SENATE BILL REPORT
SB 5293

As Reported by Senate Committee On:
Environment, Energy & Technology, February 7, 2019
Ways & Means, February 28, 2019

Title: An act relating to energy efficiency.

Brief Description: Concerning energy efficiency.

Sponsors: Senators Carlyle, Nguyen, Palumbo, Das, Billig, Kuderer, Keiser, McCoy, Hunt, Liias, Frockt, Pedersen and Wellman; by request of Governor Inslee.

Brief History:
Committee Activity: Environment, Energy & Technology: 1/23/19, 2/07/19 [DPS-WM, DNP, w/oRec].
Ways & Means: 2/18/19, 2/28/19 [DP2S, DNP, w/oRec].

Brief Summary of Second Substitute Bill

- Establishes energy performance standards for larger existing commercial buildings.
- Provides financial incentives and technical assistance for building owners taking early action.
- Expands access to commercial building energy consumption data to assist with monitoring progress toward meeting energy performance standards.
- Authorizes local governments to voluntarily adopt energy codes for residential structures beyond the minimum state energy code.
- Directs the Building Code Council to require electric vehicle charging capability at all new buildings.
- Requires gas companies to set natural gas conservation targets and a voluntary renewable natural gas tariff to customers.
- Allows a natural gas company to propose an renewable natural gas program to procure or produce renewable natural gas for a portion of its natural gas sold to its customers, the costs of which may not exceed 5 percent of retail rates.

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.

SENATE COMMITTEE ON ENVIRONMENT, ENERGY & TECHNOLOGY

Majority Report: That Substitute Senate Bill No. 5293 be substituted therefor, and the substitute bill do pass and be referred to Committee on Ways & Means.

Signed by Senators Carlyle, Chair; Palumbo, Vice Chair; Billig, Das, Liias, McCoy, Nguyen and Wellman.

Minority Report: Do not pass.

Signed by Senators Ericksen, Ranking Member; Fortunato, Assistant Ranking Member, Environment; Brown and Short.

Minority Report: That it be referred without recommendation.

Signed by Senator Rivers.

Staff: Kimberly Cushing (786-7421)

SENATE COMMITTEE ON WAYS & MEANS

Majority Report: That Second Substitute Senate Bill No. 5293 be substituted therefor, and the second substitute bill do pass.

Signed by Senators Rolfes, Chair; Frockt, Vice Chair, Operating, Capital Lead; Billig, Carlyle, Conway, Darneille, Hasegawa, Hunt, Keiser, Liias, Palumbo, Pedersen and Van De Wege.

Minority Report: Do not pass.

Signed by Senators Braun, Ranking Member; Brown, Assistant Ranking Member, Operating; Honeyford, Assistant Ranking Member, Capital; Bailey, Becker, Schoesler, Wagoner, Warnick and Wilson, L..

Minority Report: That it be referred without recommendation.

Signed by Senators Mullet, Capital Budget Cabinet; Rivers.

Staff: Jeffrey Mitchell (786-7438)

Background: State Building Code. The State Building Code Council (Council) was established in 1974 to provide analysis and advice to the Legislature and the Office of the Governor on State Building Code (Code) issues. The Council establishes the minimum building, mechanical, fire, plumbing, and energy code requirements in Washington by reviewing, developing, and adopting the Code. The Code sets forth requirements through the provision of building codes to promote the health, safety, and welfare of the occupants or users of buildings and structures throughout the state. The Council must adopt rules for electric vehicle (EV) infrastructure requirements. The Council reviews, updates, and adopts a new Code every three years.

State Energy Code. The Code also includes the Washington State Energy Code (Energy Code), which is a state-written, state-specific code. The Energy Code provides a minimum level of energy efficiency, but allows flexibility in building design, construction, and heating equipment efficiencies. The Council must adopt state energy codes that require buildings

constructed from 2013 through 2031 to move incrementally toward a 70 percent reduction in energy use by 2031. The Energy Code must consider regional climatic conditions. The Council may amend the Energy Code by rule if the amendments increase energy efficiency in the affected buildings. Substantial amendments to the Energy Code cannot be adopted more frequently than every three years.

