



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

Date: 04/06/2021

Time: 09:30 AM

Location: CR 211 & Videoconference

Committee: Senate Ways and Means

Department: Education

Person Testifying: Dr. Christina M. Kishimoto, Superintendent of Education

Title of Bill: HB 0550, HD2, SD1 RELATING TO ENERGY EFFICIENCY.

Purpose of Bill: Requires and establishes deadlines for state facilities, except smaller facilities and facilities within the stadium development district, to implement cost-effective energy efficiency measures. Allows the department of accounting and general services to opt out of the cost-effective energy efficiency measures if a facility will be demolished within five years. Directs the Hawaii natural energy institute to collect utility bill and energy usage data for state-owned buildings and to make the data publicly available. Establishes a goal for the State to achieve at least a twenty-five percent reduction in the electricity consumption of state facilities. Provides that certain agencies that perform energy efficiency retrofitting may continue to receive appropriations for energy expenditures. Beginning 7/1/2022, requires, where feasible and cost-effective, the design of all new state building construction to maximize energy and water efficiency, maximize energy generation potential, and use building materials that reduce the carbon footprint of the project. Effective 7/1/2050. (SD1)

Department's Position:

The Hawaii State Department of Education (Department) provides comments on HB 0550, HD2, SD1.

Adequate funding is necessary to implement energy efficiency measures, such as those identified in this proposal. Significant up-front capital investments are required to effectively implement and achieve energy efficiency projects and goals.

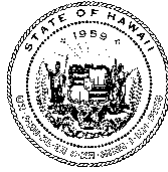
The Hawaii Green Infrastructure Authority's Hawaii Green Market Securitization (GEMS) Loan Program has proven to be a cost effective way to implement energy efficiency for state agencies, while allowing those agencies to recapture most of the energy savings. The GEMS Loan Program requires agencies to justify the return on the up-front capital investments for cost-effective energy efficiency measures, which are financed by a low interest rate. As a result, the state agency, and not the third parties, receive most of the energy efficiency savings.

To date, the Department used \$46 million for GEMS loan financing to reduce energy consumption by 15 million kWh per year. These saving are recaptured by the Department instead of going to energy services company contracts.

Thank you for the opportunity to testify on this measure.

The Hawai'i State Department of Education is committed to delivering on our promises to students, providing an equitable, excellent, and innovative learning environment in every school to engage and elevate our communities. This is achieved through targeted work around three impact strategies: school design, student voice, and teacher collaboration. Detailed information is available at www.hawaiipublicschools.org.

DAVID Y. IGE
GOVERNOR



CURT T. OTAGURO
COMPTROLLER
AUDREY HIDANO
DEPUTY COMPTROLLER

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P.O. BOX 119, HONOLULU, HAWAII 96810-0119

WRITTEN TESTIMONY
OF
CURT T. OTAGURO, COMPTROLLER
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
TO THE
COMMITTEE ON WAYS AND MEANS

TUESDAY, APRIL 6, 2021, 9:30 A.M.
CONFERENCE ROOM 211 VIA VIDEOCONFERENCE, STATE CAPITOL

H.B. 550, H.D.2, S.D. 1

RELATING TO ENERGY EFFICIENCY.

Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the Committees, thank you for the opportunity to submit testimony on H.B. 550, H.D.2., S.D. 1.

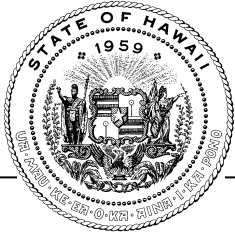
The Department of Accounting and General Services (DAGS) appreciates the intent of H.B. 550, H.D.2, S.D. 1 which requires and establishes deadlines for state facilities, except smaller facilities and facilities within the stadium development district, to implement cost-effective energy efficiency measures. The DAGS offers the following comments for the committee's consideration:

- 1) Section (c) (page 5, line 15) – This measure applies to all State agencies, we recommend that all agencies be allowed to opt out for this reason and not just the DAGS.
- 2) The DAGS would like to emphasize that the projects performed within performance contracting typically qualify for the use of Capitol Improvement Project (CIP) funds;

and when performance contracting projects are performed, these projects will be paid using future operating funds. This has the effect of paying for CIP qualified projects with operating funds and will not decrease a program's expenditure of operating funds.

- 3) The DAGS would like to emphasize that when performance contracting projects are performed, the design and construction are not subject to bidding and costs are typically much higher.

Thank you for the opportunity to submit testimony on this matter.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

SCOTT J. GLENN
CHIEF ENERGY OFFICER

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Testimony of
SCOTT J. GLENN, Chief Energy Officer

before the
SENATE COMMITTEE ON WAYS AND MEANS

Tuesday, April 6, 2021
9:30 AM
State Capitol, Conference Room 211 & Videoconference

In support of
HB 550, SD1
RELATING TO ENERGY EFFICIENCY.
(Written Testimony Only)

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committees, the Hawai'i State Energy Office (HSEO) supports and proposes amendments to HB 550, SD1, which establishes deadlines for all state facilities 10,000 square feet and larger to implement cost-effective energy efficiency measures; provides that agencies that perform energy efficiency retrofitting may receive appropriations for such measures; establishes a goal of achieving at least a twenty-five percent reduction by 2025 in electricity consumption of state facilities; and requires, where feasible and cost-effective, the design of all new state building construction to maximize energy and water efficiency, maximize energy generation potential, and use building materials that reduce the carbon footprint of the project. The bill also directs the Hawaii Natural Energy Institute to collect all state-owned facilities' utility bill and energy usage data and make this data publicly available.

