



# 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 & ENVIRONMENTAL PROTECTION**

Thursday, February 1, 2024  
9:30 AM  
State Capitol, Conference Room 325 and Videoconference

In Support of  
**HB 2105**

## **RELATING TO RENEWABLE ENERGY.**

Chair Lowen, Vice Chair Cochran, and Members of the Committee, I am writing in support of HB 2105 which provides resources to conduct slim-hole resource characterization to assist identification of geothermal energy throughout Hawai'i.

In 2023, the Hawai'i State Energy Office (HSEO) analyzed market gaps in firm renewable resources and long duration storage, especially geothermal and pumped hydro, and developed policies and pursued funding opportunities to fill those gaps. Geothermal energy is heat that was generated during the planet's formation stored in rocks and fluids and brought as steam to the earth's surface using deep wells. The steam drives turbines to generate electricity.

The Center for Strategic and International Studies notes that like solar and wind energy, modern geothermal power plants have 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.

Accordingly, it is HSEO's energy strategy to prioritize slim-hole test wells to understand where geothermal resources might exist on Maui, Hawaii, and Oahu. The ultimate goal is to stimulate private sector investment to ensure safe, reliable and affordable firm renewable energy throughout Hawai'i.

Concurrently, HSEO will engage energy stakeholders at the community level during 2024 and beyond to gain insight on how and where geothermal development can appropriately take place in ways that meaningfully benefit the affected communities.

Several obstacles have limited Hawai'i from fully developing its geothermal potential. Geothermal exploration is commercially risky and expensive. Developers have to drill multiple exploration wells before finding a reliable geothermal resource, and sometimes they do not find one at all. Private investors usually cannot mitigate and manage this risk independently.

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. HB 2105 provides that needed support.

Thank you for the opportunity to testify.