



**STATE OF HAWAII  
BOARD OF EDUCATION**  
P.O. BOX 2360  
HONOLULU, HAWAII 96804

**House Committee on Finance**

Tuesday, March 1, 2016  
3:00 P.M.  
Hawaii State Capitol, Room 308

**House Bill 2569, HD1, Relating to Energy**

Dear Chair Luke, Vice Chair Nishimoto, and Members of the Committee:

The Board of Education ("Board") voted to testify in support of House Bill 2569 HD1, which would authorize the issuance of general bonds and the use of funds from the Green Infrastructure Loan Program to implement cooling measures in public school classrooms, as well as require the Department of Education ("Department") to establish a goal of becoming net-zero with respect to energy use, establish microgrid pilot projects at public schools that also serve as emergency shelters, and expedite the cooling of all public school classrooms.

The Board has been actively monitoring the Department of Education's efforts to address heat abatement in Hawaii's schools and has been encouraging partnerships to bring relief to students, teachers, and staff as quickly as possible. The Board supports any funding that will allow the Department of Education to reach the goal of installing air conditioning in 1,000 classrooms by the end of the 2016 calendar year and to continue its heat abatement efforts.

Section 2 of this measure, which requires the Department to establish a goal of becoming net-zero with respect to energy use by January 1, 2035, aligns with Board Policy 301.9 (formerly Board Policy 6710), which requires the Department to adopt a clean energy goal of utilizing 90% on-site renewable energy by 2040. The Board supports any program that will allow the Department of Education to reach its long-term sustainability, renewable energy, and energy efficiency goals.

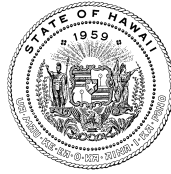
Thank you for this opportunity to testify on behalf of the Board.

Very truly yours,

A handwritten signature in cursive script that reads "Lance A. Mizumoto".

Lance A. Mizumoto  
Chairperson

DAVID Y. IGE  
GOVERNOR



WESLEY K. MACHIDA  
DIRECTOR

RODERICK K. BECKER  
DEPUTY DIRECTOR

EMPLOYEES' RETIREMENT SYSTEM  
HAWAII EMPLOYER-UNION HEALTH BENEFITS TRUST FUND  
OFFICE OF THE PUBLIC DEFENDER

**STATE OF HAWAII**  
**DEPARTMENT OF BUDGET AND FINANCE**

P.O. BOX 150  
HONOLULU, HAWAII 96810-0150

ADMINISTRATIVE AND RESEARCH OFFICE  
BUDGET, PROGRAM PLANNING AND  
MANAGEMENT DIVISION  
FINANCIAL ADMINISTRATION DIVISION  
OFFICE OF FEDERAL AWARDS MANAGEMENT (OFAM)

**TESTIMONY BY WESLEY K. MACHIDA**  
**DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE**  
**TO THE HOUSE COMMITTEE ON FINANCE**  
**ON**  
**HOUSE BILL NO. 2569, H.D. 1**

March 1, 2016  
3:00 p.m.

**RELATING TO ENERGY**

House Bill (H.B.) No. 2569, H.D. 1, is a two-part bill that accelerates the cooling of Hawaii public classrooms, establishes energy usage goals for the Department of Education (DOE) and requires the DOE to establish at least one microgrid pilot project at public schools that serve as emergency shelters in each county.

Specifically, Part I of the bill:

- Requires the DOE to establish an energy use goal of net-zero by January 1, 2035 across all public school facilities, sets the amount and value of energy consumed by the DOE during FY 2015-16 as the benchmark for measuring progress, and requires the DOE to submit annual reports to the Legislature each session;
- Requires the DOE to establish at least one microgrid pilot project at public schools that serve as emergency shelters in each county which will provide power to operate the campus without reliance on the existing electric grid, and requires the DOE to report to the Legislature in 2018 with findings and recommendations; and
- Requires the DOE to expedite the cooling of all public school classrooms, requires DOE contractors to maximize energy efficiency and installation and operating cost

savings over the life of the project, and requires the DOE to submit progress reports to the Legislature.

