SENATE COMMITTEE ON ENERGY, UTILITIES AND COMMUNICATIONS Senator Josh Becker, Chair 2025 - 2026 Regular

Bill No:	SB 282		Hearing Date:	4/7/2025
Author:	Wiener			
Version:	3/17/2025	Amended		
Urgency:	No		Fiscal:	Yes
Consultant:	Nidia Bauti	sta		

SUBJECT: Residential heat pump systems: water heaters and HVAC: installations

DIGEST: This bill requires specified streamlining of local permitting for residential heat pump systems, specifically water heaters and heating, ventilation, and air conditioning (HVAC). This bill also includes specified requirements of the California Energy Commission (CEC) to support training and certification of contractors and installations of heat pump systems.

ANALYSIS:

Existing law:

- 1) Establishes the State Energy Resources Conservation and Development Commission (CEC) and prescribes the authorities, duties, and responsibilities of the CEC pertaining to energy matters. (Public Resources Code §25200 *et seq.*)
- 2) Requires the CEC, on or before January 1, 2019, in consultation with the Contractors State License Board, local building officials, and other stakeholders, to approve a plan that promotes compliance with specified regulations relating to building energy efficiency standards in the installation of central air conditioning and heat pumps. Authorizes the CEC to adopt regulations to increase compliance with permitting and inspection requirements for central air conditioning and heat pumps, and associated sales and installations, consistent with the above-described plan. (Public Resources Code §25402.12)
- Requires the CEC to contract with California building officials to establish two regional training centers to provide continuing education for local building officials and enforcement personnel regarding 25402.1(e). (Public Resources Code §25402.3)

- 4) Requires a city or county to approve administratively applications to install solar energy systems through the issuance of a building permit or similar nondiscretionary permit. Requires every city, county, or city and county to develop a streamlined permitting process for the installation of small residential rooftop solar energy systems, as that term is defined. (Government Code §65850.5).
- 5) Prescribes and limits permit fees that a city or county may charge for a residential and commercial solar energy system. (Government Code §66015)
- 6) Establishes the Davis-Stirling Common Interest Development Act which defines and regulates common interest developments. Among other things, the act makes a provision of the governing documents, as defined, or architectural or landscaping guidelines or policies void and unenforceable if, among other things, the provision prohibits, or includes conditions that have the effect of prohibiting, the use of low water-using plants as a group or as a replacement of existing turf. (Civil Code §4000, *et seq.* and §6712)
- 7) Requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement. (California Constitution)

This bill:

1) Makes several findings and declarations concerning the intent of the Legislature to encourage the installation of residential heat pump systems by removing obstacles to and minimizing costs of permitting.

Relevant to the CEC

- 2) Requires the CEC, on or before January 1, 2027, to establish a statewide certification program for licensed contractors of residential heat pump water heaters and heat pump HVAC systems to obtain a heat pump installation certification, and requires the CEC to create a state training program on residential heat pump water heaters and heat pump HVAC systems for purposes of the certification program (limited to no more than seven hours).
- 3) Requires the CEC, on or before July 1, 2026, to develop a standardized code compliance checklist (of no more than two pages) that is designed for local jurisdictions to use in verifying whether the installation of a residential heat pump water heater or residential heat pump HVAC system is compliant with

the California Building Standards Code (Title 24 of the California Code of Regulations).

4) Requires the CEC to take into account criteria for determining whether the installation of an electric heat pump constitutes a standard appliance swap-out or whether additional architectural or structural integrity need to apply, including whether the installation requires upgrades to the electrical panel.

Relevant to contractors and local permitting

- 5) Authorizes a licensed contract to obtain a heat pump installation certification through the above-described program by completing specified tasks, including completion of the state training program described above or successful completion of five consecutive inspections per system type or through certification of a the Technology and Equipment for Clean Heating Initiative.
- 6) Authorizes a licensed contractor with a heat pump system installation certification to self-certify that the installation of a residential heat pump water heater or heat pump HVAC system, and all associated building and equipment modifications completed under the permit for each system, meets all relevant code requirements without any requirement that an inspector be present for the installation, and requires a city, including a charter city, county, or city and county to accept the certification for those purposes.
- 7) Requires local entities to adopt and offer one or more alternative inspection options that do not require a licensed contractor and an inspector to be simultaneously present during the installation of a heat pump water heater or heat pump HVAC system, to be available to licensed contractors who do not have a certification described above.
- 8) Requires the local entity, if the local entity has an internet website, to publish all requirements for contractors to obtain the above-described certification, or to complete inspections without a certification pursuant to the above-described alternative inspection option.
- 9) Authorizes a city, including a charter city, county, or city and county, except as specified, to issue up to one nondiscretionary permit per installation of a residential heat pump water heater or heat pump HVAC system in which the local entity administratively approves an application to install the residential heat pump water heater or heat pump HVAC system and the application is subject to a limited review.

