
**SENATE COMMITTEE ON ENERGY, UTILITIES AND
COMMUNICATIONS**

**Senator Steven Bradford, Chair
2023 - 2024 Regular**

Bill No:	SB 795	Hearing Date:	4/18/2023
Author:	Stern		
Version:	3/30/2023 Amended		
Urgency:	No	Fiscal:	Yes
Consultant:	Sarah Smith		

SUBJECT: Energy: building energy efficiency: heating, ventilation, and air conditioning equipment: sale registry and compliance tracking system: compliance documentation data repository

DIGEST: This bill requires the California Energy Commission (CEC) to establish online systems to track sales of heating, ventilation and air conditioning (HVAC) equipment and track compliance documents for building energy efficiency standards.

ANALYSIS:

Existing law:

- 1) Establishes the CEC's authority to create regulations for building efficiency standards. Existing law requires the CEC to create cost-effective regulations for lighting, insulation, climate control systems, and other building design and construction standards that increase energy and water efficiency for new residential and new nonresidential buildings. Local governments may not issue permits for construction and installation projects that fail to comply with the CEC's certified efficiency standards. (Public Resources Code §25402(a-b))
- 2) Establishes the CEC's authority to create regulations for appliance efficiency standards. Existing law requires the CEC to set minimum levels of operating efficiency and allows the CEC to set other cost-effective measures, including incentive programs, fleet averaging, energy and water consumption labeling not preempted by federal labeling law, and consumer education programs, to promote the use of energy and water-efficient appliances. (Public Resources Code §25402(c))
- 3) Requires the CEC to adopt standards for appliances to facilitate the deployment of flexible demand technologies. These regulations may include labeling provisions to promote the use of appliances with flexible demand capabilities. (Public Resources Code §25402(f))

- 4) Requires the CEC to adopt a plan by January 1, 2019, to promote compliance with Part 6 of Title 24 of the California Code of Regulations in the installation of central air conditioning and heat pumps. The CEC must consult with the Contractors' State License Board (CSLB), local building officials, and other stakeholders to create the plan. Existing law authorizes the CEC to create regulations to increase compliance with permitting and inspection requirements for central air conditioning and heat pumps, based on the plan. (Public Resources Code §25402.12)

This bill:

- 1) Requires the CEC to establish a system to track HVAC equipment sales that would enable the CSLB and other enforcement agencies verify that contractors and HVAC installers comply with permitting requirements and submit compliance documents for the installation of the HVAC equipment.
- 2) Authorizes the CEC to share information from the HVAC sales tracking system with local building officials, the CSLB, and other enforcement agencies.
- 3) Requires the CEC to establish a tracking system for compliance documents for enforcing the building energy efficiency standards, and requires this tracking system to do all of the following:
 - a) Collect and store compliance, installation, and acceptance test documentation data for California's building energy efficiency standards.
 - b) Allow local building departments and other enforcement agencies to review compliance, installation, and acceptance test documentation data for each construction and upgrade project in their jurisdiction to verify that all required documentation has been submitted.
 - c) Link to or integrate with the HVAC sales tracking system required by this bill.
 - d) Enable the CEC to aggregate and use data from the tracking system to support the CEC's appliance and building energy efficiency regulations.
- 4) Establishes specific data-handling requirements for the CEC's administration of the HVAC sales and compliance document tracking systems, including the following:
 - a) Prohibiting the public from having direct access to the tracking systems.

- b) Requiring the CEC to designate personal information, manufacturer information, or trade secrets collected by the systems as presumptively confidential under the California Public Records Act (CPRA).
 - c) Specifies that information that may be disclosed under the CPRA does not need to be disclosed in its original electronic format.
- 5) Requires each Integrated Energy Policy Report to include information about the status of the tracking systems and report any barriers to implementing the system, including the need for funding.
- 6) Allows the CEC to use its regular budget process to determine funding for the tracking systems, but requires the CEC to make good faith efforts to secure funding for the systems, including seeking any eligible, available federal funding.