Part II of the bill is identical to H.B. No. 2726 which is the Administration's emergency appropriation measure to accelerate the cooling of public school classrooms and reduce the DOE's energy costs. Part II specifically:

- Appropriates special funds from the Hawaii Green Infrastructure Special Fund to provide a loan to the DOE and the Department of Budget and Finance (B&F) for the equipment and installation of air conditioning, energy efficient lighting and other energy efficiency measures;
- Authorizes DOE and B&F to borrow from the Green Infrastructure Loan Program and authorizes DOE to expend the funds for the equipment and installation of air conditioning, heat abatement equipment, energy efficient lighting and other energy efficiency measures;
- Appropriates general obligation (G.O.) bond funds to DOE for the equipment and installation of air conditioning, heat abatement equipment, energy efficient lighting and other energy efficiency measures; and
- Appropriates general funds to B&F to make the initial loan repayment to the Green Infrastructure Loan Program.

B&F defers to the DOE on Part I of the bill. B&F strongly supports Part II of the bill which will allow DOE to more expeditiously address heat abatement concerns, while employing energy efficiency measures to offset increased energy needs. This measure will allow such projects to be implemented as quickly as possible and with least disruption to the affected schools to provide improved learning and teaching environments for public school students and teachers.

This measure proposes to primarily utilize funds loaned from the Green Infrastructure Loan Program, with G.O. bond funds also requested. Bond Counsel has also opined to us that the DOE may be a borrower of a green infrastructure loan.

Using the Green Infrastructure Loan Program funds will allow the State to make the best use of its existing resources, as these funds are currently available. Although the terms of the loan are still being worked out, the funds will be loaned to DOE and B&F at reasonable rates and those funds can be made available to DOE quickly through the requested emergency appropriations. Additionally, use of this alternative funding source will mean that these projects will not compete for the limited G.O. bond funds that must be used to address projects statewide.

B&F will provide support to this effort as co-borrower of the loan and will be responsible for the loan repayments. B&F will continue to work with DOE and the Hawaii Green Energy Infrastructure Authority, who oversees the Green Infrastructure Loan Program, to ensure proper implementation of this proposal.



**DEPARTMENT OF BUSINESS,  
ECONOMIC DEVELOPMENT & TOURISM**

DAVID Y. IGE  
GOVERNOR

LUIS P. SALAVERIA  
DIRECTOR

MARY ALICE EVANS  
DEPUTY DIRECTOR

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804  
Web site: [www.hawaii.gov/dbedt](http://www.hawaii.gov/dbedt)

Telephone: (808) 586-2355  
Fax: (808) 586-2377

Statement of  
**LUIS P. SALAVERIA**  
**Director**  
Department of Business, Economic Development, and Tourism  
before the  
**HOUSE FINANCE**

Tuesday, March 1, 2016  
3:00 p.m.  
State Capitol, Conference Room 308

in consideration of  
**HB 2569, HD1**  
**RELATING TO ENERGY.**

Chair Luke, Vice Chair Nishimoto, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) supports HB 2569, HD1. Part I, Sections 1-4 of this measure require the Hawaii Department of Education (DOE) to: (1) establish a goal of becoming net-zero by January 1, 2035; (2) establish a minimum of one microgrid pilot project in each county at public schools that are civil defense shelters; and (3) expedite the cooling of all public school classrooms to a temperature acceptable for student learning and submit related report to the Legislature. Part II, Sections 5-10 is recommended by Governor Ige and provides for air conditioning, heat abatement and related energy efficiency measures at public schools using, in part, a loan from the Hawaii green infrastructure loan program.

With respect to Part II of this bill, DBEDT strongly supports the deployment of cost-effective energy efficiency, which helps ensure continued progress to our Energy Efficiency Portfolio Standards and the goals of the Hawaii Clean Energy Initiative. DBEDT would also like to note that use of the Green Energy Market Securitization Bonds 2014 Series A bond sale proceeds for cost-effective energy efficiency is consistent with the “green bond” designation.

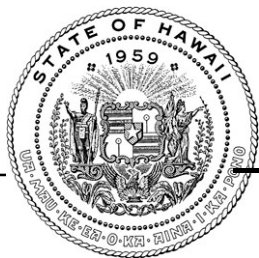
In order to be consistent with the statutorily approved uses of the green infrastructure loan program, DBEDT suggests that the language on page 7, line 11 add the additional text, “for the purposes allowed under Hawaii Revised Statutes 196-65(b).” Similarly, DBEDT suggests the

following language be added to page 8, line 1, “as permissible under Hawaii Revised Statutes 196-65(b).”