- 10) Prohibits a local entity described above from applying additional standards on the installation of residential heat pump water heater or residential heat pump HVAC systems and would require those standards to be null and void, unless the local entity provides substantial evidence that the standard is designed to mitigate the specific adverse impact on public health or safety.
- 11) Authorizes additional standards to be applied that conform to local laws designed to require the adoption of zero-emission equipment, or improvement of building efficiency.
- 12) Prohibits a local entity from requiring a permit or inspection for any low voltage plug-in appliance, defined as an appliance with a voltage rating of 120 volts or less.
- 13) Requires a city, including a charter city, county, or city and county, on or before July 1, 2027, to implement an online automated permitting process that verifies code compliance and issues permits in real time within the same day of the application being submitted, or allows the local entity to issue permits to a licensed contractor for the installation of a residential heat pump water heater or residential heat pump HVAC system. Exempts local entities with a population of fewer than 5,000 or a county with a population of fewer than 150,000.
- 14) Requires a permit to be, issued pursuant to the automated permitting process, upon discretion of the administering jurisdiction, if the installation complies with specified checklist requirements.
- 15) Requires a local entity to report to the CEC when it implements the automated permitting platform.
- 16) Requires the local entity, if it has an internet website, to publish and make publicly available, among other things, the CEC checklist on their internet website.
- 17) Deems the application complete, upon confirmation by the local entity that the application and supporting documents are complete and meets specified requirements, and requires the local entity to approve the application and issue all required permits or authorizations.
- 18) Requires, upon receipt of an incomplete application, the local entity to issue a written correction notice.

- 19) Prohibits, except as specified, a city, including a charter city, county, or city and county from charging a residential permit fee for heat pump water heaters and heat pump HVAC systems that exceeds the estimated reasonable cost of providing the service for which the fee is charged, subject to specified requirements, including that the residential permit fee for a heat pump water heater system does not exceed \$50.
- 20) Authorizes a local entity to charge a residential permit fee for the installation of a heat pump water heater or heat pump HVAC system that exceeds the above-described fee limit if the local entity, as part of a written finding and an adopted resolution or ordinance, provides substantial evidence of the reasonable cost to issue the permit, and prohibits the local entity from applying additional charges above the advertised fee schedule.
- 21) Makes any provision of the governing documents, architectural guidelines, or policies void and unenforceable if the provision prevents the replacement of a fuel-gas-burning appliance with an electric appliance.
- 22) Makes any covenant, restriction, or condition contained in any, among other specified agreements, deed, and any provision of a governing document, that effectively prohibits or restricts the installation or use of a residential heat pump water heater or heat pump HVAC system, void and unenforceable.
- 23) Includes findings that changes proposed by this bill address a matter of statewide concern rather than a municipal affair and, therefore, apply to all cities, including charter cities.
- 24) Provides that, if the Commission on State Mandates determines that this bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions.

Background

Reducing emissions from the building sector. Residential and commercial buildings are responsible for roughly 25% of California's greenhouse gas (GHG) emissions when accounting for electricity demand, fossil fuels consumed onsite, and refrigerants, according to California Air Resources Board (CARB). Of the 25%, roughly 10% of emissions are attributable to fossil fuel combustion, including natural gas, with residential buildings accounting for slightly more of those emissions than commercial buildings. However, CARB has noted that these emissions numbers can vary from year-to-year.

According to a 2021 California Public Utilities Commission (CPUC) Staff Proposal, most gas used by the residential sector is for space and water heating, with smaller percentages used for cooking, fireplaces, clothes drying, and a few other functions. Dual fuel homes – those using both gas and electricity – are the dominant type of home in California. There are several strategies that can be employed to reduce GHG emissions from the building sector, these include: improved energy efficiency of buildings and appliances, reducing carbon emissions from fossil fuel sources, ensuring cleaner sources of energy to operate buildings and associated appliances (including electric heat pumps for water heating and HVAC uses), addressing methane leaks, and others. CARB has noted that refrigerants used for space-cooling and refrigeration systems also contribute directly to building-related GHG emissions and these are a growing source of GHGs from buildings which must also be reduced.