Background

CEC's Title 24 Building Energy Efficiency Standards. Existing law establishes the CEC's authority to adopt cost-effective building and appliance standards to promote the conservation of energy and water. Title 20 of the California Code of Regulations includes the CEC's appliance standards and Title 24 includes the CEC's Building Energy Efficiency Standards. While the CEC establishes the Building Energy Efficiency Standards, enforcement of these standards rests with local building officials. Existing building codes require the completion of compliance documents and testing to demonstrate that certain installations are correctly installed and functioning. Correct installation of appliances and building elements ensures that these appliances and building elements deliver expected energy savings. Existing building codes also specify a process for submitting compliance and testing records in a digital format to a compliance document repository; however, these requirements depend upon the CEC approving a document repository. In March 2022, the CEC issued a notice to award a contract for developing a document repository.

HVAC is a major source of energy consumption, but strategies for addressing their demands differ. In 2011, the CEC issued an update to the California Energy Efficiency Strategic Plan. The plan identified trends in energy efficiency, barriers to greater potential energy savings, and goals for addressing those barriers. The plan noted that only approximately 10 percent of HVAC installations may be meeting permitting requirements, and the lack of HVAC installation compliance could limit potential peak energy savings by up to 30 percent. The plan identified a

goal of correctly installing and permitting 90 percent of HVAC installations by 2020. However, it is unclear if California has met that goal. To address concerns about energy losses from incorrectly installed HVAC systems, the Legislature passed SB 1414 (Wolk, Chapter 678, Statutes of 2016). SB 1414 required the CEC to adopt a plan by January 1, 2019, to promote HVAC and heat pump installations' compliance with building code. The bill allowed the CEC to adopt regulations to increase HVAC installations' compliance with permitting requirements as outlined in its plan. The bill also required a customer or contractor to demonstrate that a permit is closed for the customer or contractor to obtain a rebate or incentive provided by a utility for HVAC or heat pump installation.

Since 2016, both the CEC and California Public Utilities Commission (CPUC) have sought more information about what policy changes could influence the efficiency of HVAC systems. A 2017 study commissioned by the CPUC indicated that permitting makes little statistical significance in HVAC systems following replacements. The study indicated that advances in training for those installing HVAC systems may be making the largest contributions to improving HVAC energy efficiency.

Bill is broader than HVAC compliance. This bill requires the CEC to establish two different tracking systems: a system to track HVAC equipment sales and a separate system to track compliance documents for all building energy efficiency standards. The compliance document tracking systems required by this bill could potentially require the CEC to track virtually all the features of residential and non-residential buildings. The CEC's 2022 Energy Code Compliance Manual Lists the following as building elements covered by compliance documents:

- Single-family residential newly constructed buildings
- Single-family residential additions
- Single-family residential alterations
- Single-family residential HVAC changeouts
- Solar water heating
- Building envelope certification
- Lighting certification
- Mechanical certification
- Plumbing certification
- Photovoltaic and battery storage, solar-ready zone area, and solar thermal water heating certification

The documents required for each of the building features listed above potentially encompass details about the entire property parcel. Some features, including lighting and solar-readiness encompass electrical and structural features outside of

the building itself. While HVAC may be a significant source of buildings' energy consumption, not all building features for which compliance documentation is required have similar electricity demands.

Should the state take a more active role in building code enforcement, and if so, to what end? Under CEC's existing authority, CEC promulgates building energy efficiency standards; however, building codes are enforced by local code enforcement officers. This bill requires the CEC to establish a centralized system containing all building energy efficiency compliance documentation for every project that requires a building permit or compliance documentation. While this bill does not reassign code enforcement authority from local governments to the CEC, this bill specifies that the tracking systems required by this measure should enable code enforcement officers to monitor every project within their respective jurisdictions. However, it is unclear if every local code enforcement office is sufficiently resourced to respond to every potential non-compliance issue that these systems could track. It is also unclear if homeowners found to be in violation of certain compliance requirements could afford to rectify the non-compliance if they are cited after construction or installation has been completed. In seeking to give local building officers better tools to enforce building and appliance standards, this bill also raises the issue of whether the CEC should play a bigger role in overseeing how their standards are enforced and whether those standards can be uniformly enforced without lower income communities and homeowners incurring disproportionate impacts.

