



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**
KA 'OIHANA HO'OMOHALA PĀ'OIHANA, 'IMI WAIWAI
A HO'OMĀKA'IKA'I

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
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JAMES KUNANE TOKIOKA
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Statement of
JAMES KUNANE TOKIOKA
Director

Department of Business, Economic Development, and Tourism
before the

**HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & TECHNOLOGY**

Thursday, March 13, 2025
11:00 AM
State Capitol, Conference Room 325

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

Aloha Chairs Lowen and Ilagan, Vice Chairs Perruso and Hussey, and Members of the Committees:

I am writing to express my support for SB1269, SD1, which advances geothermal energy development in Hawaii as a critical component of our state's renewable energy portfolio. Geothermal energy is not only a key solution to achieving Hawaii's 100% Renewable Portfolio Standard (RPS) mandate by 2045 but also an essential resource for stabilizing energy costs, particularly for our manufacturing and data center industries.

Hawaii's heavy reliance on imported fossil fuels has historically resulted in some of the highest electricity costs in the nation. As outlined in the geothermal roadmap of DBEDT's Hawaii Economic Landscape, increasing our geothermal capacity presents a strategic opportunity to enhance grid reliability, reduce dependency on volatile global oil markets, and provide cost-effective energy solutions that benefit both businesses and consumers.

Furthermore, the advancement of geothermal energy development is critical to enabling Hawaii's future economic growth, particularly in sectors such as advanced manufacturing and data centers. These industries depend on reliable and affordable electricity to remain competitive. Without a stable energy supply, Hawaii risks losing out on investment opportunities that could otherwise diversify our economy, create high-paying jobs, and foster technological innovation.

A key initiative supporting this effort is the Memorandum of Agreement (MOA) between the Hawaii Technology Development Corporation (HTDC) and the University of Hawaii (UH). This partnership is actively working towards the development of a commercial geothermal project, leveraging UH's expertise in geological research and HTDC's role in fostering innovation and economic diversification. The MOA outlines a structured framework, including key deliverables such as program and project management, community engagement and outreach, long-term development planning, strategic advisory efforts, and the documentation of key development assets. These deliverables align directly with the objectives of SB1269, SD1, and provide a concrete pathway to accelerating geothermal exploration and commercialization.

To achieve this, SB1269, SD1, provides a necessary framework to support and expand these ongoing efforts by facilitating geothermal exploration, streamlining permitting processes, and promoting research and development initiatives. By leveraging our natural resources and existing institutional partnerships, we can make a meaningful impact on our state's energy independence and economic resilience.

I respectfully urge this committee to pass SB1269, SD1, to secure Hawaii's clean energy future while ensuring long-term energy affordability for businesses and residents alike.

Mahalo for your time and consideration.



Email: communications@ulupono.com

HOUSE COMMITTEES ON ENERGY AND ENVIRONMENTAL PROTECTION
& ECONOMIC DEVELOPMENT AND TECHNOLOGY
Thursday, March 13, 2025 — 11:00 a.m.

Ulupono Initiative supports the intent of SB 1269 SD 1, Relating to Geothermal Resources.

Dear Chair Lowen, Chair Illagan, and Members of the Committee:

My name is Mariah Yoshizu, and I am the Government Affairs Associate 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 supports the intent of SB 1269 SD 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 effectively for the benefit of its residents.

Thank you for the opportunity to testify.

Respectfully,

Mariah Yoshizu
Government Affairs Associate



P.O. Box 37158, Honolulu, Hawai`i 96837-0158
Phone: 927-0709 henry.lifeoftheland@gmail.com

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Nicole E. Lowen, Chair

Rep. Amy A. Perruso, Vice Chair

COMMITTEE ON ECONOMIC DEVELOPMENT & TECHNOLOGY

Rep. Greggor Ilagan, Chair

Rep. Ikaika Hussey, Vice Chair

DATE: Thursday, March 13, 2025

TIME: 11:00 AM

PLACE: Conference Room 325

Re: SB 1269 SD1 Geothermal

Support

Aloha Chairs Lowen and Ilagan, Members of the Committees

Life of the Land is Hawai`i's own energy, environmental and community action group advocating for the people and `aina for 55 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.

