HAWAII STATE ENERGY OFFICE
STATE OF HAWAII

JOSH GREEN, M.D.
GOVERNOR

MARK B. GLICK
CHIEF ENERGY OFFICER

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Testimony of
MARK B. GLICK, Chief Energy Officer

before the
SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION

Tuesday, February 21, 2023
10:00 AM
State Capitol, Conference Room 229 & Videoconference

Providing COMMENTS on
SB 691, SD1

RELATING TO EFFICIENCY STANDARDS.

Chair Keohokalole, Vice Chair Fukunaga, and Members of the Committee, the Hawai‘i State Energy Office (HSEO) respectfully submits comments on SB 691, SD1, which allows the Chief Energy Officer of HSEO to enforce minimum energy efficiency standards and adopt or amend efficiency standards. HSEO's testimony is guided by its mission to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy, decarbonized economy. Adoption of this bill would accelerate the attainment of Hawai‘i's decarbonization goals by substantially reducing electricity use, consumers' electricity bills, and the production of CO_2.

HSEO is not an enforcement agency and would require dedicated staffing and resources to enforce appliance efficiency standards under this measure. With the passage of this bill, Hawai‘i will join forces with twelve other states with similar provisions. The Appliance Standards Awareness Project fact sheet describes the power of efficiency standards to move Hawai‘i closer to lower utility bills and to a decarbonized economy.

Thank you for the opportunity to testify.

Appliance Efficiency Standards for Hawaii

Hawaii businesses and residents are spending more money than necessary on running appliances in homes and places of work. Setting efficiency standards ensures that the products we purchase use energy and water more efficiently while preserving quality and affordability.

Energy savings | **Utility Bill Savings** | **Water Savings** | **Emissions Reductions**

The basics of efficiency standards

- Set a minimum level of energy and water efficiency for certain household and commercial products
- Create utility bill savings for consumers and businesses
- Reduce carbon emissions and other air pollutants

Standards bring huge benefits to Hawaii

- **Affordability**: Consumers and businesses save money on utility bills, protecting customers from energy waste
- **Jobs**: Local economies get a boost when consumers have more spending money
- **Clean energy**: Public health and air quality improve when emissions and pollutants are cut

States are acting on standards

- In 2019 Hawaii adopted standards for 5 products
- Since then, 12 other states have adopted standards, including for products Hawaii does not yet have standards
- Hawaii should not be left behind

Residents and businesses save money

If new standards are enacted in 2023, Hawaii consumers and businesses would see **$11 million in utility bill savings per year** by 2030. These savings grow to **$24 million annually by 2040.**

Emissions Reductions

By 2040, appliance standards could cumulatively save Hawaii more than **54 gigawatt hours** of electricity. This would keep about **25,000 metric tons of CO_2** out of the atmosphere every year.

The best energy- and water-saving policy you've never heard of.

WATER, ENERGY, AND POLLUTION SAVINGS (HAWAII)

	Potential annual savings in 2030						Potential annual savings in 2040					
	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NO_x (tons)	SO_2 (tons)	CO_2 (thous. MT)	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NO_x (tons)	SO_2 (tons)	CO_2 (thous. MT)
Air purifiers	16.0	--	--	27.6	42.0	8.9	26.1	--	--	31.9	50.4	12.0
Electric vehicle supply equipment	1.5	--	--	2.6	4.0	0.8	10.1	--	--	12.3	19.4	4.6
Portable electric spas	6.9	--	--	12.0	18.2	3.9	11.6	--	--	14.3	22.5	5.4
Residential ventilating fans	1.3	--	--	2.3	3.5	0.7	3.6	--	--	4.4	6.9	1.7
Toilets (water closets)	--	--	83	--	--	--	--	--	219	--	--	--
Urinals	--	--	54	--	--	--	--	--	117	--	--	--
Water coolers	1.6	--	--	2.7	4.2	0.9	2.9	--	--	3.5	5.6	1.4
Total	**27**	**--**	**136**	**47**	**72**	**15**	**54**	**--**	**337**	**66**	**105**	**25**

Assuming a compliance date of 2025 for all the recommended standards. Totals may not sum due to rounding. Urinal savings were estimated using a standard case of 0.125 gallons per flush and weighted for the availability of wall-mounted urinal models found in the Modernized Appliance Efficiency Database System (MAEDbS).