With respect to Part I of HB 2569, HD1, DBEDT supports DOE’s adoption of the Net Zero goal as this is consistent with the State’s clean energy objectives. We further support the deployment of microgrid projects when they are a required infrastructure investment to further our State’s adoption of clean energy in a reliable, safe and cost-effective manner. However, DBEDT is concerned about the expansive nature of Section 3 of this bill which requires the DOE in conjunction with the Hawaii State Energy Office, amongst others, to examine the microgrid pilot projects to be deployed at each county, and identify how to maximize microgrid inclusion at all DOE public schools. DBEDT notes that the financial and human resources required to fulfill the duties of this bill under Section 3 are not fully addressed in its current budget.

DBEDT respectfully defers to the Hawaii Green Infrastructure Authority on the oversight and use of its funds, the Department of Education on the implementation of this measure, and the Department of Budget and Finance on the use of general obligation bond funds.

Thank you for the opportunity to offer these comments on HB 2569, HD1.



DAVID Y. IGE  
GOVERNOR

TARA M. YOUNG  
EXECUTIVE DIRECTOR

## HAWAII GREEN INFRASTRUCTURE AUTHORITY

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-3868

Statement of  
**TARA YOUNG**  
**Executive Director**  
Hawaii Green Infrastructure Authority  
before the  
**HOUSE COMMITTEE ON FINANCE**

Tuesday, March 1, 2016  
3:00 p.m.  
State Capitol, Conference Room 308

in consideration of  
**HB 2569, HD1**  
**RELATING TO ENERGY.**

Chair Luke, Vice Chair Nishimoto, and Members of the Committee.

The Hawaii Green Infrastructure Authority (HGIA) supports HB 2569, HD1. Part I, Sections 1-4 of this measure require the Hawaii Department of Education (DOE) to: (1) establish a goal of becoming net-zero by January 1, 2035; (2) establish a minimum of one microgrid pilot project in each county at public schools that are civil defense shelters; and (3) expedite the cooling of all public school classrooms to a temperature acceptable for student learning and submit related report to the Legislature. Part II, Sections 5-10 is recommended by Governor Ige and provides for air conditioning, heat abatement and related energy efficiency measures at public schools using, in part, a loan from the Hawaii green infrastructure loan program.

HGIA was originally founded with a broad mandate to accelerate adoption of renewable energy technology by deploying capital to consumers, for-profit, non-profit and public sector entities. HGIA is confident that this initiative will advance progress of our Energy Efficiency Portfolio Standards and the goals of the Hawaii Clean Energy Initiative. The application of Green Energy Market Securitization (GEMS) capital toward public sector energy efficiency improvements, as part of the overall program envisioned under HB 2569, HD1, is consistent with the HGIA's mission and charter, and will complement its portfolio of consumer and commercial

lending programs already in place. HGIA has already proposed a loan program for commercial energy efficiency improvements with many analogous elements to the program contemplated under HB 2569, HD1.

HGIA would also note that a secondary advantage of a market-driven program like GEMS is that funds are available for deployment, subject to appropriation. Given the urgency of the situation in our classrooms, we believe that rapid execution is critical. HGIA has the resources and capabilities to work with HIDOE to bring relief to Hawaii's classrooms as quickly as possible should the legislation be enacted.

In order to be consistent with the statutorily approved uses of the green infrastructure loan program, HGIA suggests that the language on page 7, line 11 add the additional text, "for the purposes allowed under Hawaii Revised Statutes 196-65(b)." Similarly, HGIA suggests the following language be added to page 8, line 1, "as permissible under Hawaii Revised Statutes 196-65(b)."

This proposed legislation is entirely aligned with HGIA's mission. HGIA will continue to work with the Department of Education on the implementation of the efficiency measures, and the Department of Budget and Finance on the use of general obligation bond funds. HGIA would like to work with stakeholders to ensure that improvements in energy efficiency at HIDOE as a result of these investments are measurable and accountable.

Thank you for the opportunity to offer testimony in support of HB 2569, HD1.



