLION DOLLARS! DO YOUR HOME WORK LEGISLATORS, YOU WILL LOSE TAX DOLLARS!





THERMAL SUBSURFACE MAP PRODUCED BY DON THOMAS IN 1981- Photo provided by Pele Defense Fund. The most favorable for GEOTHERMAL is on the rift of PUNA. These are the places DHHL are proposing to do exploration drilling. In 2016, we filed a Lawsuit when Don Thomas and the University of Hawai'i tried to drill on HUALĀLAI PU'U without an EIS. The trigger for JUDICIAL CHALLENGE are the IMPACTS on the traditional beliefs and the desecration of their DEITY!

DO THE RIGHT THING, SAVE TAX PAYERS DOLLARS AND DO NOT APPROPRIATE THE FUNDING!

KU'E KANAKA!

Terri Napeahi

Pele Defense Fund

<u>SB-1269-HD-1</u> Submitted on: 3/18/2025 11:02:50 AM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Lawrence Oberman	Individual	Support	Written Testimony Only

Comments:

It doesn't make sense to have easy access to geothermal and not use it to produce our electricity.

Please pass this bill.

Submitted on: 3/18/2025 11:12:19 AM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Keala Noel	Individual	Support	Written Testimony Only

Comments:

Aloha

Mahalo for the opportunity to the address the issue of allowing PHV continuing to pollute our aina, pollute our breath and our pursuit of happiness

I live In Leilani Estates. We do not need PGV, I am totally solare powered. I am harmed mentally and physically 24/7 by their operations.

They are horrific noise polluters every minute every day. They intrude our land to push electricity that this island simply DOES NOT NEED.

We must put our efforts toward other natural resources, such as our plentiful sun.

PGV tries to convince you that what they are doing is necessary. It is not.

Their representives at the last community meeting looked like menacing bouncers from a night club.

They will say that pushing materials into our aina has no effect. I call BS, pushing anything into our environment is FRACKING!! PLAIN AND SIMPLE.

I understand this really about money, who's making money here??

The people of Leilani Estates and surrounding communities do not benefit from their coffers....who does? The politicians perhaps, the lawyers they do not follow decent law.

I repeat HAWAII COUNTY, HAWAII NEI, does not WANT OR NEED THEM.

What we need better, more environmentally aina loving energy, simply Aloha!

Please stop this horrific misuse of our natural resources. There is NOTHING NATURAL OR ALOHA ABOUT PGV.

**STOP THEM NOW!** 

Im a Kupuna who has been blessed by living in Hawaii since 1973.

I really don't want to drag my old ass down to PGV gates and chaining my self there until arrested in the raw...but tragic times...as these are ..I can muster up the uhane to put this old okole on the air, just like they do to me constantly.

Aloha

Rev Keala Noel

Paster of the past from

The Church of Ho'ola Ika Honua since 1996

Submitted on: 3/18/2025 11:33:25 AM Testimony for CPC on 3/19/2025 2:00:00 PM

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

Comments:

Aloha Hawaii Legislators voting on SB1269 SD1 HD1:

Before you blankly spend any more taxpayer dollars on for-profit frackers of the aina, you must aware of the lawsuit against the County of Hawaii and Puna Geothermal Venture about PGV's INCOMPLETE Final Environmental Impact Statement filed in January 2024.

A lava flow erupted in Leilani Estates in 2018. Instead of removing the 67,000 gallons of highly explosive petrochemical Pentane and cementing their wells shut, PGV did NOTHING.

On May 9, 2018 Governor Ige declared an Emergency and ordered a Task-Force to take over PGV as they were "not taking the eruption seriously".

At that time PGV began "cooling the resource" while they waited for the taxpayers to fly in a giant pump, chemicals, metal plugs and 50,000 pounds of salt from Oahu that they pumped into the volcano trying to quench their wells.

The University of Hawaii co-authored a "Comprehensive precision relocation of Big Island earthquakes from 1986-2018 which show the smoking gun of earthquakes at the depths and location of PGV's injection wellfield from May 9-22, 2018.

Drillers who were onsite during the eruption and then after wrote a report about the Damage & Repair of Puna Well KS-14 that proves PGV was injecting fluids and mud at pressures many times above what their permits from DLNR and US EPA allow, and confirms a localized explosion at KS-14.

The University of Hawaii also has authored a long-time study of the subsidence at PGV's wellfield, which is in addition to the natural subsidence of Hawaii Island due to weight and the additional subsidence of the South Flank of Kilauea naturally slumping into the ocean.

