

UNIVERSITY OF HAWAI'I SYSTEM

Legislative Testimony

Testimony Presented Before the Senate Committee on Energy, Economic Development, and Tourism and Senate Committee on Government Operations Wednesday, February 9, 2022 at 3:00 p.m. By Richard Rocheleau, Director Hawai'i Natural Energy Institute and Michael Bruno, PhD Provost University of Hawai'i at Mānoa

SB 2963 - RELATING TO ENERGY EFFICIENCY

Chairs Wakai and Moriwaki, Vice Chairs Misalucha and Dela Cruz, and members of the committees:

The Hawai'i Natural Energy Institute (HNEI) is in support of this measure with the recommendation to modify the language, page 6, lines 15-19.

HNEI agrees that further reducing energy usage, including energy demand in state facilities as identified in this measure is important and necessary for achieving the state's energy goals. It is our understanding, as stated in this measure; that the Hawai'i State Energy Office (HSEO) "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 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 energy usage data from state – owned facilities. Based on this, we recommend that the section, lines 15-19, on page 6 be modified to read:

"§196-___ Utility bills and energy usage data; state-owned facilities. The Hawaii [natural energy institute] <u>state energy office</u> 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 15-19 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 SB 2963.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Telephone: Web: (808) 587-3807 energy.hawaii.gov

Testimony of Scott J. Glenn, Chief Energy Officer

before the SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM AND COMMITTEE ON GOVERNMENT OPERATIONS

Wednesday, February 9, 2022 3:00 PM State Capitol, Conference Room 224 & Videoconference

SUPPORT SB 2963 RELATING TO ENERGY EFFICIENCY.

Chairs Wakai and Moriwaki, Vice Chairs Misalucha and Dela Cruz, and members of the Committees, the Hawai'i State Energy Office (HSEO) supports and proposes modifications to SB 2963 which establishes deadlines for all state facilities 10,000 square feet and larger 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; establishes a goal of achieving at least a twenty-five percent reduction by 2025 in electricity consumption of state facilities; provides that agencies that perform energy efficiency retrofitting may receive appropriations for such measures; 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 utility bill and energy usage data for state-owned buildings and to make the data publicly available.

DAVID Y. IGE GOVERNOR

SCOTT J. GLENN

CHIEF ENERGY OFFICER

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

The objectives of energy efficiency, cost control, lower energy bills, and leading by example outlined in SB 2963 are consistent with HSEO's mission 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. HSEO has worked over the years and continues to work 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 is working closely with Hawai'i Energy and state agencies to assess these opportunities to reach a target goal of 25% reduction by 2025 from a 2005 baseline year. HSEO has consistently been measuring facility electricity reduction using 2005 as the baseline year, which is consistent with the United States' baseline year in its Nationally Determined Contribution for the Paris Agreement, that Hawai'i committed to support and to "be aligned with" in Part I of <u>Act 32 of 2017</u>.

HSEO's analysis shows since 2005, state agencies' total electricity consumption has declined by 20 percent. HSEO believes with Legislative and Administrative support, that amount can increase to 25 percent by 2025. Considering the above, HSEO recommends the following modification to SB 2963 on page 6, starting on line 15, 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."

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

HSEO also recommends the language in this bill be made fully consistent with the language in SB2166 or HB1801.

We appreciate your consideration of these modifications.

Thank you for the opportunity to testify.



STATE OF HAWAII OFFICE OF PLANNING & SUSTAINABLE DEVELOPMENT

DAVID Y. IGE GOVERNOR

MARY ALICE EVANS DIRECTOR

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846 Fax: (808) 587-2824 Web: https://planning.hawaii.gov/

Statement of

MARY ALICE EVANS

Director, Office of Planning and Sustainable Development

before the

SENATE COMMITTEES ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM AND

GOVERNMENT OPERATIONS

Wednesday, February 9, 2022

3:00 pm

State Capitol, Conference Room 224

on

SB 2963 RELATING TO ENERGY EFFICIENCY.

