



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
SENATE COMMITTEE ON ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

Tuesday February 14, 2023
1:02 PM
State Capitol, Conference Room 229 & Videoconference

Providing COMMENTS on
SB 691

RELATING TO EFFICIENCY STANDARDS.

Chair DeCoite, Vice Chair Wakai, and Members of the Committee, the Hawai'i State Energy Office (HSEO) respectfully submits comments on the adoption of SB 691 which allows the Chief Energy Officer of HSEO to enforce minimum energy efficiency standards. HSEO's testimony is guided by its mission to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy, decarbonized economy. Adoption of this bill would accelerate the attainment of Hawai'i's decarbonization goals by substantially reducing electricity use, consumers' electricity bills and the production of CO₂.

HSEO is not an enforcement agency empowered nor has the staffing and resources to enforce appliance efficiency standards. With the passage of this bill, Hawai'i will join forces with twelve other states with similar provisions. The Appliance Standards Awareness Project fact sheet describes the power of efficiency standards to move Hawai'i closer to lower utility bills and to a decarbonized economy.

Thank you for the opportunity to testify.



Appliance Efficiency Standards for Hawaii

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



Energy savings



Utility Bill Savings



Water Savings



Emissions Reductions

The basics of efficiency standards

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

Standards bring huge benefits to Hawaii

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

States are acting on standards

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

Residents and businesses save money

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

Emissions Reductions



By 2040, appliance standards could cumulatively save Hawaii more than **54 gigawatt hours** of electricity. This would keep about **25,000 metric tons of CO₂** out of the atmosphere every year.

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

WATER, ENERGY, AND POLLUTION SAVINGS (HAWAII)

	Potential annual savings in 2030						Potential annual savings in 2040					
	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NO _x (tons)	SO ₂ (tons)	CO ₂ (thous. MT)	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NO _x (tons)	SO ₂ (tons)	CO ₂ (thous. MT)
Air purifiers	16.0	--	--	27.6	42.0	8.9	26.1	--	--	31.9	50.4	12.0
Electric vehicle supply equipment	1.5	--	--	2.6	4.0	0.8	10.1	--	--	12.3	19.4	4.6
Portable electric spas	6.9	--	--	12.0	18.2	3.9	11.6	--	--	14.3	22.5	5.4
Residential ventilating fans	1.3	--	--	2.3	3.5	0.7	3.6	--	--	4.4	6.9	1.7
Toilets (water closets)	--	--	83	--	--	--	--	--	219	--	--	--
Urinals	--	--	54	--	--	--	--	--	117	--	--	--
Water coolers	1.6	--	--	2.7	4.2	0.9	2.9	--	--	3.5	5.6	1.4
Total	27	--	136	47	72	15	54	--	337	66	105	25

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

UTILITY BILL SAVINGS AND PAYBACK PERIODS (HAWAII)

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

Why state standards?

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

Do I have to replace my current products?

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