

ASSEMBLY BILL

No. 2030

Introduced by Assembly Members Lieu and Saldana

February 15, 2008

An act to amend Section 25402 of the Public Resources Code, relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 2030, as introduced, Lieu. Energy: building standards.

The Warren-Alquist State Energy Resources Conservation and Development Act requires the State Energy Resources Conservation and Development Commission to adopt building design and construction standards, and energy and water conservation standards to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy, including energy associated with the use of water.

This bill would require the commission to adopt, in collaboration with specified parties, building design and construction standards, and energy and water conservation standards to require new residential constructions commenced on or after January 1, 2020, and new nonresidential constructions commenced on or after January 1, 2030, to be zero net energy buildings.

This bill would define the term “zero net energy building.”

This bill would also make a technical change by deleting an absolute statutory cross-reference.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

- 1 SECTION 1. The Legislature finds and declares all of the
2 following:
- 3 (a) Buildings account for 38 percent of the carbon dioxide
4 emissions in the United States, more than either the transportation
5 or industrial sectors.
 - 6 (b) Over the next 25 years, carbon dioxide emissions from
7 buildings are projected to grow faster than any other sector, with
8 emissions from commercial buildings projected to grow the fastest
9 at 1.8 percent per year through 2030.
 - 10 (c) Buildings consume 70 percent of the electricity load in the
11 United States.
 - 12 (d) Buildings have a lifespan of 50 to 100 years during which
13 they continually consume energy and produce carbon dioxide
14 emissions. If one-half of the new commercial buildings were built
15 to use 50 percent less energy, it would save over six million metric
16 tons of carbon dioxide annually for the life of the buildings, the
17 equivalent of taking more than one million cars off the road every
18 year.
 - 19 (e) The United States population and economy are projected to
20 grow significantly over the coming decades, increasing the need
21 for new buildings to meet this demand, approximately 15 million
22 new buildings are projected to be constructed by 2015.
 - 23 (f) Building green is one of the best strategies for meeting the
24 challenge of climate change because the technology to make
25 substantial reduction in energy and carbon dioxide emissions
26 already exists.
 - 27 (g) Modest investment in energy-saving and other climate
28 friendly technologies can yield buildings and communities that
29 are environmentally responsible, profitable, and healthier places
30 to live and work, and that contribute to reducing carbon dioxide
31 emissions.
- 32 SEC. 2. Section 25402 of the Public Resources Code is
33 amended to read:
- 34 25402. The commission shall, after one or more public
35 hearings, do all of the following, in order to reduce the wasteful,
36 uneconomic, inefficient, or unnecessary consumption of energy,
37 including the energy associated with the use of water:

1 (a) (1) Prescribe, by regulation, lighting, insulation climate
2 control system, and other building design and construction
3 standards that increase the efficiency in the use of energy and water
4 for new residential and new nonresidential buildings. The
5 commission shall periodically update the standards and adopt any
6 revision that, in its judgment, it deems necessary. Six months after
7 the commission certifies an energy conservation manual pursuant
8 to subdivision (c) of Section 25402.1, ~~no a city, county, city and~~
9 ~~county~~, or state agency shall *not* issue a permit for ~~any a~~ building
10 unless the building satisfies the standards prescribed by the
11 commission pursuant to this subdivision or subdivision (b) that
12 are in effect on the date an application for a building permit is
13 filed. Water efficiency standards adopted pursuant to this
14 subdivision shall be demonstrated by the commission to be
15 necessary to save energy.

16 (2) Prior to adopting a water efficiency standard for residential
17 buildings, the Department of Housing and Community
18 Development and the commission shall issue a joint finding
19 whether the standard (A) is equivalent or superior in performance,
20 safety, and for the protection of life, health, and general welfare
21 to standards in Title 24 of the California Code of Regulations and
22 (B) does not unreasonably or unnecessarily impact the ability of
23 Californians to purchase or rent affordable housing, as determined
24 by taking account of the overall benefit derived from water
25 efficiency standards. Nothing in this subdivision in any way
26 reduces the authority of the Department of Housing and
27 Community Development to adopt standards and regulations
28 pursuant to Part 1.5 (commencing with Section 17910) of Division
29 13 of the Health and Safety Code.

