## **BILL ANALYSIS**

Senate Research Center 82R7530 JTS-F S.B. 1031 By: Carona Natural Resources 4/15/2011 As Filed

## AUTHOR'S / SPONSOR'S STATEMENT OF INTENT

Currently, the International Residential Code (IRC) and the International Energy Conservation Code (IECC) are both used as state standards, and though equal when adopted, the IECC is now more stringent. Additionally the implementation and adoption of building codes can be slow and outdated. This bill would create a uniform state energy building code standard and streamline implementation, and place new requirements on the construction or renovation of state and higher education building projects.

S.B. 1031 would require that new construction or renovation of certain state and higher education buildings be designed to achieve high performance building standards developed by the Texas Facilities Commission and the school's board of regents. The bill would also eliminate references to the IRC, leaving the IECC as the state energy code for minimum requirements of all residential, commercial, and industrial construction. The bill would also require the Energy Systems Laboratory at Texas A&M University (ESL) to conduct analysis and development of model building code modification packages that could be adopted by local jurisdictions to increase efficiency. ESL would also be required to provide technical assistance, predict any emissions reductions gained by adopting the code and local modifications, and report the results to the Energy Reliability Council of Texas and the United State Environmental Protection Agency for inclusion in the state implementation plan.

S.B. 1031 would also require the State Energy Conservation Office to conduct a feasibility study on a long-term net-zero energy goal for all new residential construction by 2030, and a goal that new homes be solar-ready and fit for electric vehicles by 2015.

As proposed, S.B. 1031 amends current law relating to design, construction, renovation, and energy efficiency standards for buildings.

[**Note:** While the statutory reference in this bill is to the Texas Natural Resource Conservation Commission (TNRCC), the following amendments affect the Texas Commission on Environmental Quality, as the successor agency to TNRCC.]

## **RULEMAKING AUTHORITY**

Rulemaking authority is expressly granted to the State Energy Conservation Office (SECO) in SECTION 2 (Section 2166.409, Government Code) of this bill.

Rulemaking authority previously granted to SECO is modified in SECTION 4 (Section 388.003, Health and Safety Code) of this bill.

Rulemaking authority previously granted to SECO is rescinded in SECTION 8 (Section 388.003, Health and Safety Code) of this bill.

## SECTION BY SECTION ANALYSIS

SECTION 1. Amends Subchapter B, Chapter 55, Education Code, by adding Section 55.115, as follows:

Sec. 55.115. HIGH-PERFORMANCE, SUSTAINABLE DESIGN, CONSTRUCTION, AND RENOVATION STANDARDS FOR CERTAIN FACILITIES. (a) Provides that this section applies to the construction of an institution of higher education building, structure, or other facility, or the renovation of a building, structure, or other facility the cost of which is more than 50 percent of the value of the building, structure, or other facility, any part of the construction or renovation of which is financed by revenue bonds issued under this subchapter.

(b) Requires that a building, structure, or other facility to which this section applies be designed and constructed or renovated so that the building, structure, or other facility complies with high-performance building standards, approved by the board of regents of the institution, that provide minimum requirements for energy use, natural resources use, and indoor air quality. Requires a board of regents, in approving high-performance building standards, to consider the standards approved by the Texas Facilities Commission (TFC) under Section 2166.409, Government Code, and authorizes the board of regents to solicit and consider recommendations from the advisory committee appointed under that section.

(c) Requires that in addition to meeting the requirements of Subsection (b), a building, structure, or other facility to which this section applies be designed and constructed or renovated to comply with the applicable energy and water conservation design standards established by the State Energy Conservation Office (SECO) under Section 447.004 (Design Standards), Government Code.

SECTION 2. Amends Subchapter I, Chapter 2166, Government Code, by adding Section 2166.409, as follows:

Sec. 2166.409. HIGH-PERFORMANCE, SUSTAINABLE DESIGN, CONSTRUCTION, AND RENOVATION STANDARDS FOR STATE BUILDINGS. (a) Provides that this section applies to the construction of a state building, or the renovation of a state building the cost of which is more than 50 percent of the value of the building, including a building for education, assembly, or office occupancy under the charge and control of the Texas Department of Transportation, the Parks and Wildlife Department, the Texas Department of Housing and Community Affairs, the Texas State Affordable Housing Corporation, or the Veterans' Land Board that is otherwise exempt from this chapter under Section 2166.003 (Exceptions). Provides that this section does not apply to a facility under the charge and control of the Texas Department of Texas Department of Criminal Justice or the Texas Youth Commission.

