



Geothermal Energy Policy

Policy Statement

The Sierra Club, Hawai'i Chapter recognizes that, among the potential energy sources available to Hawai'i, geothermal energy represents an important resource. The Club supports the diversification of Hawai'i's energy options for our island communities and supports the careful utilization of a local resource. Additional development of geothermal resources should be considered within the framework of a sound state-wide energy policy that evaluates different sources of alternative energy and emphasizes the importance of energy conservation.

The Club cautions that exploitation of geothermal resources can result in detrimental impacts on the environment and public health. Among these are the emissions of toxic gases and chemical substances that could result in the degradation of air quality, pollution of surface waters and groundwater, damage to living organisms, and hazards to public health. Additional problems arise from the heavily industrial character of geothermal operations for electrical generation, and the frequent occurrence of exceptional natural, scenic, cultural and archaeological values in geothermal resource areas.

This factual situation leads the Sierra Club, Hawai'i Chapter, to adopt a favorable but cautious position with regard to further development of geothermal resources, with the following considerations:

1. Communities and concerned citizens must have an early and direct role in the planning and decision-making processes associated with geothermal development. Developers must engage the public in an inclusive, open and transparent process that fully discloses the potential benefits, risks and proposed mitigation of all activities associated with development and use of the resource. Tools include rigorous environmental review that analyzes alternatives and the cumulative effects of environmental, social, economic, environmental justice and cultural impacts; public hearings and other opportunities for public participation; and environmental permitting requirements. Anticipated energy uses should be subject to disclosure and concurrent review.

2. Geothermal exploration, development, and resource use are industrial activities that may affect air, water and land resources, and negatively impact nearby populations. We urge the following:

- Geothermal exploration, development and permitting should be based at all government levels on appropriate data relating to anticipated environmental and social impacts. Objective review of the long-term sustainability of the geothermal resource should be conducted, with access to technical and proprietary data needed for such analyses.
- The adoption of appropriate environmental and social safeguards, including appropriate buffer zones, for proposed geothermal projects;
- The gathering and public disclosure of pre-development baseline data and monitoring of environmental impacts and cumulative effects, to include real-time emissions monitoring data available to the public and civil defense personnel. Monitoring sensors should be placed in accordance with good environmental practice, with strong consideration of community input;
- The development of a site-specific emergency response plans with full input from community and civil defense personnel;
- The use of directional drilling and other technologies that minimize surface disturbance of resource production areas;
- The containment of geothermal steam and brines and accompanying gases and chemical components should be within enclosed production systems;
- The use of geothermal reservoir management procedures that will allow a balance to be maintained, where possible, between field recharge and fluid withdrawal;
- Avoidance of areas containing valuable archaeological or cultural resources.
- No development on lands included in or adjacent to federal, state, or local park systems; in wildlife refuges and management areas; or in areas known to provide habitat for rare or endangered species.

This policy approved by Sierra Club Hawai'i Chapter Executive Committee August, 2012