STATE OF HAWAII  
DEPARTMENT OF DEFENSE

TESTIMONY ON HOUSE BILL 2569 HD1  
A BILL RELATING TO ENERGY

PRESENTATION TO  
THE HOUSE COMMITTEE ON FINANCE

BY  
MAJOR GENERAL ARTHUR J. LOGAN  
ADJUTANT GENERAL  
AND DIRECTOR OF THE HAWAII EMERGENCY MANAGEMENT AGENCY  
March 1, 2016

Chair Luke, Vice Chair Nishimoto, and Members of the House Committee on Finance.

I am Major General Arthur J. Logan, State Adjutant General and the Director of the Hawaii Emergency Management Agency. I am testifying in support of the intent of House Bill 2569 HB1.

The measure to provide power to operate school facilities without reliance on commercial power is a good initiative. It will reduce utility costs of the school. This could benefit the public as the selected school facilities will operate as hurricane shelters.

Thank you for allowing me to testify in support of the intent of House Bill 2569 HD1.



## HOUSE COMMITTEE ON FINANCE

March 1, 2016, 3 P.M.

Room 308

(Testimony is 2 pages long)

### TESTIMONY IN STRONG SUPPORT OF HB 2569 HD1

Aloha Chair Luke, Vice Chair Nishimoto, and Committee members:

The Blue Planet Foundation supports HB 2569 HD1 (i) implementing a sustainable schools initiative to generate and use renewable energy, (ii) creating microgrid projects, (iii) accelerating the cooling of classrooms, and (iv) authorizing the use of green infrastructure funding for that effort.

Blue Planet strongly supports these efforts. Such an initiative would serve the public in multiple ways by promoting long-term energy sustainability in schools, both financially and environmentally; providing an energy independent safe haven for residents during a disaster; demonstrating energy science and engineering to students; and operating as a pilot for the utility to better understand how microgrids can function as part of our 100% clean energy future.

**RESILIENCE.** A school microgrid would strengthen our resilience to disasters by providing an “islandable” shelter with its own energy supply in the event that the utility grid fails. This shelter would be more than a safe haven that provides a roof overhead—it would be able to serve those whose lives depend on reliable electricity (folks with respirators, etc.), as well as provide power for communication devices and other modern conveniences.

**ENERGY EDUCATION.** Students today will be helping build our clean energy system of tomorrow. A clean energy microgrid would provide a first-hand learning experience for students to better understand how energy systems function. They wouldn’t have to imagine what our clean energy future looks like—they could see it in action. The system could also provide opportunities for lessons in science, math, computer science, and other fields.

**TECHNOLOGY DEMONSTRATION.** Faced with disruptive technologies, new business models, and clean energy requirements, electric utilities globally are experiencing the biggest transformation since their founding. They must rapidly evolve, adopt new technologies, and “learn by doing.” Microgrid pilot projects at Hawai’i schools would provide a working model for

the utility to better understand how a microgrid interacts with the larger grid and how it can be used to support integration of more renewable sources on the grid.

Finally, Blue Planet asks that HB 2569 be amended to specify that resulting microgrid projects will be powered by renewable sources of energy only—not by fossil fuel. Having a fossil-fuel powered microgrid—even in part—would diminish the educational value, raise environmental concerns (local pollution and storing fuel), and weaken the potential of the school to provide support during an extended emergency (due to the need to have an ongoing fuel supply).

Thank you for the opportunity to testify.

**Testimony before the  
House Committee on Finance  
March 1, 2016, 3:00 pm  
Conference Room 308**



**H.B. No. 2569, H.D. 1 – Relating to Energy**

**By Scott Seu  
Vice President, System Operation  
Hawaiian Electric Company, Inc.**

*Chair Luke, Vice-Chair Nishimoto and Members of the Committee:*

My name is Scott Seu. I am Vice President for System Operation at Hawaiian Electric Company. I am testifying on behalf of Hawaiian Electric and its subsidiary utilities, Maui Electric and Hawaii Electric Light (collectively “Companies”).

We support the elements of this bill that directly relate to cooling the classrooms for our State’s children, and also support the development of microgrids to the extent they can complement the operation of the regular grid and benefit all customers. We have concerns however, that the net zero energy requirement, if not approached holistically and in synch with other energy plans and policies, could lead to unintended negative consequences for other electric customers.