During the eruption, the taxpayers also flew in an ex-Ormat Vice President, Charlene Wardlow, and her organization authored a report about the eruption detailing what a phreatomagmatic explosion is (underground magma intersecting water table at Halema'uma'u or lava hitting the ocean) and then proceeded to discuss how pumping cold water and then salt water into the wells did not work very well.

In addition to these proofs of negative impacts to the underground environment by geothermal operations, we have a University of Miami professor, who used to live in Hawaii, who has InSar radar evidence that the 2018 Fissure line started subsiding substantially once PGV operations began after the eruption because water circulation unnaturally cools the intruding dikes and causes contractions.

In addition to the above, PGV claims to have their own seismic array because the USGS does not have adequate seismometers to pick up any localized earthquakes below Magnitude 2.0. After the array was destryed in 2018, PGV claims they installed another one in 2022. The amazing thing is that PGV does not release their seismic data to the USGS, or anyone, they claim it is "proprietary".

PGV has been gassing the residents of Puna for 35 years and the Health Department does nothing. Nobody comes when we call, the records have been destroyed. When we call 911 we are told to call PGV!!! How is this possible? Because of you in the Legislature.

You legislators have allowed this to happen. You enacted goethemral resource zones which include ALL of the HAWAIIAN ISLANDS without a care to the environment and now you want to take taxpayer money and use it to poke around Hawaiian Homelands instead of putting Hawaiians on the land?

In their report to the Hawaii Legislature in 2024, the Hawaii Attorney General clearly stated that one of the biggest suckers of time and money was the AG assisting the State of Hawaii Department of Health in matters relating to Puna Geothermal Venture.

Look how many timies in the last 35 yeas we have had to have Emergeny Responses to PGV "accidents" "blow-outs' or like in 2014, when hurricane Iselle hit PGV did not shut down per their emergnecy response plan, they stayed online at the request of HELCO, tripped offline and GASSED at least 100 people TRAPPED in their homes by fallen trees.

Look how many times we have to sue PGV for harms and sue the State and County for failing to protect us!!! Please. I sent you all a copy of my lawsuit at the Intermediate Court of Appeals from pahoatoday@gmail.com. Read it and see if you want this kind of behavior in your districts and harming your constituents!!!

Sara Steiner

13-430 Pohoiki Road, Pahoa, HI 96778

pahoatoday@gmail.com

808-936-9546 if you want to talk.

#### <u>SB-1269-HD-1</u> Submitted on: 3/18/2025 12:03:29 PM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Jasmine sara Steiner	Individual	Oppose	Written Testimony Only

Comments:

Testimony Opposing SB1269: Geothermal Exploration Funding

Aloha Senate . My name is Jasmine Steiner, and I am a lifelong resident of Puna, Hawaii, born in 1988 and raised in a sunken acre basically at the base of Puna geothermal Venture on Mohala street in Leilani estates. I stand in strong opposition to HB 1307, which proposes allocating \$20 million for geothermal exploration on Hawaiian Home Lands.

This bill is deeply troubling for several reasons, and I speak not only for myself but for a large portion of our community who have suffered the consequences of unregulated geothermal activity for decades.

A major concern of mine, and many, is the claim that this funding is necessary for the delivery of Hawaiian Home Lands. This is a false choice. It pits the legitimate need for land against the very health and well-being of our community. This is unacceptable. We should not have to sacrifice our health and cultural heritage for the promise of land. There are other, more sustainable and culturally appropriate ways to address the land needs of native Hawaiians.

My personal experience with geothermal's detrimental effects is profound. My father suffers from 90% mercury poisoning, a direct result of the toxins released by the nearby geothermal plant. I myself have been suffering multiple chronic illnesses, since I was younger (my asthma alone started bad after the blowout in early 90's), and my child has had to withdraw from public school due to the toxic air caused by geothermal emissions and not being able to withstand the daily drive through MacKenzie coast and up to Pahoa. These are not isolated incidents. Many in our community experience similar health issues, yet our cries for help have been largely ignored.

Furthermore, this exploration, which involves drilling and fracking on an active volcano, is a direct affront to our cultural beliefs and practices. It is a desecration of Pele's domain and a blatant disregard for the 'aina that sustains us. How can we, as children of Hawaii, condone such disrespect for our land and our cultural heritage?