Chairs Wakai and Moriwaki, Vice Chairs Misalucha and Dela Cruz, and Members of the Committees:

The Office of Planning and Sustainable Development (OPSD) **supports the intent of this measure and offers comments** on SB 2963, 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 per cent 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 7/1/2023, 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 Office of Planning and Sustainable Development strongly supports green building management, sustainable development, and sustainable operations for Hawai'i's State Government buildings.

In addition to this important bill, it is important to highlight two laws directing the State's facilities' sustainable development:

- Hawai'i Revised Statutes §196-9 (b) (1): Where each agency in the State is directed to implement, to the extent possible, and with regard to buildings and facilities each agency shall design and construct buildings meeting the Leadership in Energy and Environmental Design (LEED) silver or two green globes rating system...; and
- Hawai'i Revised Statutes 174C-31 (g) (6): Which requires the use of reclaimed water in 100% of State and County facilities, except for drinking and potable water uses, by December 31, 2045.

The Statewide Sustainability Branch supports carbon footprinting State buildings, measuring the embedded carbons of building materials, LEED green building and similar sustainable development rating systems, energy efficiency, and especially water efficiency; however, requests the committees consider Hawai'i's existing sustainable development statutes and sustainability targets encouraging the use of LEED green building and similar sustainable development rating systems and mandating the conversion to 100% reclaimed water in State and County facilities by 2045.

Thank you for the opportunity to testify on this measure.



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 SENATE COMMITTEES ON ENERGY, ECONOMIC DEVELOPMENT AND TOURISM/ GOVERNEMENT OPERATIONS

WEDNESDAY, FEBRUARY 9, 2022, 3:00 P.M. VIA VIDEOCONFERENCE, STATE CAPITOL

S.B. 2963

RELATING TO ENERGY EFFICIENCY.

Chairs Wakai and Moriwaki, Vice Chairs Misalucha and Dela Cruz, and Members of the

Committees, thank you for the opportunity to testify on S.B. 2963.

The Department of Accounting and General Services (DAGS) supports the intent of this measure 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.

However, we request the dates mentioned in the proposed language of section 2 (a) of this S.B. 2963 be replaced with the following - proposed language of section 2 (a) of H.B. 1801:

"(1) Beginning on January 1, 2024, for all state facilities that have not implemented section 36-41 since 2010; and

(2) Beginning on January 1, 2026, for all other state facilities;"

Thank you for the opportunity to testify on this matter.

DAVID Y. IGE GOVERNOR

TESTIMONY BY:

JADE T. BUTAY DIRECTOR

Deputy Directors ROSS M. HIGASH EDUARDO P. MANGLALLAN PATRICK H. MCCAIN EDWIN H. SNIFFEN

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION 869 PUNCHBOWL STREET HONOLULU, HAWAII 96813-5097

February 9, 2022 3:00 PM State Capitol, Teleconference

S.B. 2963 **RELATING TO ENERGY EFFICIENCY**

Senate Committee on Energy, Economic Development, and Tourism Senate Committee on Government Operations

The Department of Transportation (DOT) provides comments to S.B. 2963. The bill proposes state facilities to implement cost-effective energy efficiency measures with a goal to achieve at least a twenty-five percent reduction in the electricity consumption of state facilities by 2025, from a 2005 baseline year, through the energy efficiency in state building projects. The bill also requires, where feasible and cost-effective, the design of all new state building construction to maximize energy generation, water efficiency, energy efficiency, and energy generation potential, and to use building materials that reduce the carbon footprint of the project.

DOT modal divisions have installed a variety of energy conservation measures using Energy Savings Performance Contracts (ESPC). The DOT Airports ESPC has reduced its kWh consumption by approximately 46 percent from a 2013 baseline. The DOT Harbors Division's ESPC has reduced its kWh consumption by approximately 30 percent from a 2014 baseline. The DOT Highways Division ESPC has reduced its kWh consumption by approximately 41 percent from a 2014 baseline.

Act 96, SLH 2006, already requires each agency, to the extent practicable, to design and construct state facilities meeting the Leadership in Energy and Environmental Design (LEED) Silver Certification or two green globes rating system or another comparable state-approved, nationally recognized standard or system.

