



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

JOSH GREEN, M.D.
GOVERNOR

MARK B. GLICK
CHIEF ENERGY OFFICER

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

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

Testimony of
MARK B. GLICK, Chief Energy Officer

before the
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

Thursday, March 30, 2023
2:00 PM
State Capitol, Conference Room 329 and Videoconference

Providing COMMENTS on
SB 691, SD2, HD1

RELATING TO EFFICIENCY STANDARDS.

Chair Nakashima, Vice Chair Sayama, and Members of the Committee, the Hawai'i State Energy Office (HSEO) respectfully submits comments on SB 691, SD2, HD1, which allows the Chief Energy Officer of HSEO to enforce minimum efficiency standards and adopt or amend efficiency standards.

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 CO₂. 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.

HSEO is not an enforcement agency and would require dedicated staffing and resources to enforce appliance efficiency standards under this measure.

Thank you for the opportunity to testify.

BOARD OF WATER SUPPLY

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



March 30, 2023

RICK BLANGIARDI, MAYOR

BRYAN P. ANDAYA, Chair
KAPUA SPROAT, Vice Chair
MAX J. SWORD
NA'ALEHU ANTHONY
JONATHAN KANESHIRO

DAWN B. SZEWCZYK, P.E., Ex-Officio
EDWIN H. SNIFFEN, Ex-Officio

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

ERWIN M. KAWATA
Deputy Manager

The Honorable Mark M. Nakashima, Chair
and Members
Committee on Consumer Protection and Commerce
House of Representatives
Hawaii State Capitol, Room 329
415 South Beretania Street
Honolulu, Hawaii 96813

Dear Chair Nakashima and Members:

Subject: Senate Bill 691, SD2, HD1: Relating to Efficiency Standards

The Honolulu Board of Water Supply (BWS) supports Senate Bill (SB) 691, Senate Draft (SD) 2, House Draft (HD) 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, SD2, HD1.

Very truly yours,

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



HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

March 30, 2023, 2:00 PM

Room 329

TESTIMONY IN SUPPORT OF SB 691 SD2 HD1

Aloha Chair Nakashima, Vice Chair Sayama, and Committee members:

Blue Planet Foundation **supports SB 691 SD2 HD1**, 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.

Attached to our testimony is an **organizational sign-on letter from seventeen organizations in support of SB 691, as well as an updated fact sheet** with savings estimates for the five products included in the HD1. We support amendments made in the HD1, as they address various comments presented in testimony from stakeholders. We suggest a technical amendment be made in this committee on Page 13, lines 19-20 to remove air purifiers and electric vehicle supply equipment from the implementation section of the bill, as they are no longer included in the measure:

(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, shall 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.

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

info@blueplanetfoundation.org

126 Queen Street, Suite 204 • Honolulu, Hawai'i 96813 • 808-954-6161 • blueplanetfoundation.org

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.

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 \$5 million annually on their utility bills. By 2040, this number would increase to an annual savings of \$11 million.**

Furthermore, four of the five products in SB 691 SD2 HD1 have **no incremental cost**, meaning that they don't cost more than inefficient models and **consumers will start saving right away**. For portable electric spas (i.e. hot tubs), utility bill savings pay back the incremental cost of meeting the standard 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:

¹Compton, 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>)

	Potential annual utility bill savings (million 2021\$)		Net present value savings (million 2021\$)	Benefit-cost ratio	Payback period (years)
	In 2030	In 2040			
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	0.3	0.7	4.7	no cost	0.0
Water coolers	0.4	0.8	6.3	no cost	0.0
Total	5	11	82	33.0	--

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.

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 portable electric spas have been adopted in 14 states, residential ventilating fans in 9 states, urinals in 12 states, toilets in 13 states, water coolers in 13 states, and.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

² “State Standards: State Adoption of Energy Efficiency Standards.” *Appliance Standards Awareness Project*. (<https://appliance-standards.org/states#states-table>)

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 by the 5 products included in SB 691 SD2 HD1 would **save 194 gigawatt hours of electricity and 2 billion gallons of water, as well as avoid 100,000 metric tons of carbon dioxide, 281 tons of nitrogen oxide, and 435 tons of sulfur dioxide pollution.**

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 SD2 HD1

Thank you for the opportunity to provide testimony.