Life of the Land recognizes that firm renewables are needed to support a 100% renewable energy powered grid. The current options are biofuels and geothermal. The only alternative to fossil fuel powered airplanes are biofuels. There may be other options for planes and electricity in the near or not so near future. Life of the Land supports exploratory geothermal wells and biofuel research that is respectful of community values.

Life of the Land asserts that people and communities must be at the table where decisions are made about where and if renewable infrastructure is being considered. It's not just a box you check off. The process is important. There must be open and transparent discussions that encourage diversity, equity, and inclusion of all people including those of different economic strata. Communities consent is of paramount importance. Communities have a right to say no.

Proposed projects must address environmental laws and address the potential for extreme weather events including wildfires.

CORRECTION NEEDED: The Bill must be modified. "Hawaii island holds perhaps the most promise for the development of the State's ~~first~~ second utility-scale geothermal production facility."

Mahalo

Henry Curtis
Executive Director



**Hawaiian
Electric**

**TESTIMONY BEFORE THE HOUSE COMMITTEES ON
ENERGY & ENVIRONMENTAL PROTECTION AND
ECONOMIC DEVELOPMENT & TECHNOLOGY**

**SB 1269, SD1
Relating to Geothermal Resources**

Thursday, March 13, 2025
11:00 AM
State Capitol, Conference Room 325

Greg Shimokawa
Director of Renewable Acquisition
Hawaiian Electric

Dear Chairs Lowen and Ilagan, Vice Chairs Perruso and Hussey, and Members of the Committees,

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

SB-1269-SD-1

Submitted on: 3/11/2025 9:37:00 AM

Testimony for EEP on 3/13/2025 11:00:00 AM

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

Comments:

Aloha Committee members of the House Committee on Energy & Environmental Protection and the Committee on Economic Development & Technology,

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 desecration 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.

As the committees on both Energy & Environmental Protection and Economic Development & Technology, being the leader in innovative green energy creation would serve as an economic and technological driver, as well 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.