(b) Requires that a building to which this section applies be designed and constructed or renovated so that the building achieves certification under a high-performance building standard approved by TFC that:

(1) is developed and revised through a nationally recognized consensusbased process or by a municipally owned utility in this state;

(2) provides minimum requirements for energy use, natural resources use, and indoor air quality;

(3) requires substantiating documentation for certification;

(4) requires on-site, third-party, post-construction review and verification for certification, or a third-party, post-construction, rigorous review of documentation and verification for certification; and

(5) encourages the use of materials or products manufactured or produced in this state.

(c) Requires TFC to appoint an advisory committee to advise TFC in determining which high-performance building standards to approve for use under Subsection

(b). Requires the advisory committee, at least once each year, to review available high-performance building standards and make recommendations to TFC. Provides that the advisory committee consists of:

(1) the director of facilities construction and space management appointed under Section 2152.104 (Associate Deputy Directors; Divisions; Division Directors), who serves as the presiding officer of the committee;

(2) six individuals with experience and expertise in high-performance buildings or related products, including experience and expertise in energy efficiency, water efficiency, or low-impact site development, with one individual selected from each of the following list of nominees. Sets forth a list of potential candidates for the committee;

(3) one individual representing appointed by the comptroller of public accounts who represents SECO;

(4) one individual representing a state agency that has a substantial ongoing construction program; and

(5) one individual representing the interests of historically underutilized businesses.

(d) Requires that a building to which this section applies, in addition to meeting the requirements of Subsection (b), be designed and constructed or renovated so that the building:

(1) meets the American Society of Heating, Refrigerating, and Air-Conditioning Engineers energy standards in effect on September 1, 2011, or the International Energy Conservation Code in effect on September 1, 2011, or an updated version of those standards or that code adopted by SECO under Subsection (e), if applicable; and

(2) achieves a 15 percent reduction in water use when compared to water use based on plumbing fixtures selected in accordance with the Energy Policy Act of 1992 (Pub. L. No. 102-486).

(e) Requires SECO, if SECO determines, based on written recommendations from the Energy Systems Laboratory at the Texas Engineer Experiment Station of the Texas A&M University System (laboratory), that the latest published edition of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers energy standards or the International Energy Conservation Code will result in energy efficiency and air quality that is equivalent to or better than the energy efficiency and air quality achievable under the editions described by Subsection (d)(1), by rule to adopt the equivalent or more stringent editions and substitute them for the standards or code described by Section (d)(1). Requires that the rule, if adopted, establish an effective date for the new standards or code but not earlier than nine months after the date of adoption. Requires the laboratory to makes its recommendations not later than six months after the date of publication of the new editions.

(f) Requires that a contract between TFC and a private design professional relating to services in connection with the construction or renovation of a building to which this section applies provide that, for billing purposes, any service provided by the private design professional that is necessary to satisfy the requirements of Subsection (b) or (d) is considered an additional service rather than a basic services.

SECTION 3. Amends Section 388.002(4), Health and Safety Code, to redefine "code certified inspector."

SECTION 4. Amends Section 388.003, Health and Safety Code, by amending Subsections (a), (b-2), (c)-(f), and adding Subsections (a-1) and (c-1), as follows:

(a) Requires SECO, to achieve energy conservation in the construction of, renovations to, and additions to all residential, commercial, and industrial buildings in this state, in consultation with the laboratory, to adopt the International Energy Conservation Code, as published at the end of each three-year code development cycle, as the minimum requirements for those buildings, rather than provides that to achieve energy conservation in single-family residential construction, the energy efficiency chapter of the International Residential Code, as it existed on May 1, 2001, is adopted as the energy code in this state for single-family residential construction.

(a-1) Requires SECO to set an effective date for an energy code adopted under Subsection (a) that is not later than nine months after publication of a new edition of the code at the end of each three-year code development cycle of the International Energy Conservation Code.

(b-2) Requires SECO by rule to establish a procedure for persons who have an interest in the adoption of energy codes, rather than energy codes under Subsection (b-1), to have an opportunity to comment on the codes under consideration. Requires SECO to consider persons who have an interest in adoption of energy codes to include certain professionals and the laboratory. Makes nonsubstantive changes.

(c) Requires a municipality to establish procedures:

(1) for the administration and enforcement of the code, rather than codes;

(2) to ensure that code-certified inspectors perform inspections and enforce the code in the inspectors' jurisdictions; and

(3) to track and report to SECO on implementation of the code.

