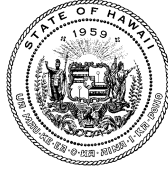


DAVID Y. IGE
GOVERNOR



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

COMMITTEES ON
ENERGY & ECONOMIC DEVELOPMENT AND TOURISM
GOVERNMENT OPERATIONS

MARCH 16, 2022, 3:00 P.M.
CONFERENCE ROOM 224 & VIA VIDEOCONFERENCE, STATE CAPITOL

H.B. 1801, H.D. 1

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 submit testimony on H.B. 1801, H.D. 1.

The Department of Accounting and General Services (DAGS) appreciates the intent of the bill to increase the energy efficiency of State buildings. The department acknowledges that reducing energy consumption at public buildings is a worthwhile endeavor and should be pursued. DAGS offers the following comments for the committee's consideration:

- 1) The department feels that it is important for all to realize 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.

- 2) The department feels that it is important for all to realize that when performance contracting projects are performed, the design and construction are not subject to bidding and costs are typically much higher.
- 3) Tenants at state buildings do not have individualized meters. A 30% reduction in energy consumption may be achievable by implementing energy saving measures and policies. An example would be providing authority for State agencies that manage State facilities to eliminate or control the amount refrigerators each tenant has.

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

HB-1801-HD-1

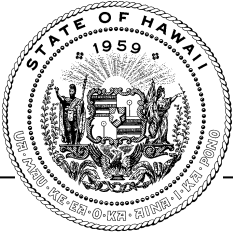
Submitted on: 3/15/2022 12:35:54 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Christine Kinimaka	Testifying for DAGS	Comments	Remotely Via Zoom

Comments:

I am available to answer questions as support to State Comptroller Curt Otaguro.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

SCOTT J. GLENN
CHIEF ENERGY OFFICER

235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-3807
Web: energy.hawaii.gov

Testimony of
SCOTT J. GLENN, Chief Energy Officer

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

Wednesday, March 16, 2022
3:00 PM
State Capitol, Conference Room 224 and Videoconference

**SUPPORT
HB 1801 HD 1
RELATING TO ENERGY EFFICIENCY.**

Chairs Wakai and Moriwaki, Vice Chairs Misalucha and Dela Cruz, and Members of the Committees, the Hawaii State Energy Office (HSEO) supports and proposes a modification to HB 1801, HD1, which requires and establishes deadlines for all state facilities, except for smaller facilities, to implement cost-effective energy efficiency measures; directs HSEO to collect utility bill and energy usage data for state-owned buildings and to make the data publicly available; establishes a goal of achieving at least a thirty percent reduction in electricity consumption of state facilities; provides that agencies that perform energy efficiency retrofitting may receive appropriations for such measures; and 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.

HSEO supports HB 1801, HD1, to maximize the near-term savings and long-term energy performance of state buildings. The objectives of energy efficiency, cost control, lower energy bills, and leading by example outlined in HB 1801, HD1, are consistent with the Chief Energy Officer's duties, set forth in Section [196-72](#) of the Hawai'i Revised Statutes, 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 works with state agencies in Hawai'i on 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.

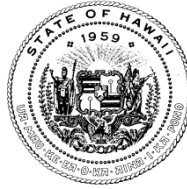
HSEO also agrees that designing new state buildings to maximize energy and water efficiency, identifying energy generation potential, and using building materials that reduce the carbon footprint, where feasible and cost-effective, are in alignment with the State's clean energy and decarbonization goals.

HSEO is working closely with Hawai'i Energy and state agencies on an energy efficiency for state buildings project to assess and promote opportunities to reduce energy use. HSEO has consistently been measuring facility electricity reduction using 2005 as the baseline year. The use of 2005 as the baseline year is also consistent with the United States' baseline year for its commitment pursuant to the Paris Agreement, which Hawai'i committed to support and to “be aligned with” in Part I of [Act 32 of 2017](#).

Considering the above, HSEO recommends the following modification to HB 1801, HD1, on page 6, starting on line 6, to read:

“§196-__ Reduction of electricity consumption of state facilities. It shall be the goal of the State to achieve at least a thirty per cent reduction in electricity consumption of state-owned facilities by 2030, using 2005 as the baseline year.”