The DOT Airports Division's new facilities have achieved or are on track to achieve LEED Silver Certification. In addition, the Daniel K. Inouye International Airport (HNL) has received its 5th Airport Carbon Accreditation Level 2 certification from the Airports Council International, for the calendar year 2019, recognizing HNL's reduction in energy use and carbon emission, and its ongoing commitment to sustainability. Renewal in the calendar year 2020 was deferred due to the pandemic.





The DOT Harbors Division has put together a process of pursuing sustainability vision for multiple buildings through LEED BD+C Certification. DOT Harbors Division will be able to transform the existing buildings into facilities that provide healthier spaces for its occupants, reduced demand on energy and water resources, and improved impact on the surrounding community. Preliminary review of the LEED BD+C credit scorecard for a building facility currently in the planning and scoping phase indicates that LEED Silver certification is attainable, and with additional planning and resources, LEED Gold certification is within reach.

The bill's provision of the 2005 baseline year may be a challenge as utility bills may no longer be available.

Thank you for the opportunity to provide testimony.

<u>SB-2963</u> Submitted on: 2/7/2022 12:27:04 PM Testimony for EET on 2/9/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Keala Dickhens	Testifying for Blue Planet Foundation	Support	No

Comments:

TO: Senate Committee on Energy, Economic Development, and Tourism, and the Committee on Government Operations SUBJECT: Support for SB 2963, RELATING TO ENERGY EFFICIENCY, February 9, 2022,

3:00 PM hearing

Aloha Chair Wakai, Chair Moriwaki, Vice Chair Misalucha, Vice Chair Dela Cruz, and members of the Committees,

I am testifying in support of Senate Bill 2963, proposing to implement cost-effective energy efficiency measures for state facilities. We cannot rely on renewable energy as our only tool to transition away from fossil fuels. We must learn to better manage our resources.

Energy efficiency is a critical component of Hawai'i's renewable energy future and will play a significant role in reaching the state's 100% clean energy requirement by 2045. Though some progress has occurred in recent years, state buildings are still one of the largest consumers of electricity in Hawai'i. While residents do their part in their own homes, the state must lead by example in changing our energy culture.

SB 2963 will not only help support the resilient, clean energy future that is necessary for our islands to thrive, it will also bolster our local economy and provide new jobs. This energy efficiency measure will reduce the cost of state energy bills for taxpayers while simultaneously providing jobs to our state, which is still recovering from the effects of the pandemic.

By implementing energy efficiency measures in state buildings, Hawai'i can once again demonstrate that our islands are committed to taking action against climate change. SB 2963 shows that the state will lead by example and serve as a model for residents and the private sector for our clean energy transformation.

Please pass SB 2963 to support Hawai'i's clean energy future.

Thank you for considering my testimony. Keala Dickhens, Honolulu, HI 96816

Senate Committee on Energy, Economic Development, and Tourism and Senate Committee onGovernmental AffairsWednesday, February 9, 20223:00 PMConference Room 224Videoconference

TESTIMONY IN SUPPORT OF SB 2963

Aloha Chair Wakai, Chair Moriwaki, Vice Chair Misalucha, Vice Chair Dela Cruz, and member of the Committees:

Mahalo for the opportunity to share my thoughts on SB 2963. I am in support of this measure that will implement cost-effective energy efficiency measures for state facilities. In order to achieve a cleaner and sustainable place for our children and for all future generations, we must all do our part. Clearly, the passage of this measure will demonstrate that the State will lead by example.

The improved energy efficiency of the existing state facilities will reduce the power generation and will play a significant role in reaching Hawaii's 100% clean energy goal. Additionally, the design criteria that requires maximization of energy efficiency and use of building material that minimize the carbon footprint of new state buildings will, hopefully, set the blueprint for all future construction projects here in Hawaii.

In 2015 Hawaii showed the nation and the world that we were the leader in this battle against the climate challenge by enacting the nation's first 100% clean energy goal. SB 2963 shows that the work is not done and there is more to be done. By implementing these energy efficiency measures in state buildings, the State is demonstrating its commitment to take action against climate change and will serve as a model for others in the private sector to join this clean energy transformation.

