

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 COMMITTEES ON ENERGY AND ENVIRONMENTAL PROTECTION
AND EDUCATION
ON
SENATE BILL NO. 3126, S.D. 2

March 22, 2016
9:00 a.m.

RELATING TO PUBLIC SCHOOLS

Senate Bill (S.B.) No. 3126, S.D. 2, appropriates \$100,000,000 in general funds in FY 15-16 and \$30,000,000 in general obligation (G.O.) bond funds in FY 15-16 to the Department of Education (DOE) to address air conditioning, heat abatement, and related energy efficiency measures at Hawaii's public schools. The bill also provides that funds shall not lapse at the end of the fiscal year, provided that all moneys unencumbered as of June 30, 2018 shall lapse as of that date.

The department strongly supports Senate Bill No. 3126, S.D. 1, which appropriates \$100 million in green infrastructure special funds for this purpose under the Green Energy Market Securitization (GEMS) program and recommends that the Committee maintain this version of the bill.

S.B. No. 3126, S.D. 1, will allow DOE to expeditiously address heat abatement concerns, while employing energy efficiency measures to offset increased energy needs. S.B. No. 3126, S.D. 1, 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.

S.B. No. 3126, S.D. 1, proposes to primarily utilize funds loaned from the GEMS Program with G.O. bond funds also requested. Bond Counsel and the Department of the Attorney General have also opined to us that DOE may be a borrower of a GEMS loan. In addition, the Public Utilities Commission (PUC) issued a conditional approval of the GEMS loan to the DOE and Department of Budget and Finance (B&F), which was subject to the Legislature and Governor enacting legislation providing for the appropriation of the loan funds to the DOE and B&F. A copy of the PUC's conditional approval is attached.

Using the GEMS funds will allow the State to make the best use of its existing resources. The GEMS bonds were issued in November 2014 and the GEMS program is incurring millions of dollars of costs and the market for which the bonds were issued no longer exists to the extent originally envisioned. Therefore, the funds are currently available and we believe that the proposed use of the GEMS monies to fund heat abatement and cooling measures in Hawaii's public schools will expedite addressing heat related issues in the public schools and utilize the GEMS program for which it was intended. 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 GEMS Program, to ensure proper implementation of this proposal.

Attachment

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of)

THE STATE OF HAWAII)
DEPARTMENT OF BUSINESS,)
ECONOMIC DEVELOPMENT,)
AND TOURISM)

DOCKET NO. 2014-0135

For an Order Approving the Green)
Infrastructure Loan Program)

ORDER NO. 33592

CONDITIONALLY APPROVING PROGRAM NOTIFICATION NO. 6

PUBLIC UTILITIES
COMMISSION

2016 MAR 15 P 3 21

FILED

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of)

THE STATE OF HAWAII)
DEPARTMENT OF BUSINESS,)
ECONOMIC DEVELOPMENT,)
AND TOURISM)

Docket No. 2014-0135

Order No. **33592**

For an Order Approving the Green)
Infrastructure Loan Program)

CONDITIONALLY APPROVING PROGRAM NOTIFICATION NO. 6

By this Order, the commission conditionally approves Program Notification No. 6, subject to certain legislative action, as described below.

I.

Background

On February 11, 2016, the commission held an informal technical conference ("Conference") to allow the Hawaii Green Infrastructure Authority ("Authority") to, among other things, make a presentation to all docket parties regarding proposed future uses and deployments of Green Energy Market Securitization ("GEMS") funds.

At the Conference, the Authority shared its plan to deploy a \$100,000,000 term loan ("DOE Loan") to the Department of Education ("DOE") and Department of Budget and Finance ("B&F") for an Energy Efficiency/Heat Abatement Project ("DOE Project").¹ The DOE Project would utilize GEMS funds to finance the retrofiting of a number of DOE schools with energy efficiency measures and the installation of heat abatement measures, including air conditioners.