UTILITY BILL SAVINGS AND PAYBACK PERIODS (HAWAII)

	Potential annual utility bill savings (million 2021$)		Payback period (years)
	In 2030	In 2040	
Air purifiers	5.1	8.5	0.5
Electric vehicle supply equipment	0.5	3.3	0.0
Portable electric spas	2.2	3.8	0.6
Residential ventilating fans	0.4	1.2	0.0
Toilets (water closets)	1.4	4.2	0.0
Urinals	0.9	2.2	0.0
Water coolers	0.4	0.8	0.0
Total	**11**	**24**	**--**

Why state standards?

States have historically led the nation in the development of new efficiency standards for residential and commercial products. Over time consensus efficiency standards develop into national standards. By setting state efficiency standards, Hawaii can help accelerate the adoption of energy and water saving products across the country.

Do I have to replace my current products?

No. Efficiency standards merely raise the floor for products available for new purchases and do not require changing out of products currently in use. The recommended standards are also set to ensure consumers and businesses will have numerous choices of qualifying products to purchase.

Savings analysis from the Appliance Standards Awareness Project

February 20, 2023

Chairman Keohokalole
Vice-Chair Fukunaga
Senator McKelvey
Senator Richards III
Senator Awa

RE: SB 690 – Relating to Energy Efficiency ("Clean Lighting")

Dear Members of the Senate Committee on Commerce and Consumer Protection:

Please accept this testimony on behalf of the Appliance Standards Awareness Project (ASAP). We are a project of the American Council for an Energy Efficient Economy (ACEEE) dedicated to advancing cost-effective appliance and lighting standards at both the national and state level.

In 2022, ASAP and ACEEE published a joint report - *Farewell to Fluorescents: How a Phaseout Can Cut Mercury Pollution, Protect the Climate, and Save Money* – detailing research findings on the lighting market and whether Light Emitting Diodes (LEDs) are ready to widely replace fluorescent light bulbs. [1] We also published analysis showing savings states could see from transitioning common fluorescent light bulbs to LEDs. Included as a separate file submitted with this written testimony is the 2023 Hawaii savings analysis for the products covered by SB 690. We would be happy to provide additional information about this analysis or answer any questions.

SB 690 WOULD SAVE RESIDENTS AND BUSINESSES MONEY, HAVE VERY FAST PAYBACKS
SB 690 would transition out sales of common fluorescent light bulbs, allowing LEDs to take their place . Because LEDs are twice as energy efficient as fluorescents, they generate significant electricity bill savings. ASAP estimates by 2030 Hawaii would see $39 million in annual, statewide electricity bill savings due to transitioning from fluorescents to LEDs.[2] By 2050 this would result in cumulative savings of $446 million statewide on electricity bills.

Additionally, the majority of fluorescent light bulb sales today are for commercial buildings. ASAP estimates for the most common fluorescent light bulb type, the 4-foot T8, the commercial sector would see a payback period of less than one month. Each 4-foot T8 LED would then go on to save about $65 per bulb over its lifetime, resulting in significant electricity bill savings.

SB 690 WOULD AVOID TOXIC MERCURY POLLUTION, SAVE ENERGY, AND AVOID GREENHOUSE GASSES
All fluorescent light bulbs contain mercury, a potent neurotoxin that threatens human health and the environment. When fluorescent bulbs are accidentally broken—whether in homes, businesses, or the waste management system—they present a health hazard to those nearby. LEDs do not contain mercury, therefore transitioning away from fluorescents would avoid a source of mercury pollution coming into Hawaii. ASAP estimates by 2050 Hawaii would cumulatively avoid 36 pounds of mercury waste, enough to contaminate 1.8 billion gallons of water.

[1] For the 2022 ASAP/ACEEE report and state savings analysis visit https://appliance-standards.org/clean-lighting
[2] For all 2023 Hawaii savings analysis see https://appliance-standards.org/sites/default/files/Hawaii.pdf

ASAP | APPLIANCE STANDARDS AWARENESS PROJECT

Furthermore, LEDs increased energy efficiency means the state would see reduced energy consumption and thereby also avoid greenhouse gas emissions. ASAP estimates in 2030 Hawaii would see annual savings of 129 gigawatt hours of electricity. From this, by 2050 Hawaii could cumulatively avoid the release of 756,000 metric tons of carbon dioxide per year, the equivalent of 162,000 gasoline-powered passenger vehicles driven for one year.