30 (3) Water efficiency standards and water conservation design
31 standards adopted pursuant to this subdivision and subdivision (b)
32 shall be consistent with the legislative findings of this division to
33 ensure and maintain a reliable supply of electrical energy and be
34 equivalent to or superior to the performance, safety, and protection
35 of life, health, and general welfare standards contained in Title 24
36 of the California Code of Regulations. The commission shall
37 consult with the members of the coordinating council as established
38 in Section 18926 of the Health and Safety Code in the development
39 of these standards.

1 (b) (1) Prescribe, by regulation, energy and water conservation
2 design standards for new residential and new nonresidential
3 buildings. The standards shall be performance standards and shall
4 be promulgated in terms of energy consumption per gross square
5 foot of floorspace, but may also include devices, systems, and
6 techniques required to conserve energy and water. The commission
7 shall periodically review the standards and adopt any revision that,
8 in its judgment, it deems necessary. A building that satisfies the
9 standards prescribed pursuant to this subdivision need not comply
10 with the standards prescribed pursuant to subdivision (a). Water
11 conservation design standards adopted pursuant to this subdivision
12 shall be demonstrated by the commission to be necessary to save
13 energy. Prior to adopting a water conservation design standard for
14 residential buildings, the Department of Housing and Community
15 Development and the commission shall issue a joint finding
16 whether the standard (A) is equivalent or superior in performance,
17 safety, and for the protection of life, health, and general welfare
18 to standards in the California Building Standards Code and (B)
19 does not unreasonably or unnecessarily impact the ability of
20 Californians to purchase or rent affordable housing, as determined
21 by taking account of the overall benefit derived from the water
22 conservation design standards. Nothing in this subdivision in any
23 way reduces the authority of the Department of Housing and
24 Community Development to adopt standards and regulations
25 pursuant to Part 1.5 (commencing with Section 17910) of Division
26 13 of the Health and Safety Code.

27 (2) In order to increase public participation and improve the
28 efficacy of the standards adopted pursuant to subdivisions (a) and
29 (b), the commission shall, prior to publication of the notice of
30 proposed action required by Section 18935 of the Health and Safety
31 Code, involve parties who would be subject to the proposed
32 regulations in public meetings regarding the proposed regulations.
33 All potential affected parties shall be provided advance notice of
34 these meetings and given an opportunity to provide written or oral
35 comments. During these public meetings, the commission shall
36 receive and take into consideration input from all parties
37 concerning the parties' design recommendations, cost
38 considerations, and other factors that would affect consumers and
39 California businesses of the proposed standard. The commission

1 shall take into consideration prior to the start of the notice of
2 proposed action any input provided during these public meetings.

3 (3) The standards adopted or revised pursuant to subdivisions
4 (a) and (b) shall be cost-effective when taken in their entirety and
5 when amortized over the economic life of the structure compared
6 with historic practice. When determining cost-effectiveness, the
7 commission shall consider the value of the water or energy saved,
8 impact on product efficacy for the consumer, and the life cycle
9 cost of complying with the standard. The commission shall consider
10 other relevant factors, as required by Sections 18930 and 18935
11 of the Health and Safety Code, including, but not limited to, the
12 impact on housing costs, the total statewide costs and benefits of
13 the standard over its lifetime, economic impact on California
14 businesses, and alternative approaches and their associated costs.

