HB
556
HD1

HOUSE OF REPRESENTATIVES
THIRTIETH LEGISLATURE, 2019
STATE OF HAWAII

H.B. NO. 556 H.D. 1

A BILL FOR AN ACT

RELATING TO ENERGY EFFICIENCY.

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

SECTION 1. The legislature finds that the high cost of living in Hawaii adds to the importance of adopting policies that promote and encourage energy efficiency, which can provide relief for families and businesses faced with high utility bills. Without state appliance efficiency standards to protect consumers, Hawaii residents risk losing as much as $1,000,000,000 in unnecessary energy waste as manufacturers unload less efficient appliances that they cannot sell in other states with heightened standards. Multiple states, including California, Colorado, Connecticut, Oregon, Rhode Island, Vermont, and Washington, have adopted state appliance efficiency standards.

The legislature further finds that new appliance efficiency standards have the potential to save Hawaii families and businesses billions of dollars while conserving energy and water resources. According to a 2017 national study from the American Council for an Energy-Efficient Economy, Hawaii has the best

opportunity in the nation to save money through the implementation of appliance efficiency standards. The study found that by adopting appliance efficiency standards, Hawaii could save up to $1,000,000,000 in electricity costs over twenty years, which is the equivalent of about $215 annually for each Hawaii household. Although many appliances, such as refrigerators, dishwashers, and commercial air conditioners, are regulated by national appliance efficiency standards, the study found that states can save billions of dollars by adopting state-level appliance efficiency standards for appliances that are not regulated by national standards.

The legislature further finds that by adopting state appliance efficiency standards, the State, among other positive results, can:

(1) Provide a boost to the local economy, which occurs when consumers and businesses spend their economic savings on other goods and services;

(2) Protect consumers against manufacturers who would otherwise unload less efficient appliances that they cannot sell in other states with heightened standards;

(3) Ensure that Hawaii residents do not miss out on potential savings while progress on standards at the national level is uncertain;

(4) Improve electric system reliability and potentially reduce the need for new energy and water infrastructures based on the resulting energy and water savings;

(5) Lower electricity bills for residents and businesses; and

(6) Reduce air pollutants and greenhouse gas emissions, which can result in public health benefits and help the State meet its clean energy and climate mitigation targets.

Furthermore, the legislature finds that the cost of most appliances specifically listed in this Act are equal to the cost of non-compliant appliances, or available at a minimal cost premium.

The legislature recognizes the state of California as a leader in establishing state-level appliance efficiency standards that protect consumers and finds that the California appliance efficiency standards should be used as a model for

Hawaii's standards. For non-federally regulated appliances without state-level appliance efficiency standards in California, Hawaii should look to other existing standards of efficiency specifications, such as the ENERGY STAR or the U.S. Environmental Protection Agency's WaterSense program standards.

The purpose of this Act is to require the department of business, economic development, and tourism to adopt state appliance efficiency standards to protect consumers.

SECTION 2. Chapter 196, Hawaii Revised Statutes, is amended by adding a new part to be appropriately designated and to read as follows:

"**PART . APPLIANCE EFFICIENCY STANDARDS**

§196-A Definitions. As used in this chapter:

"Compensation" means money or any other valuable thing, regardless of form, received or to be received by a person for services rendered.

"Computer" means a device that performs logical operations and processes data. A computer includes both stationary and portable units and includes a desktop computer, a portable all-in-one, a notebook computer, a mobile gaming system, a high expandability computer, a small-scale server, a thin client, and

a workstation. Although a computer is capable of using input devices and displays, such devices are not required to be included with the computer when the computer is shipped. A computer is composed of, at a minimum:

(1) A central processing unit (CPU) to perform operations or, if no CPU is present, then the device must function as a client gateway to a server and the server acts as a computational CPU;

(2) Ability to support user input devices such as a keyboard, mouse, or touchpad; and

(3) An integrated display screen or the ability to support an external display screen to output information.

The term "computer" does not include a tablet, a game console, a television, a small computer device, a server other than a small-scale server, or an industrial computer.

"Computer monitor" means an analog or digital device of diagonal screen size greater than or equal to seventeen inches and less than or equal to sixty-one inches, that has a pixel density of greater than five thousand pixels per square inch, and that is designed primarily for the display of computer generated signals for viewing by one person in a desk-based

environment. A computer monitor is composed of a display screen and associated electronics. A computer monitor does not include:

(1) Displays with integrated or replaceable batteries designed to support primary operation without AC mains or external DC power, such as electronic readers, mobile phones, tablets, or battery-powered digital picture frames; or

(2) A television or a signage display.

"Director" means the director of business, economic development, and tourism.

"Faucet" means a lavatory faucet, kitchen faucet, metering faucet, or replacement aerator for a lavatory or kitchen faucet.

"High color rendering index (CRI) fluorescent lamp" means a fluorescent lamp with a color rendering index of eighty-seven or greater that is not a compact fluorescent lamp.

"Showerhead" means a device through which water is discharged for a shower bath. Showerhead includes any showerhead, including a handheld showerhead, except a safety showerhead.

"Spray sprinkler body" means the exterior case or shell of a sprinkler incorporating a means of connection to the piping system designed to convey water to a nozzle or orifice.

§196-B Purpose. The purpose of this part is to direct the department to adopt minimum appliance efficiency standards for certain products sold or installed in the State.

§196-C Rules. The director shall adopt rules pursuant to chapter 91 establishing minimum efficiency standards for the types of new products set forth in section 196-D.

§196-D Scope. (a) The director shall adopt appliance efficiency standards for the following appliances, if standards for these appliances are not preempted by federal law:

(1) Computers and monitors;

(2) Faucets;

(3) High CRI fluorescent lamps;

(4) Showerheads; and

(5) Spray sprinkler bodies.

(b) This section shall apply to the sale and offering for sale, lease, or rent of appliances under subsection (a) in the State.

(c) This section shall not apply to:

(1) New products manufactured in the State and sold outside the State;

(2) New products manufactured outside the State and sold at wholesale inside the State for final retail sale and installation outside the State;

(3) Products installed in mobile manufactured homes at the time of construction; or

(4) Products designed expressly for installation and use in recreational vehicles.

If any standard adopted by the director pursuant to this chapter is subsequently preempted by federal law, all other state appliance efficiency standards not preempted shall remain in effect.

§196-E Appliance efficiency standards. (a) The rules adopted by the director pursuant to this section shall provide for the following minimum efficiency standards:

(1) Computers and computer monitors shall meet the requirements set forth in California Code of Regulations, Title 20, Section 1605.3, as in effect on July 1, 2019;

(2) Faucets shall meet the minimum efficiency standards set forth in California Code of Regulations, Title 20, Section 1605.1, as in effect on July 1, 2019;

(3) High CRI fluorescent lamps shall meet the minimum efficacy requirements contained in Section 430.32(n)(4) of Title 10 of the Code of Federal Regulations as in effect on January 3, 2017, as measured in accordance with Appendix R to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations—"Uniform Test Method for Measuring Average Lamp Efficacy (LE), Color Rendering Index (CRI), and Correlated Color Temperature (CCT) of Electric Lamps"— as in effect on January 3, 2017;

(4) Showerheads shall meet the minimum efficiency standards set forth in California Code of Regulations, Title 20, Section 1605.1, as in effect on July 1, 2019; and

(5) Spray sprinkler bodies that are not specifically excluded from the scope of the WaterSense Specification for Spray Sprinkler Bodies, Version 1.0, shall include an integral pressure regulator and shall

meet the water efficiency and performance criteria and other requirements of that specification, as in effect on July 1, 2019.