LEDs ARE READY TO REPLACE COMMON FLUORESCENT LIGHT BULBS

LEDs have advanced tremendously over the last 10 years. Our lighting market research found that today LEDs are widely available and cost effective as replacements for general-purpose, white light fluorescent light bulbs across the different sizes and shapes. General-purpose, white light bulbs are most commonly found in office building settings or in certain residential situations like a kitchen or basement (see Figure 1). LEDs were found to produce the same or better light quality, last 2-3 times longer, have positive economic outcomes for consumers, and not contain mercury compared to their general-purpose fluorescent counterpart. SB 690 only proposes to transition out these types of fluorescents and would not cover specialty fluorescents, such as ultraviolet (UV) fluorescents used for suntanning booths or other specialty purposes.

Figure 1. General-purpose, white light fluorescent light bulbs.

SB 690 IS A COST-EFFECTIVE WAY TO ACHIEVE STATE GOALS

Transitioning from fluorescent light bulbs to LEDs is a low-cost way for Hawaii to cut energy waste, reduce electricity bills, and reduce greenhouse gases – helping the state meet its clean energy, energy efficiency, and affordability goals.

We would be happy to provide further information, answer questions, or provide technical assistance.

Thank you,

Brian Fadie

Brian Fadie, State Policy Manager
Appliance Standards Awareness Project

SENATE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION
February 21, 2023, 10:00 AM
Room 229

TESTIMONY IN SUPPORT OF SB 691 SD1

Aloha Chair Keohokalole, Vice Chair Fukunaga, and Committee members:

Blue Planet Foundation **supports SB 691**, which expands the list of household products in Hawai‘i that have minimum energy and water efficiency standards. Energy efficiency measures, like setting appliance standards as proposed in Senate Bill 691, are a simple, accessible, and effective tool to reduce the high-cost of electricity for local residents and businesses, while also accelerating our state's transition to 100% clean energy and carbon-negative economy by 2045.

What are appliance efficiency standards?

Appliance and equipment standards specify the minimum energy and/or water efficiency levels of specific products. Many large household appliances—like refrigerators, washers, and dryers—are regulated by national standards. Action at the state level has historically been the catalyst for national policy. Most of the products now covered by national standards were first subject to state standards. For example, California, New York, and Florida refrigerator standards in the 1970s and 1980s were the basis of and a catalyst for the 1987 national refrigerator standards.

By adopting state appliance efficiency standards, states can fill in the gaps on appliances that aren't regulated by the federal government. While doing so, they also decrease energy use, save consumers and businesses money, and reduce greenhouse gas emissions and other pollutants.

In 2019, Hawai‘i adopted appliance efficiency standards for five products sold in the state, including computers and monitors, high color rendering fluorescent lamps, showerheads, faucets, and spray sprinklers (Act 41 of 2019). Since then, 12 other states have also adopted efficiency standards, including for the products in SB 691.

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Helping Hawai‘i save on utility bills

Hawai‘i residents and businesses pay the highest electricity rates in the nation,[1] which exacerbates our already high cost of living. Appliance efficiency standards are a low-hanging-fruit policy that can provide economic relief to Hawai‘i's small businesses and struggling families.

Estimates show that if Hawai‘i passed this bill with an effective date of 2025, **by 2030, Hawai‘i households and businesses would be saving $11 million annually on their utility bills. By 2040, this number would increase to an annual savings of $24 million.**

Furthermore, the majority of the products in SB 691 have **no incremental cost**, meaning that they don’t cost more than inefficient models and **consumers will start saving right away**. For other appliances, like air purifiers and portable electric spas, utility bill savings pay back the small incremental cost of products meeting the standards within six months. After that, savings accrue to the consumers over the lifetime of the product.