Thank you for the opportunity to testify.



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

March 16, 2022
3:00 PM
State Capitol, Teleconference

H.B. 1801, H.D.1
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 H.B. 1801, H.D.1. The bill proposes state facilities to implement cost-effective energy efficiency measures with a goal to achieve at least a thirty 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 Division \$209M ESPC has reduced its kWh consumption by approximately 51 percent from a 2013 baseline. The electrical cost savings over a 20-year period is approximately \$529M. The DOT Harbors Division's ESPC has reduced its kWh consumption by approximately 30 percent from a 2014 baseline. The DOT Harbors Division has installed approximately 740 kW of solar photovoltaic arrays at six facilities that produce 100% renewable power. Power generated by the solar photovoltaics is used within the Harbor facilities and the Harbors Division is currently working with the power utility to reach the Division's clean energy goals. 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. A 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 DOT also recommends the language including the energy efficiency target in this bill be made consistent with the language in SB2963 S.D.2.

Thank you for the opportunity to provide testimony.

HB-1801-HD-1

Submitted on: 3/13/2022 11:08:40 AM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Jennifer Navarra	Testifying for Zero Waste Hawaii Island	Support	Written Testimony Only

Comments:

Please pass this measure. Energy efficiency will save money in the long run and help reduce greenhouse gas emissions.

Testimony in Support of HB1801 HD1

Aloha, I am writing on behalf of Kauai Climate Action Coalition, a large group of Kauai residents who recognize the urgency presented by the climate crisis. This necessitates a fast, substantial reduction of fossil fuel usage. One aspect of that reduction must be increased energy efficiency. Energy efficiency saves money and reduces the amount of fossil fuels we use on our path to fully transitioning to 100% clean renewable energy. HB1801 HD1 offers important cost-effective energy efficiency measures for State buildings, saving the State, and taxpayers, money. Reducing the energy usage and carbon footprint of State buildings is a meaningful way for the State to lead by example as we transition to 100% clean, renewable energy. For the sake of our keiki and our `aina, please support HB1801 HD1. Mahalo.

Helen A. Cox, Chair

Kauai Climate Action Coalition

HB-1801-HD-1

Submitted on: 3/14/2022 12:15:11 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Ted Bohlen	Testifying for Climate Protectors Hawai'i	Support	Remotely Via Zoom

Comments:

To: The Honorable Senators Glenn Wakai, Chair, Bennette Misalucha, Vice Chair, and Energy, Economic Development and Tourism Committee members, and

The Honorable Senator Sharon Moriwaki, Chair, and the Honorable Senator Donovan Dela Cruz, Vice Chair, and members of the Committee on Government Operations

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

RE: Hearing RELATING TO ENERGY EFFICIENCY, Wednesday, March 16, 2022, 3:00 pm

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

The Climate Protectors Hawai'i is a group focused on reversing the climate crisis and encouraging Hawai'i to lead the world towards a safe and sustainable climate and future.

The Climate Protectors Hawai'i STRONGLY SUPPORTS HB1801 HD1, 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. 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 keiki.

One of the areas where the State can lead by example in reducing greenhouse gas emissions is by installing energy efficient equipment and taking energy efficiency measures at State facilities. Energy efficiency is the first and most cost-effective step in smart energy management and should be utilized in every State agency. Energy used to power buildings accounts for more than 50% of the electricity consumption in the state **This bill would establish a goal of reducing electricity consumption at State facilities by at least 30%.**

Another important way this bill would reduce greenhouse gases is by requiring State building design, where reasonable and cost effective, to maximize energy and water efficiency and use building materials that reduce the carbon footprint of the project. This plan will help substantially in reducing greenhouse gases and addressing our climate emergency.

Hawai'i must lead on climate. **Reducing the energy usage and carbon footprint of State buildings is an excellent way for Hawai'i to show how to begin to mitigate the climate emergency!**

Please pass this bill! Mahalo!

Climate Protectors Hawai'i (by Ted Bohlen)



Before the House Committee on Finance
Friday, February 25, 2022 at 1:30p.m.