The Authority explained that the issuance and repayment of the DOE Loan would require legislative action. Specifically, the Authority explained that House Bill No. 2569 (2016), as amended ("HB 2569"), was introduced, in part, to appropriate \$100,000,000 from the Hawaii Green Infrastructure Special Fund ("GEMS Special Fund") to be loaned to DOE and B&F. Without this appropriation, the Authority explained that it would not be able to issue the DOE Loan. House Bill No. 2569 also authorizes DOE and B&F to borrow the money from the Authority and authorizes an appropriation out of the general revenues of the State for the initial DOE Loan repayment.

On February 23, 2016, the Authority filed Program Notification No. 6 to deploy capital to government agencies for commercial energy efficiency. At the Conference,

¹Commission Letter issued on February 8, 2016, attachment, at 8.

the Authority explained that the DOE Loan would be made pursuant to Program Notification No. 6.

II.

Findings and Conclusions

The commission finds that Program Notification No. 6 meets the minimum requirements as provided in Decision and Order No. 32318, filed September 30, 2014, which approved the GEMS Program. However, it is not clear that HB 2569 will be enacted. Further, the commission is concerned that Program Notification No. 6 does not provide sufficient assurances or safeguards to ensure repayment of the DOE Loan, as repayment is contingent upon legislative action, as discussed above.

Senate Bill No. 3126 (2016), as amended ("SB 3126"), was introduced as a companion bill to HB 2569, meaning that the two bills were introduced with the exact same content in order to allow both houses of the legislature to consider the proposal simultaneously. However, on February 29, 2016, the Senate Committee on Ways and Means ("WAM") adopted amendments to SB 3126 that would do the following:

- 1) Delete the authorization of DOE and B&F to borrow moneys from the Authority;
- 2) Delete the appropriation of general funds to make the initial loan repayment; and

3) Replace the GEMS Special Fund as the means of financing the DOE Project with a \$100,000,000 appropriation out of the general funds.²

Accordingly, the commission finds that Program Notification No. 6 should be approved, subject to the legislature and Governor enacting legislation that authorizes an appropriation out of the GEMS Special Fund to loan such moneys to DOE and B&F for capital improvement program equipment, installation costs for air conditioning, energy efficient lighting, and other energy efficiency measures related to heat abatement at public schools. In addition, the Authority shall not deploy any funds to state agencies under Program Notification No. 6 in excess of borrowing amounts authorized by the legislature.

The absence of such legislation obviates the need for Program Notification No. 6, as explained to the commission and docket parties by the Authority. Thus, in the event that such legislation is not enacted, this approval shall be deemed void and of no effect.

²Senate Standing Committee Report No. 2787 (2016) ("SSCR No. 2787").