(b) When adopting standards for appliances pursuant to section 196-D(a), the director shall set appliance efficiency standards upon a determination that increased efficiency standards would serve to promote energy or water conservation in the State and would be cost effective for consumers who purchase and use such new products.

§196-F Implementation. (a) On or after January 1, 2021, no new computer or computer monitor, faucet, high CRI fluorescent lamp, showerhead, or spray sprinkler body 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-E.

(b) One year after the date upon which the sale or offering for sale of certain products becomes subject to the requirements of subsection (a), no such products may be installed for compensation in the state unless the efficiency of the new product meets or exceeds the efficiency standards provided in section 196-E.

§196-G New and revised standards. The director may adopt rules pursuant to chapter 91 to establish increased efficiency standards for the products listed or incorporated in section 196-D. The department may also establish standards for products not specifically listed in section 196-D. In considering such new or amended standards, the director shall set efficiency standards upon a determination that increased efficiency standards would serve to promote energy or water conservation in the State and would be cost effective for consumers who purchase and use such new products; provided that no new or increased efficiency standards shall become effective within one year following the adoption of any amended regulations establishing such increased efficiency standards.

§196-H Protection against repeal of federal standards. (a) If any of the energy or water conservation standards issued or approved for publication by the Office of the United States Secretary of Energy as of January 19, 2017, pursuant to the Energy Policy and Conservation Act (Parts 430-431 of Title 10 of the Code of Federal Regulations), are withdrawn, repealed, or otherwise voided, the minimum energy or water efficiency level permitted for products previously subject to federal energy or

water conservation standards shall be the previously applicable federal standards, and no such new product may be sold or offered for sale, lease, or rent in the State unless it meets or exceeds such standards.

(b) This section shall not apply to any federal energy or water conservation standard set aside by a court upon the petition of a person who will be adversely affected, as provided in Section 6306(b) of Title 42 of the United States Code.

§196-I Testing, certification, labeling, and enforcement. (a) The manufacturers of products covered by this part shall test samples of their products in accordance with the test procedures adopted pursuant to this part. The director may adopt updated test methods when new versions of test procedures become available.

(b) Manufacturers of new products covered by section 196-D of this part shall certify to the director that such products are in compliance with the provisions of this part. Such certifications shall be based on test results. The director shall promulgate rules, pursuant to chapter 91, governing the certification of such products and shall coordinate with the

certification programs of other states and federal agencies with similar standards.

(c) Manufacturers of new products covered by section 196-D of this part shall identify each product offered for sale or installation in the State that is in compliance with the provisions of this part by means of a mark, label, or tag on the product and packaging at the time of sale or installation. The director shall promulgate rules, pursuant to chapter 91, governing the identification of such products and packaging, which shall be coordinated to the greatest practical extent with the labeling programs of other states and federal agencies with equivalent efficiency standards. The director shall allow the use of existing marks, labels, or tags, which connote compliance with the efficiency requirements of this part.

(d) The director may test products covered by section 196-D. If products so tested are found not to be in compliance with the minimum efficiency standards established under section 196-E, the director shall:

(1) Charge the manufacturer of such product for the cost of product purchase and testing, and

(2) Make information available to the attorney general and the public on products found not to be in compliance with the standards.

(e) With prior notice and at reasonable and convenient hours, the director may cause periodic inspections to be made of distributors or retailers of new products covered by section 196-D in order to determine compliance with the provisions of this part.

(f) The director shall investigate complaints received concerning violations of this part and shall report the results of such investigations to the attorney general. The attorney general may institute proceedings to enforce the provisions of this part. Any manufacturer, distributor, or retailer, or any person who installs a product covered by this part for compensation and who violates any provision of this part shall be issued a warning by the director for any first violation and subject to a civil penalty of up to $100 for each offense. Repeat violations shall be subject to a civil penalty of not more than $500 for each offense. Each violation shall constitute a separate offense, and each day that such violation continues shall constitute a separate offense. Penalties

assessed under this paragraph are in addition to costs assessed under section 196-I(d).

(g) The director may adopt such further rules, pursuant to chapter 91, as necessary to ensure the proper implementation and enforcement of the provisions of this part."

SECTION 3. This Act does not affect rights and duties that matured, penalties that were incurred, and proceedings that were begun before its effective date.

SECTION 4. If any provision of this Act, or the application thereof to any person or circumstance, is held invalid, the invalidity does not affect other provisions or applications of the Act that can be given effect without the invalid provision or application, and to this end the provisions of this Act are severable.

SECTION 5. In codifying the new sections added by section 2 of this Act, the revisor of statutes shall substitute appropriate section numbers for the letters used in designating the new sections in this Act.

SECTION 6. This Act shall take effect on July 1, 2100.

H.B. NO. 556 H.D. 1

Report Title:
DBEDT; Appliance Efficiency Standards

Description:
Requires the Department of Business, Economic Development, and Tourism to adopt state appliance efficiency standards. (HB556 HD1)

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

TESTIMONY OF
JAMES P. GRIFFIN, Ph.D.
CHAIR, PUBLIC UTILITIES COMMISSION
STATE OF HAWAII

TO THE
HOUSE COMMITTEE ON
CONSUMER PROTECTION AND COMMERCE

February 20, 2019
2:00 p.m.

Chair Takumi and Members of the Committee:

MEASURE: H.B. No. 556 HD1
TITLE: RELATING TO ENERGY EFFICIENCY.

DESCRIPTION: Requires the Department of Business, Economic Development, and Tourism to adopt state appliance efficiency standards. (HB556 HD1)

POSITION:

The Public Utilities Commission offers the following comments for consideration.

COMMENTS:

The Public Utilities Commission ("Commission") supports the intent of the measure, which is to adopt state appliance efficiency standards to protect consumers.

The Commission has reviewed the previous testimony and is working with the Department of Business, Economic Development, and Tourism, the Department of Commerce and Consumer Affairs, and the Public Benefits Fee Administrator on possible amendments to this measure.

Thank you for the opportunity to testify on this measure.

DAVID Y. IGE
GOVERNOR

MIKE MCCARTNEY
DIRECTOR

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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Statement of
MIKE MCCARTNEY
Director
Department of Business, Economic Development, and Tourism
before the
HOUSE COMMITTEES ON CONSUMER PROTECTION AND COMMERCE

Wednesday, February 20, 2019
2:00 PM
State Capitol, Conference Room #329

In consideration of
HB 556 HD1
RELATING TO ENERGY EFFICIENCY.

Chair Takumi, Vice Chair Ichiyama, and Members of the Committees. The Department of Business, Economic Development, and Tourism (DBEDT) **supports** HB 556 HD1 which calls for DBEDT to adopt California's appliance efficiency standards for appliances as allowed by federal law.

We concur with the energy conservation and energy efficiency goals of this bill and concur with the amendments offered by the Public Utilities Commission.

Thank you for the opportunity to testify.