Testimony in Support of HB1801 HD1: Relating to Energy Efficiency

Chair Luke, Vice Chair Yamashita, and Members of the Committees:

Thank you for the opportunity to testify in support and provide comments on House Bill 1801 HD1.

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 the legislature's efforts to support energy efficiency for State facilities. As reported in the Hawai'i State Energy Office's [2021 Annual Report \(pg. 30\)](#), government agencies saw a 20.1% reduction in electricity usage for State buildings over a 2005 baseline. Plus, the State has benefitted from a successful Energy Savings Performance Contract (ESPC) program that drove a significant level of energy savings projects between 2009 and 2015.

However, ESPC procurements have significantly dropped since 2015, due to a number of potential factors, including previously completed projects 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. With increased federal funding for energy efficiency and green banks, there isn't a better time for the State to move forward.

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 2021 version. Thank you for the opportunity to testify in support of House Bill 1801 HD1.

Sincerely,
Brian Kealoha
Executive Director
Hawai'i Energy

HB-1801-HD-1

Submitted on: 3/14/2022 3:18:16 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Keala Dickhens	Testifying for Blue Planet Foundation	Support	Written Testimony Only

Comments:

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

I am testifying in support of House Bill 1801, proposing to implement cost-effective energy efficiency measures for state facilities. Conservation and efficiency to reduce energy use is one of the most economically efficient and equitable paths to a clean energy future.

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.

HB 1801 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. HB 1801 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 HB 1801 to support Hawai'i's clean energy future.

Thank you for considering my testimony.

Keala Dickhens, Honolulu, HI, 96816

HB-1801-HD-1

Submitted on: 3/14/2022 8:43:46 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
laurel brier	Testifying for Kauai women's caucus	Support	Written Testimony Only

Comments:

In 2017 you passed legislation to align our state with the Paris Agreement and last year you passed the Climate Emergency Resolution and NOW we need action to back up these commitments to decarbonize. Not only would this Bill step in that direction it will ultimately save money through building energy efficiency. Set the example and next apply this to all state construction including low income housing etc.



Email: communications@ulupono.com

SENATE COMMITTEES ON ENERGY, ECONOMIC DEVELOPMENT, & TOURISM AND
GOVERNMENT OPERATIONS

Wednesday, March 16, 2022 — 3:00 p.m.

Ulupono Initiative supports HB 1801 HD 1, 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 supports HB 1801 HD 1, which requires and establishes deadlines for State facilities, except smaller facilities, to implement cost-effective energy efficiency measures; directs the Hawai'i State Energy Office 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 30% reduction in the electricity consumption of state facilities; and, 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 30% 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



To: The Senate Committee on Energy, Economic Development and Tourism (EET)
and
The Senate Committee on Government Operations (GVO)
From: Sherry Pollack, 350Hawaii.org
Date: Wednesday, March 16, 2022, 3pm

In support of HB1801 HD1

Aloha Chairs Wakai and Moriwaki, Vice Chairs Misalucha and Dela Cruz, and members of the EET and GVO committees,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org **supports HB1801 HD1** that 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 30%. 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. With respect to building materials, we strongly urge that plant-based products such as industrial hempcrete and structural bamboo be considered to replace carbon-intensive materials such as concrete and steel.

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 important legislation.

Sherry Pollack
Co-Founder, 350Hawaii.org



**Hawaiian
Electric**

**TESTIMONY BEFORE THE SENATE COMMITTEES ON
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM
AND GOVERNMENT OPERATIONS**

**HB 1801
Relating to Energy Efficiency**

March 16, 2021
3:00pm, Agenda Item #2
State Capitol, Conference Room 224 & Videoconference

Jennifer Baker
Senior Program Manager
Hawaiian Electric Company, Inc.