The 2022 CARB Climate Change Scoping Plan identifies actions to reduce GHG emissions from the building sector, including progressively improving building codes and standards, pursuing voluntary efforts to exceed code requirements, and completing existing building retrofits. The most recent Scoping Plan also noted:

"Achieving carbon neutrality must include transitioning away from fossil gas in residential and commercial buildings, and will rely primarily on advancing energy efficiency while replacing gas appliances with non-combustion alternatives. This transition must include the goal of trimming back the existing gas infrastructure so pockets of gas-fueled residential and commercial buildings do not require ongoing maintenance of the entire limb for gas delivery."

California's agencies are taking steps toward achieving carbon neutrality by 2045 and meeting the state's ambitious 2030 GHG emissions reduction target, including with actions specific to reducing emissions from the building sector. These actions include:

- The CARB adopted a strategy to end sales of natural gas space and water heaters starting in 2030 as part of the 2022 State Implementation Plan for meeting the eight-hour ozone standard, which is submitted in compliance with the federal Clean Air Act. CARB will need to adopt regulations to implement these measures.
- The CEC adopted building energy efficiency standards in 2022 that establish electric-ready standards, encourage electric heat pump technologies, and expand the solar photovoltaic system and energy storage standards.

• The CPUC has also adopted various decisions to reduce dependency on the natural gas system, including eliminated financial subsidies available to builders to offset the costs of extending natural gas lines to serve new buildings, known as allowances which are funded by natural gas utility customers.

Local rules to limit or ban gas use. In 2019, the City of Berkeley adopted the nation's first ban of natural gas hookups in most new residences and commercial buildings. Since then, about 50 other California cities and counties have adopted reach codes (those that surpass state building standards) or ordinances that either limit or ban the installation of gas connections to new buildings. Additionally, the Bay Area Air Quality Management District adopted rules prohibiting installation of natural gas furnaces and water heaters in residential and commercial settings beginning in 2027. The City of Berkeley ban was successfully challenged the courts.

Comments

Need for this bill. Air conditioning use is common in California. Today, 95% of new homes built in California include central air conditioning and homes are bigger now than they were before. As a result, it took seven times as much energy to power California's air conditioners in 2008 as it did in 1970. Much of the need to power our air conditioners came at times of peak system demand, traditionally the most costly, most polluting times to supply electric power. Yet, according to a document jointly issued by the CEC and the CPUC, as of 2008, fewer than 10% of HVAC systems obtained legally required pre-installation local building permits; 30-50% of new central air conditioning systems were not being properly installed, leading to a 20-30% increase in peak energy needed cool the state's buildings. The state energy agencies conclude the installation of cooling systems without proper permitting "represents a huge lost opportunity for energy savings."

Barriers to installing heat pump equipment. According to this bill proponents, there are barriers to installing heat pump equipment. Interviews with heat pump installers point to a number of barriers at the local level to installing heat pump equipment, including long inspection wait times, local architectural requirements, wide variations in requirements across jurisdictions, and the need to obtain multiple permit types for a water heater installation. Overburdensome requirements can drive up the cost of installations, and limit the time that qualified contractors have to work on other projects, further tightening the supply of labor available to meet increasing demand for heat pump appliances. Contractors and consumers report that the requirements and cost for installing a permitted heat pump vary from jurisdiction to jurisdiction. In some jurisdictions, the process may take 48

hours to replace a water heater with a minimal fee. In others, securing a permit can take months of back and forth with a city, and cost several thousand dollars.

CEC role. The majority of the requirements of this bill pertain to local permitting requirements, including capping permitting fees, affording self-certification of installations, and prohibiting additional requirements of heat pump installations, to name a few. This bill also requires an expanded role for the CEC to develop a training and certification program to certify contractors of heat pump installations. This CEC certification would authorize the contractor to conduct self-certification of installations. This bill also requires the CEC to develop a code compliance check list (of no more than two pages) to designed for local jurisdictions to use in verifying whether the installation of a residential heat pump water heater or residential heat pump HVAC system is compliant with Title 24 of the California Code of Regulations. The CEC has shared that they do not currently operate a similar program as proposed by this bill. Although the CEC does operate a Field Verification and Diagnostic Testing (FV and DT) service to confirm equipment in residential buildings are operating in compliance with the Energy Code, as part of the Home Energy Rating System (HERS) program. The HERS program ensures correct installation and proper function of specific building features and equipment which have been shown to be prone to incorrect installation in the past, which include heat pump HVAC systems. The FV and DT service includes visual and functional performance testing of building features and equipment by a certified third-party HERS rater. If the installation fails the testing, the contractor is required to fix issues identified by the rater. This program is complementary to local jurisdiction inspection which focuses primarily on health and safety.