Bill's privacy protections remain nebulous. This bill establishes various requirements for how the CEC must handle data submitted to the tracking systems established by this bill; however, it is unclear if these data handling specifications are sufficient to prevent disclosure of personally-identifiable information, including information that may jeopardize the safety of certain individuals if disclosed. This bill specifies that the public may not have direct access to the tracking systems; however, this bill does not expressly prohibit public disclosure of data in the tracking systems, and this bill allows the CEC to share the information from the tracking systems with various third-party enforcement agencies. This bill is also silent on the responsibilities of various third-parties with access to the tracking systems to keep that data confidential. This bill does not exempt disclosure of data submitted to the tracking systems from public disclosure under the CPRA. Instead, it specifies that the CEC must designate which information should be treated as confidential under the CPRA and stipulates that the information does not need to be disclosed under the CPRA in its original electronic format. Since this bill could enable various entities to gain access to information about sensitive building features, including locations of specific rooms, safety features, installation of specific technologies, it is unclear if this bill establishes

sufficient protections to ensure that this data cannot be obtained by individuals who play no role in the construction or permit compliance.

Need for amendments. While this bill emphasizes the importance of improving energy savings from correctly installed HVAC systems, the tracking systems required by this bill would track building code compliance for measures beyond HVAC installations. *Since it is not clear that enhanced tracking of code enforcement for those other measures would result in meaningful energy savings, the author and committee may wish to amend this bill to narrow the required tracking systems to solely those documents required for HVAC tracking.*

Prior/Related Legislation

SB 1164 (Stern, 2022) was substantially similar to this bill and required the CEC to create a compliance testing registry. The bill was held in the Assembly Appropriations Committee.

SB 49 (Skinner, Chapter 697, Statutes of 2019) expanded the CEC's authority to create appliance efficiency standards to require the CEC to adopt standards to promote the deployment of appliances with flexible demand capabilities.

SB 1414 (Wolk, Chapter 678, Statutes of 2016) required the CEC to create a plan to promote HVAC and heat pump installations' compliance with building codes. The bill also required customers or contractors to demonstrate that a permit for the installation of an HVAC or heat pump system is closed for the customer or contractor to obtain a rebate or incentive provided by a public utility.

AB 2021 (Levine, Chapter 734, Statutes of 2006) established energy efficiency procurement and planning requirements for local publicly owned electric utilities. The bill also required the CEC to take certain steps for energy efficiency planning, including requiring the CEC to create a plan to improve HVAC energy efficiency and decrease the peak electricity demand of air conditioners.

FISCAL EFFECT: Appropriation: No Fiscal Com.: Yes Local: No

SUPPORT:

Natural Resources Defense Council, Co-sponsor
Western States Council of Sheet Metal Workers, Co-sponsor
350 Humboldt
350 Sacramento
AIM Associates

American Institute of Architects California
Building Electrification Institute
California Building Industry Association
California Building Officials
California Environmental Voters
California State Pipe Trades Council
Carbon Zero Buildings, Inc.
Earthjustice
Indivisible Sacramento
Rewiring America
RMI
San Francisco Bay Physicians for Social Responsibility
Sierra Club California
Wooley Energy & Environment

OPPOSITION:

None received

ARGUMENTS IN SUPPORT: According to the author:

Barriers to effective compliance and enforcement are undermining California's building energy efficiency standards. Studies show, for example, that the vast majority of HVAC replacement projects are performed without a permit and without completion of acceptance testing and other Title 24 energy efficiency verification requirements. This puts contractors that pull permits and comply with the California Energy Code at a disadvantage because they must bid against contractors that cut costs by ignoring these requirements altogether.

Some estimates have put permit and code compliance for HVAC replacement projects at just 10 to 15 percent. It is estimated that increasing permit and Title 24 Energy Code compliance could reduce peak energy demand by up to 400 megawatts.

Currently, however, there is no way to readily track and identify HVAC replacements that are installed without a permit. To address this issue, past Energy Commission reports have called for developing an HVAC equipment sale registry that can be used to track HVAC sales to ensure that permit requirements are being followed for all HVAC installations.

In addition, stakeholders have long called for a central Title 24 compliance document repository and data registry that would provide building officials the ability to simply type in an address in order to confirm that all required Title 24 compliance documents have been completed. Even when permits are pulled, the large number of Title 24 energy efficiency compliance documents now required for each project makes it difficult for building officials to verify compliance, resulting in uneven enforcement.

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