The table below was produced by a non-profit research association, the Appliance Standards Awareness Project, to provide a Hawai‘i-specific breakdown on annual utility bill savings and incremental costs for products considered in this bill:

	Potential annual utility bill savings (million 2021$)		Net present value savings (million 2021$)	Benefit-cost ratio	Payback period (years)
	In 2030	In 2040			
Air purifiers	5.1	8.5	62.8	15.2	0.5
Electric vehicle supply equipment	0.5	3.3	20.1	no cost	0.0
Portable electric spas	2.2	3.8	27.3	11.6	0.6
Residential ventilating fans	0.4	1.2	8.1	no cost	0.0
Toilets (water closets)	1.4	4.2	36.0	no cost	0.0
Urinals	0.9	2.2	16.0	no cost	0.0
Water coolers	0.4	0.8	6.3	no cost	0.0
Total	**11**	**24**	**177**	**26.3**	--

Assuming a compliance date of 2025 for all the recommended standards. Net present value savings take into account both utility bill savings and estimated impacts on product costs for items sold between 2025 and 2040. Totals may not sum due to rounding. The total benefit-cost ratio is calculated as the present value of the total utility bill savings from products sold through 2040 for the package of recommended standards divided by the present value of the total additional costs. Urinal savings were estimated using a standard case of 0.125 gallons per flush and weighted for the availability of wall-mounted urinal models found in the Modernized Appliance Efficiency Database System (MAEDbS).

[1]Compton, Sophia. “Hawaii has the highest electric bills nationwide in 2022, report finds.” *Pacific Business News.* January 6, 2023. (https://www.bizjournals.com/pacific/news/2023/01/06/hawaii-had-highest-electric-bills-nationwide.html)

States are already leading the way on appliance standards

The standards referenced in SB 691 are also easily implementable for the government agency tasked with oversight. This is because: (1) the standards are applicable to readily available products—i.e. products and technologies meeting the standards are readily available today from multiple manufacturers, and (2) other states have already done the lion's share of work to set the appropriate standards and shift manufacturers' behavior and compliance.

The proposed standards are largely modeled after standards adopted in other states, meaning that the manufacturers have already adapted to the testing, certification, and labeling requirements for selling energy and water efficient products across the country. As a reference, the following number of states have already adopted efficiency standards for the products included in this bill: standards for EV supply equipment have been adopted in 4 states, air purifiers in 5 states, residential ventilating fans in 9 states, urinals in 12 states, toilets in 13 states, water coolers in 13 states, and standards for portable electric spas have been adopted in 14 states.[2] Consequently, Hawai'i can merely piggyback off of these standards for **easy implementation without a heavy lift for the local government agency tasked with oversight**.

Preventing carbon emissions to help meet our climate goals

Climate change will have devastating, long-term consequences on Hawai'i's environment, economy, and quality of life. For these reasons and others, the State of Hawai'i has committed to a decisive transition away from fossil fuels. The legislature has passed aggressive carbon reduction goals, including a mandate to achieve 100% renewable electricity by 2045 (Act 97 of 2015), and a goal to be carbon-negative by 2045 (Act 15 of 2018), with an interim goal to achieve a 50% reduction from 2005 levels by 2030 (Act 238 of 2022).

Embracing energy efficiency measures is an important part of addressing climate change and reducing carbon emissions. In fact, adopting state appliance efficiency standards is a priority initiative for the U.S. Climate Alliance to accelerate climate action.[3]

Expanding Hawai'i's list of products with appliance standards would significantly aid our collective efforts to achieve a carbon-negative, clean energy future. Cumulatively through 2040, the standards set forth in this bill would **save 552 gigawatt hours of electricity and 3 billion gallons of water, as well as avoid 281,500 metric tons of carbon dioxide, 795 tons of nitrogen oxide, and 1,230 tons of sulfur dioxide pollution.**

[2] "State Standards: State Adoption of Energy Efficiency Standards."*Appliance Standards Awareness Project.* (https://appliance-standards.org/states#states-table)
[3] *See* https://www.usclimatealliance.org/efficiency-challenge.

