



# UNIVERSITY OF HAWAII SYSTEM

## Legislative Testimony

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Testimony Presented Before the

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION and  
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

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By

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SB 3161 SD3 – RELATING TO RENEWABLE ENERGY

Chair Morita, Chair Herkes, Vice-Chair Evans, Vice Chair Schatz, and Members of the Committees:

I am Dr. Richard Rocheleau, Director of the Hawaii Natural Energy Institute of the University of Hawai'i at Mānoa. We have specific comments on the following sections of SB 3161 SD3:

Hawaii Renewable Hydrogen Program (Section 3):

This section establishes the Hawaii Renewable Hydrogen Program within DBEDT to coordinate the State's transition to a renewable hydrogen economy. The provisions of Section 3 lay out a comprehensive set of activities in support of the proposed Hydrogen program ranging from research and development to strategic partnerships with the private sector, as well as education and outreach and plans for implementation. HNEI supports the strategic vision projected in this section but wishes to emphasize that for commercial scale deployment to become economically and technically feasible there will be a continuing need to invest significant resources in the R&D effort in developing the requisite renewable energy sources and the technologies to convert them into commercially viable hydrogen systems.

Establishment of the Hydrogen Investment Capital Special Fund (Section 4): HNEI has been very successful in building a world-class “Renewables to Hydrogen” program with over 20 years of support from the US Department of Energy. More recently, HNEI and other organizations such as the Hawaii Center for Advanced Transportation Technology have also been very successful in developing public-private partnerships attracting several major federally-funded projects that are important to the state of Hawaii in developing its indigenous energy systems. To continue this progress, the State needs to invest significant resources in its energy future. If we are to utilize our abundant renewable resources to produce hydrogen and realize the vision of a hydrogen economy, then we must invest in performing the R&D to develop and deploy the necessary technology. Section 4 of this bill establishes the Hydrogen Investment Capital Special Fund which includes funding from a variety of sources including appropriations made by the legislature. In making its decisions, the legislature should note that the federal government is investing billions of dollars in multi-year technology development programs to progress a national transition to a hydrogen economy. Many of these programs involve the utilization of renewable energy sources. Hawaii currently enjoys a good technical capability in renewable hydrogen technology and is strategically positioned to capture federal renewable hydrogen program dollars which would also help to develop Hawai'i's renewable energy sources. We have an immediate and urgent requirement for cost-sharing funds for federally-funded hydrogen projects that are currently being proposed and planned. This is particularly important due to the recent success of HNEI and others in attracting multi-million dollar grants, all which require cost share. It should be emphasized that State dollars can leverage up to five times their amount in federal dollars depending on the degree of risk for a particular project.

Based on the tremendous potential to accelerate Hawai'i's development of its renewable energy resources, and their leverage of federal program dollars, HNEI strongly supports the hydrogen program provided by SB 3161 SD3

Thank you for the opportunity to testify