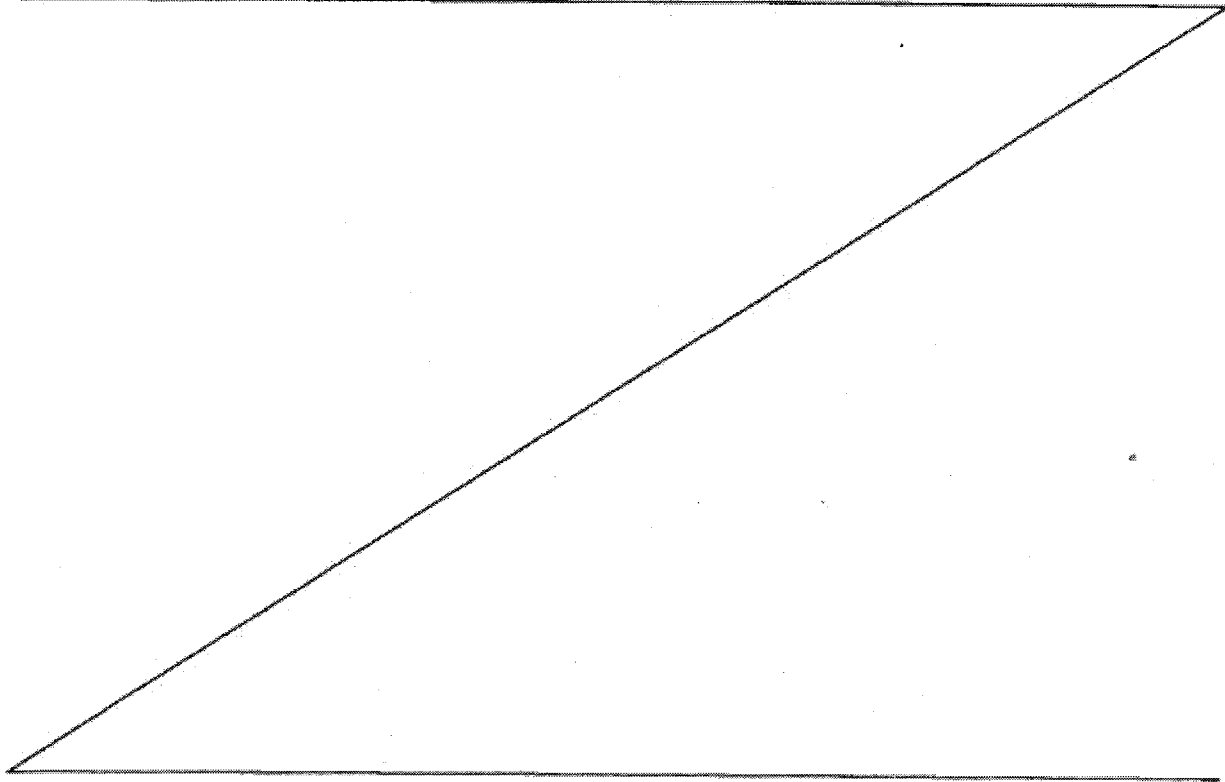
III.

Orders

The commission orders:

1) Program Notification No. 6 is conditionally approved, provided that the legislature and Governor enact legislation authorizing an appropriation out of the GEMS Special Fund to loan such moneys to DOE and B&F for capital improvement program equipment, installation costs for air conditioning, energy efficient lighting, and other energy efficiency measures related to heat abatement at public schools.

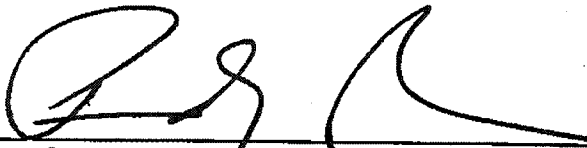
2) In the event that such legislation is not enacted, this approval shall be deemed void and of no effect.

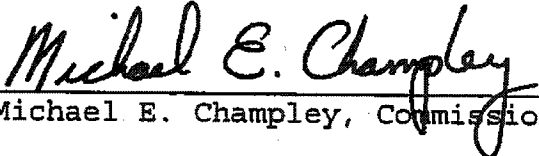


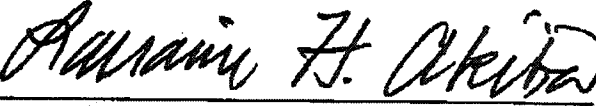
3) The Authority shall not deploy any funds to state agencies under Program Notification No. 6 in excess of borrowing amounts authorized by the legislature.

DONE at Honolulu, Hawaii MAR 15 2016

PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By 
Randall Y. Iwase, Chair

By 
Michael E. Champley, Commissioner

By 
Lorraine H. Akiba, Commissioner

APPROVED AS TO FORM:


Shannon Mears
Commission Counsel

2014-0135.ljk

CERTIFICATE OF SERVICE

The foregoing Order was served on the date of filing by mail, postage prepaid, and properly addressed to the following parties:

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DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS
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DEBORAH DAY EMERSON
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Honolulu, HI 96813

DANIEL G. BROWN
MANAGER-REGULATORY NON-RATE PROCEEDINGS
HAWAIIAN ELECTRIC COMPANY, INC.
HAWAII ELECTRIC LIGHT COMPANY, INC.
MAUI ELECTRIC COMPANY, LTD.
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Honolulu, HI 96840-0001

RICK REED
DIRECTOR
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Honolulu, HI 96837

Certificate of Service

Page 2

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

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Statement of
LUIS P. SALAVERIA
Director
Department of Business, Economic Development, and Tourism
before the
**HOUSE COMMITTEES ON ENERGY AND ENVIRONMENTAL PROTECTION
AND
EDUCATION**

March 22, 2016
9:00 a.m.