Conclusion

As Hawai‘i progresses toward achieving its 100% renewable energy and decarbonization goals, energy efficiency remains the quickest, cheapest, and cleanest way to reduce emissions from the electricity sector, while providing financial benefits to Hawai‘i residents and businesses during the transition. Numerous states have adopted standards for all of the products proposed in this bill, and Hawai‘i’s past experience with appliance standards have already proven to be a cost-effective and easily implementable policy. Furthermore, as more states adopt similar legislation and lead the way to an energy efficient economy, the states without appliance standards become a dumping ground for inefficient products that suppliers cannot sell elsewhere. As a result, Blue Planet strongly supports expanding Hawai‘i’s list of appliance efficiency standards by adding the products included in SB 691.

Thank you for the opportunity to provide testimony.

Hawai'i Energy

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Before the Senate Committee on Commerce and Consumer Protection
Tuesday, February 21, 2023 at 10:00 a.m.

Testimony in Support of SB691 SD1: Relating to Efficiency Standards

Chair Keohokalole, Vice Chair Fukunaga, and Members of the Committee:

Thank you for the opportunity to testify in support and provide comments on Senate Bill 691 SD1.

Hawai'i Energy works to empower island families and businesses on behalf of the Hawai'i Public Utilities Commission (PUC) to make smart energy choices to reduce energy consumption, save money, and pursue a 100% clean energy future. Energy efficiency – the energy we do not use – 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 the continued impact of energy efficiency on Hawai'i's residents and businesses as an integral component of the State's Clean Energy Initiative, which calls for Hawai'i to achieve 100% clean energy by 2045.

In 2019, the State Legislature passed Hawai'i's first minimum appliance standards, a law that went into effect in 2021. Although progress has been made, it is crucial that we do not rest on our laurels. We need to continue to push for more – more minimum standards, more savings, and more customer protection for different appliances.

Appliance standards empower Hawai'i consumers to make the best energy, water and financial choice over the lifetime of the equipment and protect our consumers from "dumping" by manufacturers who cannot sell less efficient products in markets where standards do exist. This bill adds several appliances to the state's minimum appliance standards, including air purifiers, residential ventilating fans, toilets, urinals, and water coolers.

In addition, adopting the appliance energy standards modeled after and already implemented in California will allow Hawai'i to benefit from the market power that California exerts on manufacturers and the appliances they produce and ensure consistency for manufacturers.

Hawai'i Energy supports minimum appliance standards as a cost effective way to help reach our state's clean energy and carbon neutrality goals.

Thank you for the opportunity to testify in support of Senate Bill 691 SD1.

Sincerely,
Caroline Carl
Executive Director
Hawai'i Energy

PAMCA
PLUMBING & MECHANICAL CONTRACTORS ASSOCIATION OF HAWAII

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PH: (808) 597-1216

GREGG S. SERIKAKU
EXECUTIVE DIRECTOR

Via E-File February 17, 2023

Senator Jarrett Keohokalole, Chair
Senator Carol Fukunaga, Vice-Chair
Senate Committee on Commerce and Consumer Protection

Chair Keohokalole, Vice Chair Fukunaga, and Members of the Committee:

SUBJECT: SB 691 SD1 Relating to Efficiency Standards

My name is Gregg Serikaku, Executive Director for the Plumbing and Mechanical Contractors Association of Hawaii, and we are the State's largest trade association representing contractors in the plumbing, air conditioning, refrigeration, steamfitter, and fire sprinkler trades throughout Hawaii.

SB 691 SD1 seeks to mandate the water efficiency standard of plumbing fixtures such as faucets, showerheads, toilets, and urinals and sprinklers.

Our Association has the following comments regarding this bill:

- The current Hawaii model plumbing code which was established by the State Building Code Council (SBCC) pursuant to HRS 107-25, includes the adoption of "Appendix L-Sustainable Practices", of the 2018 Uniform Plumbing Code (UPC). Appendix L includes the majority of water efficiency standards that are being proposed in this bill, and also provides a more detailed application of these efficiency standards as well as many additional water efficiency opportunities. The UPC and Appendix L are nationally vetted through an ANSI certified process every 3 years, and any potential updates and new water efficiency requirements are included in updated publications which are reviewed locally by the SBCC every 3 years. This combination of national and local vetting ensures that all newly adopted water efficiency standards are both appropriate for Hawaii, and also implemented in a manner that maintains the operational integrity of the entire plumbing system and safeguards the public's health and safety.
- This bill's proposed inclusion of water efficiency standards that are separate from the model plumbing code creates confusion for owners, developers, designers, contractors, and the public, as these stakeholders must now look outside of the established model building codes and search other statutes for standards that may conflict or have varying implementation dates.
- In addition to the confusion for end users, separately adopted water efficiency standards makes the process of code adoption , training, and administration very cumbersome for the SBCC as well as the various county agencies tasked with enforcing compliance.