³ See <https://www.usclimatealliance.org/efficiency-challenge>.



Hawai'i Appliance Efficiency Standards

SB 691 SD2 HD1

Basics of appliance efficiency standards

HAWAI'I 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.
- Provide substantial savings for consumers and businesses.
- Encourage innovative water- and energy-saving technologies.
- Reduce carbon emissions and other air pollutants.
- Protect consumers against manufacturers who would otherwise sell the less efficient appliances that they can't sell in markets without such protections.

"Adopting efficiency standards 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."

— Appliance Standards Awareness Project

\$11 MILLION

POTENTIAL ANNUAL UTILITY BILL SAVINGS FOR HAWAI'I CONSUMERS AND BUSINESSES 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.

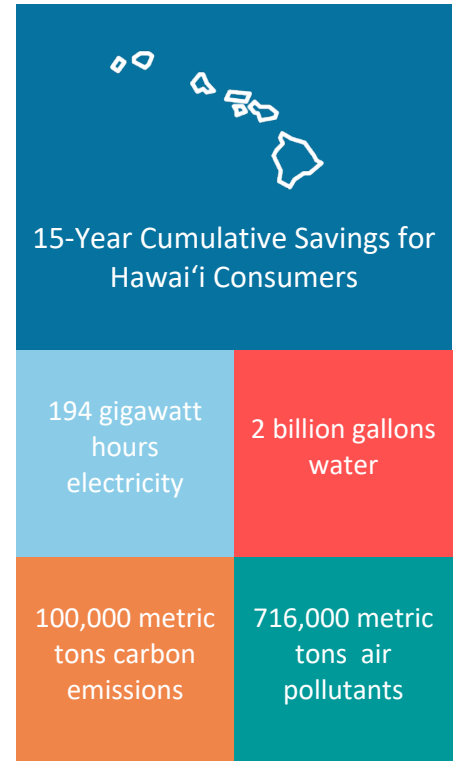
CLEAN ENERGY

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

Cost-effective and ready to implement

The standards proposed in SB 691 are:

- **COST EFFECTIVE:** Majority 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 six months. 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.



Hawai'i Potential Annual Savings Through 2040

	Utility Bill savings (million 2021\$)	Electricity (gigawatt hours)	Water (million gallons)	CO ₂ emissions (thousand metric tons)	NOx emissions (tons)	SO ₂ emissions (tons)
Portable electric spas	3.8	11.6	--	5.4	14.3	22.5
Residential ventilating fans	1.2	3.6	--	1.7	4.4	6.9
Toilets	4.2	--	219	--	--	--
Urinals	0.7	--	35	--	--	--
Water Coolers	0.8	2.9	--	1.4	3.5	5.6
Total	10.7	18.1	254	8.5	22.2	35

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.



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

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

info@blueplanetfoundation.org

126 Queen Street, Suite 204 • Honolulu, Hawai'i 96813 • 808-954-6161 • blueplanetfoundation.org

To: Hawai'i State Representatives and Senators
Date: March 20, 2023
Re: Diversity of Hawai'i-based Organizations Support Appliance Standards– SB 691

Aloha Hawai'i Senators and Representatives,

The seventeen undersigned organizations¹ encourage your support of Senate Bill 691, an energy and water efficiency measure that is good for the climate and for the pocketbooks of Hawai'i's families and businesses. Efficiency is an easy to implement and effective way to make utility bills more affordable, while also eliminating air pollutants, carbon emissions, and conserving freshwater resources for the future for our islands.

