



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 7, 2023
1:01 PM
State Capitol, Conference Room 229 and Videoconference

In SUPPORT of
SB 690

RELATING TO ENERGY EFFICIENCY.

Chair DeCoite, Vice Chair Wakai, and Members of the Committee, the Hawaii State Energy Office (HSEO) supports the adoption of SB 690, which prohibits the sale of common fluorescent lamps while exempting certain specialty lamps.

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.

The attached summary sheet from the Appliance Standards Awareness Project summarizes estimated benefits of adopting this bill. In addition to avoiding the dumping of inefficient lamps in Hawai'i from other locations that have banned these products, the bill is projected to reduce Hawai'i consumers' electricity bills by \$37 million annually by 2030, eliminate the production of 756,000 tons of CO₂ by 2050, and avoid the production of 36 pounds of mercury (sufficient to contaminate 1.8 billion gallons of drinking water).

Thank you for the opportunity to testify on this bill.

Hawaii Can Protect Health and Lower Energy Bills by Phasing Out Fluorescent Light Bulbs

FACT SHEET | JANUARY 2023

Fluorescent lights are a common sight in offices, garages, and basements—but they contain toxic mercury and use far more energy than newer alternatives. By phasing out fluorescents in favor of efficient LED bulbs, Hawaii can avert a needless health risk, save families and business money on utility bills, and curb greenhouse gas emissions.

Fluorescent lighting was once the preferred option for many uses, but not anymore. LED light bulbs—readily available as replacements for fluorescents in all needed shapes and sizes—do not contain any of the toxic mercury that fluorescent bulbs do. They also cut energy use in half compared to fluorescents, last about twice as long, and typically cost far less to purchase and operate over their lifetime. So why are fluorescents still on store shelves?

In 2022, Vermont and California became the first states to phase out the sale of most fluorescent bulbs. As other states move to eliminate fluorescents, Hawaii risks becoming a dumping ground for inefficient, mercury-containing bulbs that suppliers cannot sell elsewhere. Hawaii lawmakers should take prompt action to phase out sales of the most common fluorescent bulbs by 2025.

REDUCE THE THREAT OF MERCURY EXPOSURE

All fluorescent bulbs contain mercury, a potent neurotoxin that threatens human health and the environment. The World Health Organization counts mercury among the top 10 most dangerous chemicals impacting public health.

When fluorescent bulbs are accidentally broken—whether in homes, businesses, or the waste management system—they present a health hazard to those nearby. And when fluorescent bulbs are not disposed of properly—as happens with an estimated 75% of bulbs—mercury can leach from landfills and eventually contaminate waterways and the fish and shellfish within them.

LEDs, which are mercury-free, are a much safer option. Technological advancements in recent years have made them readily available and cost effective.



By transitioning from
the most common
fluorescent bulbs to
LEDs, Hawaii could avoid

36 pounds

of mercury waste,
enough to contaminate
1.8 billion gallons of
water.



By 2030, Hawaii households and businesses would save more than **\$37 million annually** on their utility bills.

SAVE MONEY ON ELECTRIC BILLS

Fluorescent bulbs are [no longer the most affordable lighting option](#). Because they are more energy efficient than fluorescents, LEDs cost less to operate, more than paying back their slightly higher upfront costs—which continue to drop each year—through lower electric bills. A typical school could see more than \$5,000 in annual utility bill savings if all its fluorescent bulbs were replaced with LEDs.

LEDs also last about twice as long as fluorescents, so they need to be replaced less often. And because LEDs do not contain mercury, a hazardous waste, they can be disposed of more easily and cheaply than fluorescents when the time comes.

AVERT NEEDLESS GREENHOUSE GAS EMISSIONS

LEDs use approximately half the electricity as fluorescent bulbs to produce the same amount of light. As a result, accelerating the transition to LEDs can reduce planet-warming emissions from power plants and help prevent the worst effects of climate change.

HAWAII LAWMAKERS CAN PHASE OUT FLUORESCENTS

24 states around the country already regulate mercury-containing products, including fluorescent light bulbs, because of their toxic nature. Lawmakers could continue this effort and protect Hawaii from mercury pollution by ensuring a transition from fluorescents to LEDs.



By 2050, Hawaii could avoid the release of **756,000 metric tons** of carbon dioxide per year, the equivalent of **162,000 gasoline-powered passenger vehicles driven for one year.**