The objectives of energy efficiency, cost control, lower energy bills, and leading by example outlined in HB 550, SD1, are consistent with HSEO's mission "to promote energy efficiency... to help achieve a resilient clean energy economy" in accordance with Section 196-71(a), Hawai'i Revised Statutes. It is also consistent with the Chief Energy Officer's duties to "provide technical assistance to state and county agencies to

assess and implement projects and programs related to energy conservation and efficiency, renewable energy, clean transportation, energy resiliency, and related measures.”

HSEO agrees that energy efficiency is the most cost-effective way to reduce energy usage, and has worked over the years with a number of state agencies in Hawai'i that have participated, or are currently participating in, facility benchmarking, energy audits, and energy savings performance contracts. HSEO has observed that there are always more, and sometimes new, energy savings and bill reduction opportunities.

HSEO also agrees that designing new state buildings to maximize energy and water efficiency, identifying energy generation potential, and using building materials that reduce the carbon footprint, where feasible and cost-effective, are in alignment with the State's clean energy and decarbonization goals.

HSEO is working closely with Hawai'i Energy and state agencies to assess opportunities to reach a target goal of 25% by 2025 reduction from a 2005 baseline year. HSEO has consistently been collecting state facility electricity use data and savings, using 2005 as the baseline year. The use of 2005 as the baseline year is consistent with the United States' baseline year in its Nationally Determined Contribution for the Paris Agreement, which Hawai'i committed to support and to “be aligned with” in Part I of [Act 32 of 2017](#).

HSEO's analysis shows that since 2005, state agencies' total electricity consumption has declined by 17 percent. HSEO believes that, with Legislative and Administrative support, and the Energy Efficiency in State Buildings Project described in the attachment, that amount can increase to 25 percent by 2025.

HSEO recommends one change to HB550, SD1. HSEO recommends that on Page 6, starting on line 12, the bill be modified to read:

“§196-__ Utility bills and energy usage data; state-owned facilities. The Hawaii [~~natural energy institute~~] state energy office shall collect all utility bill and energy usage data for

state-owned facilities monthly and shall make this information available in a publicly accessible format.”

The task is consistent with the HSEO’s current activities as well as within the scope of its statutory responsibilities.

HSEO’s comments are guided by its mission to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy, decarbonized economy.

In summary, HSEO supports HB550, SD1, to maximize the near-term savings and long-term energy performance of State buildings.

Thank you for the opportunity to testify.

Energy Efficiency in State Buildings (EESB)
 25% energy use reduction by 2025

Proactive management of energy costs by State agencies is expected to result in cost savings as well as improved facility operation. The Energy Efficiency in State Buildings project takes a comprehensive and coordinated approach to this objective.

Goal: Reduce state departmental energy use by 25% (from 2005 levels) by 2025.¹

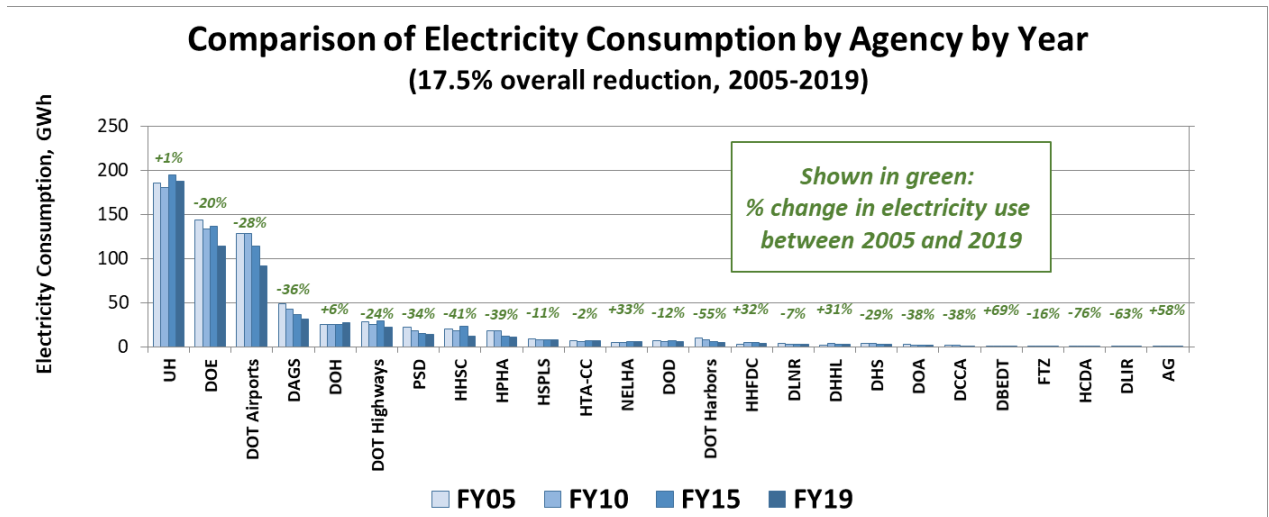
Hawai'i Revised Statutes, Section 196-30, requires that “each state department with responsibilities for the design and construction of public buildings and facilities” is to evaluate the energy efficiency of public buildings larger than 5,000 square feet or using more than 8,000 kilowatt-hours annually. The goal of 25% reduction by 2025 builds upon that requirement by setting a target amount and date.

Coordination:

Coordination will be provided by the Hawai'i State Energy Office (HSEO) and Hawai'i Energy.

Status:

A previous State (HSEO and partners) project benchmarked 416 public facilities, including more than 2,600 buildings covering more than 29 million square feet. By the end of 2019, the State agencies' energy use was 17.5% less than it was in 2005, the baseline year. The figure below shows the percentage change from 2005 to 2019 and the relative magnitude of electricity purchases by agencies.