Helping Hawai'i Save on Utility Bills: SB 691 expands the list of household products in Hawai'i that meet minimum efficiency standards to reduce energy and water waste and save money on utility bills. Hawai'i has the highest electricity rates in the nation. By adopting efficiency standards for the products included in SB 691, Hawai'i residents could save \$11,000,000 on utility bills each year by 2030, increasing to \$24,000,000 in annual utility bill savings by 2040. This would result in an estimated cumulative savings of \$232.2 million in net utility bills over the next 15 years– a substantial savings for consumers and businesses.

Addressing Climate Change and Hawai'i's Clean Energy Goals: Climate change will have devastating, long-term consequences on Hawai'i's environment, economy, and quality of life. SB 691 would reduce air pollutants and carbon emissions to improve public health and accelerate progress towards a climate-resilient and 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.

Cost-effective and ready to implement: Numerous states have adopted standards for all of the products proposed in this bill and Hawai'i's past experience with adopting appliance standards have already proven to be a cost-effective and easily implementable policy. SB 691 does not require the replacement of appliances, rather that when new products are purchased, the versions available are more energy and water efficient. Additionally, the majority of products included also have no incremental cost, meaning that they don't cost more than the inefficient models and consumers will start seeing savings right away.

At a time when Hawai'i's residents are facing multiple crises– including high electricity bills, a rising cost of living, and climate change– setting appliance efficiency standards are a win-win policy solution for our working families and businesses. Please support SB 691.

Mahalo nui loa.

¹ Appliance Standards Awareness Project, Architects Hawai'i, Blue Planet Energy, Blue Planet Foundation, Chamber of Commerce Hawai'i, Climate Protectors Hawai'i, Elemental Excelsior, Hawai'i Appleseed Center for Law & Economic Justice, Hawai'i Energy, Hawai'i Public Health Institute, Our Revolution Hawai'i, Shifted Energy, Sierra Club of Hawai'i, The Hawai'i Youth Climate Coalition, Trinity United Methodist Church, Ulupono Initiative, and 350Hawai'i

blue planet



Hawai'i Energy



Elemental
Excelserator


Chamber of Commerce
HAWAII
The Voice of Business

 HAWAII
PUBLIC
HEALTH
INSTITUTE


ulupono
INITIATIVE®

ahl.



HAWAII APPLESEED
CENTER FOR LAW & ECONOMIC JUSTICE

ASAP

APPLIANCE STANDARDS
AWARENESS PROJECT



SHIFTED
ENERGY



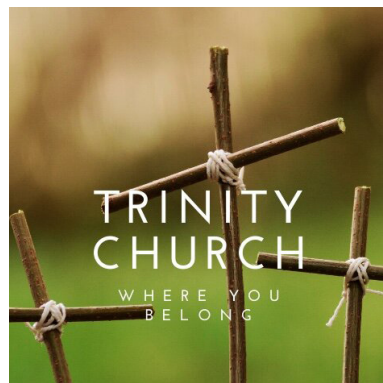
350
Hawaii


OUR
REVOLUTION
HAWAII



SIERRA
CLUB

HAWAII CHAPTER





Before the House Committee on Consumer Protection & Commerce
Thursday, March 30, 2023 at 2:00 p.m.

Testimony in Support of SB691 SD2 HD1: Relating to Efficiency Standards

Chair Nakashima, Vice Chair Sayama, and Members of the Committee:

Thank you for the opportunity to testify in support and provide comments on Senate Bill 691 SD2 HD1.

Hawai'i Energy works to empower island families and businesses on behalf of the Hawai'i Public Utilities Commission (PUC) to make smart energy choices to reduce energy consumption, save money, and pursue a 100% clean energy future. Energy efficiency – 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 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 SD2 HD1.

Sincerely,
Caroline Carl
Executive Director
Hawai'i Energy

SB-691-HD-1

Submitted on: 3/29/2023 10:31:13 AM

Testimony for CPC on 3/30/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Ted Bohlen	Climate Protectors Hawaii	Support	Written Testimony Only

Comments:

The Climate Protectors Hawai'i are in **STRONG SUPPORT** of SB691!