For example, if the net zero requirement drives DOE to singularly focus on building as much PV as they can at all their school sites, they may face significant technical integration challenges that can be very expensive to work through. Or if DOE determines that they can only meet net zero by building several larger scale PV farms at a handful of DOE sites, and the goal is applied very literally to require their consumption of this energy, then that could lead the DOE to have to advocate for energy wheeling which can negatively impact other customers and renewable generators. The net zero requirement in this bill also does not emphasize energy efficiency and conservation, nor consider how it meshes with programs such as demand response or time of use pricing.

The Hawaiian Electric companies are already committed to generate or procure 100% of the electricity they provide to customers from renewable energy sources by 2045. The more we can work in synch with our large customers, the greater our chance of succeeding as a whole. We recommend that the net zero requirement be reworked to address these concerns or be deleted from this measure.

Thank you for this opportunity to testify.



**LATE**

46-063 Emepela Pl. #U101 Kaneohe, HI 96744 · (808) 679-7454 · Kris Coffield · Co-founder/Executive Director

---

**TESTIMONY FOR HOUSE BILL 2569, HOUSE DRAFT 1, RELATING TO  
ENERGY**

**House Committee on Finance  
Hon. Sylvia Luke, Chair  
Hon. Scott Y. Nishimoto, Vice Chair**

**Wednesday, March 1, 2016, 3:00 PM  
State Capitol, Conference Room 308**

Honorable Chair Luke and committee members:

I am Kris Coffield, representing IMUAlliance, a nonpartisan political advocacy organization that boasts over 350 members. On behalf of our members, we offer this testimony **in strong support of** House Bill, HD1, relating to energy.

If school is cool, our classrooms should be, too. Yet, last year, classroom temperatures regularly exceeded 90 degrees, reaching as high as 108 degrees in one Kalaheo High School classroom. Studies show that the achievement gap between cooled and non-cooled classroom environments can reach 17 percent on standardized tests. While local schools' outdated electrical infrastructure often cannot support traditional air conditioning technology, experiments in renewable energy cooling systems have lowered departmental projections for comprehensive cooling. Using available energy efficient technology—including on-grid, off-grid, microgrid, and photovoltaic technology—could reduce the cost of classroom cooling to \$20,000, or a total of \$140 million for the 7,000 classrooms currently in need.

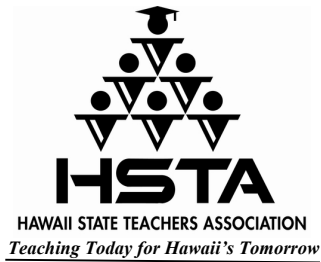
Therefore, we strongly support passage of this measure, which establishes a departmental goal of becoming net-zero with respect to energy use by January 1, 2035, advances microgrid pilot projects at public schools that also serve as emergency shelters, expedites the cooling of all public school classrooms, and 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. That said, **we humbly request that this bill be amended to include a five-year timeline for comprehensive classroom cooling,**

preventing this session's efforts from succumbing to political inertia. All overheated classrooms deserve assistance, something that will take time to see through efficiently and cost-effectively.

While these programs are necessary to ensure that cooling systems are installed for all classrooms in need, we note that Gov. Ige has called for implementation of immediate heat abatement in 2016, before the 2016-2017 schoolyear begins. We, thus, **urge your committee to fast-track a measure moving forward, Senate Bill 3126, which funds classroom cooling for this fiscal year in the amount of \$130 million**, financed through \$100 million in general revenue (from unexpected federal Medicaid reimbursements) and \$30 million in general obligation bonds. HB 2569 and SB 3126 are complementary, in that one measure provides immediate relief to the state's hottest classrooms and the other offers a long-term solution.

Mahalo for the opportunity to testify **in support** of this bill.

Sincerely,  
Kris Coffield  
*Executive Director*  
IMUAlliance



**LATE**

1200 Ala Kapuna Street ♦ Honolulu, Hawaii 96819  
Tel: (808) 833-2711 ♦ Fax: (808) 839-7106 ♦ Web: www.hsta.org

Corey Rosenlee  
President  
Justin Hughey  
Vice President  
Amy Perruso  
Secretary-Treasurer  
Wilbert Holck  
Executive Director

TESTIMONY BEFORE THE HOUSE COMMITTEE ON  
FINANCE

RE: HB 2569, HD1 - RELATING TO ENERGY.