Background:

Energy Performance Contracting in Hawai'i

Agencies have been pursuing energy retrofits since 1996. State and local government agencies' savings from the performance contracting program*² (since its introduction by the State Energy Office in 1996) are expected to total an estimated \$1.1 billion in energy costs over the life of the contracts, and a cumulative amount of electricity equal to the amount used by 396,586 homes in one year. The projects comprise over 112 million square feet in 295 existing buildings and facilities. Hawai'i Revised Statutes, Section 196-30, also requires that every five years, major facilities be “retro-commissioned.”

Plan:

HSEO coordinates provision of technical assistance and training with Hawai'i Energy to support State agencies in financing energy efficiency and cost reductions via operational changes, energy savings performance contracts, or other mechanisms.

Funding: Pursue-federal funding and use of existing HSEO consultants to support technical assistance and to finance and incentivize the proposed work with state agencies.

Year 1 (2021-2022)

Identify highest potential ("Tier 1") State facilities for immediate action using the results of the previous benchmarking study, working with agencies that are among the highest energy users and have not yet achieved the 25% energy savings goal.

Tier 1 agencies include: University of Hawai'i, Department of Education, Department of Health, Department of Defense, Hawai'i Public Library System, and Hawai'i Health Systems Corporation. DAGS, as the building operations and manager for many state facilities, would also assist and participate in both Tiers 1 and 2. In partnership with HSEO and Hawai'i Energy, this State agency cohort would identify, address, and implement energy retrofit and operational savings opportunities.

Agency	FY05 kWh	FY19 kWh	Change FY05 - FY19 %	Maximum Annual Use with 25% Reduction kWh	Additional Reduction from 2019 Levels to Reach Goal kWh	Estimated Additional Savings \$
UH	186,135,017	187,264,956	0.6	139,601,263	47,663,693	14,156,117
DOE	143,491,511	114,391,027	-20.3	107,618,633	6,772,394	2,011,401
DOH	25,800,739	27,273,819	5.7	19,350,554	7,923,265	2,353,210
HSPLS	8,477,520	7,508,738	-11.4	6,358,140	1,150,598	341,728
DOD	6,703,102	5,885,274	-12.2	5,027,327	857,947	254,810

Year 2 (2022-2023)

Identify "Tier 2" State facilities with energy efficiency retrofit potential. For both Tier 1 and Tier 2 sites, identify demand response or other potential tariff /aggregator participation options to reduce State agency energy (electricity and fuel) costs. Tier 2 agencies would include: DBEDT, DLNR, FTZ, HTA-CC and NELHA. HHFDC and DHHL would be the housing and other agencies included in Tier 2.

Energy Performance Contracts in Hawaii as of October, 2020

Agency	Year(s)	Contract Amount (\$)	Est. Savings Over Life of Contract (\$)
UH-Hilo	1996-2012	\$6,402,695	\$14,630,066
County of Hawaii	1997-2026	\$2,215,546	\$8,157,880
County of Kauai	1998-2012	\$525,965	\$1,205,990
City & County of Honolulu	2001-2025	\$11,900,205	\$36,066,761
Hawaii Health Systems Corporation	2002-2022	\$21,936,997	\$55,766,364
Judiciary	2003-2012	\$1,474,406	\$9,785,036
DAGS Phase I	2009-2029	\$36,873,266	\$72,580,767
PSD	2010-2030	\$25,511,264	\$57,211,112
UH Community Colleges	2012-2032	\$34,207,392	\$37,000,000
City & County HNL Kailua Wastewater	2013-2033	\$6,054,178	\$13,693,910
DAGS Phase II	2013-2033	\$17,400,000	\$28,000,000
DOT	2013-2034	\$309,506,592	\$795,560,746
Honolulu Board of Water Supply	2016-2036	\$33,125,398	\$56,846,668
	Total	\$507,133,904	\$1,186,505,300

Notes:

¹ The commitment to the 25% reduction, and the use of 2005 as the baseline year, are consistent with the United Nations' baseline year and the Paris Agreement, which Hawai'i committed to support and to "be aligned with" in Part I of [Act 32 of 2017](#).

² With an Energy Performance Contract, a State or County agency enters into an agreement with a private Energy Services Company (ESCO) to purchase and install an Energy Conservation Measure (possibly including photovoltaics). The agency uses a portion of the electricity bill savings from those energy conservation measures to, over time, reimburse the ESCO for the cost of the equipment and installation (and maintenance, if included in the agreement). This allows the private contractor to purchase and install equipment that reduces energy and water use in government-owned facilities, based on the future savings from the energy conservation measures, with no required up-front payment by the government agency. Under the agreement, the ESCO will guarantee the savings – and pay for any shortfall.



**Testimony to the Senate Committee Ways and Means
Tuesday, April 6, 2021 at 9:30 A.M.
Written Testimony**

RE: HB 550, HD 2, REALTING TO ENERGY EFFICIENCY

Chair Dela Cruz, Vice-Chair Keith-Agaran, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") **supports** HB 550, HD 2, SD 1 which:

- 1) Requires and establishes deadlines for state facilities, except smaller facilities and facilities within the stadium development district, to implement cost-effective energy efficiency measures;
- 2) Allows the department of accounting and general services to opt out of the cost-effective energy efficiency measures if a facility will be demolished within five years;
- 3) Directs the Hawaii natural energy institute to collect utility bill and energy usage data for state-owned buildings and to make the data publicly available;
- 4) Establishes a goal for the State to achieve at least a twenty-five percent reduction in the electricity consumption of state facilities;
- 5) Provides that certain agencies that perform energy efficiency retrofitting may continue to receive appropriations for energy expenditures; and
- 6) Beginning 7/1/2022, requires, where feasible and cost-effective, the design of all new state building construction to maximize energy and water efficiency, maximize energy generation potential, and use building materials that reduce the carbon footprint of the project.