Appliance efficiency standards are one of the best ways to save consumers substantial money over the life of the appliance. Improved standards also avoid the need to generate some electricity for many years, reducing the greenhouse gas emissions and other pollution, conserving water, and helping Hawaii meet its goal of being carbon negative as soon as practicable, but not later than 2045. Estimated annual savings for consumers are \$24 million by 2040, 552 GWh of electricity and 3 billion gallons of water!

Please pass this bill!

Mahalo!

Climate Protectors Hawai'i (by Ted Bohlen)

March 29, 2023

Chairman Nakashima
Vice-Chair Sayama

RE: SB 691_SD2 – Relating to efficiency standards (“Appliance efficiency standards”)

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

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.

Our organization, along with ACEEE, conducted the research and analysis upon which SB 691 was based. In 2017, we published a joint report, *States Go First: How States Can Save Consumers Money, Reduce Energy and Water Waste, and Protect the Environment with New Appliance Standards*, and created savings analyses for each state which have been updated annually.¹ We would be happy to provide additional information about this analysis as well as the products and standards covered by the bill.

APPLIANCE STANDARDS SAVE MONEY, ENERGY, AND AVOID GREENHOUSE GASES

SB 691_SD2 would set minimum energy or water efficiency standards for five products. If adopted, our analysis shows these standards would save Hawaii residents and businesses \$11 million annually on utility bills by 2040.² Additionally, by 2040 Hawaii could cumulatively save 194 gigawatt hours of electricity while avoiding 100,000 metric tons of CO₂ emissions.

THIS WOULD CONTINUE HAWAII’S LEADERSHIP ON APPLIANCE STANDARDS

In 2019, Hawaii passed efficiency standards for five products, becoming one of the first states in the nation to do so and putting the state on the path toward saving millions of dollars from decreased utility bills. Since then, 12 other states have also adopted appliance standards, creating a “strength in numbers” effect that is helping states with the implementation of standards.³

STANDARDS ARE A COST-EFFECTIVE WAY TO ACHIEVE STATE GOALS

Adopting efficiency standards 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 about appliance standards, or provide technical assistance should such a need arise.

Sincerely,

Brian Fadie, State Policy Manager
Appliance Standards Awareness Project

¹ For the 2017 ASAP/ACEEE report and subsequent updates, see: <https://appliance-standards.org/document/report-overview-states-go-first>

² See 2023 Hawaii Appliance Standards Savings Analysis at the end of these comments.

³ Washington, Oregon, California, Nevada, Colorado, New York, New Jersey, Maryland, Rhode Island, Massachusetts, Maine, and Vermont.

Appliance Standards Awareness Project
2023 State Appliance Standards Recommendations

Savings estimates for: **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)
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	--	--	16	--	--	--	--	--	35	--	--	--
Water coolers	1.6	--	--	2.7	4.2	0.9	2.9	--	3.5	5.6	1.4	--
Total	10	--	98	17	26	6	18	--	254	22	35	8

Assuming a compliance date of 2025 for all the recommended standards. Totals may not sum due to rounding.

	Potential annual utility bill savings (million 2021\$)		Net present value savings (million 2021\$)	Benefit-cost ratio	Payback period (years)
	In 2030	In 2040			
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	0.3	0.7	4.7	no cost	0.0
Water coolers	0.4	0.8	6.3	no cost	0.0
Total	5	11	82	33.0	--

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.

Cumulative savings estimates for: **Hawaii**

	Potential cumulative savings through 2040					
	Electricity (GWh)	Natural gas (TBtu)	Water (billion gallons)	NO _x (tons)	SO ₂ (tons)	CO ₂ (thous. MT)
Portable electric spas	132	--	--	192.1	297.2	67.5
Residential ventilating fans	30	--	--	43.2	66.9	15.3
Toilets (water closets)	--	--	1.9	--	--	--
Urinals	--	--	0.3	--	--	--
Water coolers	32	--	--	45.8	70.9	17.3
Total	194	--	2	281	435	100

Assuming a compliance date of 2025 for all the recommended standards. Totals may not sum due to rounding.



