



# Hawai'i Natural Energy Institute Research Highlights

Energy Policy & Analysis

NELHA Energy Plan

**OBJECTIVE AND SIGNIFICANCE:** This project supports Natural Energy Laboratory of Hawai'i Authority (NELHA)'s development of an updated energy program that will support the state's energy goals. The previous energy plan focused on how NELHA could use in-house resources to obtain funding for demonstrations of distributed energy resources. Based on the recent legislative request, this set of recommendations is more broadly focused on what additional resources will be needed to allow NELHA to be more effective in supporting the state's energy goals.

**BACKGROUND:** The enabling legislation creating NELHA is contained in Section 227D-2 which provides for the "Establishment of the natural energy laboratory of Hawai'i authority". "The purpose of the natural energy laboratory of Hawai'i authority shall be to facilitate research, development, and commercialization of natural energy resources and ocean-related research, technology, and industry in Hawai'i and to engage in retail, commercial, or tourism activities that will financially support that research, development, and commercialization at a research and technology park in Hawai'i." Based on this legislation, NELHA leadership was asked by the legislature to determine how NELHA could best support the state's energy goals. As a result, NELHA requested HNEI's support in determining paths forward in responding to this question.

**PROJECT STATUS/RESULTS:** The nature of the legislative request required an evaluation of current NELHA capabilities. Effectively, NELHA is a landlord for tenant companies with its chief contribution being a utility provider, specifically ocean water, including water pumped from below the thermocline. As a result, NELHA has considerably more capabilities in ocean sciences as compared to energy systems.

HNEI has developed draft recommendations to NELHA as to how it can best respond to the legislative request. Development of the draft entailed interviews with various stakeholders and NELHA board members to better incorporate a range of possible energy initiatives. A range of suggestions were made by the interviewees. In particular, a number of them raised the idea of NELHA obtaining Department of Land and Natural Resources land to

find mechanisms to spur the growth of geothermal energy on the Big Island.

The draft has been reviewed and commented upon by NELHA leadership. As a result, a draft presentation has been presented to the NELHA board to obtain their comments and critique. Specific early commentary by the Board was to discuss in greater detail the potential for utilizing state lands under NELHA for further development. An additional set of comments discussed the need for NELHA to find mechanisms for improved outreach to local communities in order to include them in some new projects. Based on these comments, additional meetings will be held to expand on these ideas.

Following these meetings, a revised draft set of recommendations will be submitted to NELHA management. The current plan is to receive comments from NELHA management and make appropriate revisions to the recommendations. HNEI anticipates that the final set of recommendations will be submitted to NELHA leadership by the end of the year.

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*Contact:* Richard Rocheleau, [rochelea@hawaii.edu](mailto:rochelea@hawaii.edu)

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