PLUMBING MANUFACTURERS INTERNATIONAL

February 19, 2019

Representative Roy M. Takumi
District 35
Hawaii State Capitol
415 South Beretania Street / Room 320
Honolulu, HI 96813

Representative Linda Ichiyama
District 32
Hawaii State Capitol
415 South Beretania Street / Room 426
Honolulu, HI 96813

RE: HAWAII HB 556 – ENERGY EFFICIENCY

Dear Chairman Takumi and Vice Chair Ichiyama:

Plumbing Manufacturers International (PMI) appreciates this opportunity to provide comments to the House Committee on Consumer Protection & Commerce regarding Hawaii HB 556 that looks to adopt appliance efficiency standards for faucets and showerheads within the State of Hawaii that are modeled after Title 20 of California's Code of Regulations.

PMI is an international, U.S.-based trade association representing manufacturers that provide 90% of the plumbing products sold in the United States. PMI members manufacture water-efficient toilets, urinals, faucets, showerheads and other plumbing products at more than 70 locations across the country for the residential and commercial marketplace. These products are readily available at home improvement stores, hardware stores and showrooms in all 50 states, as well as online. In Hawaii, plumbing manufacturers contribute $234 million to the economy, provide more than 1500 good paying jobs with their wholesale and retail partners, and generate $74.8 million in wages.

PMI has 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.

[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.

Regarding the proposed bill, PMI **opposes** the bill as currently drafted and would like to bring to your attention the following comments for your consideration (**Please note:** PMI's proposed text changes are indicated in red):

- Based on recent research that was funded by the California Energy Commission and conducted by Gary Klein and Associates, Inc. titled: "*Code Changes and Implications of Residential Low Flow Hot Water Fixtures*," Mr. Klein submitted a letter (click **here** to view) to the State of Washington that is also looking to reduce the water consumption levels for showerheads, lavatory faucets and kitchen faucets to match those used in California. In the letter, Mr. Klein states the following:

  "***Our research found that reducing flow rates without a corresponding reduction in pipe sizing does not save water in proportion to the change in flow rate. In fact, lowering flow rates of showers actually increases the waste of water while waiting for the hot water to arrive, eating up much of the savings that accrue during the shower itself.*** *We also found that lavatory and kitchen faucets are rarely used at full flow – this is reserved for filling pots or the sink basin itself. Faucets are typically opened to the flow rate needed for the task at hand, which is often less than half of the rated flow.* ***As with showers, lowering faucet flow rates will not save water or energy in proportion to the change in flow rate; mostly it will increase the time it takes to fill pots***."

  "There are unintended consequences to public health that can come from reducing flow rates without a corresponding reduction in pipe size. *Lower flow rates increase the residence time of the water in the piping from the time it leaves the water treatment plant until it arrives at the building as well as within the building itself. This changes the dosing schedule for disinfection applied at the water treatment plant, generally increasing the amount that is needed to ensure that enough arrives at distant buildings, and ultimately at distant fixtures within those buildings. Lower flow rates and smaller water volumes also impact the functioning of the entire waste water treatment system*."

- Based on the November 2017 white paper titled: "*Adapting to Change: Utility Systems and Declining Flows*"[2], where issues with California's drinking water, wastewater and recycled-water infrastructures have been highlighted due to reductions in indoor water use, PMI believes that the State of Hawaii should first analyze the impact on its infrastructures before lowering the water consumption levels of plumbing fixtures and fixture fittings below current state levels. Without such an analysis, there could be possible risks to public health.

- On page 6, lines 17 – 20, under Section 196-A (Definitions), regarding the definition for "Showerhead," PMI recommends revising the definition in accordance with the industry standard ASME A112.18.1/CSA B125.1, and including definitions for "body spray" and "hand-held shower" as follows:

[2] "Adapting to Change: Utility Systems and Declining Flows," California Association of Sanitation Agencies (CASA), Water Research Foundation (WRF), WateReuse California, California Water Environment Association (CWEA) and California Water Urban Agencies (CUWA), November 2017, http://www.cuwa.org/pubs/CUWA_DecliningFlowsWhitePaper_11-28-17.pdf.

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"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*~~.

"Body spray" means a shower device for spraying water onto a bather other than from the overhead position.

"Hand-held shower" means a showerhead that can be held or fixed in place for the purpose of spraying water onto a bather and that is connected to a flexible hose.

- If the State of Hawaii decides to lower the water consumption levels of private lavatory faucets and showerheads below current state levels, PMI believes that the state should adopt maximum flow rates of 1.5 gpm for private lavatory faucets (which includes residences and private restrooms in hotels and hospitals) and 2.0 gpm for showerheads that are consistent with the EPA WaterSense® program. Such requirements will ensure that private lavatory faucets are not only 30% more water efficient, and for showerheads 20% more water efficient, then federal regulations (or what is currently permitted in Hawaii), but are also required to meet high performance standards.

- On page 9, lines 1 – 3 and 14 – 17, under Section 196-E (Appliance efficiency standards), if the State of Hawaii decides to lower the water consumption levels of faucets and showerheads, the appropriate test procedures for such plumbing products should be referenced in the bill to ensure that all faucets and showerheads that are sold and installed in the state have been tested in accordance with federal regulations. Therefore, PMI recommends revising the text as follows:

  (2) Faucets, except for metering faucets, and showerheads must meet the following standards when measured in accordance with the test methods prescribed in 10 CFR Appendix S to Subpart B of Part 430, Uniform Test Method for Measuring the Water Consumption of Faucets and Showerheads:

  a) *Private lavatory faucets and replacement aerators may not exceed a maximum flow rate of 1.5 gallons per minute at 60 pounds per square inch;*
  b) *Showerheads may not exceed a maximum flow rate of 2.0 gallons per minute at 80 pounds per square inch;*
  c) *Public lavatory faucets and replacement aerators may not exceed a maximum flow rate of 0.5 gallons per minute at 60 pounds per square inch; and*
  d) *Residential kitchen faucets and replacement aerators may not exceed a maximum flow rate of 1.8 gallons per minute at 60 pounds per square inch, with optional temporary flow of 2.2 gallons per minute, provided the kitchen faucets and replacement aerators default to a maximum flow rate of 1.8 gallons per minute at 60 pounds per square inch after each use.*

  ~~*(2) Faucets shall meet the minimum efficiency standards set forth in California Code of Regulations, Title 20, Section 1605.1, as in effect on July 1, 2019;*~~

  ~~*(4) Showerheads shall meet the minimum efficiency standards set forth in California Code of Regulations, Title 20, Section 1605.1, as in effect on July 1, 2019; and*~~

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- On page 10, lines 10 – 15, under Section 196-F (Implementation), as far as the effective date of the proposed bill, PMI believes that for retailers and distributors to meet the new efficiency standards without incurring excessive costs or hardship, the standards should apply to products manufactured on or after January 1, 2021. Other states, including California, have used this approach which has allowed retailers and distributors to sell through existing inventories while ensuring that products brought into stores on or after the effective date meet the new efficiency standards. PMI recommends revising the text as follows:

  (a) ~~On or after January 1, 2021, no~~ No new computer or computer monitor, faucet, high CRI fluorescent lamp, showerhead, or spray sprinkler body manufactured on or after January 1, 2021 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-E.

- On page 13, lines 3 – 7, under Section 196-I (Testing, certification, labeling, and enforcement), regarding product identification, all major plumbing codes (including the International Plumbing Code and Uniform Plumbing Code) require plumbing products to be third party certified in accordance with the requirements of applicable industry standards. Plumbing codes also require plumbing products to be marked in accordance with the requirements of the applicable industry standards and the accredited third party certification agency. The industry standard that applies to lavatory faucets and showerheads is ASME A112.18.1/CSA B125.1. This standard requires that lavatory faucets and showerheads be permanently marked or labeled with the maximum flow rate. Therefore, PMI recommends revising the text as follows:

  (c) Manufacturers of new products covered by section 196-D of this part shall identify each product offered for sale or installation in the State as in compliance with the provisions of this part by means of a mark, label, or tag in accordance with the requirements of the state plumbing code ~~on the product and packaging~~ at the time of sale or installation.

