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STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2360
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Date: 03/21/2016
Time: 01:15 PM
Location: 229
Committee: Senate Education Senate
Transportation and Energy

Department: Education

Person Testifying: Kathryn S. Matayoshi, Superintendent of Education

Title of Bill: HB 2569, HD2 RELATING TO ENERGY.

Purpose of Bill: Requires DOE to: (1) Establish a goal of becoming net-zero with respect to energy use by January 1, 2035; (2) Establish microgrid pilot projects at public schools that also serve as emergency shelters; and (3) Expedite the cooling of all public school classrooms. Authorizes the issuance of general obligation bonds and the use of funds from the Green Infrastructure Loan Program to implement cooling measures in public school classrooms. (HB2569 HD2)

Department's Position:

The Hawaii State Department of Education (Department) is pleased to testify in support of HB 2569, HD2.

The Department supports the goal of becoming net-zero with respect to energy use by January 1, 2035. We will have constructed photo voltaic (PV) systems on approximately 120 of our 256 schools statewide by the end of 2017. Those PV systems were financed through power purchase agreements (PPA) under the old NEM program. However we are concerned that the recent Public Utility Commission ruling ending the Net Energy Metering (NEM) program will make it very difficult to finance future PV systems under a PPA and would need capital improvement funds instead.

This bill also provides funding for air conditioning (AC), heat abatement and related energy efficiency measures at public school classrooms. We thank you for your support and defer to the Department of Budget and Finance to offer guidance on the best method to finance these worthwhile efforts.

Thank you for the opportunity to testify in support of HB 2569, HD2.



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March 21, 2016

Senator Michelle N. Kidani, Chair
Senator Breene Harimoto, Vice Chair
Senate Committee on Education

Senator Lorraine R. Inouye, Chair
Senator Mike Gabbard, Vice Chair
Senate Committee on Transportation and Energy

Comments, Concerns and Proposed Amendments to HB 2569, HD2 Relating to Energy. (PART I: Requires DOE to establish a goal of becoming net-zero with respect to energy use by January 1, 2035; and establish microgrid pilot projects at public schools that also serve as emergency shelters; and PART II: Expedite the cooling of all public school classrooms; by authorizing the issuance of general obligation bonds and the use of funds from the Green Infrastructure Loan Program to implement cooling measures in public school classrooms.)

EDU/TRE Hearing: Monday, March 21, 2016, 1:15 p.m., Conf. Rm. 229

The Land Use Research Foundation of Hawaii (LURF) is a private, non-profit research and trade association whose members include major Hawaii landowners, developers and a utility company. One of LURF's missions is to advocate for reasonable, rational and equitable land use planning, legislation and regulations that encourage well-planned economic growth and development, while safeguarding Hawaii's significant natural and cultural resources and public health and safety.

LURF appreciates the opportunity to express its **comments, concerns and proposed amendments to Part I**, of HB 2569, HD2, as discussed below; and its **support for only Part II**, of this measure, relating to expediting the cooling of all Department of Education (DOE) public school classrooms, by authorizing the issuance of general obligation bonds and the use of funds from the Green Infrastructure Loan Program to implement cooling measures in public school classrooms.

SB 2569, HD2. The current measure provides as follows:

Part I. Would require the Department of Education (DOE) to establish a goal of becoming net-zero with respect to energy use by January 1, 2035, with **the only alternatives being** *“producing as much renewable energy as the department consumes across all public school facilities”* and to establish microgrid pilot

projects at public schools that also serve as emergency shelters to provide power for the operations of campus facilities and be capable of operation without reliance on the existing electric grid; and

Part II. Expedite the cooling of all public school classrooms, by authorizing the issuance of general obligation bonds and the use of funds from the Green Infrastructure Loan Program to implement cooling measures in public school classrooms, including, among other things, capital improvement program equipment and costs for air conditioning, *energy-efficient lighting, and other energy-efficiency measures* related to heat abatement at public schools.