Energy Benchmarking Information. The United States Environmental Protection Agency's Energy Star portfolio manager provides energy management tools and resources for building and plant owners to track and assess energy and water consumption, performance, and cost information. The program uses a national energy performance rating system as a benchmark to assess a building's efficiency relative to similar buildings nationwide.

In 2009, the Legislature required electric utilities with more than 25,000 customers to maintain energy consumption data for all nonresidential and qualifying public agency buildings to which they provide service. Upon written authorization of a building owner or operator, a qualifying utility must upload all of the energy consumption data to the Energy Star portfolio manager in a form that does not disclose personally identifying information. The property owner or operator of a nonresidential building must disclose energy performance data to prospective buyers, lessees, or lenders.

Utilities and Transportation Commission. The Utilities and Transportation Commission (UTC) regulates the rates, services, and practices of privately-owned utilities and transportation companies. Among the companies regulated by the UTC are electrical and natural gas companies. The UTC must ensure that rates charged by these companies are fair, just, and reasonable.

Initiative 937. Initiative 937, also called the Energy Independence Act, requires electric utilities with 25,000 or more customers to meet targets for energy conservation and for using eligible renewable resources.

Summary of Bill (Second Substitute): State Energy Performance Standard. By November 1, 2020, the Department of Commerce (Commerce) must establish a state energy performance standard (energy standard) for covered commercial buildings by rule. A commercial building is a nonresidential, hotel, motel or dormitory that exceeds 50,000 square feet, excluding the parking garage area.

Commerce must seek to maximize reductions of greenhouse gas (GHG) emissions from the building sector when developing the energy standard. The energy standard must include:

- energy use intensity (EUI) targets by building type—EUI is a measurement that normalizes a building's site energy use relative to its size; and
- methods of conditional compliance that include an energy management plan, operations and maintenance program, energy efficiency audits, and investment in energy efficiency measures designed to meet the targets.

To establish the energy standards, Commerce must:

- use specified standards as the model;
- develop EUI targets that are no greater than the average energy use intensity for commercial buildings;

- adopt a conditional compliance method, which is a temporary compliance method to demonstrate the owner has implemented required energy use reduction strategies, but has not demonstrated full compliance with the EUI target;
- create a database of commercial buildings and owners required to comply with the energy standard and provide owners with notification of compliance requirements by July 1, 2021;
- provide a customer support program to building owners;
- update the energy standard by July 1, 2029, and every five years thereafter; and
- adopt rules as necessary to implement the energy standard, which may include reporting, enforcement, and a mechanism for appealing any administrative penalties.

The building owner of a commercial building must report to Commerce its compliance with the energy standard according to the following reporting schedule:

- for a building with more than 220,000 gross square feet, by June 1, 2026;
- for a building with more than 90,000 and less than 221,000 gross square feet, by June 1, 2027; and
- for a building with more than 50,000 and less than 91,000 gross square feet, by June 1, 2028.

The building owner must continue to report every five years, and submit documentation to demonstrate that:

- the weather normalized energy use intensity of the commercial building is less than or equal to the EUI target;
- the commercial building has received conditional compliance from Commerce; or
- the building is exempt from the energy standard.

Commercial buildings may be exempt from the energy standard if the building meets specific occupancy criteria; the primary use is manufacturing or industrial purposes; is an agricultural structure; or meets a specific condition of financial hardship. Additionally, no individual energy efficiency requirement needs to be met that would compromise the historical integrity of a building listed in local, state, or national registries or laws.

Commerce must annually report to the Legislature regarding implementation of the energy efficiency measures established in the bill beginning January 15, 2021, until 2028. The report must include information regarding the adoption of the ANSI/ASHRAE/IES standards, the level of incentives provided, and any other significant issues.

Commerce may issue a notice of violation to a building owner for noncompliance. A determination of noncompliance may be made for failure to submit a compliance report as required, meet an EUI target, receive conditional compliance approval, provide accurate reporting, or provide a valid exemption certificate.

