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# A BILL FOR AN ACT

RELATING TO ENERGY EFFICIENCY.

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

1           SECTION 1. The legislature finds that there have been many  
2 advances in the energy efficiency of lighting. Fluorescent  
3 bulbs were promoted in the 1980s because they are up to thirty-  
4 five per cent more energy efficient than the incandescent light  
5 fixtures widely in use at that time; however, further advances  
6 have been made with light-emitting diodes (LEDs) that are now up  
7 to eighty per cent more energy efficient than fluorescent bulbs  
8 and can last three to five times longer than fluorescent bulbs  
9 and thirty times longer than incandescent bulbs.

10           The legislature further finds that all fluorescent bulbs  
11 contain mercury, a toxic pollutant that bioaccumulates in the  
12 environment, can pollute air and water, and causes harm to  
13 wildlife and human health. The legislature notes that mercury-  
14 free alternatives exist for most of the thousands of products  
15 that contain mercury components.

16           The legislature believes that LEDs are a better alternative  
17 because they do not contain any mercury, are more energy



1 efficient, and are the cheaper life-cycle cost lighting option  
2 for consumers and businesses. Phasing out the sale of mercury-  
3 containing bulbs in Hawaii will prevent additional toxic  
4 pollutants from being brought into the State's ecosystem, reduce  
5 energy use, and save consumer dollars.

6 Accordingly, the purpose of this Act is to prohibit the  
7 sale of certain fluorescent lamps in the State as a new  
8 manufactured product, with certain exemptions.

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

12 **"PART . FLUORESCENT LAMPS**

13 **§196- Definitions.** As used in this part, unless the  
14 context otherwise requires:

15 "Compact fluorescent lamp" means a compact low-pressure,  
16 mercury-containing, electric-discharge light source in which a  
17 fluorescent coating transforms some of the ultraviolet energy  
18 generated by the mercury discharge into visible light, and  
19 includes the following characteristics:

- 20 (1) One base (end cap) of any type, including but not  
21 limited to screw, bayonet, two pins, and four pins;



- 1           (2) Integrally ballasted or non-integrally ballasted;
- 2           (3) Light emission between a correlated color temperature
- 3                 of one thousand seven hundred Kelvin and twenty-four
- 4                 thousand Kelvin and a Duv of +0.024 and -0.024 in the
- 5                 International Commission on Illumination Uniform Color
- 6                 Space;
- 7           (4) All tube diameters and all tube lengths; and
- 8           (5) All lamp sizes and shapes for directional and
- 9                 nondirectional installations, including but not
- 10                limited to plug-in, spiral, twin tube, triple twin,
- 11                2D, U-bend, and circular.

12           "Linear fluorescent lamp" means a low-pressure, mercury-  
13 containing, electric-discharge light source in which a  
14 fluorescent coating transforms some of the ultraviolet energy  
15 generated by the mercury discharge into visible light, and  
16 includes all of the following characteristics:

- 17           (1) Two bases (end caps) of any type, including but not
- 18                 limited to single-pin, two-pin, and recessed double
- 19                 contact;
- 20           (2) Light emission between a correlated color temperature
- 21                 of one thousand seven hundred Kelvin and twenty-four



1 thousand Kelvin and a Duv of +0.024 and -0.024 in the  
2 International Commission on Illumination Uniform Color  
3 Space;

4 (3) All tube diameters, including but not limited to T5,  
5 T8, T10, and T12;

6 (4) All tube lengths from 0.5 to eight feet, inclusive;  
7 and

8 (5) All lamp shapes, including but not limited to linear,  
9 U-bend, and circular.

10 **§196- Fluorescent lamps; mercury-containing lighting;**  
11 **prohibited.** It shall be unlawful to sell, offer for sale, or  
12 distribute for sale in the State as a new manufactured product:

13 (1) Beginning January 1, , a screw or bayonet base  
14 type compact fluorescent lamp; and

15 (2) Beginning January 1, , a pin-base type compact  
16 fluorescent lamp or linear fluorescent lamp.

17 **§196- Exemptions.** This part shall not apply to a lamp:

18 (1) Used for image capture and projection, including  
19 photocopying, printing, directly or in preprocessing,  
20 lithography, film and video projection, and  
21 holography;



- 1           (2) That has a high proportion of ultraviolet light
- 2           emission and is one of the following:
- 3           (A) A lamp with high ultraviolet content that has
- 4           ultraviolet power greater than two milliwatts per
- 5           kilolumen;
- 6           (B) A lamp for germicidal use, such as the
- 7           destruction of DNA, that emits a peak radiation
- 8           of approximately 253.7 nanometers;
- 9           (C) A lamp used for disinfection or fly trapping from
- 10          which either the radiation power emitted between
- 11          two hundred fifty and three hundred fifteen
- 12          nanometers represents at least five per cent of,
- 13          or the radiation power emitted between three
- 14          hundred fifteen and four hundred nanometers
- 15          represents at least twenty per cent of, the total
- 16          radiation power emitted between two hundred fifty
- 17          and eight hundred nanometers;
- 18          (D) A lamp used for the generation of ozone where the
- 19          primary purpose is to emit radiation at
- 20          approximately 185.1 nanometers;



- 1 (E) A lamp used for coral zooxanthellae symbiosis
- 2 from which the radiation power emitted between
- 3 four hundred and four hundred eighty nanometers
- 4 represents at least forty per cent of the total
- 5 radiation power emitted between two hundred fifty
- 6 and eight hundred nanometers; or
- 7 (F) Any lamp used in a sunlamp product. For the
- 8 purposes of this subparagraph, "sunlamp product"
- 9 has the same meaning as defined in title 21 Code
- 10 of Federal Regulations section 1040.20(b)(9);
- 11 (3) Used for medical or veterinary diagnosis or treatment
- 12 or used in a medical device;
- 13 (4) Used in pharmaceutical product manufacturing or
- 14 quality control;
- 15 (5) Used for spectroscopy and photometric applications,
- 16 such as ultraviolet-visible spectroscopy, molecular
- 17 spectroscopy, atomic absorption spectroscopy,
- 18 nondispersive infrared, Fourier transform infrared,
- 19 medical analysis, ellipsometry, layer thickness
- 20 measurement, process monitoring, or environmental
- 21 monitoring; or



1           (6) Used by academic and research institutions exclusively  
2                   for conducting research projects and experiments."  
3           SECTION 3. This Act shall take effect upon its approval.



**Report Title:**

Fluorescent Lamps; Mercury-containing Lighting; Sales; Compact  
Fluorescent Lamps; Linear Fluorescent Lamps; Prohibition

**Description:**

Prohibits the sale of certain fluorescent lamps as a new  
manufactured product, with certain exemptions. (SD1)

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