Aloha Chairs Wakai and Moriwaki, and Members of the Committees,

My name is Jennifer Baker and I am testifying on behalf of Hawaiian Electric Company in support of HB 1801 HD1. Hawaiian Electric continues to support energy efficiency as a cost-effective method to reduce emissions associated with electricity consumption/generation, and recognizes that efficiency is an essential component to reach the State's renewable energy goals. Further, Hawaiian Electric fully appreciates the scope of an initiative that would require all large commercial State-owned buildings to reduce their energy consumption, which in turn reduces energy costs for the State. If passed, this bill would direct the Hawaii State Energy Office to collect all state-owned facilities' utility bill and energy usage data and make this data publicly available. Hawaiian Electric recognizes the utility's role to assist in such data collection and dissemination subject to the utility's privacy rules and will support the State in this aspect as well if required.

Accordingly, Hawaiian Electric supports HB 1801 HD 1. Thank you for this opportunity to testify.



Environmental Caucus of The Democratic Party of Hawai'i

Energy & Climate Action Committee

Wednesday, March 16, 2022, 3:00 pm

Senate Committee on Energy, Economic Development, Tourism , and Technology

HOUSE BILL 1801 – RELATING TO ENERGY EFFICIENCY

Position: Support with possible amendments

Me ke Aloha, Chair Wakai, Vice-Chair Misalucha, and Members of the Committee on Energy, Economic Development, Tourism , and Technology:

HB1801 sets the target of at least thirty percent reduction in the electricity consumption of state facilities through cost-effective energy efficiency measures, and requires 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 Energy & Climate Action Committee has taken an even more staunch position favoring greater efficiencies and a rethinking of our unnecessarily extravagant energy lifestyles, in view of continuing efforts to match the supply of alternative and truly sustainable energy sources to the total demand for power, replacing any that continue or add greenhouse gas (GHG) emissions, and in view of a persistent pursuit of misunderstood “firm” power sources that impermissibly increase our total of GHG emissions.

Scientists are virtually unanimous in admonishing us to (1) immediately and drastically reduce GHG emissions and (2) rapidly accelerate regenerative land management practices to sequester, or draw down, atmospheric GHGs already threatening extinction. We must do this by the end of the decade, to avoid losing control of climate change and risk unlivable conditions on the planet.

HB1801 moves us in the right direction, and its long list of strong legislative endorsements is a demonstration that a strong majority understands this predicament. The efficiencies to be achieved are also complementary to a sense of conservation and discipline in energy use, which the Committee also supports, in contrast to a casually wasteful energy lifestyle.

/s/ Charley Ice & Ted Bohlen, Co-Chairs, Energy and Climate Action Committee
Environmental Caucus of the Democratic Party



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

March 16, 2022, 3:00 P.M.
Conference Room 224 and Video Conference

TESTIMONY IN STRONG SUPPORT OF HB 1801 HD1

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

Blue Planet Foundation **supports HB 1801**, 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 1801 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 1801 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 1801 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. House Bill 1801 would help to identify new energy savings opportunities and revitalize the successful performance contracting program.

Blue Planet also strongly supports the HD1 version of that bill that sets a 30% goal for reduction of electricity consumption in state facilities. State agencies have already reduced energy consumption roughly 20.1% since 2005.¹ A more ambitious—yet reasonable and 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

House Bill 1801 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 1801 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

LATE



**Written Statement of Elemental Excelerator
before the Senate Committees on Energy, Economic Development and Tourism and Government
Operations**

In consideration of HB 1801, HD1 RELATING TO ENERGY EFFICIENCY March 16, 2022

**Aloha Chair Wakai, Chair Moriwaki, Vice-Chair Misalucha, Vice-Chair Dela Cruz, and Members of
the Committees:**

Elemental Excelerator respectfully submits **strong support** for HB 1801, HD1.

Elemental Excelerator is a Honolulu-based non-profit organization that supports climate positive startup companies that are helping solve Hawai'i's most urgent environmental problems. Each year, we select 15-20 companies annually that best fit our mission and fund each company up to \$1 million. To date, we have awarded over \$48 million to 135 companies resulting in 80 demonstration projects in Hawai'i & the Asia Pacific.

We strongly support HB 1801, HD1 and the requirement for state facilities to implement cost-effective energy efficiency measures, establish a goal for the State to achieve at least a thirty percent reduction in the electricity consumption of state facilities, and use building materials that reduce the carbon footprint of new state building projects.