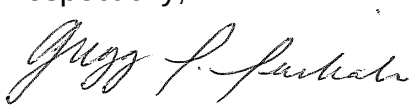
- This bill allows adoption of future efficiency standards as deemed appropriate, provided that such standards serve to promote water efficiency and be cost effective to consumers, however, such standards must also consider the health and safety of end users, especially when such standards affect single components and do not necessarily consider the entire plumbing system as a whole. Technical considerations such as flow rate, slope, pipe sizing, etc. all need to be considered when designing an efficient and safe plumbing system.

If the desire of this committee is to mandate stricter water efficiency standards, we recommend that the committee remove and replace all references to plumbing fixtures in HRS 196-84, and replace such references with Appendix L in the Hawaii model plumbing code. Doing so will achieve the following:

- Same realized water savings
- More detailed description of water efficiency requirements
- Easier implementation for all stakeholders
- Automatic updates to standards every 3 years as mandated by HRS 107-24(c)
- National and local vetting process for any changes
- Consideration of health and safety as it relates to the entire plumbing system

Thank you for this opportunity to provide our testimony.

Respectfully,



Gregg S. Serikaku
Executive Director

February 20, 2023

Senator Jarrett Keohokalole
Hawaii State Capitol
415 South Beretania Street
Room 205
Honolulu, HI 96813
senkeohokalole@capitol.hawaii.gov

RE: RE: Hawaii HB 194/SB 691 – An Act Relating to Efficiency Standards

Dear Chair Keohokalole and Members of the House Committee on Energy & Environmental Protection:

Plumbing Manufacturers International (PMI) appreciates the opportunity to provide comments regarding Hawaii HB 116, that your committee will be considering on February 21st, that looks to modify the definition for "showerhead" and creates a new position "Chief Energy Officer" to administer and enforce the state's appliance efficiency standards.

Regarding the proposed bill, PMI has the following concerns (**Please note:** PMI's proposed text changes are indicated in red):

- In Section 2, for consistency with the definitions in the national standards that address plumbing fixtures and fittings (i.e., ASME A112.18.1/CSA B125.1 "Plumbing Fittings" and ASME A112.19.2/CSA B45.1 "Ceramic Plumbing Fixtures"). PMI recommends revising the definitions of showerhead and water closet as follows:

"Toilet" or "water closet" means a plumbing fixture ~~that includes~~ with a water—containing receptor that ~~is designed to~~ receives liquid and solid ~~human~~ body waste and on actuation conveys the waste through an exposed integral trap into a drainage system. "Toilet" or "water closet" includes but is not limited to a dual—flush toilet.

"Showerhead" means an accessory to a supply fitting for spraying water onto a bather typically from an overhead position ~~a device through which water is discharged for a shower bath. Showerhead includes any showerhead, including a handheld showerhead, except a safety showerhead~~.

- In Section 3 (2), the text as proposed appears to permit the chief energy officer to increase the efficiency standards without any public input at all. Such changes could have a significant, long-term impact on the health and safety of the public, and should be required to, at a minimum, seek public input. Any amendment to efficiency standards should provide for a public input period of no less than 45 days which is the common practice in many states. PMI recommends revising the new text as follows:

(2) Adopt or amend efficiency standards for any products as the chief energy officer deems appropriate, including but not limited to those products listed or incorporated in section 196—84(a); provided that the chief energy officer shall set efficiency standards upon a determination that new or increased efficiency standards would serve to promote energy or water conservation in the State, would not jeopardize health and safety, and would be cost—effective for consumers who newly purchase and use those products; provided further that the chief energy officer seeks public input on any amendment to efficiency standards for a period of no less than 45 days and no new or increased efficiency standards shall become effective within one year following the adoption of any amended regulations establishing the increased efficiency standards."

2022-02-09 Note: During the Committee Hearing the representatives noted that Hawaii statutes include provisions requiring public input for changes to efficiency standards. Therefore, the chief energy officer would not be able to amend efficiency standards without going through a public review process.