TUESDAY, MARCH 1, 2016

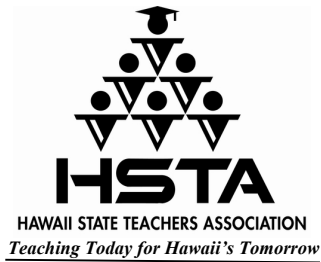
COREY ROSENLEE, PRESIDENT  
HAWAII STATE TEACHERS ASSOCIATION

Chair Luke and Members of the Committee:

The Hawaii State Teachers Association **strongly supports HB 2569, HD1,**  
relating to energy, **with suggested amendments.**

It's getting hot in Hawai'i. According to the National Weather Service, our state set over 50 high temperature records this summer, with the heat and humidity lingering well into the start of fall. In our schools, children and teachers alike became ill from the blistering conditions. Kalaheo High School science teacher Micah Pregitzer recorded temperatures as high as 108 degrees inside his classroom last August, telling reporters, "You're dripping in sweat when you're just sitting there grading papers by yourself with no students in the room. You get the room packed with 36, 38, sometimes 40 students, and it just boosts that temperature up even higher."

A recent study conducted by University of California at Los Angeles researchers showed that the percentile gap between students learning in air conditioned and non-air-conditioned environments can reach as much as 17 percent on achievement tests, clearly evincing the impact of a comfortable classroom environment on student success. In a longitudinal analysis contained in "Effects of the Physical Environment on Student Learning," moreover, Glen I. Earthman of Virginia Polytechnic Institute and State University found that students between 4<sup>th</sup> and 9<sup>th</sup> grade at demographically similar schools showed increased gains in reading vocabulary, total math, problem solving, math procedures, pre-writing, and editing at schools with air conditioning, as compared with peers from non-cooled schools.



1200 Ala Kapuna Street ♦ Honolulu, Hawaii 96819  
Tel: (808) 833-2711 ♦ Fax: (808) 839-7106 ♦ Web: [www.hsta.org](http://www.hsta.org)

**Corey Rosenlee**  
President  
**Justin Hughey**  
Vice President  
**Amy Perruso**  
Secretary-Treasurer  
**Wilbert Holck**  
Executive Director

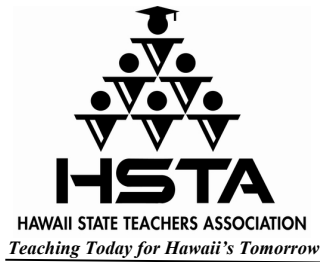
Earthman demonstrated that the longer and more consistently students are exposed to classroom cooling, the better and more stable their performance gains tend to be. Conversely, students exposed to thermal conditioning for only short or intermittent periods of time achieved less than their peers. These findings are supported by U.S. Department of Education sponsored research, which claims that proper cooling systems lead to better attitudes toward learning, fewer disciplinary problems, and sustained achievement.

We applaud Gov. David Ige's call to cool 1,000 classrooms within the next two years. While previous department of education estimates put the cost of comprehensive air conditioning at \$1.5 billion, that figure has been fallen as investments in experiments with renewable energy technology have proven fruitful. Furthermore, in conversations with photovoltaic companies, advocates for cool schools have learned that employing off-grid DC-powered air conditioners, operated entirely from photovoltaic modules that store energy in power-saving batteries, could cost between \$15,000 to \$30,000 per classroom, a savings of approximately 70 percent from earlier departmental projections (discounting a monthly lease per-classroom payment that could be offset by the department's ongoing and all-encompassing renewable energy savings).

Yet, a number of questions remain about comprehensive classroom cooling, such as:

- What type of batteries and/or solar panels should be used for off-grid and renewable units, and how many of each? Enchanted Lakes Elementary is piloting a lead acid battery, while Kalaheo High School will be employing a salt water battery.
- How many thermal units (BTU) are needed to properly air condition classrooms of varying sizes?
- How should comprehensive heat abatement be funded, especially if the cost of a cooling system can be lowered by up to 75 percent? Administrators at Enchanted Lake Elementary believe that they can install air conditioning at a cost of \$5,000-\$6,000 per classroom, a cost at which, if scaled, could bring down the total for comprehensive statewide cooling for all 7,000 classrooms in need to approximately \$40 million.