Caution. Supporters of this bill may be rightfully concerned about the need for more support to reach the Governor's goal of six million heat pump installations by 2030 (particularly as the new federal administration has raised uncertainty about anticipated federal funding support for these installations). However, the self-certification and aggressive timelines by when the CEC must adopt regulations could result in less than adequate installations that may jeopardize broader residential adoption of the heat pump technology. As this bill proceeds through the legislative process, the author and supporters may wish to consider whether these components should be adjusted and amended.

Dual Referral. Should this bill be approved by this committee, it will be re-referred to the Senate Local Government Committee.

Prior/Related Legislation

SB 379 (Wiener, Chapter 356, Statutes of 2022) required most cities and counties to adopt an automated, online permitting system for solar energy systems and energy storage.

SB 617 (Wiener) of 2021, had similar provisions to those in SB 379 (Wiener) of 2022. The bill died in the Senate Appropriations Committee.

SB 1095 (Becker) of 2024, would have prevented HOAs from prohibiting the installation of heat pumps due to architectural review, and required other actions unrelated to permitting. The bill died in the Senate Appropriations Committee.

AB 1132 (Friedman, Chapter 357, Statues of 2023) extended the sunset date from January 1, 2025, to January 1, 2034, on the statutory cap on the amount a city or county may charge for a permit to install a residential and commercial solar energy system.

AB 1572 (Friedman, Chapter 849, Statues of 2023) prohibited the use of potable water to irrigate nonfunctional turf on properties including homeowners' association, common interest development, and community service organizations.

AB 970 (McCarty, Chapter 710, Statutes of 2021) deems approved applications for electric vehicle charging stations after specified time periods.

SB 1016 (Allen, Chapter 376, Statutes of 2018) prohibited any unreasonable restriction, particularly concerning to multi-family housing, on the installation or use of an electric vehicle-dedicated time-of-use meter in common interest developments.

AB 1236 (Chiu, Chapter 598, Statutes of 2015) required an expedited and simplified local permit process focused solely on a health and safety review for the installation of electric vehicle charging stations.

SB 1414 (Wolk, Chapter 678, Statutes of 2016) among its provisions, directed the CEC to approve a plan that will promote the installation of central air conditioning and heat pumps in compliance with Part 6 of Title 24 of the California Code of Regulations, and authorizes the CEC to adopt regulations consistent with the approved plan.

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

SUPPORT:

Bay Area Air District (Co-sponsor) Building Decarbonization Coalition (Co-sponsor) SPUR (Co-sponsor) 350 Humboldt: Grass Roots Climate Action California Center for Sustainable Energy Climate Action California Fujitsu LG Electronics Mitsubishi Electric SanDiego350

OPPOSITION:

California Building Officials

ARGUMENTS IN SUPPORT: The Building Decarbonization Coalition and SPUR state:

California has set some of the nation's most ambitious targets to reduce carbon emissions, including a goal to install 6 million heat pumps statewide. This leaves 5 years to deploy over 4 million heat pumps—which will require quadrupling the current rate of installation. A heat pump installed in California today will cut emissions from space heating by 93% over the lifetime of the equipment compared to a gas furnace. In order to meet our climate and clean air targets, the state must make it easy, fast, and affordable for customers to install heat pump appliances. ...Unfortunately, the process for securing building permits in California is notoriously complex. Installation standards can vary significantly by jurisdiction, creating a patchwork of confusing and opaque requirements that are difficult for contractors and consumers to comply with. ... Permitting adds to an installation's total price in a number of ways. ... To drive electric appliance adoption and achieve cost-parity with fossil fuel appliances, California must address heat pump permitting.

ARGUMENTS IN OPPOSITION: The California Building Officials states:

Establishing a new statewide certification program for HVAC contractors only creates a narrow cottage industry of a few professionals who will be enabled to conduct the work outlined within your measure. Further, the practice of automated permitting is troublesome as it gives no oversight to trained public officials who are sworn to ensure the safety of their communities. In our

professional opinion, this bill undermines the public sector and the imperative work that we do every day altogether. We are tasked with ensuring that finite tasks, such as heat pumps and their functionality with an HVAC system, are completed in a prudent manner and do not pose a threat to the property owner or its inhabitants. Trained professionals, such as Building Officials and our departmental colleagues, are stewards of public resources for a reason. Please allow us to continue to do our critical work for California communities."

-- END --