Please pass SB 2963 to support our clean energy future.

Mahalo for allowing me to testify.

Ernest K. Nishizaki Principal, Acumen Advisor LLC Chair, Blue Planet Foundation Honolulu, Hawaii 96825



Email: communications@ulupono.com

SENATE COMMITTEES ON ENERGY, ECONOMIC DEVELOPMENT & TOURISM AND GOVERNMENT OPERATIONS Wednesday, February 9, 2022 — 3:00 p.m.

Ulupono Initiative <u>supports</u> SB 2963, Relating to Energy Efficiency.

Dear Chair Wakai, Chair Moriwaki and Members of the Committees:

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 the 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 <u>supports</u> SB 2963, 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 per cent 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 7/1/2023, 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

February 09, 2022

- TO: Senator Glenn Wakai Chair, Energy, Economic Development, and Tourism Senator Sharon Y. Moriwaki Chair, Government Operations
- FR: Michael A. Trovato Johnson Controls Inc.

RE: SB2963 Relating to Energy Efficiency. - SUPPORT

We agree that energy efficiency is the most cost-effective way to reduce emissions associated with electricity generation and consumption. Furthermore, maximizing efficiency and thereby reducing demand for power generation is a necessary component of reaching the State's goal of one hundred per cent renewable energy by 2045. And yes, energy used to power buildings does account for more than fifty per cent of the electricity consumed in the State, yet the State in great part has not undertaken improvements for increased efficiency in many of its own facilities, forgoing millions of dollars in potential savings.

Case in point. Johnson Controls, Inc. is a sales leader who along with our entire team through a significant partnership with the State have implemented significant energy efficiency measures at both the University of Hawaii Community Colleges and the Hawaii Department of Transportation, two organizations that are doing their part, saving the state hundreds of millions of dollars in energy costs over the term of those energy savings projects.

For the most part this bill is well written and captures all the salient points, including protecting a certain amount of budget appropriations for energy expenditures, to hopefully jump start the goal of getting state owned facilities to control their energy usage and lower their utility bills in the interest of being responsible with taxpayer dollars.

One area however where we think the bill can be strengthened is, "however, those efforts lack statewide **coordination**, preventing economies of scale to maximize savings" which we whole-heartedly agree with. Again, the state recognizes that first and foremost they have created a goal to be 100% renewable by 2045.

What contributes to strengthening this bill is that it should include language on **coordination** and focus between the energy office and DAGS Public Works. Yes, the energy office can work with facilities to plan for energy measures but in parallel and in conjunction to that the Public Works team needs to ensure that procurement vehicles exist to implement the state's wishes. The key is these two organizations work in parallel vs. serially which will only elongate the process.

This is a high priority of the state and there is no reason why projects couldn't be underway as early as calendar year 2023. Collecting utility bills is merely contacting the utility and requesting them, identifying energy savings measures is typically nothing more than visiting the site with energy engineers and creating a preliminary plan. What takes the lion's share of the time is getting through the procurement process. Those templates exist today and would require tailoring for any specific facility needs.

In summary, a plan **coordinated** by both the energy office and DAGS public works can be completed, both of these entities have much prior experience in creating energy efficiency projects, in months and projects underway much quicker than the bill currently indicates. If the state truly wants to lead by example, now is the time.

Thank you for allowing me to provide this testimony.



SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM SENATE COMMITTEE ON GOVERNMENT OPERATIONS

February 9, 2022, 3:00 P.M. Video Conference

TESTIMONY IN STRONG SUPPORT OF SB 2963, WITH SUGGESTED AMENDMENT

Aloha Chair Wakai, Chair Moriwaki, Vice Chair Misalucha, Vice Chair Dela Cruz, and members of the Committees:

Blue Planet Foundation **supports SB 2963**, 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.

Senate Bill 2963 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. Senate Bill 2963 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, SB 2963 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. 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

inefficient equipment in many facilities that do not meet this requirement and waste taxpayer money. Senate Bill 2963 would help to identify new energy savings opportunities and revitalize the successful performance contracting program.

