

111TH CONGRESS  
1ST SESSION

# H. R. 1732

To amend the Energy Policy and Conservation Act to provide for standards for energy efficient outdoor lighting.

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## IN THE HOUSE OF REPRESENTATIVES

MARCH 26, 2009

Ms. HARMAN (for herself and Mr. UPTON) introduced the following bill; which was referred to the Committee on Energy and Commerce

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## A BILL

To amend the Energy Policy and Conservation Act to provide for standards for energy efficient outdoor lighting.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

3       **SECTION 1. SHORT TITLE.**

4       This Act may be cited as the “Outdoor Lighting Effi-  
5       ciency Act”.

6       **SEC. 2. FINDINGS.**

7       The Congress finds as follows:

8               (1) Of all the electricity generated in the United  
9       States, 4.4 percent is consumed for outdoor lighting.

1           (2) Outdoor lighting represents approximately  
2       20 percent of all electricity consumed for lighting  
3       purposes in the United States.

4           (3) Efficient outdoor lighting technologies pro-  
5       vide light quality equal or superior to other tech-  
6       nologies in common use today.

7           (4) Efficient outdoor lighting technologies often  
8       have longer product lifetimes than other technologies  
9       in common use today.

10          (5) The use of efficient outdoor lighting tech-  
11       nologies will substantially reduce waste and emis-  
12       sions from power generation, and reduce the cost of  
13       electricity used in certain commercial and govern-  
14       ment applications, such as lighting the Nation's  
15       roadways and parking lots.

16 **SEC. 3. DEFINITIONS.**

17       (a) Section 340(1) of the Energy Policy and Con-  
18       servation Act (42 U.S.C. 6311(1)) is amended by striking  
19       subparagraph (L) and inserting the following:

20               “(L) Outdoor luminaires.

21               “(M) Outdoor high light output lamps.

22               “(N) Any other type of industrial equip-  
23       ment which the Secretary classifies as covered  
24       equipment under section 341(b).”.

1 (b) Section 340 of the Energy Policy and Conserva-  
2 tion Act (42 U.S.C. 6311) is amended as adding at the  
3 end the following:

4 “(25) The term ‘luminaire’ means a complete  
5 lighting unit consisting of a lamp or lamps, together  
6 with parts designed to distribute the light, to posi-  
7 tion and protect such lamps, and to connect such  
8 lamps to the power supply.

9 “(26) The term ‘outdoor luminaire’ means a lu-  
10 minaire that is listed as suitable for wet locations  
11 pursuant to Underwriters Laboratories Inc. stand-  
12 ard UL 1598 and is labeled as ‘Suitable for Wet Lo-  
13 cations’ consistent with section 410.4(A) of the Na-  
14 tional Electrical Code 2005, except for—

15 “(A) luminaires designed solely for signs  
16 that cannot be used in general lighting applica-  
17 tions;

18 “(B) portable luminaires designed for use  
19 at theatrical and television performance areas  
20 and construction sites;

21 “(C) luminaires designed for continuous  
22 immersion in swimming pools and other water  
23 features;

1           “(D) seasonal luminaires incorporating  
2 solely individual lamps rated at 10 watts or  
3 less;

4           “(E) luminaires designed solely to be used  
5 in emergency conditions;

6           “(F) landscape luminaries, with an inte-  
7 grated photoelectric switch or programmable  
8 time switch, with a nominal voltage of 15 volts  
9 or less; and

10           “(G) components used for repair of in-  
11 stalled luminaries.

12           “(27) The term ‘outdoor high light output  
13 lamp’ means a lamp that—

14           “(A) has a rated lumen output not less  
15 than 2601 lumens and not greater than 35,000  
16 lumens;

17           “(B) is capable of being operated at a volt-  
18 age not less than 110 volts and not greater  
19 than 300 volts, or driven at a constant current  
20 of 6.6 amperes; and

21           “(C) is not a Parabolic Aluminized Reflec-  
22 tor lamp.

23           “(28) The term ‘outdoor lighting control’ means  
24 a device incorporated in a luminaire that receives a  
25 signal, from either a sensor (such as an occupancy

1 sensor, motion sensor, or daylight sensor) or an  
2 input signal (including analog or digital signals com-  
3 municated through wired or wireless technology),  
4 and can adjust the light level according to the sig-  
5 nal.”.

6 **SEC. 4. STANDARDS.**

7 Section 342 of the Energy Policy and Conservation  
8 Act (42 U.S.C. 6313) is amended by adding at the end  
9 the following:

10 “(g) OUTDOOR LUMINAIRES.—

11 “(1) Each outdoor luminaire manufactured on  
12 or after January 1, 2011, shall have—

13 “(A) a lighting efficiency of at least 50  
14 lumens per watt; and

15 “(B) a lumen maintenance, calculated as  
16 mean rated lumens divided by initial lumens, of  
17 at least 0.6.