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

Sincerely,

Matt Sigler
Technical Director
Plumbing Manufacturers International
Office 847-217-7212
msigler@safeplumbing.org

PMI Members

*Bradley Corporation *BrassCraft Mfg. Co. *CSA Group *Delta Faucet Company *Dornbracht Americas *Duravit USA *Fisher Manufacturing Company *Fluidmaster, Inc. *Franke *Global OEM *Globe Union Group, Inc.*Hansgrohe, Inc. *Haws Corporation *IAPMO *InSinkErator *International Code Council Evaluation Service *Jing Mei Industrial (USA) Inc. *KEROX *Kohler Co *Lavelle Industries, Inc. *LIXIL *Moen Incorporated *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 *Viega LLC *WaterPik *WCM Industries, Inc

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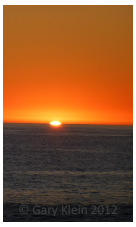

Gary Klein and Associates, Inc.

11891 Autumn Sunset Way, Suite A
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Telephone: 916-549-7080
Email: Gary@GaryKleinAssociates.com

February 11, 2019

Senator Reuven Carlyle
District 36
3131 Western Avenue
Seattle, WA 98121

Representative Jeff Morris
District 40
436A Legislative Building
P.O. Box 40600
Olympia, WA 98504

RE: Washington SB 5115 and HB 1444 Bills – Appliance Efficiency Standards

Dear Senator Carlyle and Representative Morris:

Gary Klein and Associates, Inc. appreciates this opportunity to provide comments regarding these bills to amend the State's appliance efficiency standards.

In 2008, after 19 years with the California Energy Commission, I established my firm to provide consulting on sustainability issues with an emphasis on the connection between water and energy. As such, I have been actively involved in the development of the IAPMO Uniform Plumbing Code (UPC) which forms the basis of Washington State's plumbing code and in the development of the ICC International Energy Conservation Code (IECC) which forms the basis of your State's building energy efficiency standards. In both of these and other venues, I have worked closely with colleagues from Washington State. I also provide teaching and training on how to design and install water, energy and time efficient hot water systems in buildings, and have done so on several occasions in several of your cities.

I am writing today to share with you some of the results of a recently completed research project funded by the California Energy Commission, **Code Changes and Implications of Residential Low Flow Hot Water Fixtures Agreement Number PIR-16-020.** The goals of this project were to:

- Develop code change recommendations based on comprehensive assessment of technical, economic, and market feasibility improvement strategies that can significantly increase hot water distribution system efficiency in new construction and existing buildings;
- Characterize the impact of low flow fixtures on distribution system performance and determine the theoretical lowest flow possible for hot water fixtures.

The Energy Commission thought it important to fund this research because while plumbing fixture flow rates, flush volumes and appliance fill volumes have been reduced every decade since the 1950s, pipe sizing rules have not been revisited since written down in the 1940s. Just

since 1980, the water consumption of plumbing fixtures and appliances in California have been reduced 49-96%. Assuming that water supply piping was sized correctly for the plumbing fixtures and appliances in the 1950s, it is significantly oversized for the plumbing fixtures and appliances we have today.

Our research found that reducing flow rates without a corresponding reduction in pipe sizing does not save water in proportion to the change in flow rate. In fact, lowering flow rates of showers actually increases the waste of water while waiting for the hot water to arrive, eating up much of the savings that accrue during the shower itself. We also found that lavatory and kitchen faucets are rarely used at full flow – this is reserved for filling pots or the sink basin itself. Faucets are typically opened to the flow rate needed for the task at hand, which is often less than half of the rated flow. As with showers, lowering faucet flow rates will not save water or energy in proportion to the change in flow rate; mostly it will increase the time it takes to fill pots.

In addition to our research, the 2016 Residential End Uses of Water Study Update – Version 2, funded by the Water Research Foundation found that there was a 15% decrease in daily per capita water use from 1999 to 2016. More than 80% of the reduction came from toilets and clothes washers. Shower consumption went down approximately 0.5 gallons per person per day, while faucet use actually went up about 0.2 gallons per person per day. Our research into the interaction between flow rates and pipe sizing helps explain much of the reason behind the very small changes to shower and faucet use.

There are unintended consequences to public health that can come from reducing flow rates without a corresponding reduction in pipe size. Lower flow rates increase the residence time of the water in the piping from the time it leaves the water treatment plant until it arrives at the building as well as within the building itself. This changes the dosing schedule for disinfection applied at the water treatment plant, generally increasing the amount that is needed to ensure that enough arrives at distant buildings, and ultimately at distant fixtures within those buildings. Lower flow rates and smaller water volumes also impact the functioning of the entire waste water treatment system.

Washington's appliance efficiency standards will apply to faucets and showers installed in existing buildings. It is prohibitively expensive to redo the plumbing in these buildings to right-size the piping to match the proposed reductions in flow rate. There is, of course, the opportunity to right-size the plumbing in new construction, but that is a topic for another rulemaking!

So, unless the Washington State legislature intends to replace the piping in all existing buildings, my recommendation is to not reduce the flow rates for showerheads, lavatory faucets and kitchen faucets.

Please get in touch if you have any questions.

Sincerely,

Gary Klein

Gary Klein
President

Consumer Federation of America

February 19, 2019

Rep. Roy M. Takumi, Chair
House Committee on Consumer Protection and Commerce
Hawaii State Legislature

Rep. Linda Ichiyama, Vice Chair
House Committee on Consumer Protection and Commerce
Hawaii State Legislature

Submitted via: https://www.capitol.hawaii.gov/submittestimony.aspx

RE: Support for HB 556, Relating to appliance efficiency standards

Dear Chair Takumi and Vice Chair Ichiyama, and members of the Committees:

The Consumer Federation of America (CFA) is writing in support of HB 556, appliance efficiency standards legislation. We are pleased your committee is holding a hearing on this bill which will benefit consumers and help protect them from higher utility bills.

By way of background, CFA is an association of more than 250 nonprofit consumer organizations that was established in 1968 to advance the consumer interest through research, advocacy, and education. We have long advocated for cost-effective energy and water efficiency standards at the state and federal levels as they benefit consumers through lower utility bills.

We strongly support HB 556, which would adopt energy and water efficiency standards for 5 consumer products that are estimated to save Hawaiians approximately $537 million between 2021 and 2035. With Hawaii's highest-in-the-nation electricity prices and high per household water use, HB 556 is a great opportunity to reduce energy and water waste and lower consumer utility bills.

The bill would adopt minimum efficiency standards for computers and computer monitors, faucets, showerheads, spray sprinkler bodies, and high CRI fluorescent lamps using standards already set or under development by the California Energy Commission (CEC). According to a recent analysis by the Appliance Standards Awareness Project, this bill could save up to $38 million on utility bills for Hawaiians in 2025 and reduce water consumption by nearly 1.5 billion gallons. As more and more consumers purchase the efficient products compliant with standards proposed in HB 556, annual savings would grow, reaching nearly $77 million and 3.2 billion gallons of water annually in 2035.