Commerce may impose an administrative penalty on a building owner for failing to comply with the energy standard. The penalty may not exceed $5,000, plus a daily amount equal to $1 per year per square foot of floor area for a continuing violation. Commerce may increase penalties to adjust for inflation.

Administrative penalties collected must be deposited into the existing Low-Income Weatherization and Structural Rehabilitation Assistance Account.

Early Adoption Incentive Program. Commerce must develop a State Energy Performance Standard Early Adoption Incentive Program (incentive program). Commerce may adopt rules to implement the incentive program, and must:

- adopt application and reporting requirements for the incentive program;
- develop professional qualifications for people who will be completing the required building energy reporting;
- authorize the utilities that will administer the incentive payments to the building owner;
- review each application and determine eligibility and whether funds are available;
- establish requirements for the verification of energy consumption by the building owner and participating utility;
- provide an administrative process for building owners to appeal an incentive eligibility or amount; and
- report biennially to the Legislature the results of the incentive program beginning September 30, 2025.

An eligible building owner may receive an incentive payment if the following requirements are met:

- the building is a commercial building subject to the energy standard or a multifamily residential building exceeding 50,000 square feet, excluding the parking garage;
- the building's baseline energy use intensity exceeds its EUI target by at least 15 EUI units;
- at least one utility providing or delivering energy to the building is participating in the incentive program; and
- the building owner complies with any requirements set by Commerce.

An eligible building owner may submit an application to Commerce according to the following schedule:

- for a building with more than 220,000 gross square feet, July 1, 2021 to June 1, 2025;
- for a building with more than 90,000 and less than 221,000 gross square feet, July 1, 2021 to June 1, 2026; and
- for a building with more than 50,000 and less than 91,000 gross square feet, July 1, 2021 to June 1, 2027.

An incentive is equal to $0.83 per square foot. Commerce may not issue certification for an incentive program if it would result in total payments exceeding $75 million.

A gas or electric utility that serves more than 250,000 Washington customers must administer incentive payments for the incentive program. Any other gas, electric, or thermal energy utility may voluntarily participate by providing notice to Commerce.

An electric or gas utility is allowed a credit against the public utility tax in an amount equal to:

- incentive payments made in any calendar year under the incentive program; and
- up to 8 percent of the incentive payment for documented administrative costs.

Credit earned in one calendar year may not be carried or backward, but may be carried forward two years.

A utility's participation in the incentive program does not relieve the utility of any existing obligation to provide customer energy efficiency programs or incentives.

Energy Consumption Data Disclosure. Within 60 days of receiving a request and authorization of a building owner, the utility must provide the building owner with monthly energy consumption data to benchmark the specified building. An electric or gas utility with less than 25,000 customers must either (1) offer the upload service to the Energy Star portfolio manager or (2) provide customers who are building owners of covered commercial buildings with consumption data in an electronic document formatted for direct upload of the Energy Star portfolio manager.

For any covered commercial building with three or more tenants, a utility must provide to a building owner upon request the aggregated monthly energy consumption data without requiring prior consent from tenants. Energy consumption data provided must not contain personally identifiable information or customer-specific billing information about tenants.

Natural Gas and Renewable Natural Gas. Each gas company must establish an acquisition target for conservation measures every two years that will result in the acquisition of all resources identified as available and cost effective. The cost-effectiveness analysis must include the cost of the green house gas (GHG) emissions set by the Interagency Working Group. The targets must be based on a conservation potential assessment prepared by an independent third party. Conservation targets must be approved by the UTC and the initial target must take effect by 2022.

The cost of GHG emissions resulting from the use of natural gas, including the effect of emissions occurring in the gathering, transmission, and distribution of natural gas, is equal to the cost per metric ton of carbon dioxide emissions, using the 2.5 percent discount rate developed by the Interagency Working Group on Social Cost of GHGs of the United States government.

A natural gas company is authorized to propose a RNG program to procure or produce RNG for a portion of its natural gas sold to its customers, the costs of which may not exceed 5 percent of retail rates. The environmental attributes of RNG used to comply with this program must be retired, and the UTC must approve procedures for their banking and transfer. The UTC may approve pilot programs for procurement of RNG.