To: The House Committee on Consumer Protection & Commerce (CPC)
From: Sherry Pollack, 350Hawaii.org
Date: Thursday, March 30, 2023, 2pm

In support of SB691 SD2 HD1

Aloha Chair Nakashima, Vice Chair Sayama, and Consumer Protection & Commerce Committee members,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org **supports SB691 SD2 HD1** which would cut energy and water waste, and thereby reduce the taxpayer burden, conserve our precious water, and decrease our carbon emissions.

Energy and water efficiency is a cost-effective, common-sense approach to address lowering carbon emissions and water waste by using less to get the same job done. With the climate crisis we are facing, it is critical that dedicated efforts be made to lower consumption and conserve our precious resources.

By adopting efficiency standards for the products included in SB 691 SD2 HD1, Hawaii residents and businesses will save millions on utility bills, cut energy and water waste, and eliminate air pollutants and carbon emissions harmful to human health and the environment. Simply put, the cleanest, cheapest and safest energy is the energy we don't use.

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

Sherry Pollack
Co-Founder, 350Hawaii.org



Aloha committee members,

My name is Arwen Revere and I'm a high school student from Kailua and a member of the environmental organization Wild Kids, whom I am representing today. Wild Kids is in strong support of SB691 in order to enforce minimum efficiency standards and adopt or amend efficiency standards. This bill is not only important but also necessary for the protection of our environment and the reduction of our carbon footprint.

The adoption of minimum efficiency standards for portable electric spas, residential ventilating fans, toilets, and water coolers is a crucial step towards reducing energy waste and promoting sustainable energy practices. By setting these standards, we can ensure that the products we use in our homes and businesses are energy-efficient and contribute to the reduction of greenhouse gas emissions. This is particularly important in Hawaii, where energy costs are high, and our reliance on fossil fuels for energy production is significant.

Allowing manufacturers to utilize the Home Ventilating Institute's certified products directory certification program to meet certain standards is another critical component of this bill. This program ensures that the products manufactured by the participating companies meet specific energy-efficiency standards, making it easier for consumers to identify and choose environmentally friendly products. This not only benefits the environment but also saves consumers money on their energy bills.

In addition, the enforcement of these standards by the Chief Energy Officer of the Hawaii State Energy Office will ensure that manufacturers comply with the minimum efficiency standards set by the state. This will help prevent the production and sale of inefficient and environmentally harmful products, promoting the use of cleaner and greener alternatives.

In conclusion, the passage of this bill is essential for promoting sustainable energy practices and protecting our environment. The adoption of minimum efficiency standards and the enforcement of these standards by the Chief Energy Officer will benefit both the environment and consumers, contributing to a cleaner, more sustainable future for Hawaii. I urge the legislature to pass this bill and take an important step towards a greener, more energy-efficient Hawaii.

Thank you for hearing our testimony,

Arwen



Email: communications@ulupono.com

HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
Thursday, March 30, 2023 — 2:00 p.m.

Ulupono Initiative supports SB 691 SD2 HD1, Relating to Efficiency Standards.

Dear Chair Nakashima 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 SD2 HD1, which allows the Chief Energy Officer of the Hawai'i State Energy Office to enforce minimum efficiency standards and adopt or amend efficiency standards; sets minimum efficiency standards for portable electric spas, residential ventilating fans, toilets, urinals, and water coolers; and, allows manufacturers to utilize the Home Ventilating Institute's certified products directory certification program to meet certain standards.

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 items listed in this bill, Hawai'i consumers will realize millions in savings by 2030.¹ 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
Director of Government Affairs

¹ <https://appliance-standards.org/>



**TESTIMONY OF TINA YAMAKI, PRESIDENT
RETAIL MERCHANTS OF HAWAII
MARCH 30, 2023
Re: SB 691 SD2 RELATING TO EFFICIENCY STANDARDS**

Good afternoon, Chair Nakashima and members of the House Committee on Consumer Protection & Commerce. I am Tina Yamaki, President of the Retail Merchants of Hawaii and I appreciate this opportunity to testify.