Suggested Amendment

Blue Planet recommends that the Committee increase the percentage goal for reduction of electricity consumption of state facilities in Section 2 from 25% to at least 30-35%. State agencies have already reduced energy consumption roughly 20.1% since 2005.¹ A more ambitious—yet still attainable—goal will ensure that deeper energy efficiency upgrades and their associated cost savings are pursued, rather than merely "checking the box" on the lowest hanging fruit. Further, if Hawai'i hopes to achieve its vision of a carbon negative economy by 2045, we must ensure we are taking action to reduce emissions *now* and that our state-level goals put us on track to actually achieve that vision.

Conclusion

Senate Bill 2963 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, SB 2963 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.

Thank you for the opportunity to provide testimony.

¹ See *Hawaii State Energy Office 2021 Annual Report*, at 30, https://energy.hawaii.gov/wp-content/uploads/2022/01/HSEO_2021_Annual_Report_1.4-3.pdf

<u>SB-2963</u> Submitted on: 2/4/2022 2:15:48 PM Testimony for EET on 2/9/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Camile Cleveland	Individual	Support	No

Comments:

I strongly support this bill.

SB 2963 TESTIMONY

To: Senate Committee on Energy, Economic Development, and Tourism Senate Committee on Government Operations Hearing on Feb. 9, 2022 at 3:00 p.m.

From: John Kawamoto

Position: Support

"Once [carbon dioxide is] added to the atmosphere, it hangs around, for a long time: between 300 to 1,000 years," according to <u>NASA</u>. Carbon dioxide that has been emitted into the atmosphere since the beginning of the Industrial Revolution is still warming the Earth. Carbon dioxide that is being emitted today will warm the Earth for hundreds of years. What we do now -- and what we don't do -- will impact the climate for many generations.

We must adopt a multi-faceted strategy to mitigate climate change. One element of that strategy is to make buildings more energy efficient since buildings typically use substantial amounts of electricity. Hawaii is making a transition to generate electricity completely from renewable energy, but it is not there yet. According to the State Energy Office, 90% of the electricity generated in Hawaii in 2019 came from fossil fuels.

Buildings must become more energy efficient, and this bill makes State government a leader in this effort.

<u>SB-2963</u> Submitted on: 2/7/2022 2:03:15 PM Testimony for EET on 2/9/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
donn viviani	Individual	Support	No

Comments:

I'm writing in support of SB2963 I'm Donn Viviani. My wife and I live in Kailua and have family in the Punchbowl and Aina Haina areas. Before I retired, I was the director of the Climate Policy Division at EPA headquarters in DC. I served as Chairman of the Great Lakes Water Quality Board's Toxic Substances Committee and I'm currently the Board President for the Climate Protection and Restoration Initiative. I have a PhD in Chemistry. I am familiar with the unique threat climate change poses to Hawaii, and specifically the threat to the water surrounding our islands.

I want to address the notion that climate change is a global problem that can't be addressed by any individual states. This is exactly backwards. In fact, climate change can't be fixed WITHOUT the US and its individual states. Given our economic power, outsized consumption and massive energy use we are responsible for at least a quarter of the past problem and much of the ongoing problem. So it's important that each State takes actions, both large and small that are necessary to help deal with this existential threat to mankind. Hawaii's actions obviously aren't a sufficient condition to stop the threats Climate change poses, but it is a necessary condition. Everyone needs to act or it won't work. Please take this small step on a long journey... for our children. Mahalo

<u>SB-2963</u> Submitted on: 2/7/2022 3:34:26 PM Testimony for EET on 2/9/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Elena Arinaga	Individual	Support	No

Comments:

TO: Senate Committee on Energy, Economic Development, and Tourism, and the Committee on Government Operations SUBJECT: Support for SB 2963, RELATING TO ENERGY EFFICIENCY, February 9, 2022, 3:00 PM hearing

Aloha Chair Wakai, Chair Moriwaki, Vice Chair Misalucha, Vice Chair Dela Cruz, and members of the Committees,

I am testifying in support of Senate Bill 2963, proposing to implement cost-effective energy efficiency measures for state facilities.