The Chamber is Hawaii's leading statewide business advocacy organization, representing about 2,000+ businesses. Approximately 80% of our members are small businesses with less than 20 employees. As the "Voice of Business" in Hawaii, the organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

Hawaii continues to play a leading role in protecting our environment and increasing energy efficiency. We believe in the benefits of a sustainable future, but we must ensure that solutions that would affect the business community do not impede or create unintended burdens on entrepreneurs. Policies need to be shaped to create common



Chamber *of* Commerce HAWAII

The Voice of Business

ground, especially so that businesses can have the flexibility to develop and create sound solutions to address these important issues.

As such, we believe this measure is leading by example to advance clean energy benefits in state facilities.

Thank you for this opportunity to provide testimony.



Before the Senate Committee on Ways and Means
Tuesday, April 6, 2021, 9:30am

Testimony in Support of HD550 HD2 SD1: Relating to Energy Efficiency

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committees:

Thank you for the opportunity to testify in support of House Bill 550 HD2 SD1.

Hawai'i Energy works to empower island families and businesses on behalf of the Hawai'i Public Utilities Commission (PUC) to make smart energy choices to reduce energy consumption, save money, and pursue a 100% clean energy future. Energy efficiency is the cheapest option to help us achieve our 100% clean energy goal by eliminating waste and being more efficient.

Hawai'i Energy applauds efforts to improve energy efficiency in State facilities. The State of Hawai'i has benefitted from a successful Energy Savings Performance Contract (ESPC) program that drove a significant level of energy savings projects between 2009 and 2015. Hawai'i Energy estimates that since 1996, Hawai'i government agencies have saved, on average, more than 5 million kilowatt hours a year, equating to over \$24 million in savings, with the majority of this coming through ESPCs.

ESPC procurements have significantly dropped since 2015, due to a number of potential factors, including previously completed projects, the expiration of the approved ESCO vendor list, and other non-energy priorities among others. With advances in technologies that increase efficiency coupled with the number of buildings that are still largely inefficient, opportunity remains for further improvement. ESPCs have demonstrated the ability to help the State save money without any capital budget allocation, which is now more important than ever.

This bill requires the State agencies to implement cost-effective energy efficiency measures, meaning that the savings will be greater than the cost of upgrade. Given Hawai'i has the highest energy rates in the country, energy efficiency can deliver significant cost savings which need to be harvested during these challenging budgetary times. Upgrades that cannot pay for themselves do not need to be implemented, ensuring fiscal responsibility.

Tackling energy use at state facilities will take time, manpower, and, in some instances, funding. State agencies have the flexibility to implement energy efficiency measures through ESPC, but it could also be funded through the Green Energy Market Securitization (GEMS) so that no upfront capital is required. The legislation does not limit state agencies from also funding the upgrades through capital improvement budgets if that is preferred.

As the State looks at ways to help local businesses recover from COVID-19, efficiency projects at state facilities can help to expand the economy and create opportunities for economic growth in the energy industry. We also need to support energy efficiency contractors who have been negatively impacted by COVID-19, including loss of business, project delays and staff reduction. Hawai'i Energy stands ready to assist agencies with educational and engineering resources, as well as financial incentives to help launch these projects.

We appreciate the efforts made by the State Legislature, the Hawai'i State Energy Office and other State agencies, and various stakeholders to improve on the 2020 version. Thank you for the opportunity to testify in support of House Bill 550 HD2 SD1.

Sincerely,
Brian Kealoha
Executive Director
Hawai'i Energy



**Statement of the Democratic Party of Hawai'i
In Support of HB550 HD2 SD1, Relating to Energy Efficiency**

The [Democratic Party of Hawai'i](#) supports HB550 HD2 SD1, Relating to Energy Efficiency, to the extent that it aligns with our Party's [platform](#). The bill requires and establishes deadlines for state facilities, except smaller facilities and facilities within the Stadium Development District, to implement cost-effective energy efficiency measures; allows the Department of Accounting and General Services to opt out of the cost-effective energy efficiency measures if a facility will be demolished within five years; directs the Hawai'i Natural Energy Institute to collect utility bill and energy usage data for state-owned buildings and to make the data publicly available; establishes a goal for the State to achieve at least a twenty-five percent reduction in the electricity consumption of state facilities; provides that certain agencies that perform energy efficiency retrofitting may continue to receive appropriations for energy expenditures; and beginning 7/1/2022, requires, where feasible and cost-effective, the design of all new state building construction to maximize energy and water efficiency, maximize energy generation potential, and use building materials that reduce the carbon footprint of the project.

The Democratic Party of Hawai'i has prioritized issues that relate to the Green New Deal as a Tier 2 priority among our legislative committee. This bill, which would improve energy efficiency for state facilities, aligns with these goals. We believe the State must seek to achieve energy sustainability based on renewable energy sources, develop the use of a variety of cost-effective energy providing systems, support tax incentives that encourage renewable energy initiatives, and comprehensively implement renewable energy and associated technologies such as storage and smart grid technologies.

We find that HB550 HD2 SD1 would help us to get closer to these goals within state facilities.

Mahalo nui for the opportunity to provide these comments in support of this important bill.

*Tyler Dos Santos-Tam
Chairperson*



SENATE COMMITTEE ON WAYS AND MEANS

April 6, 2021, 9:30 A.M.

Video Conference

TESTIMONY IN SUPPORT OF HB 550 HD2 SD1

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and Committee members:

Blue Planet Foundation **supports HB 550 HD2 SD1**, an important energy efficiency measure that will reduce the taxpayer burden of state energy bills, create new jobs in clean energy, and decrease our carbon emissions. These are critical objectives—particularly given the dramatic economic challenges that Hawai'i faces. What's more, passing this measure will demonstrate that the State of Hawai'i leads by example.