The Retail Merchants of Hawaii was founded in 1901, RMH is a statewide, not for profit trade organization committed to the growth and development of the retail industry in Hawaii. Our membership includes small mom & pop stores, large box stores, resellers, luxury retail, department stores, shopping malls, local, national, and international retailers, chains, and everyone in between.

While we understand the intent, we are respectfully opposed to SB 691 SD 2 HD1 Relating to Efficiency Standards. This measure allows the Chief Energy Officer of the Hawai'i State Energy Office to enforce minimum efficiency standards and adopt or amend efficiency standards. Sets minimum efficiency standards for air purifiers, electric vehicle supply equipment, portable electric spas, residential ventilating fans, toilets, urinals, and water coolers; and is effective 7/1/2050.

There is already a national government program in place for decades that addresses the energy efficiency called ENERGY STAR. There are already thousands of industrial, commercial, utility, state and other local organizations that are in partnership with the US Environmental Protection Agency that delivers cost-saving energy efficiency solutions that protect the climate while improving air quality and protecting public health. Products include room air conditioners, refrigerators, light bulbs, water heaters, washers, & dryers, dishwashers, ventilation fans, air cleaners, ceiling fans and more. We need to also be cautious and not only take into consideration minimum efficiency standards that serve only to promote energy efficiency. **We must also consider if the minimum standard products are safe**

- **On our plumbing or will it cause backups or clogs in the pipes in our homes and places of work**
- **For those suffering from illnesses be able to purchase products that are strong enough for their medical needs**

We question why is the state trying to duplicate what is already being done on a national level? And if there are two competing programs on determining the efficiency standards of products, wouldn't the consumer be confused?

We are also concerned that products may not be effective with low standards, especially those who suffer from illnesses may not be able to purchase the strength of product that they need. We are also cautious that manufacturers would no longer send products to Hawaii or severely limit what they send to Hawaii for customers.

This measure would also impose hardship for those retailers who are unable to comply with the upon approval deadline. Not all stores will be able to send their merchandise that does not comply with the State Standard outside of Hawaii to a sister store. This would mean that the goods would either have to be sold at loss or trashed. If passed we asked that retailers be able to sell their current inventory and not bring in any new items.

Retailers are one of the hardest hit industries due to the pandemic and this type of ban would hurt our retailers during a time when many are still struggling to remain open. Stores had to endure astronomical increases in shipping costs and in the price of goods from manufacturers and wholesalers. And last year with the unexpected increase in employee wages at the end of the year when the minimum wage was raised. Many retailers are still struggling to pay back the debt incurred during the pandemic. Businesses cannot afford any more hardship as we are seeing more and more retailers closing their doors forever. And as a result, many of our friends, family and neighbors no longer have jobs and are contributing to Hawaii's unemployment.

Mahalo again for this opportunity to testify.

SB-691-HD-1

Submitted on: 3/29/2023 10:18:48 AM

Testimony for CPC on 3/30/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Forest Frizzell	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Nakashima, Vice Chair Sayama, and members of the Committee,

I am testifying in support of Senate Bill 691 SD2 HD1, which expands the list of household products sold in Hawai‘i that meet minimum energy and water efficiency standards.

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 also providing financial benefits to Hawai‘i residents and businesses. By adopting efficiency standards for the products included in SB 691, Hawai‘i residents and businesses will save millions on utility bills, cut energy and water waste, and eliminate air pollutants and carbon emissions harmful to human health and the environment.

In 2019, Hawai‘i adopted efficiency standards for five products. Since then, 12 other states have also adopted standards, including for the products in SB 691. The products included in this bill are cost-effective and readily available, and most of these products don’t cost more than the inefficient models, so consumers will start seeing savings right away.

Please pass SB 691 to support affordability for Hawai‘i families and businesses, significantly reduce air pollutants and carbon emissions, and save freshwater resources for the future of our islands.