Energy efficiency is a critical component of Hawai'i's renewable energy future and will play a significant role in reaching the state's 100% clean energy requirement by 2045. Though some progress has occurred in recent years, state buildings are still one of the largest consumers of electricity in Hawai'i. While residents do their part in their own homes, the state must lead by example in changing our energy culture.

SB 2963 will not only help support the resilient, clean energy future that is necessary for our islands to thrive, it will also bolster our local economy and provide new jobs. This energy efficiency measure will reduce the cost of state energy bills for taxpayers while simultaneously providing jobs to our state, which is still recovering from the effects of the pandemic.

By implementing energy efficiency measures in state buildings, Hawai'i can once again demonstrate that our islands are committed to taking action against climate change. SB 2963 shows that the state will lead by example and serve as a model for residents and the private sector for our clean energy transformation.

Please pass SB 2963 to support Hawai'i's clean energy future.

Thank you for considering my testimony.

Elena Arinaga Honolulu, HI, 96815 **TO:** Senate Committee on Energy, Economic Development, and Tourism, and the Committee on Government Operations

SUBJECT: Support for SB 2963, RELATING TO ENERGY EFFICIENCY, February 9, 2022, 3:00 PM hearing

Aloha Chair Wakai, Chair Moriwaki, Vice Chair Misalucha, Vice Chair Dela Cruz, and members of the Committees,

I am testifying in support of Senate Bill 2963, proposing to implement cost-effective energy efficiency measures for state facilities.

Hawai'i is being a trailblazer by being the first in the nation to set a 100% clean energy mandate, but to fully achieve this vital feat, we need to strive as a state to implement policies encouraging energy efficiency. During my sixteen years of life, I have been told by teachers, parents, and friends that conserving energy is not only cost-efficient but reduces my carbon footprint. So why is it so bold to request that our state implement a policy to support this commonly accepted, environmentally friendly, and cost-efficient bill?

Our own government facilities and buildings should be excellent role models for other businesses for energy conservation and cost-efficiency. By implementing this bill, I hope to see our state lead by example and reduce the carbon emission they produce and be more mindful of its carbon footprint. By having their electricity consumption public, I hope it keeps state facilities responsible and aware of their greenhouse gas emissions. I want 2045 to meet the ambitious goal because I know we need to for the sake of our planet and community.

Energy efficiency is a critical component of Hawai'i's renewable energy future and will play a significant role in reaching the state's 100% clean energy requirement by 2045. Though some progress has occurred in recent years, state buildings are still one of the largest consumers of electricity in Hawai'i. While residents do their part in their own homes, the state must lead by example in changing our energy culture.

SB 2963 will not only help support the resilient, clean energy future that is necessary for our islands to thrive, it will also bolster our local economy and provide new jobs. This energy efficiency measure will reduce the cost of state energy bills for taxpayers while simultaneously providing jobs to our state, which is still recovering from the effects of the pandemic.

By implementing energy efficiency measures in state buildings, Hawai'i can once again demonstrate that our islands are committed to taking action against climate change. SB 2963 shows that the state will lead by example and serve as a model for residents and the private sector for our clean energy transformation.

Please pass SB 2963 to support Hawai'i's clean energy future.

Thank you for considering my testimony.

Isabelle Eastmond, Kaneohe, Hawaii 96744

<u>SB-2963</u> Submitted on: 2/7/2022 8:05:17 PM Testimony for EET on 2/9/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Andrea Bertoli	Individual	Support	No

Comments:

Aloha Chair Wakai, Chair Moriwaki, Vice Chair Misalucha, Vice Chair Dela Cruz, and members of the Committees,

I am testifying in support of Senate Bill 2963, proposing to implement cost-effective energy efficiency measures for state facilities.

SB 2963 will not only help support the resilient, clean energy future that is necessary for our islands to thrive, it will also bolster our local economy and provide new jobs. This energy efficiency measure will reduce the cost of state energy bills for taxpayers while simultaneously providing jobs to our state, which is still recovering from the effects of the pandemic.

