H.B. NO. ²⁵⁶⁹ H.D. 2 S.D. 1 C.D. 1

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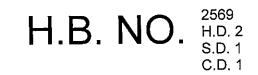
A BILL FOR AN ACT

RELATING TO ENERGY.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

SECTION 1. The legislature finds that the current governor
 has pledged to address the challenges facing Hawaii's
 classrooms, including soaring temperatures, outdated
 infrastructure, and costly electric bills throughout the State.

The legislature also finds that the University of Hawaii is 5 progressing toward becoming energy net-zero by producing as much 6 renewable energy as the system consumes by 2035. This progress 7 will reduce the university's energy costs, contribute to 8 Hawaii's clean energy goals, and make better use of limited 9 A similar opportunity to save on long-term energy 10 resources. costs and maximize limited resources exists in Hawaii's 11 elementary, middle, and high schools. The department of 12 education spends approximately \$48,000,000 annually for 13 electricity. By implementing a program similar to the 14 university program, the large sum of money used for utility 15 services could be redirected broadly on projects that will 16 improve the learning environment, such as cooling solutions, 17 better learning tools for students, enriching sports, arts, and 18 HB2569 CD1 LRB 16-2397.doc



extracurricular programs, and increasing pay to hire and retain
 better teachers.

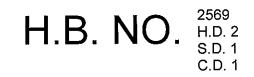
Temperatures in Hawaii's kindergarten through grade twelve 3 classrooms can reach over one hundred degrees Fahrenheit, far 4 exceeding the ideal conditions in which children and teachers 5 are effectively able to perform. Reducing temperatures in hot 6 classrooms is critical to increasing student learning. A recent 7 peer-reviewed study by the Harvard School of Public Health, "The 8 Impact of Green Buildings on Cognitive Function, " found that 9 cognitive scores were over one hundred per cent higher in 10 enhanced green building conditions with adequate ventilation 11 that lowered carbon dioxide levels and provided a comfortable 12 indoor environment. Other recent studies have shown increases 13 in cognitive function and student performance in classrooms with 14 daytime light emitting diode lighting over traditional 15 fluorescent or incandescent lighting. 16

17 Installing more efficient lighting, natural ventilation, 18 and integrating innovative renewable technologies such as solar 19 panels and batteries can help power schools, reduce electricity 20 costs, and improve student performance. Powering new classroom 21 air conditioning units with solar panels and batteries without



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1 the need to connect to the electric grid can also reduce costs
2 by eliminating the need for costly campus electrical upgrades,
3 and will not add significant new costs to public school electric
4 bills. Therefore, the legislature finds that it is in the
5 public's interest to maximize the use of effective renewable
6 technologies to reduce air conditioning installation and
7 operating costs.

8 The purpose of this Act is to accelerate the goals of the 9 department of education to cool Hawaii's schools, reduce energy 10 costs, meet Hawaii's clean energy goals, and provide all 11 students with better classrooms in which to learn.

12 SECTION 2. Chapter 302A, Hawaii Revised Statutes, is
13 amended by adding a new section to part VI to be appropriately
14 designated and to read as follows:

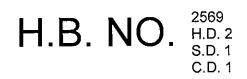
15 "<u>§302A-</u> <u>Sustainable schools initiative.</u> (a) The
16 department shall establish a goal of becoming net-zero with
17 respect to energy use, producing as much renewable energy as the
18 department consumes across all public school facilities, by
19 January 1, 2035.

(b) The department shall use the amount and value of
 energy consumed by the department across all public school



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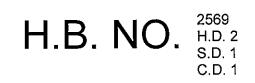
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1	facilities	s during the 2015-2016 fiscal year as the benchmark for
2	measuring	the department's progress toward the energy usage goal
3	set forth	in subsection (a).
4	(c)	The department shall submit an annual report that
5	shall inc	lude information on:
6	(1)	The overall progress toward the net-zero energy goal
7		set forth in subsection (a);
8	(2)	Its plans and recommendations to advance the net-zero
9		energy goal set forth in subsection (a); and
10	(3)	Any challenges or barriers encountered or anticipated
11		by the department in meeting the net-zero energy goal
12		set forth in subsection (a).
13	(d)	The department shall expedite the cooling of all
14	public sc	hool classrooms to a temperature acceptable for student
15	learning.	When implementing classroom cooling measures, the
16	departmen	t, and any contractor hired to implement classroom
17	cooling m	easures, shall maximize energy efficiency and
18	installat	ion and operating cost savings over the entire life of
19	the proje	ect.
20	(e)	Pursuant to this section, the department shall include
21	in the re	port the status of the implementation of measures taken



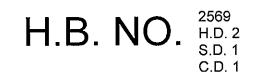
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1	to cool pi	ublic school classrooms as required by subsection (d).
2	The report	shall include the following information:
3	(1)	The number of completed classrooms in which cooling
4		measures were implemented and the number of classrooms
5		remaining that require cooling;
6	(2)	The different types of cooling measures implemented;
7	(3)	The approximate cost per classroom for planned cooling
8		measures, including installation, upgrades, equipment,
9		maintenance, and projected operating costs over the
10		life of the installed cooling measures;
11	(4)	The approximate cost per completed classroom for
12		cooling measures implemented, including installation,
13		upgrades, equipment, maintenance, and projected
14		operating costs over the life of the installed cooling
15		measures;
16	<u>(5)</u>	The number of completed classrooms in which energy
17		efficiency measures were installed or implemented and
18		the number of classrooms remaining that require energy
19		efficiency measures; and
20	(6)	The different types of energy efficiency measures
21		installed or implemented.



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1	(f) The department shall report its findings and
2	recommendations, including any proposed legislation, to the
3	legislature no later than twenty days prior to the convening of
4	each regular session."
5	SECTION 3. New statutory material is underscored.
6	SECTION 4. This Act shall take effect upon its approval.





Report Title:

Department of Education; Net-Zero Energy Use; Classrooms; Cooling; Energy

Description:

Requires the Department of Education to establish a goal of becoming net-zero with respect to energy use by January 1, 2035. Requires the Department of Education to expedite the cooling of all public school classrooms. (CD1)

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

