HAWAII STATE TEACHERS ASSOCIATION
Teaching Today for Hawaii's Tomorrow

1200 Ala Kapuna Street ♦ Honolulu, Hawaii 96819
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TESTIMONY BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS

RE: HB 2569, HD 2, SD 1 - RELATING TO ENERGY.

THURSDAY, MARCH 31, 2016

COREY ROSENLEE, PRESIDENT
HAWAII STATE TEACHERS ASSOCIATION

Chair Tokuda and Members of the Committees:

The Hawaii State Teachers Association **strongly supports HB 2569, HD 2, SD 1,** relating to energy.

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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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.

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

TESTIMONY FOR HOUSE BILL 2569, HOUSE DRAFT 2, SENATE DRAFT 1, RELATING TO ENERGY

Senate Committee on Ways and Means
Hon. Jill N. Tokuda, Chair
Hon. Donovan M. Dela Cruz, Vice Chair

Thursday, March 31, 2016, 9:00 AM
State Capitol, Conference Room 211

Honorable Chair Tokuda 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 2569, HD2, SD1, 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 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. We feel that this measure resolves concerns that have arisen about a parallel proposal's (SB 3126, SD 2, HD 1; the House's heat abatement and air conditioning bill) use of the Green Infrastructure Loan Program to pay for classroom cooling, a use that some have

argued does not align with the original intent of the fund, namely subsidizing clean energy technology, demand response technology, and energy use reduction. Certain departmental heat abatement initiatives, like repainting, may fall outside the parameters of this program. Moreover, it is our broad view that the acceleration of renewable energy technology by consumers, for-profit, non-profit, and public sector entities should be one of our state's highest priorities, and that capital dedicated to such advancement should be sustained and amplified. Using Medicaid reimbursement funds would not deplete our state's "green capital," but would accomplish the goal of making our schools cool as quickly as possible.

We additionally request that you include 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 status of heat abatement and classroom and cooling should be reviewed in future legislative sessions, since the proposed funding may 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

Kris Coffield **(808) 679-7454** **imuaalliance@gmail.com**