A natural gas company must offer a voluntary RNG tariff to customers to replace any portion of the natural gas that would otherwise be provided. The tariff may provide reasonable limits on participation based on the availability of RNG and may use environmental attributes of RNG combined with natural gas.

The UTC must monitor the GHG emissions resulting from natural gas and RNG gas delivered to its customers relative to the company's proportionate share of the state's GHG emissions reduction goal.

The UTC must report to the Governor on whether the gas companies are on track, by January 1, 2020, and every five years thereafter.

State Energy Code. The Energy Code for residential buildings remains the minimum residential energy code for all municipalities in Washington. However, a city, town, or county may adopt additional residential energy code requirements developed by the Council. By December 1, 2019, the Council must adopt the following two optional efficiency appendices providing energy code provisions that will reduce energy use by an additional:

- 8 to 10 percent compared to the minimum code; and
- 16 to 20 percent compared to the minimum code.

The Council must amend the optional appendices whenever it amends the minimum code requirement.

The Council may amend the energy code for new nonresidential buildings provided that any new measures, standards, or requirements adopted must be developed to yield the lowest overall cost to the building owner and occupant while meeting the statutory goal of moving incrementally toward a 70 percent reduction in energy use by 2031.

Electric Vehicle Charging Infrastructure. The Council's existing rules for EV infrastructure must require EV charging capability at all new buildings that provide on-site parking. Where parking is provided, either one parking space or 10 percent of parking spaces, whichever is greater, must be provided with wiring or raceway to accommodate specified EV charging. Electrical rooms serving buildings with on-site parking must be sized to accommodate the potential for electrical equipment and distribution required to serve a minimum of 50 percent of total parking spaces with EV charging infrastructure. For accessible parking spaces, either one parking space or 10 percent of parking spaces, whichever is greater, must be provided with EV charging infrastructure.

For buildings classified as assembly or mercantile, EV charging infrastructure requirements only apply to employee parking spaces. The new rules will not apply to occupancies classified as small commercial, utility, or miscellaneous.

EFFECT OF CHANGES MADE BY WAYS & MEANS COMMITTEE (Second Substitute):

- Removes the section of the bill eliminating state preemption of residential energy code regulation and allowing local jurisdictions to have a different (more stringent) energy code for residential structures.
- Clarifies that a covered building owner must satisfy either conventional or conditional compliance, but not both.
- Specifies data sources JLARC will use in its review of the utility tax credit.
- Removes intent language regarding natural gas conservation.
- Limits the purpose of defining the cost of greenhouse gas emissions to evaluating the cost of natural gas conservation as provided in the bill.
- Makes other technical clarifications.

EFFECT OF CHANGES MADE BY ENVIRONMENT, ENERGY & TECHNOLOGY COMMITTEE (First Substitute):

- Aligns language to clarify the measurement of baseline energy takes place in a previous calendar year and is weather normalized.
- Adjusts timelines for rule making and the incentive program.
- Removes the requirement that Commerce must define technical and professional qualifications for building energy reporting.
- Adds an annual reporting requirement from Commerce to the Legislature by January 15, 2021, regarding implementation of the energy efficiency measures established in the bill.
- Combines the base and bonus incentives rates to one payment of $0.85 per gross square foot of floor area.
- Adds language that limits the liability of a utility administering the incentive program.
- Extends the time utilities may claim public utility tax (PUT) credits for building owner incentives two years following the year the incentive payments were made.
- Increases administrative costs from 5 to 8 percent allowed to be credited against the PUT.
- Adds RNG intent language.
- Removes the RNG acquisition targets and instead allows natural gas company to propose an RNG program to procure or produce RNG for a portion of its natural gas sold to its customers, the costs of which may not exceed 5 percent of retail rates.
- Requires gas companies to offer a voluntary RNG tariff to customers to replace any portion of the natural gas that would otherwise be provided.
- Allows the tariff to provide reasonable limits on participation based on RNG availability.
- Removes language requiring a cost benefit analysis of extending gas into new service areas.
- Requires the UTC, rather than the gas company, to report on GHG emissions resulting from natural gas and RNG delivered by each gas company to its customers by January 1, 2020.
- Makes technical corrections throughout.