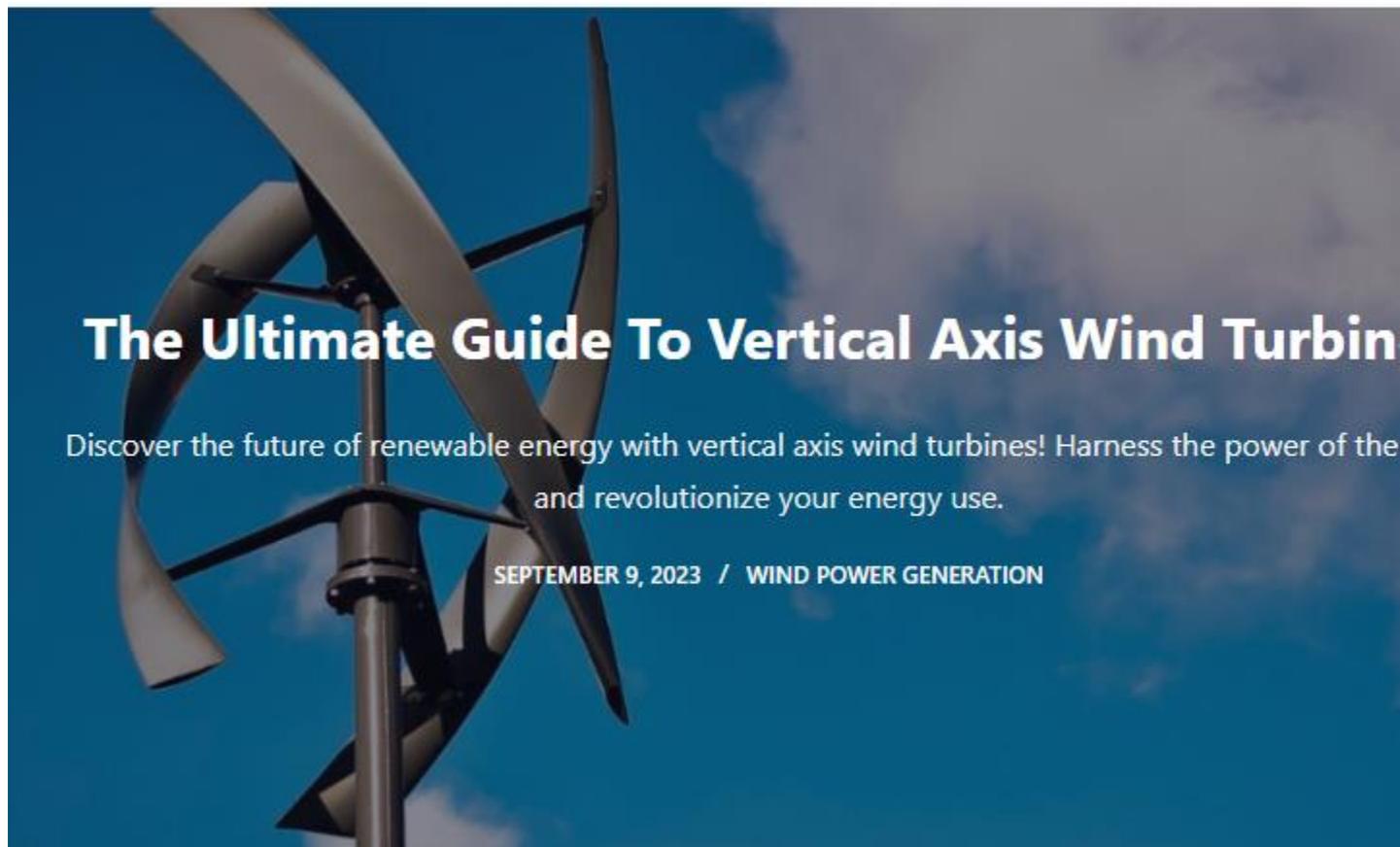
Innovations in wind technology in Denmark, where smaller scale wind turbines designed for communities and/or personal use can help to decentralize our energy grids, helping communities to become more sustainable and resilient to natural disasters. Exploring the use of these technologies would also diminish the need for high-voltage powerlines 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.

Another benefit to decentralized solutions like smaller-scale wind turbine systems, is that the community in which the systems are installed are the ones who both benefit from the technologies, as well as burden any negative environmental or community impacts as well. If a geothermal energy production system was to be created, the community where it is built would be the only ones to have the burden of the negative environmental and community impacts, while other communities would benefit from the energy production. Thus, decentralized solutions are more fair for the communities where the renewable energy systems are created.

When the City and County of Honolulu decided to build the rail system, it was already an older technology, and when it is finally finished, it'll be outdated and inefficient compared to similar technologies at the time. Let's not do the same with renewable energy. Let's not invest in old centralized technologies like geothermal and large windmills. Let's look to future innovations that allow for decentralization, that are culturally sensitive, more efficient, less disruptive, and easily accepted by the people it may affect.

Attached are some examples of smaller scale wind energy technologies that should be explored here in Hawaii, ahead of geothermal, as well as a link to learn more about it: [Youtube link](#)





Mahalo for your consideration,
Keoni Shizuma
President, Hulu Mamo Hawaiian Civic Club



Sustainable Energy Hawai'i

sustainableenergyhawaii.org
info@sustainableenergyhawaii.org

March 12, 2025

TESTIMONY FOR SB1269 SD1 - RELATING TO GEOTHERMAL RESOURCES

Thursday, March 13, 2025

HOUSE OF REPRESENTATIVES
THE THIRTY-THIRD LEGISLATURE
REGULAR SESSION OF 2025

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Nicole E. Lowen, Chair
Rep. Amy A. Perruso, Vice Chair
Members of the Committee

HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & TECHNOLOGY

Rep. Greggor Ilagan, Chair
Rep. Ikaika Hussey, Vice Chair
Members of the Committee

I'm testifying on behalf of **Sustainable Energy Hawai'i (SEH)**, 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 and the creation of a thriving clean economy.

We appreciate the intention of SB1269 SD1, 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."* Efforts to enable the exploration and identification of geothermal resources for commercialization will help establish geothermal power generation across Hawai'i and help the state achieve energy resilience.