Aligning Hawaii standards with those in place or under development in California allows Hawaii to take advantage of a significant body of work already completed. CEC develops

standards through a thorough rulemaking process and currently maintains a database of compliant products that other states are able to use.

Passing HB 556 will cut energy and water waste, save consumers and businesses money and reduce greenhouse gases. Because Hawaii can take advantage of work already completed by other states, the effort to implement such standards in Hawaii can be minimal. CFA urges you to adopt this cost-effective, pro-consumer bill—it's a win-win-win opportunity for Hawaii.

Thank you for your consideration.

Sincerely,

Mel Hall-Crawford
Director of Energy Programs
Consumer Federation of America

Young Democrats of Hawaii
Democratic Party of Hawaii

Testimony presented before the Committee on Consumer Protection & Commerce
Wednesday, February 20, 2019 at 2:00 p.m.
Conference Room 329

House Bill 556, House Draft I

Dear Chair Takumi, Vice Chair Ichiyama, and members of the Committee on Consumer Protection & Commerce:

House Bill 556, House Draft 1 requires the Department of Business, Economic Development, and Tourism to adopt state appliance efficiency standards. In January 2019 the Young Democrats of Hawaii conducted a member survey to identify and prioritize important issues facing young people today. Taking action on climate change was identified as one of the top three issues. YDHI members recognize that the impacts of climate change are already being felt throughout the world and in the State of Hawaii, and that taking action now is a policy must to ensure a viable future for all of Hawaii residents. The Young Democrats of Hawaii **strongly supports** the passing of HB556, HD1 for the following reasons:

1) Hawaii residents already face one of the highest costs of living in the nation, including the highest electricity price. Energy efficient appliances will allow consumers to reduce their monthly utility bills as well as reduce greenhouse gas emissions that contribute to climate change.
2) Bill 556, HD1 will help Hawaii meet its goal of 100% clean energy by 2045 as well as the Paris Agreement. When the federal government decided to step away from the Paris Agreement in 2017, the State of Hawaii became the first state to enact legislation to implement the goals of the global accord. Hawaii must continue to lead by example for the rest of the nation and the world in climate change mitigation.

Thank you for the opportunity to testify.

Sincerely,

Executive Committee
Young Democrats of Hawaii

ASSOCIATION OF HOME APPLIANCE MANUFACTURERS

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TESTIMONY

KEVIN MESSNER
SENIOR VP, POLICY & GOVERNMENT RELATIONS

ON BEHALF OF
THE ASSOCIATION OF HOME APPLIANCE MANUFACTURERS

BEFORE THE HAWAII STATE LEGISLATURE
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

HEARING
HB 556
RELATING TO APPLIANCE EFFICIENCY STANDARDS

FEBRUARY 20, 2019

Chairman Takumi, Vice Chair Ichiyama, and Members of the Committee, I appreciate the opportunity to provide testimony on HB 556, relating to creating new energy efficiency standards. The Association of Home Appliance Manufacturers (AHAM) is opposed to HB 556.

AHAM represents manufacturers of major, portable and floor care home appliances, and suppliers to the industry. AHAM's membership includes over 150 companies throughout the world. In the U.S., AHAM members employ tens of thousands of people and produce more than 95% of the household appliances shipped for sale. The factory shipment value of these products is more than $30 billion annually. The home appliance industry, through its products and innovation, is essential to improving a person's lifestyle and health, and saving people time. Through its technology, employees, and productivity, the industry contributes significantly to U.S. jobs and economic security. Home appliances also are a success story in terms of energy efficiency and environmental protection. New appliances often represent the most effective choice a consumer can make to reduce home energy use and costs.

We appreciate that Hawaii is striving to improve energy efficiency. As leaders in energy efficiency and active participants in efficiency matters before the U.S. Department of Energy, AHAM has a particular interest in H.B. 556. We oppose section 196-G, which provides a blanket authorization to the Department of Business, Economic Development, and Tourism "to establish standards for products not specifically listed in section 196-D." The Hawaii State Legislature should consider whether it is appropriate to permanently transfer its oversight and expertise on appliance efficiency standards to a state agency in such a broad way. In addition, developing efficiency standards require a lot of resources to do it correctly. Even if the legislature would decide to risk providing such blanket authority to the department, the increased budget to implement it should be considered. Also, there should be some sort of limits to this authority, such as requiring a certain threshold of energy savings, cost-benefit criteria, and impacts on consumers and manufacturers. These types of thresholds are found in federal law, which has a long history and experience with establishing minimum energy standards for decades.

Further, AHAM does not support, nor do we see the value in Hawaii attempting to duplicate California standards. Since our members have a national market share that provides an incentive to adhere to California's standards, states, including Hawaii, will automatically experience the energy savings generated by our sectors' compliance with the California standards. H.B. 556 unnecessarily creates a significant administrative burden on all stakeholders, including the department, for the state to amend Hawaii's rules to adhere to California's constantly evolving modifications.

AHAM appreciates the opportunity to comment on the Hawaii House Bill 556 and would be glad to further discuss these matters.

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

February 19, 2019

Representative Roy M. Takumi, Chair
Committee on Consumer Protection and Commerce
Hawaii State Legislature, Honolulu HI
via www.capitol.hawaii.gov/submittestimony.aspx

Representative Linda Ichiyama, Vice Chair
Committee on Consumer Protection and Commerce
Hawaii State Legislature, Honolulu HI
via www.capitol.hawaii.gov/submittestimony.aspx

RE: SUPPORT OF HB 556, RELATING TO APPLIANCE EFFICIENCY STANDARDS

Dear Chair Takumi, Vice Chair Ichiyama, and Honorable Members of the House Committee:

The California Energy Commission is California's primary energy policy and planning agency. Since 1976, the Energy Commission has set cost-effective and technically feasible appliance standards to improve the efficiency and reduce the energy use of appliances in the state. These standards have saved Californians billions of dollars in utility costs and helped keep the state's energy demand relatively flat, even as demand grew in the rest of the country, reducing the need for new power plants and avoiding emissions from electricity generation derived from fossil fuels.

As the Lead Commissioner for Efficiency at the Energy Commission, I write to support enactment of HB 556. These bills would establish appliance efficiency standards that require everyday products sold in Hawaii to meet minimum energy or water efficiency standards. Three of the standards proposed in HB 556 have been adopted by the Energy Commission and are currently in effect: computers and monitors, faucets, and showerheads. For high color rendering index (CRI) fluorescent lamps and spray sprinkler bodies, the Energy Commission has begun its rulemaking process to adopt standards for these products in California as well and looks forward to joining the multi-state effort to improve their efficiency in the absence of federal action. By California statute, appliance efficiency standards adopted in California must save consumers money over the lifetime of the appliance. The appliance efficiency standards proposed in HB 556 will save Hawaii consumers and businesses a projected $38 million annually in lower utility bills by 2025.

We offer our support to Hawaii in responding to any implementation challenges associated with appliance efficiency standards that California has adopted. The Energy Commission maintains a publicly searchable database of products certified to the Commission as compliant with California standards, which may be useful to Hawaii in its implementation of appliance efficiency standards (https://cacertappliances.energy.ca.gov/Pages/Search/AdvancedSearch.aspx). We also support the efforts to protect against repeal of federal appliance standards. California has similar provisions in its appliance efficiency regulations.

Thank you for considering our input and please let us know if there is any additional information that California can offer to support the adoption and implementation of the appliance efficiency measures in HB 556.