Appropriation: None.

Fiscal Note: Available.

Creates Committee/Commission/Task Force that includes Legislative members: No.

Effective Date: Ninety days after adjournment of session in which bill is passed.

Staff Summary of Public Testimony on Original Bill (Environment, Energy & Technology): *The committee recommended a different version of the bill than what was heard.* PRO: Buildings account for 27 percent of state emissions, and these emissions have grown by 51 percent. The bill focuses on efficiency, looks at the entire building life cycle, allows commercial jurisdictions to innovate, allows for stretch goals, and creates an incentive program for deep energy retrofits—allowing building owners to make changes to bring their

building into compliance. An alternative compliance pathway allows for compliance if an owner implements measures regardless of where your EUI is. The natural gas conservation standard is like the standard for electricity, which has been successful. We appreciate a tiered building code standard and high energy charging stations. Cities are growing through unprecedented growth and this helps local governments by having the state implement a program. We risk undoing progress elsewhere if we do not update energy standards for buildings. Inefficient buildings are more susceptible to dirty air and more expensive to heat. We can slash carbon emissions from buildings in cost-effective ways. Architects have the experience to build lower carbon buildings. But right now existing buildings are the greatest challenge and offer the greatest benefits. We have concerns about ASHRI. Not meeting targets will be an important part of rulemaking. The building code is the biggest driver of energy efficiency. Energy efficiency is an important tool as the cleanest and cheapest source of energy. EUI targets are already common targets. Incentive programs can easily return three-fold. Technology is available to make energy efficiency reductions. Stretch codes keep innovators innovating and help others keep rolling along. There is a large number of trades across a range of crafts and we regard these as high value jobs. The scale and magnitude of the program should show significant economic opportunity for more than just low-wage jobs across the state. The value of energy is different depending on the time of day, so an annual metric might not be the best way to determine the value energy. We should encourage requirements to be adopted sooner and be more aggressive. The standard should apply to smaller buildings. 2028 is not soon enough. Methane from natural gas currently escapes and instead can be captured, cleaned, and replaced as RNG. A procurement target for RNG preserves consumer choice. Customers prefer gas five to one over electricity. The bill allows municipalities to adopt a more stringent energy code and would like an estimate of savings and costs so utilities can make informed decisions. This bill is part of a broader strategy for reducing GHG emissions.

CON: The bill modifies the certificate of necessity in a way that has never been used. The natural gas provisions will extract very little in terms of real GHG reductions. The bill undoes the statewide energy code and risks creating a patchwork of standards in variety of cities. Natural gas provides baseload power, is popular with consumers for heating, and allows the state to get off coal. The policy encroaches on customer needs based on energy choice. There are competing uses for RNG. The most expensive use of RNG is to condition it for pipeline quality, so this is not necessarily the most cost-effective use.

OTHER: We embrace new technologies, but the bill represents a departure from current building code standards. Incentives are for only the worse-performing buildings and one-third of the cost is not enough. There is no guarantee there will be enough incentives. The proposed rules should sit through one legislative session so there is time to petition the Legislature for changes. The incentive tax language should be tightened to ensure liabilities are conserved. The carbon adder to this bill is different from several other proposals. Professional engineers are qualified to be engineers for state of Washington. Commerce would become the second agency to qualify engineers because the Department of Licensing already does this.

Persons Testifying (Environment, Energy & Technology): PRO: Jay Arnold, Kirkland Deputy Mayor; Nancy Tosta, Councilmember, Burien City; Neil Hartman, Washington State Building & Construction Trades Council; Amy Wheeless, NW Energy Coalition; Zack

Semke, Shift Zero; Kirsten Smith, AIA; Mark Frankel, New Buildings Institute; Kerry Meade, Northwest Energy Efficiency Council; Michael Frank, McKinstry; David McCaughey, Ameresco; Tom Balderston, NW EcoBuilding Guild; Elyette Weinstein, Washington League of Women Voters; Nina Kapoor, Coalition for Renewable Natural Gas; Leah Missik, Climate Solutions; Jesse Piedfort, Sierra Club; Mendy Droke, Seattle City Light; Greg Rock, Carbon Washington; Nicolas Garcia, WPUDA; Dave Warren, Klickitat PUD; Clifford Traisman, Washington Environmental Council/WCV.

