Introduced by Representative Harry L. Roque Jr.

## AN ACT

PROHIBITING THE MANUFACTURE, IMPORTATION, SALE, AND USE OF INCANDESCENT LIGHT BULBS, PRESCRIBING A PHASE-OUT PERIOD, AND PROVIDING PENALTIES FOR VIOLATIONS THEREOF

## **EXPLANATORY NOTE**

The Constitution, Article 2, Section 16 provides:

SECTION 16. The State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature.

This bill seeks to conserve energy by banning the production of incandescent light bulbs and the promoting of the use of compact fluorescent light bulbs.

One of the most serious problems humankind is facing is global warming. Global warming results to increase in the earth's atmospheric temperature which causes climate change. Climate change brings about extreme weather conditions worldwide and causes strong typhoons, heavy rains and snowfalls, droughts, polar caps and glacier melts, rise in sea levels, flash floods, strong tornadoes, and other abnormal weather patterns.

Global warming is brought about by greenhouse gases trapped in the earth's atmosphere. Examples of greenhouse gases are carbon dioxide, methane, chlorofluorocarbons or CFCs, nitrogen, and sulphur. These greenhouse gases come from the burning of fossil fuels to feed our energy needs and run our industries and transportation, as well as from deforestation and decomposition of agricultural wastes and other organic matters.

The Kyoto Protocol is an international agreement which calls for the reduction of carbon dioxide emissions. The Philippines, which is a signatory to the Kyoto Protocol, has responded to this international agreement by instituting measures that will reduce the country's dependence on fossil fuels in generating electricity. One of the ways that the ordinary Filipino can contribute to reduce our fossil fuels dependence and minimize our carbon dioxide emission is to utilize energy efficient electrical appliances, lightings, electronic gadgets and tools, and other electricity-powered household items.

Lighting is one of the areas where we can achieve significant energy savings. It has been established that incandescent light bulbs consume more electricity than fluorescent lamps or compact fluorescent lamps (CFLs). Fluorescent light bulbs (including compact fluorescents) are more energy-efficient than regular bulbs because of the different method they use to produce light. Regular bulbs (also known as incandescent bulbs) create light by heating a filament inside the bulb; the heat makes the filament white-hot, producing the light that you see. A lot of the energy used to create the heat that lights an incandescent bulb is wasted. A fluorescent bulb, on the other hand, contains a gas that produces invisible ultraviolet light (UV) when the gas is excited by

electricity. The UV light hits the white coating inside the fluorescent bulb and the coating changes it into light you can see. Because fluorescent bulbs don't use heat to create light, they are far more energy-efficient than regular incandescent bulbs.<sup>1</sup>

A 15-watt CFL gives the same lumens as that of a 60-watt incandescent light bulb. CFLs use around 20% of the electricity used by incandescent bulbs to produce the same amount of light. The switch to CFLs will result in household lighting costs falling by as much as 80%, and the Philippines' annual greenhouse gas (GHG) emissions falling 2 million metric tons. This is an equivalent of taking 250,000 cars off the road or planting 2 million trees a year. Also, national electricity demand is expected to fall by 2,000 megawatts, or the equivalent of electricity generated by six power plants.

This bill aims to prohibit the manufacture, importation, sale, and use of incandescent light bulbs, and prescribe a phase-out period. It also establishes a Minimum Energy Performance Standards (MEPS) for lighting products and encourages the use of CFLs and other energy efficient lightings for our requirements.<sup>2</sup>

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<sup>&</sup>lt;sup>1</sup> http://www.gelighting.com/na/business\_lighting/faqs/cfl.htm#10.

<sup>&</sup>lt;sup>2</sup>This bill was previously filed in the Fourteenth Congress by Senator Juan Miguel Zubiri, and refiled in the Fifteenth Congress, Second Regular Session by Senator Miriam Defensor Santiago.

SEVENTEENTH CONGRESS OF THE REPUBLIC	)
OF THE PHILIPPINES	1
First Regular Session	1

## HOUSE OF REPRESENTATIVES H.B No. 3049

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## AN ACT

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Be it enacted by the Senate and the House of Representatives of the Philippines in Congress assembled:

- SECTION 1. Short Title. This Act shall be known as the "Incandescent Light
  Bulb Ban Act."
- 3 SECTION 2. Declaration of Policy. It is hereby declared the policy of the State
- 4 to protect the environment, promote environmental awareness, and conserve our natural
- 5 resources consistent with the country's sustainable development plans. Toward this end,
- 6 the State shall reduce the utilization of fossil fuels and other greenhouse gas-emitting
- 7 substances. Further, the State shall also promote the use of energy-efficient appliances,
- 8 lightings, electronic gadgets, household implements, and other similar electrical devices.
- 9 SECTION 3. Definition of Terms. As used in this Act, the following terms shall
- 10 be taken to mean as follows:

- 1 (A) "BPS" refers to the Bureau of Product Standard, which is a bureau under the
- 2 Department of Trade and Industry;
- 3 (B) "Compact Fluorescent Lamp (CFL)" refers to a type of light bulb which has 16
- 4 electrodes at both ends of the tube, a gas containing argon and mercury vapor wherein a
- 5 stream of electrons flows through the gas from one electrode to the other which gives off
- 6 ultraviolet photons that hit the phosphor coating inside the tube and creates visible light,
- 7 and other similar light bulb;
- 8 (C) "DOE" refers to the Department of Energy;
- 9 (D) "DOST" refers to the Department of Science and Technology;
- (E) "DTI" refers to the Department of Trade and Industry;
- 11 (F) "Incandescent light bulb" refers to a light bulb which has an electricity
- 12 resistant filament inside that turns electrical energy into heat and makes the filament
- white hot, the "white" being the light, and other similar light bulb;
- (G) "LATL" refers to the Lighting and Appliance Testing Laboratory of the DOE;
- 15 (H) "Lumens" refers to a measure of light output;
- (I) "PCIERD" refers to the Philippine Council for Industry and Energy, which is
- 17 an attached agency of the DOST;
- 18 (J) "TFL" refers to Tubular Fluorescent Lamps, which uses the same research and
- 19 development technology as that of CFLs; and
- 20 (K) "Watt" refers to a measure of energy input.

SECTION 4. Prohibited Acts Under the Ban. - The manufacture, importation,

2 sale, and use of incandescent light bulbs and other similar lightings and fixtures which

does not meet the Minimum Energy Performance Standards shall be prohibited five (5)

4 years from the effectivity of this Act.

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5 SECTION 5. Minimum Energy Performance Standards (MEPS). - A Minimum

6 Energy Performance Standards shall be formulated by the DOE-LATL and the BPS for

lighting products which shall not be less than lumens per watt. The concerned

government agencies mentioned in this Section may adjust the MEPS every three years in

consultation with lighting manufacturers, importers, consumers, and other stakeholders.

SECTION 6. Exemption. – Exempt from the prohibition as provided for in Section

4 of this Act are those for use in scientific, research, medical, and technological purposes.

Persons, whether natural or juridical, who wish to avail of the exemption hereof shall

secure a certificate of exemption from PCIERD under the Department of Science and

14 Technology.

SECTION 7. Phasing-out Period. – A phasing-out period of three years upon the

effectivity of this Act shall be in place. During this period the DTI and DOE shall

formulate mechanisms for the gradual phase-out of incandescent light bulbs in the

market. PCIERD shall identify other alternative lightings or bulbs aside from the TFLs

19 and CFLs.

- SECTION 8. Penalty Clause. At the onset of the ban, any person who violates
- 2 this Act or part thereof shall be imposed a fine as follows:
- 3 (A) If the violator is a manufacturer or importer.— A fine of not less than One
- 4 Hundred Thousand pesos (\$\P100,000\$) but not more than Five Hundred Thousand pesos
- 5 (\$\pm\$500,000), or imprisonment of one year to two years or both, upon conviction by a
- 6 competent court.
- 7 (B) If the violator is a seller. A fine of not less than Fifty Thousand pesos
- 8 (₱50,000) but not more than One Hundred Thousand pesos (₱100,000), or imprisonment
- 9 of six months to one year or both, upon conviction by a competent court.
- 10 (C) If the violator is a consumer or user of the product.— A fine of not less than
- 11 Five Thousand pesos (₱5,000) but not more than Ten Thousand pesos (₱10,000), or
- imprisonment of one month to six months or both, upon conviction by a competent court.
- 13 If the violator is a juridical person, the president or chief executive officer of the entity
- shall be held responsible for the violation.
- SECTION 9. Implementing Rules and Regulations. The DTI, DOE, and DOST
- shall promulgate the implementing rules and regulations within three months from the
- 17 effectivity of this Act.
- SECTION 10. Separability Clause. If any provision of this Act is held invalid or
- 19 unconstitutional, the same shall not affect the validity and effectivity of the other
- 20 provisions hereof.

- SECTION 11. Repealing Clause. All laws, decrees, orders, and issuances, or
- 2 portions thereof, which are inconsistent with the provisions of this Act, are hereby
- 3 repealed, amended or modified accordingly.
- 4 SECTION 12. Effectivity Clause. This Act shall take effect fifteen (15) days after
- 5 its publication in the Official Gazette or in two (2) newspapers of general circulation.

Approved,