Beyond the cultural (sacrilegious to say the LEAST) and extreme chronic health impacts, the environmental consequences are equally alarming. Geothermal operations threaten endangered endemic species within critical habitats. This pursuit of energy at the expense of our unique and fragile ecosystem is short-sighted and irresponsible.

I also want to emphasize that our community is currently engaged in an unprecedented legal battle, with an injunction against geothermal operations headed to the Supreme Court. For this committee to even consider allocating funds for further exploration while this legal challenge is ongoing demonstrates a shocking disregard for the concerns of the people. It is a slap in the face to those of us who have been fighting for environmental justice for generations.

Due to the ongoing struggles the Hawaiian community is already dealing with due to 40 years of purposefully unmonitored toxic geothermal, I actually have a community organization start-up named KahuPuna, which works very hard 24/7 advocating for accurate geothermal education and supporting the people in the community who are completely concealed and covered up who have been seeking help for generations regarding this. We have witnessed firsthand the devastating impacts of geothermal development, and we cannot allow further desecration of our land and harm to our people. Currently my goal is a small air monitoring hub and communication hub for disaster response in geothermal radius on the Puna coast. Its a very dangerous environment which cannot be dismissed and ignored any longer as you try to fund MORE.

Finally, I urge you to consider the ethical implications of this bill. We, the people of Hawaii, have repeatedly voiced our opposition to geothermal expansion. We have shared our stories of suffering and loss. We have demanded that our voices be heard. It is your kuleana, your responsibility, as representatives of the people, to listen to our concerns and act in our best interests. We are not your personal piggy banks. You work for us.

NO CONSULTATION WITH THE PEOPLE OF HAWAII AT ALL as they pass this up the ladder. Not one thing until they are already doing it. as usual .

Therefore, I implore you to reject SB 1269. Choose the health of our community, the preservation of our culture, and the protection of our environment over the profits of a few. Choose Aloha 'Aina. Choose justice.

I am looking forward to seeing you folks in these seats do the right thing. It sure seems to be criminal at this point.

#### #AOLEPGV #PGVINJUNCTION2024

Thank you.

Jasmine Steiner

KahuPuna

03182025 1203pm

Submitted on: 3/18/2025 12:16:14 PM Testimony for CPC on 3/19/2025 2:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Wai'ala Ahn	Individual	Oppose	Written Testimony Only

Comments:

Aloha,

As your constituent, I strongly urge you to OPPOSE SB1269. Our community, culture, land and people deserves policies that protect our 'aina, and doesn't continue to displace our native people dying on waitlist, waiting for land/homes in their homeland; while exploitation and development is fast tracked to use land meant to nourish its people.

Please stand with your constituents and vote no on SB1269. Geothermal energy isn't a safe or viable "resource" that's been proven time and time again for over 30 years by the preexisting power plant and it's extensive history of leaks, blowouts, lawsuits, relocations and continued community concerns and EPA recommendations still unresolved.

OPPOSE SB1269.

Sincerely, Alicia Wai'ala Ahn

one of the closest/longest residents to PGV relocated by the state due to Geothermal related health issues

<u>SB-1269-HD-1</u> Submitted on: 3/18/2025 1:13:16 PM Testimony for CPC on 3/19/2025 2:00:00 PM

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

Comments:

I oppose SB1269

I live on the big island and oppose any geothermal advancement . Please vote no on this bill.

### SB-1269-HD-1

Submitted on: 3/19/2025 5:28:09 AM Testimony for CPC on 3/19/2025 2:00:00 PM



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

Comments:

We do not need more geothermal here. Many people suffered who lived near the geothermal plant in Puna. Leave this island alone it belongs to the people of this land. What companies are you looking at for the research and development? Would it reduce the enormous cost of energy on this land? Will the benefit go to the people or again to the corporate billionaires? When is enough enough? Listen to the voice of the people.

No to SB1269

# SB-1269-HD-1

Submitted on: 3/19/2025 7:50:00 AM Testimony for CPC on 3/19/2025 2:00:00 PM



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

Comments:

This should not be done on the islands.



The focus should be on encouraging the public release of already developed, but suppressed, technologies that would make all such geothermal exploration moot.

Working models of patents (such as anti-gravity vehicles) already exist, according to U.S. Navy, in confirming Patent Office inquiries re whether to approve the patents submitted by Salvatore Cezar Pais, a Romanian-American scientist.

In addition to the U.S. Navy/Salvatore Pais patents, there are **thousands of suppressed patents**, **including clean (free, anti-gravity, zero point, etc.) energy production and propulsion systems and medical technology.** 

Regarding patents for new energy options, propulsion, etc., with some working models already in existence, here are just two of many relevant interviews with scientists and inventors.