CON: Charlie Brown, Cascade Natural Gas Company; Dan Kirschner, Northwest Gas Association; Peter Godlewski, Association of Washington Business; John Rothlin, Avista; Bill Stauffacher, Building Industry Association of Washington; Van Collins, ACEC Washington.

OTHER: Greg Hanon, NAIOP; Jerry VanderWood, Associated General Contractors; Brandon Houskeeper, Puget Sound Energy.

Persons Signed In To Testify But Not Testifying (Environment, Energy & Technology): No one.

Staff Summary of Public Testimony on First Substitute (Ways & Means): *The committee recommended a different version of the bill than what was heard.* PRO: This is part of the Governor's comprehensive package related to carbon emissions. In combination, this bill moves us meaningfully toward an overall state goals and towards the Paris accord in terms of our overall reductions. It might be surprising to people, but the energy efficiency in a carbon emission reductions achieved in this bill are really substantial. In aggregate, they contribute in a very meaningful way almost to the same extent as the 100 percent renewable standard and in combination with other bills makes a meaningful difference. This bill relies heavily on incentives and carefully designed new energy standards to significantly expand the role of energy efficiency in reducing greenhouse gas emissions. This is part of a sector by sector package to help the state move toward greenhouse gas emissions. This bill has been under development for months has been greatly improved from the input of developers, building owners, and utilities. This bill recognizes the tremendous opportunity our state has to achieve greater energy efficiency in our buildings. It takes some important steps towards providing cleaner buildings and a healthier environment. Buildings are the most rapidly growing source of greenhouse gas emissions in Washington State. The conditions are ripe for a rapid and equitable scale up of zero energy or close to zero energy ready buildings, which can simultaneously create jobs, improve public health, and address the crisis of carbon emissions coming from our homes and buildings, which I've heard is the fastest growing sector. This bill is a critical step needed to spark a virtuous cycle of investing in high performance buildings.

CON: This bill creates a policy that allows various local governments from one jurisdiction to the next to adopt different energy codes. For large commercial developers, this may be easier to do but that is not the case for small builders. It would be a very difficult challenge for them to comply.

OTHER: We have serious concerns about the cost to building owners who will be impacted by the policies in this bill. We do not believe the standard in this bill represents a modest,

achievable target as has been suggested. How can it be a modest impact in greenhouse gas emission reductions when the goal is more than two-thirds of the greenhouse gas emissions associated with the 100 percent clean energy proposal. Absent careful consideration in implementing this standard, there is the very real possibility of stagnating the commercial office market. Lack of preemption in energy efficiency standards at the state levy will increase regulatory complexity and cost. The language allowing the Utilities and Transportation Commission to determine the purposes of greenhouse gas emissions is too broad. We are signed in as other but look forward to soon reaching a point of support. We would like to see the provision remove that leaves open the manner in which Utilities and Transportation Commission can apply the social cost calculation for greenhouse gas emissions.

Persons Testifying (Ways & Means): PRO: Senator Reuven Carlyle, Prime Sponsor; Joni Bosh, NW Energy Coalition; Laura Wilkeson, Puget Sound Energy; Dave Warren, Klickitat PUD; Kerry Meade, Northwest Energy Efficiency Council; Vlad Gutman-Britten, Climate Solutions; Chris Davis, Governor's Office; Chris van Daalen, NW EcoBuilding Guild.

CON: Bill Stauffacher, Building Industry Association of Washington.

OTHER: Peter Godlewski , Association of Washington Business; Greg Hanon, NAIOP; Dan Kirschner, Northwest Gas Association; John Rothlin, Avista.

Persons Signed In To Testify But Not Testifying (Ways & Means): No one.