Thank you for the opportunity to submit testimony in support of SB 691 SD2 HD1.
Forest Frizzell, Waimanalo HI 96795

SB-691-HD-1

Submitted on: 3/29/2023 10:42:15 AM

Testimony for CPC on 3/30/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Severine Busquet	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Nakashima, Vice Chair Sayama, and members of the Committee,

I am testifying in support of Senate Bill 691 SD2 HD1, which expands the list of household products sold in Hawai‘i that meet minimum energy and water efficiency standards.

Efficiency is a proof of intelligence. Intelligent society should forbid inefficient devices especially when facing a huge climate crisis due to overconsumption, a crisis putting the next generations in a troubling future with expected wars on resources and mandatory migration to survive.

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 also providing financial benefits to Hawai‘i residents and businesses. By adopting efficiency standards for the products included in SB 691, Hawai‘i residents and businesses will save millions on utility bills, cut energy and water waste, and eliminate air pollutants and carbon emissions harmful to human health and the environment.

In 2019, Hawai‘i adopted efficiency standards for five products. Since then, 12 other states have also adopted standards, including for the products in SB 691. The products included in this bill are cost-effective and readily available, and most of these products don’t cost more than the inefficient models, so consumers will start seeing savings right away.

Please pass SB 691 to support affordability for Hawai‘i families and businesses, significantly reduce air pollutants and carbon emissions, and save freshwater resources for the future of our islands.

Thank you for the opportunity to submit testimony in support of SB 691 SD2 HD1.

Severine Busquet

Honolulu, Hi 96825

SB-691-HD-1

Submitted on: 3/29/2023 11:00:53 AM

Testimony for CPC on 3/30/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Virginia Hinshaw	Individual	Support	Written Testimony Only

Comments:

Aloha! Please support this bill which will save energy and money. This is critically important for our future. Mahalo for supporting this investment for our State.

SB-691-HD-1

Submitted on: 3/29/2023 11:19:21 AM

Testimony for CPC on 3/30/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Elena Arinaga	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Nakashima, Vice Chair Sayama, and members of the Committee,

I am testifying in support of Senate Bill 691 SD2 HD1, which expands the list of household products sold in Hawai‘i that meet minimum energy and water efficiency standards.

Embracing energy efficiency is a critical part of addressing climate change and reducing carbon emissions.

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 also providing financial benefits to Hawai‘i residents and businesses. By adopting efficiency standards for the products included in SB 691, Hawai‘i residents and businesses will save millions on utility bills, cut energy and water waste, and eliminate air pollutants and carbon emissions harmful to human health and the environment.

In 2019, Hawai‘i adopted efficiency standards for five products. Since then, 12 other states have also adopted standards, including for the products in SB 691. The products included in this bill are cost-effective and readily available, and most of these products don’t cost more than the inefficient models, so consumers will start seeing savings right away.

Please pass SB 691 to support affordability for Hawai‘i families and businesses, significantly reduce air pollutants and carbon emissions, and save freshwater resources for the future of our islands.

Thank you for the opportunity to submit testimony in support of SB 691 SD2 HD1.

Elena Arinaga
Honolulu, Hawaii 96816

SB-691-HD-1

Submitted on: 3/29/2023 12:08:10 PM

Testimony for CPC on 3/30/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Marilyn Mick	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Nakashima, Vice Chair Sayama, and members of the Committee,

I am testifying in support of Senate Bill 691 SD2 HD1, which expands the list of household products sold in Hawai‘i that meet minimum energy and water efficiency standards.

Please pass SB 691 to support affordability for Hawai‘i families and businesses, significantly reduce air pollutants and carbon emissions, and save freshwater resources for the future of our islands.

Mahalo, Marilyn Mick, Honolulu

SB-691-HD-1

Submitted on: 3/29/2023 12:31:56 PM

Testimony for CPC on 3/30/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Leigh Anne Mayberry	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Nakashima, Vice Chair Sayama, and members of the Committee,

I am testifying in support of Senate Bill 691 SD2 HD1, which expands the list of household products sold in Hawai‘i that meet minimum energy and water efficiency standards.