18 “(2) Each outdoor luminaire manufactured on  
19 or after January 1, 2013, shall have—

20 “(A) a lighting efficiency of at least 70  
21 lumens per watt; and

22 “(B) a lumen maintenance, calculated as  
23 mean rated lumens divided by initial lumens, of  
24 at least 0.6.

1           “(3) Each outdoor luminaire manufactured on  
2 or after January 1, 2015, shall have—

3                   “(A) a lighting efficiency of at least 80  
4 lumens per watt; and

5                   “(B) a lumen maintenance, calculated as  
6 mean rated lumens divided by initial lumens, of  
7 at least 0.65.

8           “(4) In addition to the requirements of para-  
9 graphs (1) through (3), each outdoor luminaire man-  
10 ufactured on or after January 1, 2011, shall have  
11 the capability of producing at least two different  
12 light levels, including 100 percent and 60 percent of  
13 full lamp output.

14           “(5)(A) Not later than January 1, 2017, the  
15 Secretary shall issue a final rule amending the appli-  
16 cable standards established in paragraphs (3) and  
17 (4) if technologically feasible and economically justi-  
18 fied. Such a final rule shall be effective no later than  
19 January 1, 2020.

20           “(B) A final rule issued under subparagraph  
21 (A) shall establish efficiency standards at the max-  
22 imum level that is technically feasible and economi-  
23 cally justified, as provided in subsections (o) and (p)  
24 of section 325. The Secretary may also, in such rule-  
25 making, amend or discontinue the product exclusions

1 listed in section 340(23)(A) through (G), or amend  
2 the lumen maintenance requirements in paragraph  
3 (3) if he determines that such amendments are con-  
4 sistent with the purposes of this Act.

5 “(C) If the Secretary issues a final rule under  
6 subparagraph (A) establishing amended standards,  
7 the final rule shall provide that the amended stand-  
8 ards apply to products manufactured on or after  
9 January 1, 2020, or one year after the date on  
10 which the final amended standard is published,  
11 whichever is later.

12 “(h) OUTDOOR HIGH LIGHT OUTPUT LAMPS.—Each  
13 outdoor high light output lamp manufactured on or after  
14 January 1, 2012, shall have a lighting efficiency of at least  
15 45 lumens per watt.”.

16 **SEC. 5. TEST PROCEDURES.**

17 Section 343(a) of the Energy Policy and Conserva-  
18 tion Act (42 U.S.C. 6314(a)) is amended by adding at  
19 the end the following:

20 “(10) OUTDOOR LIGHTING.—

21 “(A) With respect to outdoor luminaries  
22 and outdoor high light output lamps, the test  
23 procedures shall be based upon the test proce-  
24 dures specified in Illuminating Engineering So-  
25 ciety procedure LM–79 as of March 1, 2009,

1 and/or other appropriate consensus test proce-  
2 dures developed by the Illuminating Engineer-  
3 ing Society or other appropriate consensus  
4 standards bodies.

5 “(B) If Illuminating Engineering Society  
6 procedure LM-79 is amended, the Secretary  
7 shall amend the test procedures established in  
8 subparagraph (A) as necessary to be consistent  
9 with the amended LM-79 test procedure, unless  
10 the Secretary determines, by rule, published in  
11 the Federal Register and supported by clear  
12 and convincing evidence, that to do so would  
13 not meet the requirements for test procedures  
14 under paragraph (2).

15 “(C) The Secretary may revise the test  
16 procedures for outdoor luminaries or outdoor  
17 high light output lamps by rule consistent with  
18 paragraph (2), and may incorporate as appro-  
19 priate consensus test procedures developed by  
20 the Illuminating Engineering Society or other  
21 appropriate consensus standards bodies.”.

22 **SEC. 6. PREEMPTION.**

23 Section 345 of the Energy Policy and Conservation  
24 Act (42 U.S.C. 6316) is amended by adding at the end  
25 the following:



1       “(i)(1) Except as provided in paragraph (2), section  
2 327 shall apply to outdoor luminaries to the same extent  
3 and in the same manner as the section applies under part  
4 B.

5       “(2) Any State standard that is adopted on or before  
6 January 1, 2015, pursuant to a statutory requirement to  
7 adopt efficiency standards for reducing outdoor lighting  
8 energy use enacted prior to January, 31, 2008, shall not  
9 be preempted.”.

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