State Capitol, Conference Room 325

in consideration of
SB 3126, SD2

RELATING TO PUBLIC SCHOOLS.

Chairs Lee and Takumi, Vice Chairs Lowen and Ohno, and Members of the Committees.

The Department of Business, Economic Development, and Tourism (DBEDT) supports the intent of SB 3126, SD2, which provides for air conditioning, heat abatement and related energy efficiency measures at public schools using general funds.

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 respectfully defers to the Department of Education on the implementation of the efficiency measures, and the Department of Budget and Finance on the use of general funds.

Thank you for the opportunity to offer testimony in support of SB 3126, SD2.



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 ENERGY & ENVIRONMENTAL PROTECTION
and
HOUSE COMMITTEE ON EDUCATION

Tuesday, March 22, 2016
9:00 a.m.

State Capitol, Conference Room 325

in consideration of
SB3126 SD2

RELATING TO PUBLIC SCHOOLS.

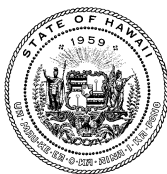
Chair Lee, Chair Takumi, Vice Chair Lowen, Vice Chair Ohno, and
Members of the Committee.

The Hawaii Green Infrastructure Authority (HGIA) offers comments on SB3126 SD2, which provides for air conditioning, heat abatement and related energy efficiency measures at public schools using, in part, a loan from the HGIA's green infrastructure lending portfolio.

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. The application of Green Energy Market Securitization (GEMS) capital toward public sector energy efficiency improvements is consistent with the HGIA's mission and charter, and will complement its portfolio of consumer and commercial lending programs already in place. On March 15, 2016, the Public Utilities Commission confirmed in Order No. 33592 (Conditionally Approving Program Notification No. 6) that the use of GEMS funds for capital

improvement program equipment, installation costs for air conditioning, energy efficiency lighting, and other energy efficiency measures related to heat abatement at public schools is permissible, provided that the legislature and Governor enact legislation authorizing an appropriation out of the GEMS Special Fund to loan such moneys to the DOE and Department of Budget and Finance.

Thank you for the opportunity to offer these comments regarding SB3126 SD2.



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

**House Committee on Energy and Environmental Protection and
House Committee on Education**

Tuesday, March 22, 2016
9:00 A.M.
Hawaii State Capitol, Room 325

Senate Bill 3126, SD2, Relating to Public Schools

Dear Chairs Lee and Takumi, Vice Chairs Lowen and Ohno, and Members of the Committees:

The Board of Education ("Board") voted to testify in support of the intent of Senate Bill 3126, SD2, which would, among other things, provide funds for air conditioning, heat abatement, and related energy efficiency measures at public schools.

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.

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



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

Date: 03/22/2016

Time: 09:00 AM

Location: 325

Committee: House Energy & Environmental
Protection House Education

Department: Education

Person Testifying: Kathryn S. Matayoshi, Superintendent of Education

Title of Bill: SB 3126, SD2 RELATING TO PUBLIC SCHOOLS.

Purpose of Bill: Provides for air conditioning, heat abatement, and related energy efficiency measures at public schools by appropriating general funds and general obligation bond funds to the DOE for these projects. (SD2)

Department's Position:

The Hawaii State Department of Education (Department) is pleased to testify in support of SB 3126, SD2. 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.

The Department looks forward to completing this urgently needed work.

Thank you for the opportunity to testify in support of SB 3126, SD2.

Glenn Barayuga
glenn6@hawaii.edu

LATE

March 21, 2016

To: Representative Chris Lee, Chair
Representative Nicole E. Lowen, Vice Chair
Representative Roy M. Takumi, Chair
Representative Takashi Ohno, Vice Chair
And Members of the Energy and Environmental Protection and Education Committee on
SB3126 SD2

RE: SB3126 SD2, Relating to Public Schools-Support

Hearing Date and Time: Tuesday, March 22, 2016
Hearing Room: Conference Room 325

Chair, Vice-Chair, and members of the Senate Committee on Education , I am testifying in support of SB3126 SD2.

