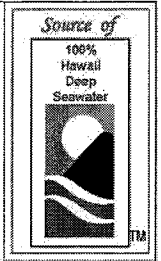




# **NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY**

An Attached Agency of the Department of Business, Economic Development & Tourism, State of Hawaii



Statement of  
**RONALD N. BAIRD**  
**Chief Executive Officer**  
Natural Energy Laboratory of Hawaii Authority  
before the  
**SENATE WAYS AND MEANS COMMITTEE**  
Tuesday, February 12, 2008  
2:45 P.M.  
State Capitol, Conference Room 414

in consideration of

**SB 2845 SD 1**  
**RELATING TO REORGANIZATION OF STATE AGENCIES.**

Chair Baker, Vice-Chair Tsutsui, and members of the Senate Ways and Means Committee, I am Ron Baird, Chief Executive Officer of the Natural Energy Laboratory of Hawaii Authority.

I want to speak to you today on the important subject regarding the reorganization of state agencies specifically as the subject relates to energy. One way or another, from the investment banking business to the traditional petroleum industry, to working on a gas-to-liquids conversion plant with the world leader Sasol, I have been involved in both domestic and international energy for nearly 40 years. Over 30 years ago, we received a wake-up call when OPEC embargoed the United States, which had just become a net importer of oil the year before, and prices of oil and gas skyrocketed to \$9.00 or \$10.00 per barrel. Several days ago, oil closed over \$100 per barrel.

Hawaii responded in the 1970s by forming the Natural Energy Laboratory of Hawaii, which later became NELHA, to promulgate energy research and development from the ocean. We all know, but tend to forget, that the ocean is the largest reservoir of solar power in the world. Brilliant financial engineering by OPEC in the mid-1980's drove the price of oil down, almost to single digit prices. This enabled world economies to recover, increase their usage of oil, and reduce their own supplies of petroleum. This has enhanced the value of OPEC reserves, which have nearly 30 years' remaining life at current *world* consumption rates and prices!

But, that down turn in oil prices led to false hopes that prices would stay low forever:

- 1.) Look at our own government oil price forecasts back then.
- 2.) Alternative power projects such as ocean thermal energy conversion at NELHA were no longer funded.
- 3.) Research into alternative sources stopped or slowed so dramatically that progress was virtually nil as it pertained to methodological improvements.

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4.) A new generation of citizens matured without ever feeling the financial pain of rising oil prices, gasoline prices, and just fatalistically accepting the situation as it is.

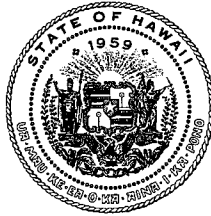
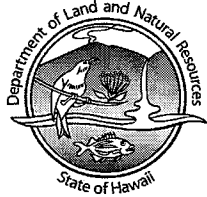
I have long advocated that our national approach to the severe problem facing us regarding energy is too lackadaisical. In the past 30 years, we have built an economy based on *services*, not the production of *goods*. We are a developed economy, one that cannot afford to pay as much for energy (of any kind) compared to a *developing* economy. The current majority of our citizens have not been through a situation where one has to make a decision of putting gas in the tank to get to work or paying the electric bill versus buying a new computer game or big truck.

What is needed is an energy program similar to the Manhattan Project during the Second World War. We need to galvanize awareness, we need to cut through red tape, and we need action, not words.

I personally believe that all energy activities within the State should be within a single department – a Department of Energy. This department would have as its single purpose the evaluation, financing, construction, and control of energy activities that benefit the citizens of this great state. It would have just this single purpose and mission: free Hawaii from fossil fuels and their resultant high costs to all the citizens. Ideally, such a department would be a stand alone department, but that would require a great leap of faith to authorize and create. An alternative would be for the legislature to create an Energy Authority. An authority similar to NELHA would have statewide power granted it by the legislature to engage in intense and rapid alternative energy development. It would answer ideally to the legislature as to its progress in achieving the goals set for it.

If you have any questions that I might be answer, I would be happy to take and answer them now to the best of my ability. Thank you again for your time.

LINDA LINGLE  
GOVERNOR OF HAWAII



**STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES**

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HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

**TESTIMONY OF THE CHAIRPERSON  
OF THE BOARD OF LAND AND NATURAL RESOURCES**

**on Senate Bill 2845, Senate Draft 1 – Relating To Reorganization Of State Agencies**

**BEFORE THE SENATE COMMITTEE ON  
WAYS AND MEANS**

**February 21, 2008**

Senate Bill 2845, Senate Draft 1 directs the Legislative Reference Bureau to conduct a study of agencies relating to environmental protection and energy self-sufficiency and to identify the most effective and efficient options of reorganizing state agencies tasked with issues related to energy and environmental protection appropriately. The Department of Land and Natural Resources (Department) does not support this measure as the Department believes that there are other initiatives that could accomplish what this measure intends, that have not yet had the chance to come to fruition.

The Department recognizes that there are ongoing actions that are addressing planning & sustainability on multiple fronts. One example is that the Department of Business, Economic Development, and Tourism is currently developing a comprehensive renewable biofuels framework, pursuant to Act 253, Session Laws of Hawaii, 2007.. Additionally, an agreement was signed January 28, 2008 for a partnership between Hawaii and the United States Department of Energy to make Hawaii a world model for a clean energy economy. It is unclear how the establishment of a new department would affect such ongoing projects.

LINDA LINGLE  
Governor



SANDRA LEE KUNIMOTO  
Chairperson, Board of Agriculture

DUANE K. OKAMOTO  
Deputy to the Chairperson

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WRITTEN TESTIMONY OF SANDRA LEE KUNIMOTO  
CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS  
FEBRUARY 21, 2008  
9:30 A.M.

SENATE BILL NO. 2845, S.D.1  
RELATING TO REORGANIZATION OF STATE AGENCIES

Chairperson Baker and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill No. 2845, S.D.1 that directs the Legislative Reference Bureau to conduct a study on Hawaii's options to reorganize state agencies tasked with issues relating to energy self-sufficiency and security and environmental protection. The Department of Agriculture believes that the bill is premature and recommends that Act 253 be allowed to proceed to completion before a reorganization study is commissioned. We also wish to note that the requirement that the Legislative Reference Bureau complete the study 20 days before the convening of the 2009 legislative session will preclude the inclusion of the findings and recommendations from Act 253 in the report to the legislature.

The Department of Business, Economic Development and Tourism (DBEDT) is currently developing a comprehensive renewable biofuels framework, pursuant to Act 253 that was passed by the 2007 legislature. Upon completion, the master plan will include a Hawaii renewable biofuels program to manage the State's transition to energy self-sufficiency based in part on biofuels for power generation and transportation. The components of the plan include establishing strategic partnerships for the research, development, testing, and deployment of renewable biofuels technologies and production of biomass crops; evaluation of Hawaii's potential to rely on biofuels as a

significant renewable energy resource; supporting biofuels demonstration projects, including infrastructure for production, storage, and transportation of biofuels; promoting Hawaii's renewable biofuels resources to potential partners and investors for development in Hawaii as well as for export purposes; and developing a plan or roadmap to implement commercially viable biofuels development. We anticipate that completion of the plan will provide a better understanding of the private sector's needs as well as long-term commitment to biofuels.

Completion of the plan will identify many of the key issues that need to be addressed and should be the basis for changes in government operations to support energy self-sufficiency and environmental protection.