



# University of Hawaii at Manoa

## Environmental Center

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HB 3640

MAKING AN APPROPRIATION FOR A DEMONSTRATION OTEC PLANT AT KEAHOLE POINT

House Committee on  
Energy and Environmental Protection

Public Hearing - February 3, 1992  
8:00 AM, Rm 1310

By

John T. Harrison, Environmental Center  
Hub Hubbard, Hawaii Natural Energy Institute

HB 3640 would appropriate funds from the general revenues of the state for the operation of a demonstration closed cycle OTEC plant at Keahole Point, Hawaii.

Our statement on this bill does not constitute an institutional position of the University of Hawaii.

We strongly support the vigorous pursuit of renewable energy implementation in Hawaii, particularly those methodologies such as OTEC which are ideally suited to Hawaiian environments. However, operation of a demonstration closed cycle OTEC plant at this time is superfluous. This technology already has been demonstrated locally with the successful deployment and operation of the Mini-OTEC barge off of Keahole Point in July of 1979. Since that time, most effort locally has been devoted to development of open cycle OTEC technology and improvement of ancillary systems for OTEC deployment.

A 50 MWe closed cycle OTEC plant was proposed in the early 1980s for emplacement adjacent to HEI's Kahe Point generating station on Oahu. A substantial amount of the environmental and engineering survey and development work needed for site specific OTEC deployment already exists for this site. Furthermore, evolution of new technologies utilizing slant drilling techniques to avoid intake and discharge pipeline logistic problems is nearly mature. We suggest that a more productive use of these funds might be the demonstration of slant drilling at Kahe Point, leading to implementation of a commercially significant OTEC facility.