We recommend amendments to ensure the intentions are met.

Hawai'i has geothermal resources available statewide. According to the Hawai'i Groundwater and Geothermal Resource Center (HGGRC) at UH Manoa, the subsurface geology characterization remains virtually unknown outside of the East Riff Zone on Hawai'i Island due to a chronic lack of funding. Our state must expedite the acquisition of this data to de-risk the development of this much-needed resource.

Geothermal developments in the Philippines and New Zealand have required 20-50 exploratory wells to confirm viable development sites. With each exploratory well costing over \$1M, limited funding impact must be maximized and directed to local experts who have been researching this opportunity but have been constrained by the lack of funding.

The State has experts in the field of geophysics at the HGGRC. They own their geophysical exploration equipment and have the expertise to conduct focused, efficient, data-driven exploratory activities.

We strongly recommend that SB1269 SD1 be amended as follows:

- 1) Direct the appropriated funds to the HGGRC so that we can expedite the necessary exploration, discovery, and identification of commercially viable geothermal sites across the state, building upon the body of knowledge they have collected and leveraging their resources (expertise and infrastructure).
- 2) Remove the population constraint (“... geothermal production in counties with a population of less than three hundred thousand.”). As stated, the measure excludes Oahu. We believe this is unnecessarily limiting as it precludes the discovery of the energy resource on the island with the most significant energy demand.

Thank you for this opportunity to testify.

Respectfully,

Keith Neal

Policy Lead, Sustainable Energy Hawai'i



**HOUSE COMMITTEES ON ENERGY AND ENVIRONMENTAL PROTECTION
and ECONOMIC DEVELOPMENT**

MARCH 13, 2025

SB 1269, SD1, RELATING TO GEOTHERMAL RESOURCES

POSITION: SUPPORT

Coalition Earth **supports** SB 1269, SD1, 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.



WAIKĀ
CONSULTING

Testimony of Ryan Matsumoto on behalf of Waika Consulting
Before the EEP/ECD Committees
Thursday, March 13, 2025 Room 325

SB 1269: Relating to Geothermal Resources
DBEDT; Geothermal Resources; Appropriations (\$)

Chairs Lowen, Ilagan and members of the Committee,

Waikā Consulting, LLC submits this testimony in strong support of SB1269, under the leadership of DBEDT, is a vital measure to advance Hawai'i's energy independence through responsible and equitable geothermal energy development. As a Native Hawaiian-owned company, Waikā has advocated for a Native-to-Native model for over two decades, ensuring Indigenous leadership in resource management. Our commitment is to ensure geothermal energy benefits Native Hawaiians, uplifts local communities, and contributes to a sustainable, self-reliant future for Hawai'i.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ryan Matsumoto', with a stylized flourish at the end.

Ryan Matsumoto
President, Waika Consulting



Testimony of Al Hackbarth, Innovations Development Group, Inc.

Committees: EEP/ECD

Thursday, March 13, 2025 at 11am

SB 1269: Relating to Geothermal Resources

Dear Chair Lowen, Chair Ilagan and members of the Committee,

I, Al Hackbarth, on behalf of Innovations Development Group (IDG), submit this testimony in strong support of SB1269 SD1. 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.

Testimony of
Robbie Cabral
Founder, Innovations Development Group (IDG)
before the
Committees on EEP / EDT
Thursday, March 13, 2025
Room 325

SB1269 SD1
Relating to Geothermal Resources

Dear Chair Lowen, Chair Ilagan and Memberes of the Committee,

Today is another hearing in 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 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 continue to move this bill forward.

SB-1269-SD-1

Submitted on: 3/12/2025 12:08:51 PM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	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

SB-1269-SD-1

Submitted on: 3/12/2025 9:11:35 AM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	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.

SB-1269-SD-1

Submitted on: 3/12/2025 8:03:06 AM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier 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!