Sincerely,

J. ANDREW MCALLISTER, Ph.D.
Commissioner

American Council for an Energy-Efficient Economy
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February 19, 2019

Representative Roy Takumi, Chair
House Committee on Consumer Protection and Commerce
Hawaii State Capitol

RE: Support of HB 556, Relating To Energy Efficiency

Dear Chair Takumi, Vice Chair Ichiyama, and members of the Committees:

On behalf of the American Council for an Energy-Efficient Economy (ACEEE), I write in support of HB 556, Relating to Energy Efficiency. ACEEE is a nonprofit research organization based in Washington, D.C. that conducts research and analysis on energy efficiency. We have been active on energy efficiency issues at the national, state, and local level for more than three decades, collecting extensive best-practice information on topics including energy efficiency programs and utility business model design.

HB 556 sets state appliance efficiency standards for Hawaii for the first time. These state-level standards for minimum energy and water efficiency have been projected to result in water and energy bill savings of $38 million annually by 2025, adding dollars to consumers' pockets and benefiting the economy. These savings would double, to $77 million, by 2035. By saving energy, state appliance standards also help to avoid the need to import fossil fuel and help to reduce emissions reductions.

Hawaii has long been a leader in energy efficiency. These state-level appliance standards would reaffirm Hawaii's leadership, and deliver benefits to residents and businesses alike. We urge you to support and work to advance HB 556. Thank you for considering our input.

Sincerely,

Annie Gilleo
Senior Manager, State Policy
American Council for an Energy-Efficient Economy

Hawai'i Energy
YOUR CONSERVATION & EFFICIENCY PROGRAM

1132 Bishop Street, Suite 1800 • Honolulu, Hawai'i 96813 • HawaiiEnergy.com • P: (808) 839-8880 • F: (808) 441-6068

Before the House Committee on Consumer Protection & Commerce
Thursday, February 20, 2019, 2:00 p.m., Conference Room 329

Testimony in Strong Support of HB556 HD1: Relating to Energy Efficiency

Chair Takumi, Vice-Chair Ichiyama and Members of the Committee:

Thank you for the opportunity to submit comments on House Bill 556 HD1. The Hawai'i Energy program would like to testify in strong **support**.

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.

Hawai'i Energy would like to affirm the critical importance of this bill. Appliance Standards will play an important role in reaching the state's Energy Efficiency Portfolio Standard of a 4300 GWh reduction by 2030, as well as boost efforts to reach our 100% clean energy goal by 2045. Hawai'i is not alone in adopting appliance standards, as over a dozen states have some form of appliance standards in place for various equipment[1], with California, a market leader, having paved the way.

With minimal or no additional up-front cost, appliances in HB556 HD1 could potentially save households with electric water heaters over $200 annually and could save 1,122 GWh over the next 15 years. Appliance standards enable 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. Standards will also protect renters who often have little say in purchasing decisions by their landlords, but who may then bear the brunt of higher electric bills.

As it relates to enforcement, Hawai'i Energy would like to emphasize that minimal active enforcement has proven to be effective in key jurisdictions, and that a notification to manufacturers may be sufficient. **Hawai'i Energy is willing to assist in outreach to distributors and others to educate and encourage compliance.**

Thank you for the opportunity to provide comments on HB556 HD1.

Sincerely,

Karen Shishido
Transformational Program Manager
Hawai'i Energy

[1] https://appliance-standards.org/states#states-table

ELEMENTAL
EXCELERATOR

Written Statement of Elemental Excelerator
before the House Committee on Consumer Protection and Commerce
Wednesday, February 20, 2019

In consideration of HB 556 HD 1
RELATING TO ENERGY EFFICIENCY

Aloha Chair Takumi, Vice Chair Ichiyama, and Members of the House Committee on Consumer Protection and Commerce:

Elemental Excelerator respectfully submits our **support for HB 556 HD 1** which requires the Department of Business, Economic Development, and Tourism (DBEDT) to adopt state appliance efficiency standards.

Elemental Excelerator is a Honolulu-based growth accelerator program founded and operating in Hawai'i. We have awarded over $30 million to 82 companies resulting in 56 demonstration projects in Hawai'i & Asia Pacific. Each year, we evaluate over 500 companies and look for innovative entrepreneurs from around the world to come to Hawai'i and find transformative solutions to help us achieve our 100% clean energy goals and solve our most pressing environmental problems. We select 15-20 companies annually that best fit our mission and fund each company up to $1 million.

In April 2018, Elemental Excelerator commissioned a study entitled *Transcending Oil: Hawai'i's Path to a Clean Energy Economy.* The study found that in Hawai'i, transitioning to renewable energy is cheaper than sticking with fossil fuels like oil. The faster we go, the cheaper it will be.[1]

We support HB 556 HD 1 for the following reasons:

1. **It will support the acceleration of our clean energy goals:** The adoption of state appliance efficiency standards strengthens and reaffirms our state's commitment to its clean energy goals. In 2014, the *Hawai'i Energy Efficiency Potential Study* assessed whether the State is on track to meet the Energy Efficiency Portfolio Standard (EEPS) 2030 goal of 4,300-gigawatt hours (GWh) savings. The assessment found that one-third of the goal could be reached through the adoption of new appliance standards and implementation of updated building codes. The 2014 assessment estimated that Hawai'i's economic energy efficiency potential could be as high as 6,210 GWh by 2030, 44% greater than the current goal.[2]
2. **It is economically responsible:** A July 2017 study by the Appliance Standards Awareness Project called *States Go First: How States Can Save Consumers Money, Reduce Energy and Water Waste, and Protect the Environment with New Appliance Standards*, identifies potential for $119 and $235 per household annual energy and

[1] Transcending Oil, pg.3, Retrieved from https://www.transcendingoil.com/
[2] Hawai'i Energy Efficiency Potential Study. (n.d.). Retrieved from https://puc.hawaii.gov/wp-content/uploads/2013/04/State_of_HI_Potential_Study_Final.pdf

water savings per household in Hawai‘i in 2025 and 2035 respectively.[3] This is particularly important, given the findings by Aloha United Way's *ALICE Report* that identifies 48% of households in Hawai'i are “Asset Limited, Income Constrained, and Employed.”[4]

3. **It opens up opportunities for innovation to achieve efficiency standards:** Innovation has the potential to reduce the cost of very high levels of renewable energy penetration, through technologies such as advanced storage and high levels of demand response (DR). About 17% of Elemental Excelerator's 82 portfolio companies, such as Hawai'i grown company Pono Home, focus on energy efficiency, demonstrating an increased opportunity to attract innovation with forward-thinking policies.[5]

Mahalo for the opportunity to provide testimony on this legislation.

Sincerely,

Aki Marceau
Managing Director, Policy & Community - Hawai'i

[3] Mauer, J., DeLaski, A., & DiMascio, M. (2017,July). States Go First: How States Can Save Consumers Money, Reduce Energy and Water Waste, and Protect the Environment with New Appliance Standards. Retrieved from https://appliance-standards.org/sites/default/files/States Go First.pdf
[4] ALICE: A Study of Financial Hardship in Hawai'i. (2017). Retrieved from https://www.auw.org/alice
[5] Pono Home. (n.d.). Retrieved from https://elementalexcelerator.com/companies/pono-home/

Consumer Technology Association™

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February 20, 2019

Representative Roy Takumi
Chair, House Committee on Consumer Protection and Commerce
Hawaii State Capitol Room 320
Honolulu, HI 96813

Re: CTA Comments on HB 556 (HD 1)– Relating to Energy Efficiency – OPPOSE

Dear Representative Takumi:

The Consumer Technology Association™ (CTA) respectfully submits these comments to express our concerns and opposition regarding House Bill 556 (HD 1), specifically Section 196-G which grants broad authority to the Department of Business, Economic Development, and Tourism to establish energy efficiency standards for products not specifically approved by the Hawaii legislature. While CTA appreciates the Legislature's leadership in the area of energy efficiency, policies and initiatives already in place for consumer technology are resulting in real savings for consumers, while at the same time protecting consumer choice and industry innovation.