Elemental Excelerator has helped support dozens of climate tech solution companies that create good jobs, help transition our economy to 100% clean energy, and lower the energy burden for companies and households throughout the islands. HB 1801, HD1 will help the State of Hawaii lead by example in the areas of energy efficiency, energy savings, and smart green building that will save taxpayer funds for years into the future as well as drive down carbon emissions in our built environment. It will also provide an opportunity for the climate tech sector to help Hawaii meet climate goals and increase the number of green jobs in the sector.

Mahalo for the opportunity to provide testimony.

HB-1801-HD-1

Submitted on: 3/12/2022 10:43:30 AM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Douglas Perrine	Individual	Support	Written Testimony Only

Comments:

HB1801 is a common sense measure that will both save the State money and protect our environment. Please pass HB1801.

HB-1801-HD-1

Submitted on: 3/12/2022 1:43:34 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Keith Neal	Individual	Support	Written Testimony Only

Comments:

As a resident of Hawaii, I strongly support HB1801 as it further harmonizes the state's energy efficiency measures.

The public sector should reflect the values of sustainability and climate action, and set an example for efforts across Hawaii. The state must expand on the good examples set by numerous agencies that have already adopted energy efficiency measures. Such projects have proven that public energy efficiency is sound action. Much has been discussed about clean, affordable sustainable energy generation. Perhaps even more important is the demand side of the energy equation. Clean, efficient buildings are critical to meeting the state's sustainability and climate action goals.

HB1801 encourages reliable long-term investments that pay for themselves, and dividends for many years there after.

Respectfully,

Keith Neal

HB-1801-HD-1

Submitted on: 3/12/2022 2:56:19 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Dylan Ramos	Individual	Support	Written Testimony Only

Comments:

Aloha,

As a resident of Hawaii, I strongly support HB1801 and its bolstering of State energy efficiency measures.

If we purport to value sustainability and climate action, then the public sector should reflect those values and set the example for efforts across Hawaii. Not only does this bill prompt the State to make good on its commitments to clean energy and decarbonization, but it expands on the good example set by numerous agencies that have already adopted energy efficiency measures. Such projects have proven that public energy efficiency is feasible.

Furthermore, by proposing a realistic timeframe for calculating cost-effectiveness, HB1801 encourages reliable long-term investments that literally pay for themselves.

For all these reasons and more, please pass this bill and encourage your colleagues to do the same.

Mahalo,
Dylan Ramos

HB-1801-HD-1

Submitted on: 3/12/2022 3:20:17 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Gerard Silva	Individual	Oppose	Written Testimony Only

Comments:

Stop ripping the People off . You know we end up paying for all the Crap you do in the Government.

HB-1801-HD-1

Submitted on: 3/12/2022 7:21:24 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Tadia Rice	Individual	Support	Written Testimony Only

Comments:

Aloha EET/GVO Committees:

Please SUPPORT HB1801 HD1 because it would establish a goal of reducing electricity consumption at State facilities by at least 30%. 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 is important. 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.

HB1801 HD1 offers important cost-effective energy efficiency measures for State buildings, saving the State, and taxpayers, money. It also will provide energy efficiency that saves money and reduces the amount of fossil fuels we use on our path to fully transitioning to 100% clean renewable energy.

Reducing the energy usage and carbon footprint of State buildings is a meaningful way for the State to lead by example as we transition to 100% clean, renewable energy.

Mahalo!

HB-1801-HD-1

Submitted on: 3/12/2022 7:26:28 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
David Dinner	Individual	Support	Written Testimony Only

Comments:

This bill, IMO, show the intention of the State and the State must stand for climate change and do everything possible to combat it.

HB-1801-HD-1

Submitted on: 3/12/2022 8:16:58 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Robert Douglas	Individual	Support	Written Testimony Only

Comments:

- HB1801 HD1 offers important cost-effective energy efficiency measures for State buildings, saving the State, and taxpayers, money.

- Energy efficiency saves money and reduces the amount of fossil fuels we use on our path to fully transitioning to 100% clean renewable energy.