March 11, 2025
Testimony of Peter Sternlicht
Resident of Hawaii Island

COMMENTARY IN RELATION TO
SB1269_SD1 - RELATING TO GEOTHERMAL RESOURCES

Thursday, March 13, 2025

HOUSE OF REPRESENTATIVES
THE THIRTY-THIRD LEGISLATURE - REGULAR SESSION OF 2025

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Nicole E. Lowen, Chair
Rep. Amy A. Perruso, Vice Chair
Members of the Committee

HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & TECHNOLOGY

Rep. Greggor Ilagan, Chair
Rep. Ikaika Hussey, Vice Chair
Members of the Committee

As an active participant in the clean energy advocacy arena in Hawai'i, I have studied geothermal research and development challenges along with its progress in our state for many years. I currently serve as a co-lead for the Regional Interest Group within the broader, national organization, Geothermal Rising as well as serving on the board of directors of an active, renewable energy research organization and bona fide 501(c)(3) non-profit.

I appreciate the intent of SB1269 SD1, 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.”*

However, I have a hard time understanding what criteria was used to make the statement that The Department of Business, Economic Development and Tourism (DBEDT) is *“the appropriate department to guide the continued exploration and identification of geothermal resources in the State.”*

- What process was used to make this statement in proposed legislation as if it is a “fact”? It's not.
- How does DBEDT have the requisite expertise to determine what courses of action are, or are not necessary for geophysical data gathering? Clearly they will have to hire from the outside.
- How does adding the financial overhead of a task that is outside their professional skillset qualify as responsible, productive use of limited tax payer funds when the state has an entire team of experts at the University of Hawai'i that could be tapped instead?

Yes, it is essential that our state expedite acquisition of this data to de-risk the private sector investment needed to develop this critical clean energy resource. Geothermal exploration and subsurface characterization is expensive. Globally, commercial ventures have required 20-50 exploratory wells to confirm viable development sites. With each exploratory well costing over \$1-2 million, spending efficiency here must be maximized, and superfluous, non-critical spending must be minimized.

Therefore, at the research phase, where the extremely limited funds come from public tax dollars, spending on non-essential management, or on inexperienced, for-profit consultants without the experience in Hawai'i to do this research seems counter productive.

The State of Hawaii has scientific experts who are experienced in the unique nature of Hawaiian geology. They are responsible for 100% of the data currently known about our subsurface conditions. They own their own geophysical and geological exploration equipment and are already paid for by the state to do this research. That organization is the Hawaii Groundwater and Geothermal Resource Center (HGGRC). This is what HGGRC does.

This is not what DBEDT does.

To be clear, I support commercial geothermal resource development, however the funding of an entity focused on economic development to manage and document scientific research when a scientific entity already exists within Hawai'i's State Government seems to be making a complicated, expensive task more costly, more inefficient and take longer to execute.

I implore the legislature to amend this bill and designate its own internally staffed, highly skilled professionals to execute this mission and use this hard to come by funding as efficiently as possible.

Thank you for this opportunity to testify.

Peter Sternlicht
Pepe'ekeo, HI 96783

SB-1269-SD-1

Submitted on: 3/11/2025 7:08:22 AM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Frank Schultz	Individual	Oppose	Written Testimony Only

Comments:

I oppose this initiative.

SB-1269-SD-1

Submitted on: 3/10/2025 5:23:16 PM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Douglas Perrine	Individual	Support	Written Testimony Only

Comments:

Geothermal energy holds great promise for nearly unlimited amounts of firm carbon-free energy at a low price. We need to continue to explore this potential and hope that the reality of our pressing need for a source of clean renewable energy will outweigh the voices of NIMBYism. There are few other viable paths to our emission-free goals. Please pass SB1269.

SB-1269-SD-1

Submitted on: 3/10/2025 4:19:28 PM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Lu Ann Mahiki Lankford-Faborito	Individual	Support	Written Testimony Only

Comments:

Support in partnership with vetted community organizations.

SB-1269-SD-1

Submitted on: 3/12/2025 1:47:01 PM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Estelle Birch	Individual	Oppose	Written Testimony Only

Comments:

Toxic Geothermal is a Dinosaur – Solar is the Future

- **Cost Matters:** Solar is already **cheaper** than geothermal and continues to drop in price every day.
- **Water Waste:** Geothermal requires **millions of gallons** of water, depleting local resources.
- **No Risk, No Harm:** Solar eliminates the need for **evacuation plans, sinkholes, earthquakes, and contaminated wastewater**—all common risks with geothermal.