My name is Glenn Barayuga I am a social work student at the Myron B. Thompson School of Social Work in University of Hawaii at Manoa. This is my first time testifying and I am testifying on the Senate Bill 3126 SD2.

I want to thank Representative Chris Lee, Representative Nicole E. Lowen, Representative Roy M. Takumi, Representative Takashi Ohno, and fellow members of the Committee for the opportunity to speak to you today about Senate Bill 3126 SD2.

Senate Bill 3126 SD2 would help the students that attend schools that are troubled by heat due to the weather and not having air condition. With classrooms having air condition it would reduce the heat related stroke for students.

I would like this bill to pass so that some of the schools would be a safe and comfortable for students, so they would not feel the heat in a classroom again.

I support this Senate Bill 3126 SD2 on Public Schools.

Thank you for the opportunity to testify.

Sincerely,
Glenn Barayuga

LATE



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

**TESTIMONY FOR SENATE BILL 3126, SENATE DRAFT 2, RELATING TO
PUBLIC SCHOOLS**

House Committee on Energy and Environmental Protection

Hon. Chris Lee, Chair

Hon. Nicole E. Lowen, Vice Chair

House Committee on Education

Hon. Roy M. Takumi, Chair

Hon. Takashi Ohno, Vice Chair

Tuesday, March 22, 2016, 9:00 AM

State Capitol, Conference Room 325

Honorable Chair Lee, Chair Takumi, and committee members:

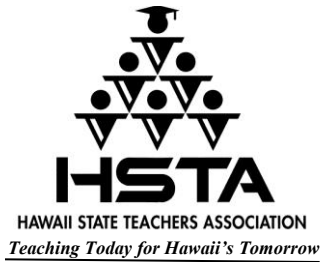
I am Kris Coffield, representing IMUAlliance, a nonpartisan political advocacy organization that boasts over 350 members. On behalf of our members, we offer this testimony **in strong support of** Senate Bill 3126, SD2, relating to public schools.

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 funds classroom cooling for this fiscal year in the amount of \$130 million, financed through \$100 million in general revenue (from federal government's Medicaid reimbursements) and \$30 million in general obligation bonds. We additionally request that you note

in your committee report a request that the bill fast-tracked by your House colleagues, so that it can be approved and funds released as soon as possible, as well as well as language indicating that the issue of heat abatement and classroom and cooling should be reviewed in future legislative sessions, since the proposed funding make not cover all 7,000 classrooms in need, particularly as our temperatures—much like our sea levels, owing to climate change—continue to rise.

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

TESTIMONY BEFORE THE HOUSE COMMITTEES ON
ENERGY AND ENVIRONMENTAL PROTECTION and EDUCATION

RE: SB 3126, SD2 - RELATING TO PUBLIC SCHOOLS.

TUESDAY, MARCH 22, 2016

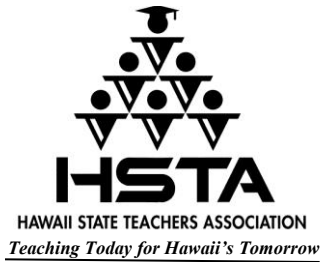
COREY ROSENLEE, PRESIDENT
HAWAII STATE TEACHERS ASSOCIATION

Chair Lee, Chair Takumi, and Members of the Committees:

The Hawaii State Teachers Association **strongly supports SB 3126, SD2**, relating to public schools.

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 4th and 9th 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.



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President

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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). Accordingly, **we strongly support this measure's appropriation 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. In your committee report, we urge you to request that members of the Hawai'i State House of Representatives fast track this measure, so that it can be signed into law as soon as possible. We also urge you to note in the committee report that the status of and need for additional classroom cooling technology should be reviewed by future Legislatures to ensure that this measure does represents a comprehensive, rather than one-time, solution.**

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** this bill.