House Bill 550 is needed today

Energy efficiency is foundational to achieve Hawai'i's critical clean energy and climate objectives, such as the state's 100% renewable energy requirement, carbon neutrality goal, and commitments to the Paris climate targets. House Bill 550 amplifies existing state efficiency efforts and brings renewed focus to the successful Energy Savings Performance Contract program. The measure also brings needed transparency on state building energy use to make visible even more savings opportunities. Finally, HB 550 ensures that new construction anticipates our future energy and climate goals by maximizing feasible and cost-effective energy efficiency and energy generation design features and using building materials that reduce the carbon footprint of the project.

While the state has made some strides toward energy efficiency, considerable opportunities remain to decarbonize state buildings and reduce energy costs for taxpayers. The facilities that the State of Hawai'i owns and/or manages comprise one of the largest electricity users in the state. While the use of energy savings performance contracting—mainly during the period between 2009 and 2014—helped some agencies reduce their energy consumption, many agencies did not participate. Additionally, no new energy service contracts have been awarded by state agencies for nearly five years and, in some cases, some performance contracts were last awarded ten years ago. Since that time, technology has evolved significantly and is far more efficient, resulting in greater cost-saving benefits for the state.

HRS 196-19 states “Agencies shall retire inefficient equipment on an accelerated basis where replacement results in lower life-cycle costs.” Instead, the State continues to utilize old and

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inefficient equipment in many facilities that do not meet this requirement and waste taxpayer money. House Bill 550 would help to identify new energy savings opportunities and revitalize the successful performance contracting program.

House Bill 550 Helps Address the State's Employment, Economic, and Budget Challenges

Energy efficiency is not only foundational to achieving our critical climate and clean energy goals, it boosts employment, economic activity, and tax revenue. State energy efficiency projects will keep hundreds of people employed at a time when the State is struggling to find new economic engines without tourism. As indicated in the “Hawai'i Clean Energy Initiative 2008-2018” report, energy efficiency employed 5,100 people statewide.¹ A BW Research Partnership report on COVID-19's economic crisis in August 2020 reported that Hawai'i lost nearly 3,800 clean jobs, or 25.2% of the clean energy workforce, since before the pandemic spread—including 1,704 in the energy efficiency sector.² These are well-paying jobs that could be regained through the adoption of HB 550.

The reduction in state energy costs resulting from the energy efficiency projects can help reduce the projected budget shortfall. Critically, investment in energy efficiency projects through innovative performance contracting do not require any state or capital improvement project funds and instead can be funded through the energy savings. Further, energy efficiency projects will generate tax revenues for the state through the construction projects subject to the state's general excise tax.

Conclusion

House Bill 550 is a keystone energy efficiency measure that will reduce the taxpayer burden of state energy bills, create new jobs in clean energy, and decrease our carbon emissions. At its core, however, HB 550 is about more than just operating efficient buildings. This measure is a promise that the state will lead by example and serve as a model for residents and the private sector for our clean energy transformation. The new requirements in HB 550 will inspire and demonstrate to everyone—consumers, building owners and managers, contractors—on how we use energy, make changes, and construct our buildings today for generations of tomorrow. House Bill 550 shows how the State of Hawai'i is leading by example on how our energy culture is changing.

Thank you for the opportunity to provide testimony.

¹ See <https://www.nrel.gov/docs/fy18osti/70709.pdf>

² See https://bwresearch.com/covid/docs/BWRResearch_CleanEnergyJobsCOVID-19Memo_July2020.pdf



Email: communications@ulupono.com

SENATE COMMITTEE ON WAYS & MEANS
Tuesday, April 6, 2021 —9:30 a.m.

Ulupono Initiative supports HB 550 HD 2 SD 1, Relating to Energy Efficiency

Dear Chair Dela Cruz and Members of the Committee:

My name is Micah Munekata, and I am the Director of Government Affairs at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve quality of life throughout the islands by helping our communities become more resilient and self-sufficient through locally produced food; renewable energy and clean transportation; and better management of freshwater and waste.

Ulupono supports HB 550 HD 2 SD 1, which requires and establishes deadlines for state facilities, except smaller facilities and facilities within the stadium development district, to implement cost-effective energy efficiency measures; allows the Department of Accounting and General Services to opt out of the cost-effective energy efficiency measures if a facility will be demolished within five years; directs the Hawai'i Natural Energy Institute to collect utility bill and energy usage data for state-owned buildings and to make the data publicly available; establishes a goal for the State to achieve at least a twenty-five percent reduction in the electricity consumption of state facilities; provides that certain agencies that perform energy efficiency retrofitting may continue to receive appropriations for energy expenditures; and, beginning 7/1/2022, requires, where feasible and cost-effective, the design of all new state building construction to maximize energy and water efficiency, maximize energy generation potential, and use building materials that reduce the carbon footprint of the project.

Ulupono supports energy efficiency measures to lower consumption across the State. As Hawai'i's energy issues become increasingly complex and challenging, we appreciate this committee's efforts to look at policies that reduce the State's overall energy demand, which in return should save the State, and taxpayers, money. We recommend adding in a deadline to meet the State's 25% reduction of electricity consumption goal. Meeting the State's 100% renewable goal by 2045 will require everyone's commitment and it is important for the State government to lead the way.

Thank you for the opportunity to testify.