-Reducing the energy usage and carbon footprint of State buildings is a meaningful way for the State to lead by example as we transition to 100% clean, renewable energy.

HB-1801-HD-1

Submitted on: 3/12/2022 10:12:17 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Camile Cleveland	Individual	Support	Written Testimony Only

Comments:

I strongly support this bill. Hawaii needs to quickly reduce its greenhouse gas emissions, and energy and water efficiency measures are a critical piece of that. Mahalo for the opportunity to testify.

HB-1801-HD-1

Submitted on: 3/13/2022 11:10:04 AM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Ruta Jordans	Individual	Support	Written Testimony Only

Comments:

Strongly support! 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.

HB 1801 HD 1 TESTIMONY

To: Senate Committee on Energy, Economic Development, and Tourism
Senate Committee on Government Operations
Hearing on March 16, 2022 at 3:00 p.m.

From: John Kawamoto

Position: Support

When carbon dioxide is emitted into the atmosphere it stays there for 300 to 1,000 years, according to the National Aeronautics and Space Administration (NASA). 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 have harmful effects on the climate for hundreds of years. Our efforts to reduce carbon dioxide emissions will benefit many future generations.

We must adopt a multi-faceted strategy to reduce carbon emissions. One element of that strategy is to make State buildings more energy efficient. This bill makes the State a leader in energy efficiency.

HB-1801-HD-1

Submitted on: 3/13/2022 5:00:27 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Diane Ware	Individual	Support	Written Testimony Only

Comments:

Dear Chair and Committee Members,

The state must lead in taking action to reduce our carbon footprint and mitigate the climate crisis. Without your leadership future generations will be negatively impacted.

Respectfully,

Diane Ware, Volcano HI 96785

Benjamin Duke

Kailua-Kona

March 13, 2022

Re: HD1801 HD1

Senator Wakai

State Capitol, Room 27
415 South Beretania Street

Dear Chair Wakai,

I would like to express my support for HD1801 HD1. I believe that climate change is the biggest issue that our state faces. This bill will not only address climate change, it will also save the State and taxpayers money. Energy efficiency saves money and reduces the amount of fossil fuels we use on our path to fully transitioning to 100% clean renewable energy. Our state will become increasingly vulnerable to climate change if we don't reduce our carbon footprint. Our state can lead the way by passing legislation such as this.

Sincerely,

Benjamin Duke

HB-1801-HD-1

Submitted on: 3/13/2022 9:08:38 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Thomas Brandt	Individual	Support	Written Testimony Only

Comments:

Support!

HB-1801-HD-1

Submitted on: 3/13/2022 9:41:58 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
C. Vierra	Individual	Support	Written Testimony Only

Comments:

Energy efficiency saves money in the long run and reduces the amount of fossil fuels we use on our path to fully transitioning to 100% clean renewable energy. I support HB1801.

mahalo

HB-1801-HD-1

Submitted on: 3/14/2022 5:46:30 AM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Noreen Dougherty	Individual	Support	Written Testimony Only

Comments:

Representatives:

I strongly support HB1801 HD1 in reducing electricity consumption at State Facilities.
I'm encouraging the state to lead by example creating cost effective energy measures and reduce the amount of fossil fuels we use.

Mahalo,

Noreen Dougherty

Kapaa, Kauai

HB-1801-HD-1

Submitted on: 3/14/2022 11:25:19 AM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Brijit Reis	Individual	Support	Written Testimony Only

Comments:

As a pediatrician, I am always looking to protect the next generation and our island for the future. Please support this bill!

HB-1801-HD-1

Submitted on: 3/14/2022 12:06:49 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Caroline Kunitake	Individual	Support	Written Testimony Only

Comments:

Dear Chair Wakai, Vice Chair Misalucha, Committee on Energy, Economic Development and Tourism, Chair Moriwaki, Vice Chair Dela Cruz and Committee on Government Operations,

I support HB 1801 HD1. Our state can **lead in reducing greenhouse gas emissions** while at the same time **maximizing savings of taxpayer dollars** by installing energy efficient equipment and taking energy efficiency measures at State facilities.