LURF's Position. While LURF **supports only Part II, of this measure**, relating to expediting the cooling of all Department of Education (DOE) public school classrooms,

However, LURF also has, the following **comments, concerns and suggested amendments to Part I** of this bill, as follows:

- The “Sustainable Schools Initiative” establishes a goal of becoming net=-zero with respect to energy use, WITHOUT addressing *energy conservation, energy-efficient lighting, other energy-efficiency measures.*

Proposed Amendments to PART I:

- The *Sustainable Schools Initiative* should be **amended to include:** *energy conservation, energy-efficient lighting, other energy-efficiency measures.*
- The group responsible for examining the pilot projects, and identify how to maximize microgrid inclusion at all DOE public schools, should be **amended to include:** *the Public Utilities Commission, the State Consumer Advocate and the electric utilities.*
- The DOE net zero energy goal should also be **amended to:** *require that the DOE take into account unintended negative consequences, by, among other things, coordination with the electric utilities and other energy plans and policies; resolving technical integration challenges; addressing any negative impacts on other renewable energy generators and electric customers; and to allow DOE's microgrid pilot project to be capable of both “on-grid” and “off-grid” operation.*

For the above reasons, LURF **supports the amendment of HB 2569, HD2**, and respectfully urges your favorable consideration.

Thank you for the opportunity to present testimony regarding this matter.

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Statement of
Ryan D. Hurley, Esq.

before the
SENATE COMMITTEE ON EDUCATION
and the
SENATE COMMITTEE ON TRANSPORTATION AND ENERGY

Monday, March 21, 2016 1:15 p.m.
State Capitol, Conference Room 229

in consideration of HB 2569 HD2
RELATING TO ENERGY

Chair Kidani, Chair Inouye, Vice Chair Harimoto, Vice Chair
Gabbard, and Members of the Committee,

I support the intent of House Bill 2569, HD2, which requires the Department of Education (DOE) to: (1) Establish a goal of becoming net-zero with respect to energy use by January 1, 2035; (2) Establish microgrid pilot projects at public schools that also serve as emergency shelters; and (3) Expedite the cooling of all public school classrooms, by authorizing the issuance of general obligation bonds and the use of funds from the Green Infrastructure Loan Program to implement cooling measures in public school classrooms.

After thorough review, I prefer the language in Senate Bill 3126 which **funds classroom cooling** through \$100 million in general revenue (from unexpected federal Medicaid reimbursements) and \$30 million in general obligation bonds, instead of borrowing the funds from the Hawaii Green Infrastructure Special Fund (GEMS).

The GEMS program is funded by a \$150 million dollar bond backed by the "Green Energy Infrastructure Fee," approved by the Public Utilities Commission and collected on monthly utility bills. The original intent was to quickly deploy the \$150 million to low-credit homeowners, renters and non-profits, to install clean

energy improvements. Once installed, the customer could pay their loan back directly or utilize the energy savings on their utility bill to pay the loan back. Regardless the method, the customer would **REPAY** their loan, which in turn would pay for bond interest, principle, and various costs associated with the program. Utilizing these ratepayer-backed monies in any manner that **does not sufficiently account for the necessary bond interest, principle as well as various costs associated with operating the GEMS program** would be equivalent to a new tax on ratepayers and set a bad precedent of using ratepayer funds for non-utility purposes.

Furthermore, despite my strong support of solar technology, the concept of using "solar-powered air conditioning solutions" that utilize "solar panels and batteries without the need to connect to the electric grid" to cool our schools, as HB 2569 HD2 suggests, warrants thorough review not included in this legislation. Hawaii's individual non-interconnected island grids have some of the highest levels of distributed solar penetration in the country. This means that during peak solar hours (10am - 2pm) Hawaii's electrical grids often have **too** much energy and are forced to curtail other forms of energy. Taking any school-cooling load off the grid via battery storage would eliminate any possible benefits this load could provide (as a dispatchable resource) to the grid. By keeping school cooling systems connected to the grid, schools could help to absorb the utility's excess daytime load, therefore reducing the need to curtail other energy sources during peak solar times.

Also, if battery storage technology is to be used to help integrate the Cool Schools Program (especially ratepayer funded infrastructure), such technology must be connected to the grid so all ratepayers can receive the ancillary benefits (energy storage, frequency modulation, voltage regulation, etc.) provided by the battery infrastructure.

With respect to other aspects of HB 2569, HD2, I support parts (1) Establishing a goal of becoming net-zero with respect to

energy use by January 1, 2035; and (2) Establishing microgrid pilot projects at public schools that also serve as emergency shelters.

Thank you for the opportunity to testify.

Ryan D. Hurley