(c-1) Requires that a report under Subsection (c)(3) include a description of the measures taken to enforce the most recently adopted version of the International Energy Conservation Code and an assessment of the rate of compliance.

(d) Authorizes a municipality or county to establish procedures to adopt local amendments to the International Energy Conservation Code, rather than to the International Energy Conversation Code and the energy efficiency chapter of the International Residential Code.

(e) Prohibits local amendments from resulting in less stringent energy efficiency requirements in nonattainment areas and in affected counties than the requirements of the International Energy Conservation Code. Requires that local amendments comply with the National Appliance Energy Conservation Act of 1987 (42 U.S.C. Sections 6291-6309), as amended. Requires the laboratory, at the request of a municipality or county, to determine the relative impact of proposed local amendments to an energy code, including whether proposed amendments are substantially equal to or less stringent than the unamended code. Authorizes the laboratory, for the purpose of establishing uniform requirements throughout a region, and on request of a council of governments, a county, or a municipality, to recommend a climatically appropriate modification or a climate zone designation for a county or group of counties that is different from the climate zone designation in the unamended code. Requires the laboratory to:

(1) provide to counties and municipalities suggestions for modifications to the code to increase the county's or municipality's energy efficiency by 15 percent above the efficiency achieved under the unamended code;

(2) provide technical assistance to a local government considering whether to adopt the suggested modifications described by Subdivision (1);

(3) report its findings to the council, county, or municipality, including an estimate based on suggested local amendments of any energy savings potential above the unamended code, and any resulting reduction in the emission of air pollutants, rather than report its findings to the council, county, or municipality, including an estimate of any energy savings potential above the base code from local amendments;

(4) annually submit a report to the Texas Natural Resource Conservation Commission (TNRCC):

(A) identifying the municipalities and counties whose codes are more stringent than the unamended code, and whose codes are equally stringent or less stringent than the unamended code; and

(B) quantifying energy savings and emissions reductions from this program; and

(5) report the results under Subdivision (4)(B) to TNRCC and the Electric Reliability Council of Texas, and to the United States Environmental Protection Agency for inclusion in the state implementation plan for pollution reduction.

Makes conforming and nonsubstantive changes.

(f) Requires each municipality, and each county that has established procedures under Subsection (d), to periodically review and consider revisions made by the International Code Council to the International Energy Conservation Code, rather than to the International Energy Conservation Code and the energy efficiency chapter of the International Residential Code adopted after May 1, 2001.

SECTION 5. Amends Section 388.004(a), Health and Safety Code, to provide that for construction outside of the local jurisdiction of a municipality only certain buildings will be considered to be in compliance, including a building with inspections from private code-certified inspectors using the International Energy Conservation Code, rather than a building with inspections from a private code-certified inspectors using the energy efficiency chapter of the International Residential Code or International Energy Conservation Code.

SECTION 6. Amends Sections 388.007(a) and (c), Health and Safety Code, to make conforming changes.

SECTION 7. Amends Section 388.008(a), Health and Safety Code, to make a conforming change.

SECTION 8. Repealers: Sections 388.002(6) (defining "International Residential Code"), 388.003(b) (relating to the adoption of the International Energy Conservation Code), 388.003(b-3) (relating to requiring the laboratory to consider the comments under Subsection (b-2)), Health and Safety Code.

Section 388.003(b-1) (relating to authorizing SECO to adopt more stringent editions of the International Energy Conservation Code), as added by Chapters 262 (S.B. 12) and 939 (H.B. 3693), Acts of the 80th Legislature, Regular Session, 2007.

SECTION 9. (a) Requires SECO to conduct a study on the feasibility of newly constructed residential buildings being designed to consume no more energy on a net annual basis that can be produced on-site from renewable energy sources by January 1, 2030; and all homes newly constructed in this state being designed to be ready for the installation of solar electric generation and to support electric vehicles by January 1, 2015.

(b) Requires SECO, not later than January 1, 2013, to make recommendations to the legislature on adopting standards to reach the goals described by Subsection (a) of this section.

SECTION 10. Provides that Section 55.115, Education Code, and Section 2166.409, Government Code, as added by this Act, apply only to an institution of higher education building, structure, or other facility or a state building for which the contract for design services is entered into on or after September 1, 2012.

SECTION 11. Effective date: September 1, 2011.