Safer Energy: No blowouts or emergency venting, no dangerous hydrogen sulfide, Pentane, or other hazardous chemicals, no industrial noise, no enhanced geothermal fracturing.

PLEASE OPPOSE THIS BILL!

Thank you,

Estelle Birch

SB-1269-SD-1

Submitted on: 3/12/2025 4:27:38 PM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Dephlia Rackley	Individual	Oppose	Written Testimony Only

Comments:

I oppose GEOTHERMAL IN OUR COMMUNITY. I live in Puna on Big Island and we have been gassed for 40 years. Stop this Green lie. It is not safe and it is poisoning our land, air and water. I strongly oppose this Bill.

SB-1269-SD-1

Submitted on: 3/12/2025 5:04:31 PM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
C Conda	Individual	Oppose	Written Testimony Only

Comments:

Geothermal has not worked in Puna. Please no more drilling and fracking. There are so many other ways to get renewable energy. Say no to Geothermal!

SB-1269-SD-1

Submitted on: 3/12/2025 5:01:53 PM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
jonathan jay	Individual	Oppose	Written Testimony Only

Comments:

just say NO to this boondoggle.

mahalo!

SB-1269-SD-1

Submitted on: 3/12/2025 5:30:55 PM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Sahara Lawrence	Individual	Oppose	Written Testimony Only

Comments:

I oppose

SB-1269-SD-1

Submitted on: 3/12/2025 5:31:28 PM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Jessica Kuzmier	Individual	Oppose	Written Testimony Only

Comments:

Aloha, I believe that investing in smaller scale solar will be less intrusive to the aina, and would bring more of a direct benefit to the people than a corporate geothermal project that will take its profits elsewhere. I believe geothermal will have too many risks to pollute the soil and air. Offshore wind, tidal, and even to some extent small-scale hydroelectric will do less harm. I would rather see more investment into green hydrogen if we are looking to explore bigger scale utilities here on the islands. Mahalo.

SB-1269-SD-1

Submitted on: 3/12/2025 7:42:03 PM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Gina Jones	Individual	Oppose	Written Testimony Only

Comments:

Oppose this bill

SB-1269-SD-1

Submitted on: 3/12/2025 7:10:25 PM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Susan Bambara	Individual	Oppose	Written Testimony Only

Comments:

Please VOTE NO and OPPOSE Toxic geothermal, which is a dinosaur - solar is much cheaper & getting even cheaper every day.. We have tons of son without using TOXIC FOREVER EXPLOSIVE CHEMICALS to frack out geothermal energy, which is NOT CLEAN!

Geothermal is NOT clean energy, but actually uses over 300 plus toxicforever chemicals fracked into the earth to get those steam emissions and when those FOREVER TOXIC CHEMICALS are done, they are kept in toxic holding ponds in perpetuity next to the plant, left seeping into the water table, the sea and for the one here on big island, untl forced by the public to cover the toxic chemical holding pond next to the plant, it sat uncovered killing droves of birds who fell in or drank the poison.

Geothermal and this proposal is yet another GRIFT, toxic to earth, people, animals and AINA.

NO MORE FILTHY GEOTHERMAL. NO MORE BOONDOGGLE MONEY GRIFTING DEALS falsley painted as 'green energy' when the only green is GRIFT money.

Thank you for hearing my plea and opposing this bill, remembering, too, please, that you folks are elected to be entrusted to represent the people's will for the aina, not private interests and grift.

PLEASE VOTE NO ON SB1269.

May peace, good health and common sense prevail,

Susan Bambara

Kurtistown

Testimony of Mililani Trask Esq.
Before the Committees on EEP & EDT
Thursday Mar 13, 2025 at 11 am

SB1269, SD1
Relating to Geothermal Resources

Chair Lowen, Chair Ilagan and the members of the committee,

Aloha mai kākou,

I am here to testify in strong support of SB1269 SD1. I testify as a Pele practitioner, as a lawyer who understands indigenous rights, as a Native Hawaiian who lives on Hawaii island and as an owner of the geothermal resources of our state. In Hawaii, 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 Hawaii 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 forward in the name of economic sustainability. I am an advisor to Waika Consulting, formed by IDG, in response to the state’s initiative to, not just locate geothermal energy, but to TAP IT and DEVELOP it for use by residents and businesses.

