

112TH CONGRESS
1ST SESSION

H. R. 2748

To assess the potential of smart electronics to reduce home and office electricity demand, to incorporate smart electronics into the Energy Star Program, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

AUGUST 1, 2011

Mr. HONDA introduced the following bill; which was referred to the Committee on Energy and Commerce

A BILL

To assess the potential of smart electronics to reduce home and office electricity demand, to incorporate smart electronics into the Energy Star Program, and for other purposes.

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 “Smart Electronics
5 Act”.

6 **SEC. 2. FINDINGS.**

7 Congress finds the following:

1 (1) The International Energy Agency estimates
2 new electronic gadgets have the potential to triple
3 their energy consumption by 2030 to 1,700 terawatt
4 hours, the equivalent of today's home electricity con-
5 sumption of the United States and Japan combined.

6 (2) According to the International Energy
7 Agency, electronic gadgets already account for about
8 15 percent of household electric consumption, a
9 share that is rising rapidly as the number of these
10 gadgets multiplies. Last year, the world spent
11 \$80,000,000,000 on electricity to power all these
12 household electronics, and that is projected to rise to
13 \$200,000,000,000 a year by 2030.

14 (3) Most of the increase in consumer electronics
15 will be in developing countries, where economic
16 growth is fastest and ownership rates of gadgets is
17 the lowest.

18 (4) This proliferation in the use of devices will
19 jeopardize efforts to increase the energy security of
20 the United States and reduce the emission of green-
21 house gases.

22 (5) The cost to business is even higher. Power
23 consumed by the typical corporate data center is
24 growing by 20 percent per year. Existing tech-
25 nologies could slash gadgets' energy consumption by

1 more than 30 percent at no cost or by more than
2 50 percent at a small cost, meaning that total green-
3 house gas emissions from households' electronic
4 gadgets could be held stable at around 500,000,000
5 tons of carbon dioxide per year.

6 (6) Governmental policies and programs such
7 as Energy Star have the potential to be enhanced to
8 achieve even greater energy savings through clear
9 mandates and incentives and upgraded implementa-
10 tion.

11 **SEC. 3. DEFINITIONS.**

12 For purposes of this Act:

13 (1) ADMINISTRATOR.—The term “Adminis-
14 trator” means the Administrator of the Environ-
15 mental Protection Agency.

16 (2) CONSUMER ELECTRONICS.—The term “con-
17 sumer electronics” means electronic equipment in-
18 tended for everyday use, most often in entertain-
19 ment, communications, and office productivity.

20 (3) SECRETARY.—The term “Secretary” means
21 the Secretary of Energy.

22 (4) SMART ELECTRONICS.—The term “smart
23 electronics” means consumer electronics that include
24 measures to reduce energy use and increase energy
25 efficiency, such as the following:

1 (A) Power-factor correction.

2 (B) Stand-by power mode.

3 (C) Communication with smart grid and
4 in-home and networked energy monitoring
5 equipment.

6 (D) On-demand and variable processing
7 speed semiconductors.

8 (E) Off-peak operation and charging.

9 (F) Low power switchable modes.

10 (G) The ability to achieve greater effi-
11 ciency with multiple functions on semiconduc-
12 tors.

13 **SEC. 4. ASSESSMENT AND ANALYSIS.**

14 Within 1 year after the date of enactment of this Act,
15 the Secretary and the Administrator shall submit a report
16 to Congress that—

17 (1) assesses the potential for cost-effective inte-
18 gration of smart electronics technologies and capa-
19 bilities in all products that are reviewed for potential
20 designation as Energy Star products;

21 (2) assesses the growth of consumer electronics
22 utilization and the associated energy consumption;

23 (3) analyzes the potential energy savings and
24 electricity cost savings that could accrue through

1 specific Energy Star program focus on smart elec-
2 tronics; and

3 (4) analyzes and ranks the potential of cost-ef-
4 fective smart electronics technologies.

5 **SEC. 5. INCORPORATION OF SMART ELECTRONICS IN EN-**
6 **ERGY STAR PROGRAM.**

7 To the extent that it is consistent with the findings
8 of the report under section 4, the Secretary and the Ad-
9 ministrator shall develop a smart electronics emphasis as
10 part of the implementation of the Energy Star program.

11 **SEC. 6. ENERGY STAR SMART ELECTRONICS REGISTRY.**

12 (a) IN GENERAL.—To the extent that it is consistent
13 with the findings of the report under section 4, the Sec-
14 retary and the Administrator shall establish within the
15 Energy Star program a Smart Electronics Registry that
16 provides a voluntary mechanism for electronics manufac-
17 turers and sellers to register their smart electronics prod-
18 ucts. In operating the registry, the Secretary and the Ad-
19 ministrator shall—

20 (1) work with manufacturers to develop testing
21 and verification protocols to ensure that products
22 qualify as smart electronics; and

23 (2) work with sellers to develop qualification
24 criteria for smart electronics sales location labeling.

1 (b) STATE STANDARDS.—Nothing in this section
2 shall prohibit a State from enacting smart electronics
3 standards more stringent than protocols and criteria es-
4 tablished pursuant to this section.

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