This measure is a win all-around since it cuts both harmful emissions and unnecessary costs. The bill will expand the list of existing products without removing the current options, which again is only improving the products available to Hawaii residents, most of whom are interested in protecting our beautiful islands whenever possible.

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 also providing financial benefits to Hawai‘i residents and businesses. By adopting efficiency standards for the products included in SB 691, Hawai‘i residents and businesses will save millions on utility bills, cut energy and water waste, and eliminate air pollutants and carbon emissions harmful to human health and the environment.

In 2019, Hawai‘i adopted efficiency standards for five products. Since then, 12 other states have also adopted standards, including for the products in SB 691. The products included in this bill are cost-effective and readily available, and most of these products don’t cost more than the inefficient models, so consumers will start seeing savings right away.

Please pass SB 691 to support affordability for Hawai‘i families and businesses, significantly reduce air pollutants and carbon emissions, and save freshwater resources for the future of our islands.

Thank you for the opportunity to submit testimony in support of SB 691 SD2 HD1.

Leigh Anne Mayberry, Honolulu, HI, 96815

SB-691-HD-1

Submitted on: 3/29/2023 12:33:45 PM

Testimony for CPC on 3/30/2023 2:00:00 PM

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

Comments:

The standards proposed have already been adopted in other states, and without a similar update to Hawai'i's standards, we risk being a dumping ground for inefficient products manufacturers can't sell in other states. Please support this bill. Mahalo.

SB-691-HD-1

Submitted on: 3/29/2023 5:52:48 PM

Testimony for CPC on 3/30/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Mark Hixon	Individual	Support	Written Testimony Only

Comments:

Aloha. I am testifying in support of Senate Bill 691 SD2 HD1, which expands the list of household products sold in Hawai‘i that meet minimum energy and water efficiency standards. At a time when Hawai‘i’s residents are facing multiple crises — including the highest electricity rates in the nation, a rising cost of living, and especially the ever-increasing negative effects of climate disruption — setting appliance efficiency standards can be a win-win policy solution for both our society and our environment. As the recent IPCC report emphasizes, we do not have much time left to address climate disruption. Hawaii can be the showcase for the world regarding energy self-sufficiency and sustainable resource use. Energy efficiency is a big part of that vision. Please support this bill. Mahalo.

SB-691-HD-1

Submitted on: 3/29/2023 8:49:44 PM

Testimony for CPC on 3/30/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Mattison Priest	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Nakashima, Vice Chair Sayama, and members of the Committee,

I am testifying in support of Senate Bill 691 SD2 HD1, which expands the list of household products sold in Hawai'i that meet minimum efficiency standards.

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 also providing financial benefits to Hawai'i residents and businesses. By adopting efficiency standards for the products included in SB691, Hawai'i residents and businesses will save millions on utility bills, cut energy and water waste, and eliminate air pollutants and carbon emissions harmful to human health and the environment.

In 2019, Hawai'i adopted efficiency standards for five products. Since then, 12 other states have also adopted standards, including for the products in SB 691. The products included in this bill are cost-effective and readily available, and most of these products don't cost more than the inefficient models, so consumers will start seeing savings right away.

Please pass SB 691 to support affordability for Hawai'i's families and businesses, significantly reduce air pollutants and carbon emissions, and save freshwater resources for the future of our islands.

Thank you for the opportunity to submit testimony in support of SB 691 SD2 HD1.

Mattison Priest, Honolulu, HI, 96817

SB-691-HD-1

Submitted on: 3/29/2023 10:03:16 PM

Testimony for CPC on 3/30/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Ruth Robison	Individual	Support	Written Testimony Only

Comments:

This measure can save residents and businesses as much as \$232 million on utility bills over the next 15 years, cut energy and water waste, and reduce air pollutants and carbon emissions harmful to human health and the environment. Thank you.