



# HAWAII STATE ENERGY OFFICE STATE OF HAWAII

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Testimony of  
**MARK B. GLICK, Chief Energy Officer**

before the  
**HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION**

Tuesday, March 17, 2026  
9:15 AM  
State Capitol, Conference Room 325 and Videoconference

In Support of  
**SENATE BILL NO. 3081, SD1**

**RELATING TO A PROGRAM TO CHARACTERIZE THE POTENTIAL OF UNDERGROUND  
ENERGY RESOURCES STATEWIDE.**

Chair Lowen, Vice Chair Perruso and Members of the Committee, the Hawai'i State Energy Office (HSEO) strongly supports Senate Bill No. 3081, SD1 as a priority Administration measure to accelerate Hawai'i's energy transition and stimulate economic development throughout the state. If appropriately funded, SB 3081, SD1 would enable the HSEO to administer a statewide Geothermal Resources Characterization Program supported by the Hawai'i Groundwater and Geothermal Resources Center at the University of Hawai'i.

Conducting research via slim-hole test wells is a high priority of Hawai'i's updated energy strategy because of the potential to clearly identify where geothermal resources might exist, with a focus on Maui, Hawai'i, and O'ahu. The ultimate goal is to stimulate private sector investment in producing safe, reliable, and affordable firm renewable energy that can make Hawai'i energy self-sufficient, reduce electricity costs and carbon emissions, and create jobs. HSEO's updated energy strategy indicates that better understanding of the location of geothermal potential greatly improves the potential to meet the 100% renewable portfolio targets on Maui, Hawai'i, and possibly even O'ahu.

The measure will also inform where underground water resources can be found and the longer-term potential for subsurface carbon sequestration. Further provisions provide accountability and transparency through HSEO's preparation and submission of a progress report to the Legislature with research outcomes and any proposed legislation emanating from the research findings.

To effectively and broadly conduct this research, HSEO requests no less than \$6,000,000 to carry out this program, an amount that would enable up to two slim-hole wells.

This measure is informed by HSEO's analysis of market gaps in firm renewable resources and long duration storage, especially geothermal and pumped hydro. Hawai'i is fortunate to have subsurface heat from geothermal energy remaining from Earth's formation that is stored in rocks and fluids. Through deep wells, the heat can be brought to the surface as steam to drive turbines that generate electricity. However, it is not economically feasible to procure geothermal development through the competitive bidding process without first providing evidence of geothermal potential in specific locations. Without such evidence, developers must drill multiple, costly exploration wells with the risk that they may not discover a reliable geothermal resource, if they decide to participate at all. The uncertainty is passed on to ratepayers via a risk premium added to the developer's bid. This measure would mitigate the risk premium and increase production royalties to Hawai'i through State-sponsored slim-hole research that first identifies locations where hot water is sufficient for electric power generation.

In addition to the economic development and energy self-sufficiency benefits of geothermal, the Center for Strategic and International Studies credits modern geothermal power plants as having insignificant greenhouse gas (GHG) emissions with life-cycle emissions six to twenty times lower than natural gas and four times lower than solar photovoltaic (PV) energy due to the materials used to construct the plants.

Concurrently, HSEO will engage energy stakeholders at the community level during 2026 and beyond to gain insight on how and where geothermal development can appropriately take place in ways that meaningfully benefit the affected communities.

Given the importance of geothermal in helping Hawai'i meet its firm renewable needs, government support to identify areas of geothermal potential is an appropriate first step towards incentivizing private sector investment and development of state-of-the-art geothermal resources. With the appropriate level of funding, SB 3081, SD1 would provide that needed support.

Thank you for the opportunity to testify.