CTA is the trade association representing the U.S. consumer technology industry, which supports more than 15 million U.S. jobs. Our membership includes more than 2,200 companies – 80 percent are small businesses and startups; others are among the world's best known manufacturer and retail brands. For many years, CTA has supported and advanced energy efficiency in consumer technology as part of the industry's broader commitment to environmental sustainability. CTA has advanced energy efficiency with a variety of initiatives related to public policy, consumer education, research and analysis, and industry standards. Regarding public policy, we advocate for approaches that are national, voluntary, market-oriented, globally harmonized, flexible to keep pace with technology, and friendly to innovation and economic growth.

CTA shares the Committee's interest in striving to improve energy efficiency. As leaders on energy efficiency, CTA and our members are actively engaged with state, federal and international policymakers. We've also developed new approaches –industry-led voluntary agreements– that go beyond existing programs to capture additional energy savings in rapidly-evolving product categories. While we share the same interest, we do not believe that the approach outlined in HB 556 (HD 1), specifically Section 196-G, is the path to get there.

Consumer electronics are already an energy efficiency success story. A recent study commissioned by CTA and produced by Fraunhofer USA finds the number of tech devices in U.S. homes has increased 21 percent since 2010, but those devices now account for *25 percent less* residential energy consumption

over that same time.[1] This landmark energy efficiency achievement is due to the consumer tech industry's investments in lightweight materials and energy efficient technologies, as well as the convergence of multi-functional devices and continuous innovation. These achievements weren't accomplished through mandated state or federal requirements.

Televisions are an excellent example of consumer technology's major energy efficiency strides. A television's annual in-home energy consumption declined 30 percent from 2013 to 2017 – the average cost to power a television in the U.S. is now less than five cents a day.[2] LCDs alone consume 76 percent less energy (per screen area) in 2015 than they did in 2003.[3] These major strides are driven by competition, consumer demand, and voluntary, market-oriented programs like ENERGY STAR. They have not been driven by government governments mandates.

In addition to the above accomplishments for televisions, CTA has pursued voluntary agreements on energy efficiency. A voluntary agreement for set-up boxes resulted in consumer savings of nearly $2.1 billion since it was signed in 2013 with nearly 99 percent of new set-top boxes meeting its energy standards. A similar industry agreement for home internet equipment has increased the energy efficiency of more than 98 percent of consumer broadband equipment purchased and sold in the U.S. in 2016.[4]

CTA does not support the broad authority granted in HB 556 (HD 1). As demonstrated above, consumer technology products are already an energy efficiency success story. Section 196-G of HB 556 (HD 1), which provides a blanket authorization to the Department of Business, Economic Development, and Tourism "to establish standards for products not specifically listed in section 196-D" is not the appropriate method to achieve energy efficiency and cost savings for Hawaii consumers.

Section 196-G would grant vast new authority to the Department to create mandatory standards and regulations for virtually any electronic or electrical product. For high tech products, such government standards are not only damaging to technology innovation and design, they ultimately harm consumers and limit their choice of consumer electronics products, features and services. CTA believes the Hawaii State Legislature should retain oversight and expertise on appliance efficiency standards rather than delegate their authority to a state agency in such a broad way.

Conclusion: CTA and its members are firmly committed to energy efficiency across our industry. We continue to work with policymakers across the U.S. and globally to urge innovation-friendly, voluntary and market-oriented approaches to energy efficiency for consumer electronics that have proven successful. Industry and policymakers share the goal of energy efficiency and conservation, but there are many paths to that goal.

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[1] Urban, Roth, Singh, & Howes. "Energy Consumption of Consumer Electronics in U.S. Homes in 2017". December 2017. Available at: http://www.cta.tech/cta/media/policyImages/policyPDFs/Energy-Consumption-of-Consumer-Electronics-in-U-S-Homes-in-2017.pdf

[2] Urban, Roth, Singh & Howes. December 2017.

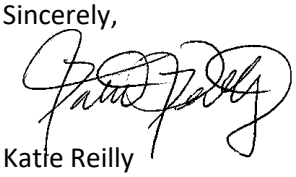
[3] Urban & Roth. "LCD Television Power Draw Trends from 2003 to 2015". May 2017. Available at: http://www.cta.tech/cta/media/policyImages/policyPDFs/Fraunhofer-LCD-TV-Power-Draw-Trends-FINAL.pdf

[4] For additional information, visit https://www.energy-efficiency.us/.

CTA Comments on HB 556 (HD 1) - OPPOSE
February 20, 2019

CTA appreciates the opportunity to provide comments on HB 556 (HD 1) and urges you to consider removal of Section 196-G from the bill. Please do not hesitate to contact us with any questions or requests for additional information.

Sincerely,



Katie Reilly
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HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
February 20, 2019, 2:00 P.M.
Room 329
(Testimony is 6 pages long, including attachment)

TESTIMONY IN STRONG SUPPORT OF HB 556

Aloha Chair Takumi, Vice Chair Ichiyama, and Committee members:

Blue Planet Foundation **strongly supports** House Bill 556, which sets in motion the adoption of state appliance efficiency standards that can lead to substantial savings (up to $537 million in cumulative net utility bill savings over 15 years) for Hawaii residents and businesses.

House Bill 556 is an important measure that helps protect consumers from energy wasting appliances that drive up utility bills by adopting a "starter suite" of appliance standards that are cost-effective and easy to implement.

Hawaii businesses and residents pay the highest electricity rates in the nation, which exacerbates our already high cost of living. Appliance efficiency standards are a low-hanging-fruit policy that can provide economic relief to Hawaii's small businesses and struggling families. We have provided a fact sheet on the benefits of appliance efficiency standards for Hawaii along with this testimony.

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 was 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.

Many states have already adopted appliance efficiency standards, including California (the leader on state appliance standards), Connecticut, New Hampshire, New York, Oregon, Rhode

Island, Vermont, and Washington. **Adopting state appliance efficiency standards is also a priority initiative for the U.S. Climate Alliance to accelerate climate action.**[1]

Hawaii has the biggest opportunity for significant savings

Lights and appliances are far more efficient than they were just years ago. Yet energy-wasting devices are still being sold because Hawaii lacks consumer protection standards for energy efficiency in appliances. As a result, manufacturers can offload in Hawaii the noncompliant appliances that they cannot sell in other states that have adopted standards—and once these products are shipped to Hawaii, they rarely leave.

In 2017, a national study[2] found that Hawaii could achieve the most savings of any state by adopting state-level appliance efficiency standards, up to $1 billion in electricity costs over 20 years, depending on the suite of appliance standards adopted—or about $215 annually per household—with a payback that is 14 times more than the cost.