Respectfully,

Micah Munekata
Director of Government Affairs

Investing in a Sustainable Hawai'i

HB-550-SD-1

Submitted on: 4/4/2021 4:48:44 PM

Testimony for WAM on 4/6/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ted Bohlen	Testifying for Climate Protectors Hawai'i	Support	No

Comments:

To: The Honorable Donovan Dela Cruz, Chair, The Honorable Gilbert Keith-Agaran, Vice Chair, and Members of the Senate Committee on Ways and Means

From: Climate Protectors Hawai'i (by Ted Bohlen)

Re: Hearing **HB550 HD2 SD1 RELATING TO ENERGY EFFICIENCY.**

Hearing: Tuesday, April 6, 2021, 9:30 a.m., Rm. 211 and by videoconference

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the Senate Committee on Ways and Means:

The Climate Protectors Hawai'i is a group focused on reversing the climate crisis. **The Climate Protectors Hawai'i STRONGLY SUPPORTS HB550 HD2 SD1, an important energy efficiency measure that will reduce the taxpayer burden of state energy bills, create new jobs in clean energy, and decrease our Greenhouse gas emissions.**

As a tropical island State, Hawai'i will be among the first places harmed by the global climate crisis, with more intense storms, loss of protective coral reefs, food insecurity, and rising sea levels destroying our shorelines. We must do all we can to reduce our carbon footprint and become carbon negative as soon as possible. The planet faces an existential climate crisis and we must act now! The IPCC (Intergovernmental Panel on Climate Change) says we have less than 10 years for worldwide climate action to avoid climate catastrophe. If we are to solve the climate crisis, it will require all of us working together. Hawaii can and should be a leader in showing the world the way forward towards a safe and sustainable climate and future. The sooner we inspire others to take action and lead by example, the better off the future will be for our children.

One of the areas where the State can lead in reducing greenhouse gas emissions is by installing energy efficient equipment and taking energy efficiency measures at State facilities. **This bill would establish a goal of reducing electricity consumption at State facilities by at least 25%.** For State building construction design, it would require, where reasonable and cost effective, maximizing energy and water efficiency,

mazimizing energy generation potential, and **using building materials that reduce the carbon footprint of the project**. This plan will help substantially in reducing greenhouse gases and addressing our existential climate crisis.

Please pass this bill! Mahalo!

Climate Protectors Hawai'i (by Ted Bohlen)



To: The Senate Committee on Ways and Means
From: Sherry Pollack, 350Hawaii.org
Date: Tuesday, April 6, 2021, 9:30 am

In support of HB550 HD2 SD1

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and Committee members of Ways and Means,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii's 6,000 members **support HB550 HD2 SD1** which would reduce the taxpayer burden of state energy bills and decrease our carbon emissions.

One of the areas where the State can **lead in reducing greenhouse gas emissions** while at the same time **maximizing savings of taxpayer dollars**, is by installing energy efficient equipment and taking energy efficiency measures at State facilities. This bill would establish a goal of reducing electricity consumption at State facilities by at least 25%. For State building construction design, it would require, where reasonable and cost effective, maximizing energy and water efficiency, maximizing energy generation potential, and using building materials that reduce the carbon footprint of the project.

This plan will help substantially in reducing greenhouse gases and addressing our existential climate crisis while saving taxpayers money via energy efficiency.

Mahalo for the opportunity to testify in **support** of this very important legislation.

Sherry Pollack
Co-Founder, 350Hawaii.org



PRESIDENT & CEO

Mahesh Ramanujam

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usgbc.org

April 5, 2021

Ways and Means Committee
Senator Dela Cruz, Chair
Senator Keith – Agaran, Vice Chair
Hawaii State Capitol
Honolulu, HI 96813

RE: Support for HB 550 HD2 SD1 Relating to Energy Efficiency

Dear Chair Dela Cruz, Vice Chair Keith – Agaran, and Members of the Committee,

On behalf of the U.S. Green Building Council (USGBC), our nearly 8,000 member companies nationwide, and our strong community in Hawai'i, we are pleased to provide our **support for HI HB 550 HD2 SD1 - Relating To Energy Efficiency.**

USGBC is a nonprofit organization dedicated to transforming the way buildings and communities are designed, built and operated, enabling an environmentally and socially responsible, healthy, and prosperous world. Our flagship green building system, Leadership in Energy & Environmental Design (LEED), has been embraced across the world. Nearly 78 Hawaii organizations are USGBC members and there are nearly 430 LEED Certified projects in the state that span over 52 million square feet of real estate. USGBC represents a full range in the building sector, including builders, product manufacturers, professional firms, and real estate professionals.

We wish to commend the State's effort to promote high efficiency building practices by requiring state facilities to implement cost-effective energy efficiency measures, and by disclosing state-owned facility's monthly utility data, thus further building upon the Lead by Example tenets of Act 96. We also commend the requirements for all new state buildings, where cost-effective, to maximize water and energy efficiency, energy generation potential, and reducing the carbon footprint of building materials. We look forward to working with you and the Legislature to advance this legislation that would provide real benefits to residents throughout Hawai'i.

Please do not hesitate to contact us if you have any questions.

Sincerely,

Jennifer Gunby
State & Local Advocacy Manager
US Green Building Council
jgunby@usgbc.org

Melanie Islam, AIA, LEED AP
Advocacy Chair
USGBC Hawaii
melanie@masonarch.com



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
Senate Committee on Ways and Means
Tuesday, April 6, 2021; 9:30AM

By

Richard Rocheleau, Director
Hawai'i Natural Energy Institute
University of Hawai'i at Mānoa

HB 550 HD2 SD1 – RELATING TO ENERGY EFFICIENCY

Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the Committee:

The Hawai'i Natural Energy Institute (HNEI) is in support of this measure with the recommendation to modify the language, page 6, lines 12-16.

HNEI agrees that further reducing energy usage, including energy demand in state facilities as identified in this measure is a necessary component for achieving the state's energy goals. It is our understanding, as stated in this measure; that “the Hawaii state energy office is working with state agencies to assess opportunities to reach a target goal of a twenty—five per cent reduction by 2025, from a 2005 baseline year, through the energy efficiency in state buildings project”. We further understand that the Hawai'i State Energy Office (HSEO) currently collects and reports energy usage from state buildings on an annual basis.