- In Section 5 (10), the flush volume for all urinals should be changed to 0.5 gallons per flush (gpf) to be consistent with EPA WaterSense® program requirements that have been vetted through a consensus process to ensure that such fixtures function safely and effectively. Such a requirement will ensure that urinals are not only 50% more water efficient than federal regulations (or what is currently permitted in Hawaii at 1.0 gpf), but are also required to meet high performance standards. For urinals and water closets located in prisons or mental health care facilities, such fixtures must flush more water per flush in order to ensure the safety of facility personnel. It is common in such facilities for inmates and patients to vandalize such fixtures by clogging them, which requires attention from facility personnel that puts their safety at risk. Finally, the reference to 10 CFR should be consistent with how it is reference in the eCFR system. The eCFR Webpage can be accessed through the url address: https://www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-430/subpart-B/appendix-Appendix%20S%20to%20Subpart%20B%20of%20Part%20430

(10) Toilets, also known as water closets, and urinals, other than those designed and marketed exclusively for use at prisons or mental health facilities, shall meet the standards shown in subparagraphs (A) to (D) when tested in accordance with 10 CFR ~~title 10 Code of Federal Regulations Part 430,~~ appendix T to subpart B of Part 430, —— "Uniform Test Method for Measuring the Water Consumption of Water Closets and Urinals" —— …
(A) Wall—mounted urinals, except for trough—type urinals and urinals designed and marketed exclusively for use in prisons and mental health care facilities, shall have a maximum flush volume of ~~0.125~~ 0.5 gallons per flush;
(B) Floor—mounted urinals, except for trough-type urinals and urinals designed and marketed exclusively for use in prisons and mental health care facilities, shall have a maximum flush volume of 0.5 gallons per flush;
(C) Toilets, except for dual-flush tank—type toilets and toilets designed and marketed exclusively for use in prisons or mental health care facilities, shall have a maximum flush volume of 1.28 gallons per flush; and
(D) Dual—flush tank—type toilets shall have a maximum dual—flush effective flush volume of 1.28 gallons per flush. As used in this subparagraph, "dual-flush effective flush volume" means the average flush volume of two reduced flushes and one full flush; and

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- In Section 5 (11), the ENERGY STAR Program Requirements Product Specification for Water Coolers, Version 3.0 became effective in March 23, 2022. PMI recommends revising the new text to reference the latest version of this specification as follows:

11) Water coolers included in the scope of the ENERGY STAR Program Requirements Product Specification for Water Coolers, Version 3.0 ~~2.0~~, shall have on mode with no water draw energy consumption less than or equal to the following values as measured in accordance with the test requirements of that program:

- In Section 6 (b), the existing text is unclear as to the meaning of the term "new" (i.e. …, no "new" air purifier, electric vehicle ….). From the perspective of a manufacturer "new" products are that which are newly produced. However, it is also understood that from the perspective of a consumer a "new" product could be one which is on the shelf and is purchased new from a store. PMI's suggested revision of this text included below is intended to clarify the meaning of the term "new" (i.e. that which is identified through a specific manufacturing date). This revision will also permit the sell through of local inventoried product to ensure that retailers and distributors (including local hardware stores) have sufficient time to vend existing stock without incurring excessive costs or hardship.

(b) On or after January 1, 2025, no new air purifier, electric vehicle supply equipment, portable electric spa, residential ventilating fan, toilet, urinal, or water cooler that is manufactured on or after January 1, 2025, may be sold or offered for sale, lease, or rent in the State unless the efficiency of the new product meets or exceeds the efficiency standards provided in section 196—85.

PMI is an international, U.S.-based trade association representing manufacturers that provide 90% of the plumbing products sold in the United States. We have made the promotion of water safety and efficiency a top priority and have included this in our mission statement[1]. PMI's members are industry leaders in producing safe, reliable and innovative water efficient plumbing technologies and have supported the U.S. EPA WaterSense® program since its inception. **In Hawaii, plumbing manufacturers contribute $234 million to the economy, provide more than 1,550 jobs (direct and indirect) and generate $74.8 million in wages.**

Thank you for considering our comments. If you have any questions regarding our comments, please do not hesitate to contact me.