- HB1801 HD1 offers important cost-effective energy efficiency measures for State buildings, saving the State, and taxpayers, money.

- Energy efficiency saves money and reduces the amount of fossil fuels we use on our path to fully transitioning to 100% clean renewable energy.

-Reducing the energy usage and carbon footprint of State buildings is a meaningful way for the State to lead by example as we transition to 100% clean, renewable energy.

Please pass HB1801 HD1.

I appreciate the opportunity to provide testimony in support of HB1801 HD1. Thank you for your time and attention to this important matter.

Mahalo,

Caroline Kunitake

HB-1801-HD-1

Submitted on: 3/14/2022 1:04:31 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
B.A. McClintock	Individual	Support	Written Testimony Only

Comments:

Please support of House Bill 1801, 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.

HB 1801 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. HB 1801 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 HB 1801 to support Hawai'i's clean energy future.

Thank you for considering my testimony.

HB-1801-HD-1

Submitted on: 3/14/2022 1:27:22 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Denise Boisvert	Individual	Support	Written Testimony Only

Comments:

Aloha, I am in FULL SUPPORT of HB1801.

Our state needs to continue to be a leader in its goal for 100% clean energy; and this bill will help!

It will also show good faith and transparency when the efforts made by the state to reduce energy costs are proven when the usage data is published.

This is an island state, and being one makes it especially critical to do everything to fight climate change.

Please pass this bill out of your committees. Thank you for your kind consideration.

HB-1801-HD-1

Submitted on: 3/14/2022 1:37:32 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Kim Jorgensen	Individual	Support	Written Testimony Only

Comments:

Please accept my FULL SUPPORT of HB1801 HD1.

There is no time like the present to think of the future - especially when it comes to implementing ways to prevent climate change and achieving Hawaii's goal to use 100% clean energy by 2045. This bill is one important step that needs to be taken.

Time flies - - so please pass HB1801 HD1 now!

Mahalo.

HB-1801-HD-1

Submitted on: 3/14/2022 3:19:58 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
malia	Individual	Support	Written Testimony Only

Comments:

I am in support of energy efficiency and reducing gas pollution.

HB-1801-HD-1

Submitted on: 3/14/2022 5:05:39 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Scott Kidd	Individual	Support	Written Testimony Only

Comments:

It's time for Hawaii to be the leader in clean and locally renewable energy! We have so many resources available to us from wind, water and sun to geothermal and more. Our energy independence is the only future that guarantees a healthy and safe one for our families. Fossil fuels have outlived their usefulness, it's time to be smart about our future.

HB-1801-HD-1

Submitted on: 3/14/2022 7:02:06 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Noel Morin	Individual	Support	Written Testimony Only

Comments:

Dear Chairs Wakai and Moriwaki, Vice-Chairs Misalucha and Dela Cruz, and members of the EET and GVO Committees,

I am in **support** of HB1801 HD1. Saving energy is a critical strategy in our goal to decarbonize our economy. Enhancing efficiency is one of the most cost-effective tools in our climate action tool chest. By reducing energy consumption, we can instantly reduce our carbon footprint and reduce demand.

This measure will enable the implementation of energy efficiency measures in our state facilities and help inspire similar action across our economy.

Thank you for this opportunity to testify.

Noel Morin

Climate Action Advocate - Hilo

HB-1801-HD-1

Submitted on: 3/14/2022 10:03:21 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Paul Bernstein	Individual	Support	Written Testimony Only

Comments:

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

I'm writing in support of HB 1801. The bill will help us meet our environmental goals by reducing emissions from state buildings. The bill helps correct a market failure around energy efficiency. Often energy efficiency projects are not undertaken because too short of a timeline is considered when analyzing the project's cost-effectiveness. By requiring energy efficiency projects to be undertaken based on a 20 year payback, this bill helps correct the problem of using too high of a discount rate. In 2021, the Hawaii State Energy Office found that the 25% reduction target by 2025 is feasible. Therefore, putting the target date at 2026 should make the target feasible and make the bill's timing based on sound research.

Please pass this bill out of your committees.