1200 Ala Kapuna Street ♦ Honolulu, Hawaii 96819  
Tel: (808) 833-2711 ♦ Fax: (808) 839-7106 ♦ Web: www.hsta.org

Corey Rosenlee  
President  
Justin Hughey  
Vice President  
Amy Perruso  
Secretary-Treasurer  
Wilbert Holck  
Executive Director

While HSTA supports the goals of this bill—including net-zero energy usage by 2035 for the DOE, microgrid pilot projects that may be scaled to other schools at a later date, expedited classroom cooling using a variety of energy technologies and financial instruments, and financing heat abatement through a loan from the green infrastructure loan program, we believe that a timeline for comprehensive classroom cooling should be placed in state law to continue the cooling initiatives launched by this bill. Thus, we urge your committee to add an additional section to the proposal to read: “§302A-Classroom climate control and cooling. (a) Beginning with the 2016-2017 school year, the department shall develop a plan to air condition public schools that

includes a mix of technologies, including off-grid technology, microgrid technology, photovoltaic technology, and split air conditioning units.

(b) Beginning with the 2017-2018 school year, the department shall develop a master plan to provide air conditioning to all public school classrooms that meet or exceed a temperature of eighty-five degrees Fahrenheit, including a list of priority schools to receive air conditioning by the 2018-2019 school year.

(c) No later than the 2019-2020 school year, the department shall provide air conditioning to at least fifty per cent of public school classrooms that meet or exceed a temperature of eighty-five degrees Fahrenheit.

(d) No later than the 2021-2022 school year, the department shall provide air conditioning to all public school classrooms that meet or exceed a temperature of eighty-five degrees Fahrenheit.”

Additionally, we encourage you fast-track legislation moving forward that would appropriate of \$100 million in general revenue and \$30 million in general obligation bonds for air conditioning installation at our state’s public schools this fiscal year.

School should be cool. To improve air conditioning facilities and, in turn, boost student learning, the Hawaii State Teachers Association asks your committee to support and amend this bill.

From: mailinglist@capitol.hawaii.gov  
Sent: Monday, February 29, 2016 7:44 PM  
To: FINTestimony  
Cc: richardfurst@yahoo.com  
Subject: Submitted testimony for HB2569 on Mar 1, 2016 15:00PM

**LATE**

**HB2569**

Submitted on: 2/29/2016

Testimony for FIN on Mar 1, 2016 15:00PM in Conference Room 308

Submitted By	Organization	Testifier Position	Present at Hearing
Richard Furst	Individual	Support	No

Comments: I am strongly in favor of HB 2569, HD1. I believe we have a duty to our children to make their classroom experiences more comfortable and reduce the environmental impact of the schools. This bill represents an important step in that process.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email [webmaster@capitol.hawaii.gov](mailto:webmaster@capitol.hawaii.gov)

DAVID Y. IGE  
GOVERNOR



**LATE**

KATHRYN S. MATAYOSHI  
SUPERINTENDENT

STATE OF HAWAII  
DEPARTMENT OF EDUCATION  
P.O. BOX 2360  
HONOLULU, HAWAII 96804

**Date:** 03/01/2016  
**Time:** 03:00 PM  
**Location:** 308  
**Committee:** House Finance

**Department:** Education

**Person Testifying:** Kathryn S. Matayoshi, Superintendent of Education

**Title of Bill:** HB 2569, HD1 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 HD1)

**Department's Position:**

The Hawaii State Department of Education (Department) is pleased to testify in support of HB 2569, HD1. This measure aims to provide funding for air conditioning (AC), heat abatement and related energy efficiency measures at public school classrooms.

The \$130 million in proposed funding will allow the Department to reach the goal of installing AC in 1,000 classrooms, as well as boost efforts in implementing heat abatement and energy efficient measures towards cooling additional classrooms, while offsetting anticipated increases in energy use due to AC.

We defer to the Department of Budget and Finance to offer guidance on the best method to finance this worthwhile effort.

Thank you for the opportunity to testify in support of HB 2569, HD1.