Although House Bill 556 proposes a smaller "starter" subset of appliance standards than recommended in the national study, the saving potential is still substantial: $537 million in cumulative utility bill savings over 15 years for Hawaii,[3] not to mention the corresponding kilowatt-hour savings that can help the state meet its energy efficiency portfolio standards, and carbon emissions reductions that can help us meet our climate goals under the Paris Agreement (Act 32 of 2017). On an annual basis, the savings equate to $38 million each year by 2025, and doubling to $77 million each year by 2035.[4]

Appliance standards are cost-effective

A number of the products in HB 556 have **no incremental cost**, meaning that they don't cost more than inefficient models and **consumers will start saving right away**. For others, utility bill savings pay back the small incremental cost of products meeting the standards within a few months to one year. After that, savings accrue to the consumers over the lifetime of the product.

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[1] *See* https://www.usclimatealliance.org/about-initiatives/.

[2] *See* Joanna Mauer, Andrew deLaski, and Marianne DiMascio, *States Go First: How States Can Save Consumers Money, Reduce Energy and Water Waste, and Protect the Environment with New Appliance Standards*, available at https://appliance-standards.org/sites/default/files/States%20Go%20First.pdf.

[3] *See* Appliance Standards Awareness Project, 2019 *State Appliance Standards Recommendations – Savings estimates for Hawaii*, available at https://appliance-standards.org/sites/default/files/state_savings_state_standards/Hawaii.pdf (providing updated saving figures for Hawaii for 2019).

[4] *Id.*

Refer to Blue Planet Foundation's enclosed fact sheet for a breakdown on these incremental costs.

House Bill 556 is ready to implement

The standards referenced in HB 556 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 California's already existing and enforced standards, meaning that the manufacturers have already adapted to the testing, certification, and labeling requirements for selling energy efficient products in California. Consequently, Hawaii can merely piggyback off of these standards for easy implementation without a heavy lift for the local government agency tasked with oversight. This could take the form of **collaborative enforcement with California**—i.e. when California sends enforcement letters to manufacturers, it could easily note that certain appliances may also not be sold in Hawaii.

A critical backstop if federal standards are repealed

House Bill 556 also includes an important backstop provision to adopt federal appliance energy efficiency and water conservation standards as Hawaii state standards in the event that the federal standards are repealed or withdrawn. With uncertainty at the national level, this is a real concern for Hawaii consumers who pay the highest electricity rates in the nation.

This backstop provision is a safeguard for Hawaii consumers and sends a powerful message: If national standards go away, Hawaii will step into the breach and continue to use this proven tool to protect consumers and the environment.

Conclusion

Energy efficiency is the cheapest, quickest, and cleanest way to accelerate Hawaii's transition to 100% renewable energy. Adopting state appliance efficiency standards is a cost-effective, easily implementable and proven policy to accelerate our clean energy goals while saving consumers money.

We respectfully request that the Committee forward HB 556 as a critical consumer protection policy to the benefit of Hawaii's families and businesses, and amend the measure to take effect upon arrival.

We are happy to work with the Committee and key stakeholders on any other proposed amendments to the bill.

Thank you for the opportunity to testify.

Hawaii Appliance Efficiency Standards

SB 1323 / HB 556

Basics of appliance efficiency standards

HAWAII BUSINESSES AND RESIDENTS PAY THE HIGHEST ELECTRICITY RATES IN THE NATION. EFFICIENCY STANDARDS ENSURE THAT THE PRODUCTS WE PURCHASE USE LESS ENERGY AND WATER WHILE ENSURING QUALITY, AFFORDABILITY, AND PROGRESS TOWARD OUR CLEAN ENERGY AND CLIMATE GOALS.

- Set a minimum level of energy and water efficiency for certain household and commercial appliances.
- Piggyback off of California standards for easy implementation.
- Provide substantial savings for consumers and businesses.
- Encourage innovative water- and energy-saving technologies.
- Protect consumers against manufacturers who would otherwise sell the less efficient appliances that they can't sell in markets without such protections.

"Those savings are particularly important for low-income households, who struggle to pay their energy bills and are too often faced with termination of vital utility services due to non-payment."

— Charlie Harak, National Consumer Law Center

$537 MILLION

NET UTILITY BILL SAVINGS HAWAII CONSUMERS AND BUSINESSES COULD SEE OVER 15 YEARS IF THE PROPOSED STANDARDS ARE ADOPTED.

AFFORDABILITY

Consumers and businesses save money on utility bills

JOBS

Local economies get a boost when consumers have more spending money.

CLEAN ENERGY

Reducing air pollutants and greenhouse gas emissions improve public health and accelerate progress toward meetings our clean energy and climate mitigation targets.

Cost-effective and ready to implement

The standards proposed in SB 1323 and HB 556 are:

- COST EFFECTIVE: A number of the products in the bill have no incremental cost, meaning that they don't cost more than inefficient models and consumers will start saving right away. For others, utility bill savings pay back the small incremental cost of products meeting the standards within a few months to one year. After that, savings accrue to the consumers over the lifetime of the product.
- APPLICABLE TO READILY AVAILABLE PRODUCTS: Products and technologies meeting the standards are readily available today from multiple manufacturers.
- IMPLEMENTABLE AT LOW COST: Each standard is ready to implement because other states are already using or proposing identical standards.

15-Year Cumulative Savings for Hawaii Consumers

$537 million net cost savings	**1,122 GWh electricity**
700,000 metric tons CO_2	**34 billion gallons water**

Savings for Hawaii consumers

	Average lifetime (years)	Per-unit incremental cost ($)	Per-unit annual savings		Per-unit annual utility bill savings in 2021 ($/yr)	Lifecycle cost savings ($)
			Electricity (kWh/yr)	Water (gallons/yr)		
Computers and monitors						
Desktops	5	$14.27	49	--	$15.38	$51.28
Notebooks	4	$1.02	4	--	$1.13	$2.92
Monitors	7	$5.10	28	--	$8.69	$44.17
Faucets						
Residential lavatory	10	$0	54	651	$23.67	$180.39
Kitchen	10	$0	210	2,543	$92.53	$705.23
High CRI fluorescent lamps	15	$4.34	12	--	$3.90	$35.75
Showerheads	10	$0	303	2,503	$121.04	$919.79
Spray sprinkler bodies	9	$3.34	--	299	$3.13	$19.43

Notes: Faucet and showerhead savings assume an electric water heater. High CRI fluorescent lamp costs and savings assume a Type A LED replacement lamp. Lifecycle cost savings are equal to the present value of the lifetime utility bill savings minus the present value of the incremental cost for a product purchased in 2021. Savings and costs are discounted to 2019 using a discount rate of 5%.

blue planet FOUNDATION

CONTACT: info@blueplanetfoundation.org; (808) 954-6161

Savings calculations provided by *Appliance Standards Awareness Project (ASAP)*, appliance-standards.org

HB-556-HD-1
Submitted on: 2/19/2019 7:37:16 PM
Testimony for CPC on 2/20/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	O`ahu County Committee on Legislative Priorities of the Democratic Party of Hawai`i	Support	No

Comments:

HB-556-HD-1
Submitted on: 2/19/2019 3:47:37 PM
Testimony for CPC on 2/20/2019 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Andrea Quinn	Individual	Support	No

Comments:

Dear Honorable Committee Members:

Please support HB556.

Hawaii's valuable coastlines are eroding and our coral reefs are dying due to climate change, which is already occurring. We need to be a leader in energy efficiency.

Thank you for the opportunity to present my testimony.

Sincerely,

Andrea Quinn

Kihei