In light of HSEO's current role and responsibilities as described above, HNEI believes that the HSEO is the appropriate agency to collect data regarding state energy usage. Specifically, we recommend that the section, lines 12-16, on page 6 be modified to read:

“§196-__ Utility bills and energy usage data; state-owned facilities. The Hawaii [~~natural energy institute~~] state energy office shall collect all utility bill and energy usage data for state-owned facilities monthly and shall make this information available in a publicly accessible format.”

While we believe this task outlined in lines 12-16 of page 6 is consistent with the HSEO's current activities and within the scope of its statutory responsibilities; if asked, HNEI currently has adequate funding from the Energy Systems Development Special Fund (ESDSF) and is ready to assist as requested to support the data collection elements of this legislation.

Thank you for the opportunity to provide written testimony on HB 550 HD2 SD1.



Environmental Caucus of The Democratic Party of Hawai'i

Tuesday, April 6, 2021, 9:30 am

Senate Committee on Ways and Means

HOUSE BILL 550 – RELATING TO ENERGY EFFICIENCY:

Position: Strong Support

LATE

Me ke Aloha, Chair Donovan Dela Cruz, Vice-Chair Gilbert Keith-Agaran, and Members of the Committee on Ways and Means:

Hawaii is struggling to get a grip on the climate crisis, which is descending upon us faster than we are prepared to address. Small steps are better than none, and even the small steps seem massive in light of our resistance to take on any change at all. HB 550 is an excellent example of an issue who time is always present, which regardless of the crises coming should be pursued by rational State policy.

Directing the Natural Energy Lab to assemble analytical data is an excellent step, and certainly even a self-initiating program by State agencies to improve energy efficiency by 25% is an important step. Moreover, the inevitable result of such savings is the Jevons Paradox of enabling more development without needing to generate more electricity than current capacity. Hawaii is struggling to replace fossil fuels with renewables in producing electrical energy, so reducing total demand while continuing to build back the economy is a positive step.

Such essential steps will demonstrate the difficulty but teach the practice of how to make change that will necessarily need to be far more rapid in the future. The Energy and Climate Action Committee of the Environmental Caucus enthusiastically endorses HB 550.

/s/ Charley Ice, Co-Chair, Energy & Climate Action Committee, Environmental Caucus of the Democratic Party of Hawaii.

LATE



Environmental Caucus of The Democratic Party of Hawai'i

April 6, 2021

To: Senate Committee on Ways and Means
Senator Donovan M. Dela Cruz, Chair
Senator Gilbert S.C. Keith-Agaran, Vice Chair
Members of the Senate Committee on Ways and Means

Re: HB 550, HD2, SD1 RELATING TO ENERGY EFFICIENCY

Meeting: Tuesday, April 6, 2021, 9:30 a.m., Room 221 via videoconference

Position: **STRONG SUPPORT**

Aloha, Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee on Ways and Means:

The Environmental Caucus of the Democratic Party of Hawai'i and its Natural Resources Committee are in **strong support** of HB550, HD2, SD1, as it requires and establishes deadlines for state facilities, except smaller facilities and facilities within the stadium development district, to implement cost-effective energy efficiency measures. This measure allows the department of accounting and general services to opt out of the cost-effective energy efficiency measures if a facility will be demolished within five years. It directs the Hawaii natural energy institute to collect utility bill and energy usage data for state-owned buildings and to make the data publicly available. It establishes a goal for the State to achieve at least a twenty-five percent reduction in the electricity consumption of state facilities. This measure also provides that certain agencies that perform energy efficiency retrofitting may continue to receive appropriations for energy expenditures. Beginning 7/1/2022, requires, where feasible and cost-effective, the design of all new state building construction to maximize energy and water efficiency, maximize energy generation potential, and use building materials that reduce the carbon footprint of the project. This bill is consistent with the Democratic Party of Hawai'i ("DPH") Party Platform.

The Democratic Party of Hawai'i has adopted at its 2018 State Convention, clear safeguards to protect and promote our clean and healthy environment. At page 17-18 of the DPH Platform, it specifically provides, to wit:

ENERGY

We seek to achieve energy sustainability based on renewable energy sources. We must encourage the use of clean alternative fuel sources to include our public transportation systems. We must increase the use of public transit, telecommuting, car and vanpooling, ridesharing, biking, walking, and other forms of transportation thereby reducing traffic



April 6, 2021

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congestion and air pollution. We must also urgently develop the use of a variety of cost-effective energy providing systems, encourage transit-oriented development, and support tax incentives that encourage renewable energy initiatives.

We oppose any tax breaks to fossil fuel industries. We support energy independence, self-sufficiency, affordability and reliability for *Hawai'i* through the development of renewable alternative energy sources. Specifically, we need to support policies that foster the development of energy production methods that de-emphasize carbon-bass and promote renewable sources such as wind, solar, wave, geothermal and Ocean Thermal Energy Conversion (OTEC).

Electricity rates in Hawai'i are among the highest in the Nation even though we enjoy an abundance of sunshine year-round. Electric utility companies and cooperatives must open the grid to alternative power sources including solar panels and geothermal energy. We support the effort of our government officials to require utilities to provide for the maximum, comprehensive, integrated use of renewable energy and associated technologies such as storage and smart grid technologies.

COMBAT CLIMATE CHANGE BUILD A CLEAN ENERGY ECONOMY, AND SECURE ENVIROMENTAL JUSTICE

We are committed to getting 100 percent of our electricity from clean energy sources within a decade. We will cut energy waste in homes, schools, hospitals, and offices through energy efficient improvements; modernize our electric grid; and make manufacturing the cleanest and most efficient in the world. These efforts will create hundreds of new jobs and save families and businesses money on their monthly energy bills. We will transform Hawai'i's transportation by reducing fossil fuel consumption through cleaner fuels, vehicle electrification, and increasing the fuel efficiency of cars, boilers, ships, and trucks. We will make new investments in public transportation and build bicycle and pedestrian infrastructure across our urban and suburban areas. We believe that the tax code must reflect our commitment to a clean energy future by preserving and extending tax incentives for energy efficiency and clean energy.