Energy fuels the economy. DBEDT exists to further economic development for Hawaii’s growth and diversification. Waika was chosen to advise DBEDT because DBEDT recognizes that this is a Hawaii-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 Aotearoa.

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 Hawaii 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 Hawaii. 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 Hawaii 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 Hawaii. 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 Hawaii island—and eventually all of Hawaii-- 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 forward.

Mahalo.

SB-1269-SD-1

Submitted on: 3/12/2025 8:21:17 PM

Testimony for EEP on 3/13/2025 11:00:00 AM

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

Comments:

Totally OPPOSED to spending any more millions on geothermal exploration.

It's old technology.

Investor groups warn that it's a RISKY INVESTMENT. Few private companies are interested.

Solar is so much cheaper & less toxic.

The only people benefiting from this boondoggle are the consultants. You might as well light the money on fire.

I'm a 40 year Hawai'i Isand resident who went to the first geothermal protest decades ago & haven't changed my mind yet, and know much more about its pitfalls now, too.

Please stop wasting our money!!!

SB-1269-SD-1

Submitted on: 3/12/2025 8:23:14 PM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Kimmer Horsen	Individual	Oppose	Written Testimony Only

Comments:

Chairs and Senators,

I Kimmer Horsen OPPOSE SB1269 ~ "Unspecified Millions" for useless Geothermal Explorations that only benefits consultants! We've already spent multi-millions on this dinosaur boondoggle!

*SB1269 & HB1307 are BAD BILLS ~ WASTING \$20 MILLION DOLLARS Plus, "Unspecified Millions" More of our tax money on expensive & toxic geothermal 'exploration' to keep consultants in business.

With Federal funding being cut across the board, we can't afford this foolishness!

* TALKING POINTS:

Toxic geothermal is a dinosaur - solar is much cheaper & getting cheaper every day.

Geothermal takes millions of gallons of water.

With solar, 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. Cleaner, cheaper.

#

More Info:

SB1269 https://www.capitol.hawaii.gov/sessions/session2025/bills/SB1269_SD1_.htm

* HB1307 ~ No Hearings Scheduled Yet

*** IF YOU ARE A BENEFICIARY OF DHHL YOU CAN ALSO LET THEM KNOW WHAT YOU THINK NOW!

* HERE: <https://dhhl.hawaii.gov/hhc/hhc-contact/>

*MORE INFO:

The Dept. of Hawaiian Home Lands/DHHL wants \$20 million bucks from the legislature for Geothermal Exploration on Hawai'i Island at South Point, Kawaihae, & Humu'ula/Pohakuloa

A'ole

Kimmer Hørsen

SB-1269-SD-1

Submitted on: 3/12/2025 9:00:52 PM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Sherry Pollack	Individual	Comments	Written Testimony Only

Comments:

People and communities must be at the table where decisions are made about where and if renewable infrastructure is being considered.

SB-1269-SD-1

Submitted on: 3/13/2025 9:37:07 AM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Maple breitbach	Individual	Oppose	Written Testimony Only

Comments:

I oppose geothermal.

SB-1269-SD-1

Submitted on: 3/13/2025 10:51:40 AM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Richard Ha	Individual	Support	Written Testimony Only

Comments:

I support the use of the Department of Business Economic Development and Tourism (dbedt) as the lead agency, because they take a broad view of the problem and results desired. This bill emphasizes food security, and this bill is the only one that mentions food security as a desired result.

SB-1269-SD-1

Submitted on: 3/13/2025 11:10:00 AM

Testimony for EEP on 3/13/2025 11:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Selah Levine	Individual	Oppose	Written Testimony Only

Comments:

I strongly oppose geothermal in Hawaii. Solar is cheaper, safer and cleaner. Geothermal is expensive, dangerous and toxic to the environment.