Respectfully,

Paul Bernstein

TO: Senate Committee on Energy, Economic Development, and Tourism, and the Committee on Government Operations

SUBJECT: Support for HB 1801, RELATING TO ENERGY EFFICIENCY, March 16, 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 House Bill 1801, proposing to implement cost-effective energy efficiency measures for state facilities.

As an island state, Hawaii is especially vulnerable to the effects of climate change which include rise in sea level, damage to coral reefs, and strengthened weather systems such as hurricanes - changes in which we observe taking place today. Reducing greenhouse gas emissions by promoting clean energy usage and prioritizing carbon reducing measures is a key step towards a sustainable Hawaii.

House Bill 1801 will allow the State of Hawaii to lead as an example in energy efficiency. By implementing initiatives to track energy usage of state-owned facilities and by designing buildings that generate and efficiently use energy, the State will be making practical strides to uphold its goal of achieving one hundred per cent renewable energy by 2045.

HB 1801 will not only help support a clean energy future for Hawaii, it will also strengthen our local economy by creating new jobs in the clean energy industry. By effectively managing energy usage and lowering utility bills the state will also save in taxpayer dollars. As a result, HB 1801 will continue to propel Hawaii towards a resilient, clean energy future that benefits the state, taxpayers, and our climate.

Mahalo for the opportunity to submit testimony.

Kimi Kawasaki
Honolulu, HI 96818

HB-1801-HD-1

Submitted on: 3/15/2022 11:58:05 AM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Carolyn Eaton	Individual	Support	Written Testimony Only

Comments:

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

My name is Carolyn Eaton and I support passage of this bill whole heartedly. Its several measures relating to the State use of energy in its many buildings, and specifically to reduce such use 30% provides a model for each property owner in the State. I see reference to a deadline for this large undertaking, but am concerned to find no specific date in the language. It's laudable also to provide guidelines for new buildings' use of energy and water and sustainable construction materials.

Mahalo for your eye on the future as Earth's climate rises. It's critical work.

HB-1801-HD-1

Submitted on: 3/15/2022 2:18:05 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Jesse Palmer	Individual	Support	Written Testimony Only

Comments:

The state should lead by example by supporting these industries in Hawaii. Furthermore, incasing the efficiency of building will save the state significant funds over the long term.

HB-1801-HD-1

Submitted on: 3/15/2022 2:31:05 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Hannah Shi	Individual	Support	Written Testimony Only

Comments:

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

I am testifying in support of House Bill 1801, proposing to implement cost-effective energy efficiency measures for state facilities.

Energy efficiency is a critical component of Hawaii's renewable energy future and will play 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, but 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 and in new construction, Hawai'i can once again demonstrate that our islands are committed to taking effective 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 HB 1801 to support Hawaii's clean energy future.

Thank you for considering my testimony.

Hannah Shi, Honolulu, Hawaii, 96286

HB-1801-HD-1

Submitted on: 3/15/2022 2:57:15 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Michelle Farrar	Individual	Comments	Written Testimony Only

Comments:

Aloha and thank you for what you do. I want to make sure the increase in EV and eBike use is considered in this 25% energy reduction, and WFH strongly encouraged for those whose work styles it pairs well with.

Miles driven and miles flown really are the big energy users, though this falls outside the building blueprint. I'm also hoping this is a per capita measure, because expanded work forces would need to be considered. Lastly, I hope top tier ventilation and access to open windows is considered, since energy efficient buildings have impacts on cognitive ability unless they have really high ventilation flow: <https://www.harvardmagazine.com/2017/05/cognitive-benefits-of-healthy-buildings>

Overall, I'm very for the rooftop energy production and LED lighting makeovers in this bill. And I so appreciate Hawaii gov modeling smart and comfortable per capita energy use to the community. Mahalo for reading!

LATE

HB-1801-HD-1

Submitted on: 3/15/2022 9:49:24 PM

Testimony for EET on 3/16/2022 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Kris Matsumoto Wong	Individual	Support	Written Testimony Only

Comments:

Please support HB 1801. Like your grandfather said turn off the dang lights and such! We tax payers are not made of money!