By implementing energy efficiency measures in state buildings, Hawai'i can once again demonstrate that our islands are committed to taking action against climate change. SB 2963 shows that the state will lead by example and serve as a model for residents and the private sector for our clean energy transformation.

Please pass SB 2963 to support Hawai'i's clean energy future.

Thank you for considering my testimony.

Aloha, Andrea Bertoli

<u>SB-2963</u>

Submitted on: 2/7/2022 8:29:44 PM Testimony for EET on 2/9/2022 3:00:00 PM

Submitte	d By	Organization	Testifier Position	Remote Testimony Requested
Douglas P	errine	Individual	Support	No

Comments:

The State should lead by example in protecting our environment, mitigating the acceleration of climate change, and looking after the taxpayers' pocketbooks by increasing energy efficiency in state buildings as prescribed by SB2963.

<u>SB-2963</u> Submitted on: 2/8/2022 8:58:35 AM Testimony for EET on 2/9/2022 3:00:00 PM

_	Submitted By	Organization	Testifier Position	Remote Testimony Requested
	Severine Busquet	Individual	Support	No

Comments:

Aloha Chair Wakai, Chair Moriwaki, Vice Chair Misalucha, Vice Chair Dela Cruz, and members of the Committees,

I am testifying in support of Senate Bill 2963, proposing to implement cost-effective energy efficiency measures for state facilities.

Embracing energy efficiency measures is to me an essential part of addressing climate change, the effects of which are already here. It is a proof of human intelligence and progress not to waste this energy that is so costly to produce.

Energy efficiency is a critical component of Hawai'i's renewable energy future and will play a significant role in reaching the state's 100% clean energy requirement by 2045. Though some progress has occurred in recent years, state buildings are still one of the largest consumers of electricity in Hawai'i. While residents do their part in their own homes, the state must lead by example in changing our energy culture.

SB 2963 will not only help support the resilient, clean energy future that is necessary for our islands to thrive, it will also bolster our local economy and provide new jobs. This energy efficiency measure will reduce the cost of state energy bills for taxpayers while simultaneously providing jobs to our state, which is still recovering from the effects of the pandemic.

By implementing energy efficiency measures in state buildings, Hawai'i can once again demonstrate that our islands are committed to taking action against climate change. SB 2963 shows that the state will lead by example and serve as a model for residents and the private sector for our clean energy transformation.

Please pass SB 2963 to support Hawai'i's clean energy future.

Thank you for considering my testimony.

Severine Busquet

Hawaii Kai

Honolulu 96825

<u>SB-2963</u> Submitted on: 2/8/2022 9:24:54 AM Testimony for EET on 2/9/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Wendy Gibson-Viviani	Individual	Support	No

Comments:

To: THE SENATE -- THE THIRTY-FIRST LEGISLATURE REGULAR SESSION OF 2022

- COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM
- COMMITTEE ON GOVERNMENT OPERATIONS

Dear Chairs Wakai and Moriwaki, Vice-Chairs Misalucha and Dela Cruz, and Members of the Committees,

I am Wendy Gibson-Viviani, a Kailua resident and support SB2963. I believe that :

- Energy used to power buildings accounts for more than fifty percent of the electricity consumed in the State.
- Energy efficiency is the most cost-effective way to reduce emissions associated with electricity generation and consumption.
- Maximizing efficiency and thereby reducing demand for power generation is a necessary component of reaching the State's clean energy and decarbonization goals
- The State needs to start making improvements to increase energy efficiency in many facilities, to potentially save millions of (taxpayer) dollars in utility bills.
- Hawaii could lead by example by constructing energy-efficient buildings and focusing on growing a clean energy industry -- which can diversify the economy, create new jobs, contribute to workforce development.
- All of this could help the State meet critical energy goals as well as making economic recovery in the wake of the coronavirus disease 2019 (COVID-19) pandemic.

Thank you for your attention to this important matter. I hope you will support SB2963 and the use of **HEMP products** in the construction of new buildings.

Wendy Gibson-Viviani RN/BSN

Kailua (Oahu resident x 30 years)