Democrats believe that carbon dioxide, methane, and other greenhouse gases should be priced to reflect their negative externalities, and to accelerate the transition to a clean energy economy and help meet our climate goals. Democrats are committed to defending, implementing and extending smart pollution and efficiency standards and fuel economy standards for automobiles and heavy-duty vehicles, building codes and appliance standards. We are also committed to expanding clean energy research and development.

We will work to expand access to cost-saving renewable energy by low-income households, create good-paying jobs in communities that struggled with energy poverty, and oppose efforts by utilities to limit consumer choice or slow clean energy deployment. We will streamline State permitting and accelerate the construction of new transmission lines to get low-cost renewable energy to market, and incentivize wind, solar, and other renewable energy.



April 6, 2021

Page 3

Specifically, HB550, HD2, SD1, requires and establishes deadlines for state facilities, except smaller facilities and facilities within the stadium development district, to implement cost-effective energy efficiency measures. This measure allows the department of accounting and general services to opt out of the cost-effective energy efficiency measures if a facility will be demolished within five years. It directs the Hawaii natural energy institute to collect utility bill and energy usage data for state-owned buildings and to make the data publicly available. It establishes a goal for the State to achieve at least a twenty-five percent reduction in the electricity consumption of state facilities. This measure also provides that certain agencies that perform energy efficiency retrofitting may continue to receive appropriations for energy expenditures. Beginning 7/1/2022, this measure would require, where feasible and cost-effective, the design of all new state building construction to maximize energy and water efficiency, maximize energy generation potential, and use building materials that reduce the carbon footprint of the project.

We strongly urge the passage HB 550, HD 2, SD1, as it is consistent with the DPH Platform relating to energy efficiency.

Thank you very much for the opportunity to testify on these important issues.

Respectfully yours,

Alan B. Burdick
Co-Chair, Environmental Caucus
Co-Chair, Natural Resources Committee
Democratic Party of Hawai'i
Email: burdick808@gmail.com

Melodie R. Aduja
Co-Chair, Environmental Caucus
Co-Chair, Human Environmental Impacts Committee
Democratic Party of Hawai'i
Email: legislativepriorities@gmail.com

HB-550-SD-1

Submitted on: 3/25/2021 5:59:08 PM

Testimony for WAM on 4/6/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ruta Jordans	Individual	Support	No

Comments:

Imperative for Hawaii to reduce green house gas emission. Please support!

HB-550-SD-1

Submitted on: 3/31/2021 5:46:41 AM

Testimony for WAM on 4/6/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Janet Pappas	Individual	Support	No

Comments:

Dear WAM Chair Dela Cruz, WAM Vice Chair Keith-Agaran and WAM Committee members,

I strongly support HB550 HD2 SD1.

Leading by example by ensuring that all State buildings are energy efficient will encourage the public to become energy efficient at home as well. The goals in this bill to reduce electricity usage in State facilities by 25% and require new buildings to meet certain energy efficiency standards are admirable, but we should set interim benchmarks to be sure we are making progress from the beginning. Energy efficiency is the most cost-effective way to reduce emissions and results in cleaner air and a healthier planet. Retro-fitting older buildings to be energy efficient saves us the cost of a new building.

There is a weekly podcast available online on Spotify called "How to Save a Planet". One episode, "Breaking Buildings' Addiction to Fossil Fuels", shares ideas on designing energy efficient buildings, and could be especially helpful in planning how to tackle the problem across hundreds of buildings.

All Hawaii government offices (at all levels), businesses, non-profits and the public will have to play a part to be successful in this existential transformation. Let's waste no more time. Pass Bill HB550 HD2 SD1 and build the plan to transition Hawaii to a renewable energy future.

Thank you for listening and for this opportunity to testify.

Sincerely,

Jan Pappas - Aiea, Hawaii

HB-550-SD-1

Submitted on: 4/1/2021 11:24:14 AM

Testimony for WAM on 4/6/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Kaikea K. Blakemore	Individual	Support	No

Comments:

Support

HB-550-SD-1

Submitted on: 4/1/2021 10:59:45 PM

Testimony for WAM on 4/6/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
John Kawamoto	Individual	Support	No

Comments:

My name is John Kawamoto, and I support HB 550 HD 2 SD 1, which strives to attain Hawaii's zero emissions goals by requiring existing facilities owned by State government to reduce electricity consumption and to require new facilities to be designed to maximize energy generation and maximize energy efficiency.

Climate change is accelerating, and human-induced global warming has already led global temperatures to rise an average of one degree Centigrade over preindustrial levels. Further temperature increases would lead to widespread drought, crop failures, floods, wildfires, energy blackouts, infrastructure breakdowns, supply chain breakdowns, and infectious disease outbreaks that would be devastating and irreversible. Hawaii must do much more to reduce its consumption of fossil fuels and replace it with clean renewable energy in order to do its share to control climate change.

The State has adopted a goal of 100% clean energy by 2045. Many efforts are needed, and this bill should be one of multiple bills passed by the Legislature to enable Hawaii to do its part to control climate change.

HB-550-SD-1

Submitted on: 4/4/2021 5:57:58 PM

Testimony for WAM on 4/6/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Shannon Rudolph	Individual	Support	No

Comments:

SUPPORT

HB-550-SD-1

Submitted on: 4/5/2021 2:55:04 AM

Testimony for WAM on 4/6/2021 9:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Christopher Dean	Testifying for Clean The Pacific	Support	No

Comments:

I don't think anything needs to be said here, energy efficiency saves money and saves the planet, so this should be a done deal.