Listen to inventor Salvatore Cezar Pais (affiliated with U.S. Navy) on Curt Jaimungal's Theory of Everything.

https://www.youtube.com/watch?v=5E6QyAhTB3o

https://www.youtube.com/watch?v=PE4C7OI7Frg&t=0s

# SB-1269-HD-1

LATE

Submitted on: 3/19/2025 7:59:33 AM Testimony for CPC on 3/19/2025 2:00:00 PM

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

Comments:

I oppose

#### SB-1269-HD-1

Submitted on: 3/19/2025 8:01:35 AM Testimony for CPC on 3/19/2025 2:00:00 PM



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

Comments:

Aloha,

I am strongly opposed to geothermal exploration for the Big Island since it is an active volcano. There is evidence to suggest that the large 2018 eruption was due to the activities of Puna geothermal. I also opposed to using energy generated for AI data centers which seem to be the reason for power issues around the nation in addition to failed "green" technologies.

Mahalo.

# SB-1269-HD-1

LATE

Submitted on: 3/19/2025 9:42:56 AM Testimony for CPC on 3/19/2025 2:00:00 PM

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

Comments:

Has a PHD biochemist and OMD medical doctor I am opposed to the geothermal research.

### SB-1269-HD-1

Submitted on: 3/19/2025 11:13:08 AM Testimony for CPC on 3/19/2025 2:00:00 PM



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

Comments:

Aloha lawmakers,

I am writing to express my concerns regarding SB1269 and its potential impact on the Puna community, particularly in relation to geothermal energy expansion. While I support the pursuit of renewable energy, I believe that any development must be approached with great care to ensure the safety, health, and well-being of our residents and environment.

#### Key Concerns:

1. Health Risks from Air and Water Contamination

• Geothermal activity has been associated with the release of hydrogen sulfide (H<sub>2</sub>S), sulfur dioxide (SO<sub>2</sub>), and heavy metals such as arsenic and mercury. These substances pose serious health risks, particularly to those with respiratory conditions, children, and kupuna.

• Past incidents, including the 1991 PGV blowout, exposed residents to toxic emissions, causing symptoms such as nausea, headaches, and respiratory distress. Without strict safeguards, further expansion could increase such risks.

2. Potential for Induced Seismicity and Structural Damage

• Studies from other geothermal sites suggest that underground fluid injection and extraction can trigger seismic activity, which is of particular concern in an area already prone to volcanic and seismic events.

• Increased earthquakes could damage infrastructure and homes, adding financial and emotional strain to the community.

3. Environmental and Cultural Impact

• Puna is a unique and sacred landscape, deeply tied to Hawaiian culture and traditions. Many residents feel that geothermal expansion does not align with the stewardship of this land.

• The potential for groundwater contamination and land degradation raises further concerns about the long-term environmental consequences.

4. Need for Greater Community Involvement and Transparency

• Given the significant risks involved, it is essential that the local community has a stronger voice in decision-making regarding geothermal expansion.

• More rigorous environmental impact assessments, health studies, and long-term monitoring should be conducted before any new projects are approved.

Request for Consideration

I urge lawmakers to reconsider and oppose SB1269 and ensure that any geothermal development is approached with comprehensive health and safety regulations, increased community input, and a commitment to environmental protection. Energy solutions should not come at the expense of the well-being of Puna residents.

Mahalo for your time and consideration. I appreciate your leadership and your willingness to listen to community concerns.

Sincerely,

Zoe Durant, Puna (29)

# SB-1269-HD-1

Submitted on: 3/19/2025 11:27:28 AM Testimony for CPC on 3/19/2025 2:00:00 PM



Submitted By	Organization	<b>Testifier Position</b>	Testify
JAMMER	Wahine o Kohala	Oppose	Written Testimony Only

Comments:

This testimony serves as Opposition to Geothermal Research and or operations.

# <u>SB-1269-HD-1</u>

Submitted on: 3/19/2025 12:34:52 PM Testimony for CPC on 3/19/2025 2:00:00 PM



Submitted By	Organization	<b>Testifier Position</b>	Testify
Julie A Carter	Individual	Oppose	Written Testimony Only

Comments:

Opposed

# <u>SB-1269-HD-1</u>

Submitted on: 3/19/2025 1:38:05 PM Testimony for CPC on 3/19/2025 2:00:00 PM



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

Comments:

no geothermal