15 (c) (1) Prescribe, by regulation, standards for minimum levels
16 of operating efficiency, based on a reasonable use pattern, and
17 may prescribe other cost-effective measures, including incentive
18 programs, fleet averaging, energy and water consumption labeling
19 not preempted by federal labeling law, and consumer education
20 programs, to promote the use of energy and water efficient
21 appliances whose use, as determined by the commission, requires
22 a significant amount of energy or water on a statewide basis. The
23 minimum levels of operating efficiency shall be based on feasible
24 and attainable efficiencies or feasible improved efficiencies that
25 will reduce the energy or water consumption growth rates. The
26 standards shall become effective no sooner than one year after the
27 date of adoption or revision. ~~No~~ A new appliance manufactured
28 on or after the effective date of the standards ~~may~~ *shall not* be sold
29 or offered for sale in the state, unless it is certified by the
30 manufacturer thereof to be in compliance with the standards. The
31 standards shall be drawn so that they do not result in any added
32 total costs for consumers over the designed life of the appliances
33 concerned.

34 In order to increase public participation and improve the efficacy
35 of the standards adopted pursuant to this subdivision, the
36 commission shall, prior to publication of the notice of proposed
37 action required by Section 18935 of the Health and Safety Code,
38 involve parties who would be subject to the proposed regulations
39 in public meetings regarding the proposed regulations. All potential
40 affected parties shall be provided advance notice of these meetings

1 and given an opportunity to provide written or oral comments.
 2 During these public meetings, the commission shall receive and
 3 take into consideration input from all parties concerning the parties'
 4 design recommendations, cost considerations, and other factors
 5 that would affect consumers and California businesses of the
 6 proposed standard. The commission shall take into consideration
 7 prior to the start of the notice of proposed action ~~any~~ input provided
 8 during these public meetings.

9 The standards adopted or revised pursuant to this subdivision
 10 shall not result in ~~any~~ added total costs for consumers over the
 11 designed life of the appliances concerned. When determining
 12 cost-effectiveness, the commission shall consider the value of the
 13 water or energy saved, impact on product efficacy for the
 14 consumer, and the life cycle cost to the consumer of complying
 15 with the standard. The commission shall consider other relevant
 16 factors, as required by Sections 11346.5 and 11357 of the
 17 Government Code, including, but not limited to, the impact on
 18 housing costs, the total statewide costs and benefits of the standard
 19 over its lifetime, economic impact on California businesses, and
 20 alternative approaches and their associated costs.

21 (2) ~~No~~ A new appliance, except for any plumbing fitting,
 22 regulated under paragraph (1), that is manufactured on or after
 23 July 1, 1984, ~~may~~ shall not be sold, or offered for sale, in the state,
 24 unless the date of the manufacture is permanently displayed in an
 25 accessible place on that appliance.

26 (3) During the period of five years after the commission has
 27 adopted a standard for a particular appliance under paragraph (1),
 28 ~~no~~ an increase or decrease in the minimum level of operating
 29 efficiency required by the standard for that appliance shall *not*
 30 become effective, unless the commission adopts other cost-effective
 31 measures for that appliance.

32 (4) Neither the commission nor any other state agency shall
 33 take ~~any~~ action to decrease ~~any~~ a standard adopted under this
 34 subdivision on or before June 30, 1985, prescribing minimum
 35 levels of operating efficiency or other energy conservation
 36 measures for ~~any~~ an appliance, unless the commission finds by a
 37 four-fifths vote that a decrease is of benefit to ratepayers, and that
 38 there is significant evidence of changed circumstances. Before
 39 January 1, 1986, the commission shall not take ~~any~~ action to
 40 increase a standard prescribing minimum levels of operating

1 efficiency for ~~any~~ *an* appliance or adopt a new standard under
2 paragraph (1). Before January 1, 1986, ~~any~~ *an* appliance
3 manufacturer doing business in this state shall provide directly, or
4 through an appropriate trade or industry association, information,
5 as specified by the commission after consultation with
6 manufacturers doing business in the state and appropriate trade or
7 industry associations on sales of appliances so that the commission
8 may study the effects of regulations on those sales. These
9 informational requirements shall remain in effect until the
10 information is received. The trade or industry association may
11 submit sales information in an aggregated form in a manner that
12 allows the commission to carry out the purposes of the study. The
13 commission shall treat ~~any~~ sales information of an individual
14 manufacturer as confidential and that information shall not be a
15 public record. The commission shall not request ~~any~~ information
16 that cannot be reasonably produced in the exercise of due diligence
17 by the manufacturer. At least one year prior to the adoption or
18 amendment of a standard for an appliance, the commission shall
19 notify the Legislature of its intent, and the justification to adopt
20 or amend a standard for the appliance. Notwithstanding paragraph
21 (3) and this paragraph, the commission may do any of the
22 following:

23 (A) Increase the minimum level of operating efficiency in an
24 existing standard up to the level of the National Voluntary
25 Consensus Standards 90, adopted by the American Society of
26 Heating, Refrigeration, and Air Conditioning Engineers or, for
27 appliances not covered by that standard, up to the level established
28 in a similar nationwide consensus standard.

29 (B) Change the measure or rating of efficiency of any standard,
30 if the minimum level of operating efficiency remains substantially
31 the same.

32 (C) Adjust the minimum level of operating efficiency in an
33 existing standard in order to reflect changes in test procedures that
34 the standards require manufacturers to use in certifying compliance,
35 if the minimum level of operating efficiency remains substantially
36 the same.

37 (D) Readopt a standard preempted, enjoined, or otherwise found
38 legally defective by an administrative agency or a lower court, if
39 final legal action determines that the standard is valid and if the

1 standard that is readopted is not more stringent than the standard
2 that was found to be defective or preempted.

3 (E) Adopt or amend any existing or new standard at any level
4 of operating efficiency, if the Governor has declared an energy
5 emergency as described in Section 8558 of the Government Code.

6 (5) Notwithstanding paragraph (4), the commission may adopt
7 standards pursuant to Commission Order No. 84-0111-1, on or
8 before June 30, 1985.

9 (d) Recommend minimum standards of efficiency for the
10 operation of ~~any~~ a new facility at a particular site that are
11 technically and economically feasible. ~~No~~ A site and related facility
12 shall *not* be certified pursuant to Chapter 6 (commencing with
13 Section 25500), unless the applicant certifies that standards
14 recommended by the commission have been considered, which
15 certification shall include a statement specifying the extent to
16 which conformance with the recommended standards will be
17 achieved.

18 ~~Whenever this section and Chapter 11.5 (commencing with~~
19 ~~Section 19878) of Part 3 of Division 13 of the Health and Safety~~
20 ~~Code are in conflict, the commission shall be governed by that~~
21 ~~chapter of the Health and Safety Code to the extent of the conflict.~~

22 (e) The commission shall do all of the following:

23 (1) Not later than January 1, 2004, amend any regulations in
24 effect on January 1, 2003, pertaining to the energy efficiency
25 standards for residential clothes washers to require that residential
26 clothes washers manufactured on or after January 1, 2007, be at
27 least as water efficient as commercial clothes washers.

28 (2) Not later than April 1, 2004, petition the federal Department
29 of Energy for an exemption from any relevant federal regulations
30 governing energy efficiency standards that are applicable to
31 residential clothes washers.

32 (3) Not later than January 1, 2005, report to the Legislature on
33 its progress with respect to the requirements of paragraphs (1) and
34 (2).

35 (f) (1) *The standards adopted by the commission pursuant to*
36 *subdivision (a) or (b) shall require a new residential construction*
37 *commenced on or after January 1, 2020, and a new nonresidential*
38 *construction commenced on or after January 1, 2030, to be a zero*
39 *net energy building.*

1 (2) *For the purposes of this subdivision, the term “zero net*
2 *energy building” means a building that implements a combination*
3 *of building energy efficiency design features and onsite clean*
4 *distributed generation that result in no net purchases from the*
5 *electricity or gas grid.*

6 (3) *In developing the standards pursuant this subdivision, the*
7 *commission shall collaborate with local planning and building*
8 *officials, consumer groups, representatives of building industry*
9 *associations, developers, and other interested parties.*

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