Sincerely,

Kyle Thompson

[1] PMI's Mission: To promote the water efficiency, health, safety, quality and environmental sustainability of plumbing products while maximizing consumer choice and value in a fair and open marketplace. To provide a forum for the exchange of information and industry education. To represent openly the members' interests and advocate for sound environmental and public health policies in the regulatory/legislative processes. To enhance the plumbing industry's growth and expansion.

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cc: Members

PMI Members

*Bradley Corporation *Brasscraft Manufacturing Company *CSA Group *Delta Faucet Company *Dornbracht Americas, Inc. *Duravit USA, Inc. *Fisher Manufacturing Company *Elkay Manufacturing Company *Fluidmaster, Inc. *Gerber Plumbing Fixtures, LLC *Hansgrohe, Inc. *Haws Corporation *IAPMO *International Code Council – Evaluation Service (ICC-ES) *KEROX LTD *Kohler Company *Lavelle Industries, Inc. *LIXIL *MOEN *NEOPERL, Inc. *NSF International *Pfister *Reliance Worldwide Corporation *Similor AG *Sloan Valve Company *Speakman Company *Sprite *Symmons Industries, Inc. *T & S Brass and Bronze Works, Inc. *TOTO USA *UL, LLC *Uponor *Viega, LLC *Water Pick, Inc. *WCM Industries, Inc.

Email: communications@ulupono.com

SENATE COMMITTEE ON COMMERCE & CONSUMER PROTECTION
Tuesday, February 21, 2023 — 10:00 a.m.

Ulupono Initiative supports SB 691 SD1, Relating to Efficiency Standards.

Dear Chair Keohokalole and Members of the Committee:

My name is Micah Munekata, and I am the Director of Government Affairs at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve 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 choices, and better management of freshwater resources.

Ulupono supports SB 691 SD1, which allows the chief energy officer of the Hawai'i State Energy Office to enforce minimum efficiency standards and adopt or amend efficiency standards; and, sets minimum efficiency standards for air purifiers, electric vehicle supply equipment, portable electric spas, residential ventilating fans, toilets, urinals, and water coolers, effective 1/1/2025.

Ulupono is supportive of energy and water efficiency measures to lower consumption across the state. This bill seeks to add certain products to the current Hawai'i efficiency standards list adopted in 2019. With the additional seven items listed in this bill, Hawai'i consumers will realize an estimated savings of $11 million by 2030 and $24 million by 2040. Additionally, by 2040, adopting these standards will save 552 GWh of electricity and 3 billion gallons of water.[1] It is also worth noting that the State and electric utilities are depending on consumers to do their part in energy efficiency and conservation in order to achieve Hawai'i's 100% Renewable Portfolio Standard by 2045. Adding renewables and reducing demand are both vital in achieving our clean energy future.

Hawai'i leaders must consider our energy and water future to support affordable and resilient options for our local communities in the long run.

Thank you for the opportunity to testify.

Respectfully,

Micah Munekata

[1] https://appliance-standards.org/

Director of Government Affairs

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843
www.boardofwatersupply.com

February 21, 2023

The Honorable Jarrett Keohokalole, Chair
and Members
Committee on Commerce and Consumer Protection
State Senate
Hawaii State Capitol, Room 229
415 South Beretania Street
Honolulu, Hawaii 96813

LATE

Dear Chair Keohokalole and Members:

Subject: Senate Bill 691, SD1: Relating to Efficiency Standards

The Honolulu Board of Water Supply (BWS) supports Senate Bill (SB) 691, Senate Draft (SD) 1, which authorizes the Chief Energy Officer of the Hawaii State Energy Office to adopt rules to enforce minimum efficiency standards for certain products and adopt or amend minimum efficiency standards in certain situations. The bill sets minimum efficiency standards for air purifiers, electric vehicle supply equipment, portable electric spas, residential ventilating fans, toilets, urinals, and water coolers.

We support efficient standards for appliances that will conserve energy and water resources, especially if there are gaps in Federal standards and to prevent manufacturers from sending noncompliant appliances to Hawaii if they cannot be sold in other states that have adopted standards.

Thank you for your consideration of our testimony on SB 691, SD1.

Very truly yours,

ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer