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

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

Bill No:	SB 48	Hearing Date:	4/10/2023
Author:	Becker		
Version:	3/30/2023 Amended		
Urgency:	No	Fiscal:	Yes
Consultant:	Nidia Bautista		

SUBJECT: Water and Energy Savings Act

DIGEST: This bill: (1) expands the existing energy benchmarking program for buildings to include water usage data; (2) requires the California Energy Commission (CEC) along with other agencies, to develop to a state strategy to achieve State goals for water, energy, and greenhouse gas (GHG) emissions from existing buildings; and (3) authorizes the CEC to implement the strategy, upon appropriation, including authorizing establishing Building Performance Standards for existing buildings to require reductions in water and energy usage and GHG emissions.

ANALYSIS:

Existing law:

- 1) Authorizes the State Energy Resources Conservation and Development Commission (also known as the California Energy Commission (CEC)) to prescribe, by regulation, lighting, insulation, climate control system, and other building design and construction standards, and energy and water conservation design standards, for new residential and new nonresidential buildings to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy, as specified. (Public Resources Code §25402)
- 2) Requires each utility to maintain records of the energy usage data of all buildings to which they provide service for at least the most recent 12 complete calendar months, and to deliver or otherwise provide that aggregated energy usage data for each covered building, as defined, to the owner, as specified. (Public Resources Code §25402.10)
- 3) Requires the CEC to assess the potential for the state to reduce the emissions of GHG from the state's residential and commercial building stock by at least 40 percent below 1990 levels by January 1, 2030. (Public Resources Code §25403)

- 4) Requires the CEC biennially to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices and to use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, and protect public health and safety. The CEC publishes its assessments and forecasts every two years in its Integrated Energy Policy Report (IEPR). (Public Resources Code §25301)
- 5) Requires each electrical corporation plan to first meet unmet resource needs through all available energy efficiency, and demand reduction resources that are cost effective, reliable, and feasible. (Public Utilities Code §§454.5 (b)(9)(C))
- 6) Requires the California Public Utilities Commission (CPUC) to identify all potentially achievable cost-effective electricity and natural gas efficiency savings and to establish energy efficiency procurement targets and ratepayer-funded programs for investor-owned utilities (IOUs). Requires a gas corporation to first meet its unmet resource needs through all available natural gas efficiency and demand reduction resources that are cost effective, reliable, and feasible. (Public Utilities Code §§454.55 and 454.56.)
- 7) Establishes a charge on electricity and natural gas consumption to fund cost-effective energy efficiency and conservation activities. (Public Utilities Code §§381 and 890)
- 8) Requires the CEC to develop and implement a comprehensive program to achieve greater energy savings in California's existing residential and nonresidential building stock. (Public Resources Code §25943)
- 9) Establishes the State Water Resources Control Board (SWRCB) and requires the SWRCB to administer provisions relating to the regulation of drinking water to protect public health, including, conducting research, studies, and demonstration programs relating to the provision of a dependable, safe supply of drinking water, enforcing the Federal Safe Drinking Water Act, adoption of enforcement regulations, and conducting studies and investigations to assess the quality of water in domestic water supplies. (Water Code §174 *et seq.* and Health and Safety Code §116271)
- 10) 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 Article XIII B §6 and Government Code §17556)

This bill:

- 1) Expands the requirements of the existing energy benchmarking program administered by the CEC, beginning January 1, 2025, to include each utility that provides water service and its water usage data. As such, this bill imposes a state-mandated local program by imposing new duties on utilities that provide water service.
- 2) Requires the CEC and the SWRCB, in consultation with the California Air Resources Board (CARB), CPUC, and Department of Housing and Community Development (HCD), on or before July 1, 2026, to jointly develop a strategy for using the energy and water usage data to track and manage the energy and water usage and emissions of GHG of covered buildings in order to achieve the state's goals, targets, and standards related to energy and water usage and emissions of GHG of covered buildings.
- 3) Authorizes the CEC and SWRCB, upon appropriation, to jointly implement the strategy, including establishing and enforcing building performance standards consistent with the strategy.
- 4) Requires the CEC, as part of the building performance standards, to establish a process by which building owners can propose, and the CEC, or a local city or county building department to which the CEC delegates this authority, may approve or reject, an alternative compliance plan for unusual circumstances where a covered building cannot reasonably meet one or more of the applicable building performance standards within the required period of time.
- 5) Requires the CEC and SWRCB to triennially evaluate the progress of the strategy in achieving improvements in energy and water efficiency and reducing the emissions of GHG and evaluate the impacts of the strategy on disadvantaged communities.
- 6) Provides that no reimbursement is required by this act because a local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act.

Background

Reducing emissions from the building sector. Residential and commercial buildings are responsible for roughly 25 percent of California's GHG emissions when accounting for electricity demand, fossil fuels consumed onsite, and refrigerants, according to CARB. Of the 25 percent, roughly 10 percent 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. 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, 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 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 the adoption of Building Performance Standards as an approach to reduce GHGs from existing buildings.

CEC tasked to assess the potential for reducing GHGs from buildings. AB 3232 (Friedman, Chapter 373, Statutes of 2018) required the CEC by January 1, 2021, to develop an assessment of the feasibility of reducing the GHG emissions of California's buildings 40 percent below 1990 levels by 2030, working in consultation with the CPUC and other state agencies. AB 3232 appropriately, does not require specific actions to implement the plan. Rather, the results of the assessments required of the CEC are intended to help inform whether future policies have merit and are cost-effective to achieve the stated goal. It is important to note that AB 3232 only required a cost-effectiveness assessment addressing emissions from space and water heating, but not other applications, such as cooking. The AB 3232 *California Building Decarbonization Assessment* was published in August of 2021 and analyzes scenarios to reduce GHG emissions from the building sector. The assessment identifies efficient electrification of space and water heating in California's buildings combined with refrigerant leakage reduction presents the most readily achievable pathway to a greater than 40 percent reduction in GHG emissions by 2030. However, the assessment also acknowledged the challenges, including consumer awareness and financing availability.

New v. Existing Buildings. California energy efficiency policy related to buildings is based on savings of electricity measured in kilowatt hours and gas savings measured in therms. The policies have also distinguished between new construction and existing/older building stock (although building renovations do sometimes fall under new construction regulations).

Energy Efficiency Building Action Plan. In 2019, the SB 350 energy efficiency goal was incorporated into the CEC's Energy Efficiency Building Action Plan, which provides a 10-year roadmap to activate market forces and transform California's existing residential, commercial, and public building stock into high-performing and energy-efficient buildings. The 2019 California Energy Efficiency Action Plan covers issues, opportunities, and savings estimates pertaining to energy efficiency in California's buildings, industrial, and agricultural sectors. The Action Plan is separated into three goals that drive energy efficiency: doubling energy efficiency savings by 2030, removing and reducing barriers to energy efficiency in low-income and disadvantaged communities, and reducing GHG emissions from the buildings sector.

Title 24. The CEC is required by statute to adopt energy efficiency building standards every three years that are cost-effective for occupants over the 30-year lifespan of a building. The standards ensure that builders for new construction (or renovations of buildings) use the most energy efficient technologies and construction, save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants and help preserve the environment. These measures (Title 24, Part 6) are listed in the California Code of Regulations. Since 1978, the standards have made buildings more comfortable with lower energy costs. Cost-effectiveness is calculated by determining the energy savings associated with a more efficient building standard. Savings are calculated by multiplying cumulative savings in each year by the average residential or commercial electricity rates to determine savings over the life of the measure.

BUILD and TECH. SB 1477 (Stern, Chapter 378, Statutes of 2018) directed the CPUC to develop, in consultation with the CEC, two programs (BUILD and TECH) aimed at reducing GHG emissions associated with buildings. SB 1477 makes available \$50 million annually for four years, for a total of \$200 million, derived from the revenue generated from the GHG emission allowances directly allocated to gas corporations and consigned to auction as part of CARB's Cap-and-Trade program. CPUC is responsible for a Building Decarbonization proceeding to implement SB 1477, develop pilot programs to address new construction in areas damaged by wildfires, coordinate policies with CEC's Energy Code and Appliance Efficiency Standards, and establish a policy framework. The CPUC allocated 40 percent of the \$200 million budget for the BUILD Program and 60 percent for the TECH Initiative.

Building Energy Benchmarking Program. The Building Energy Benchmarking Program is the state's program to publicly disclose the energy use of buildings in California. Benchmarking is tracking energy performance against a standard.

Under the Building Energy Benchmarking Program, building owners calculate energy use intensity by dividing the energy use by the square footage of the building. That number acts as a baseline to compare the efficiency of the building to that of previous years or to those of similar buildings. Mandatory reporting began in 2018 for buildings with no residential units and more than 50,000 square feet of gross floor area, and in 2019 for buildings with 17 or more residential units and more than 50,000 square feet of gross floor area. Reporting is due by June 1 annually. The CEC reports roughly 65 percent of building owners have reported data for the roughly 98 percent of the 50,000 square foot buildings identified as required to report. The CEC encouraged participation in the program, but is contemplating a letter notification campaign to encourage more participation. However, in some instances, the CEC has noted challenges to tracking down contact information for the owner of the building.

Building performance standards. Building performance standards are policies that require commercial and multifamily buildings to meet certain performance levels, typically energy use or GHG emissions. Each local or state government that implements a building performance standard customizes the requirements to fit its needs. In general, the standards include a performance target (often a specific level of energy or GHG emissions per square foot), and a timeframe by which all buildings must meet the target. Building performance standards are a relatively new policy tool, as most policies address new construction. Building performance standards are targeted to existing buildings. Nationally, only a few states (Washington, Colorado, and Maryland) and handful of local jurisdictions (New York City and Washington D.C., among others) have adopted building performance standards. In California, only the City of Chula Vista in San Diego County has adopted a building performance standard. President Biden's Administration has launched a National Building Performance Standards Coalition which includes 37 local officials (mostly mayors, including several from California), the Governors of Washington and Colorado, and CEC Commissioner Andrew McAllister. The Coalition has committed to "inclusively design and implement equitable building performance standards and complementary programs and policies, working to advance legislation and/or regulation, with a goal of adoption by Earth Day 2024."

Comments

Expanding Benchmarking program to include water usage. This bill proposes to include water usage as an additional data collection point for the energy benchmarking program administered by the CEC. The supporters of this bill contend that drought conditions and frequency in California merit additional tools to better manage water resources, especially those related to buildings. However,

water utilities across the board express concerns (and opposition in some cases) noting there is a broader State framework to address water management, including with the passage of recent legislation currently being implemented by the SWRCB. While down the road this may be a helpful tool, it's not as simple as adding water to the benchmarking program. Unlike energy utilities, there are over 2,000 water providers in the state, including many that are operated by part-time employees and volunteers. That landscape of water providers makes it much more complicated than the energy utilities. Additionally, water utilities argue that this bill's focus is on indoor use, while the main source of water management concern is outdoor water use. Additionally, many water utilities issue utility bills on a two-month billing cycle, and in some cases an annual cycle. In this regard, the benchmarking reporting would need to be adjusted to reflect these dynamics. Most benchmarking programs across the country focus on energy usage and/or GHG emissions. The inclusion of water in this data collection would require some reworking to address the concerns of the water utilities. It may be that the water usage is not well-suited for the benchmarking program, particularly on the timeline proposed by this bill.

Addressing affordability – proceed with caution. Integrating decarbonization strategies is generally more cost-effective in new building construction compared to existing buildings. The challenge to transition existing buildings is complicated by occupancy, inertia, limited consumer knowledge, but most especially costs. The Building Decarbonization Coalition, a group organized to support efforts to reduce GHGs from buildings, estimates that the investment needed to decarbonize the residential sector alone is about \$5 billion annually for just low- and moderate-income households. To the author's credit, this bill attempts to address affordability concerns, including by providing alternative compliance options and providing tenant protections against displacement. However, there are still many questions and concerns about whether these measures are adequate to address impacts. By authorizing the CEC to adopt a building performance standard in advance of the Legislature reviewing the strategy, the Legislature may not have much say in ensuring the protections are sufficient for Californians prior to building performance standards being implemented. *In order to limit the affordability impacts on Californians, especially as it related to housing affordability, the author and committee may wish to amend this bill to make explicit that the implementation of the strategy, including adoption of building performance standards shall only be adopted for existing commercial buildings that are 50,000 square feet or more.*

Double Referral. This bill is also referred to the Senate Committee on Environmental Quality.

Prior/Related Legislation

SB 1477 (Stern, Chapter 378, Statutes of 2018) required the CEC to develop a statewide market transformation initiative to transform the state's market for low-emission space and water heating equipment for new and existing residential and nonresidential buildings and to develop an incentive program to fund near-zero emission technology for new residential and commercial buildings.

AB 3232 (Friedman, Chapter 373, Statutes of 2018) required the CEC to assess the potential for the state to achieve the goal of reducing the emissions of GHGs by the state's residential and commercial building stock by at least 40 percent below the 1990 levels by January 1, 2030.

AB 802 (Williams, Chapter 590, Statutes of 2015), among its three main provisions, abolished the CEC-administered "AB 1103" program of nonresidential building energy consumption disclosure and replaces it with an energy use "benchmarking" and disclosure program for existing buildings.

AB 531 (Saldaña, Chapter 323, Statutes of 2009) gave the CEC authority to set a schedule for compliance with the requirements of AB 1103.

AB 758 (Skinner, Chapter 470, Statutes of 2009) required the development of the Existing Buildings Program, which resulted in the triennial *Existing Buildings Energy Efficiency Action Plan*.

AB 1103 (Saldaña, Chapter 533, Statutes of 2007) required utilities to maintain records of energy consumption of all nonresidential buildings to which they provide service and to upload this data to US EPA ENERGY STAR Portfolio Manager. The bill also required the owner or operator of a nonresidential building to disclose the Portfolio Manager benchmarking data and ratings for the building to a prospective buyer, lessee, or lender.

AB 1279 (Muratsuchi, Chapter 337, Statutes of 2022) established the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045

SB 32 (Pavley, Chapter 249, Statutes of 2016) required the CARB to reduce statewide GHG emissions to at least 40 percent below the 1990 emissions level by 2030.

AB 32 (Nuñez/Pavley, Chapter 488, Statutes of 2006) requires CARB to adopt policies to reduce statewide GHG emissions to 1990 levels by 2020.

AB 1482 (Chau, Chapter 597, Statutes of 2019) places an upper limit on annual rent increases: five percent plus inflation and also requires that a landlord have and state a just cause, as specified, in order to evict tenants who have occupied the premises for a year for housing built more than 15 years prior and non-single family residences (unless owned by a real estate trust or a corporation). The bill sunsets after ten years and does not preempt any local rent control ordinances.

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

SUPPORT:

Environment California, Co-sponsor
Institute for Market Transformation, Co-sponsor
350 Bay Area Action
350 Petaluma
350 Sacramento
350 Ventura County Climate Hub
A. O. Smith Corporation
Active San Gabriel Valley
American Institute of Architects California
Ban SUP
Biodiversity First!
Breathe Southern California
California Efficiency + Demand Management Council
California Energy Alliance
Californians for Energy Choice
Californians for Western Wilderness
CALPIRG
Center for Community Energy
Center for Sustainable Energy
City of West Hollywood
CleanEarth4Kids.org
Climate Action California
Climate Action Campaign
Climate Action Mendocino
Elders Climate Action, NorCal Chapter
Elder Climate Action, SoCal Chapter
Environmental Working Group
Environtees.org
Extinction Rebellion San Francisco Bay Area
Feminists in Action Los Angeles
Friends Committee on Legislation of California

Green the Church
Indivisible Alta Pasadena
Indivisible CA: StateStrong
Indivisible California Green Team
Indivisible Marin
Indivisible San Jose
Indivisible Sonoma County
Indivisible Ventura
Indivisible Yolo
Los Angeles Regional Collaborative
Menlo Spark
New Buildings Institute
Natural Heritage Institute
North County Climate Change Alliance
Our City San Francisco
Pacifica Climate Committee
Peninsula Interfaith Climate Action
Rewiring America
RMI
Rooted in Resistance
San Joaquin Valley Democratic Club
Santa Cruz Climate Action Network
Santa Cruz County Democratic Central Committee
Sierra Club California
Silicon Valley Youth Climate Action
SoCal 350 Climate Action
Southern California Edison
Sunflower Alliance
Sunrise Movement Orange County
Sustainable Mill Valley
Sustaining Way
The Climate Alliance of Santa Cruz County
The Climate Center
Throop Unitarian Universalist Church
UndauntedK12
U.S. Green Building Council
U.S. Green Building Council - Los Angeles

OPPOSITION, unless amended:

Association of California Water Agencies
California Association of Realtors
California Municipal Utilities Association

ARGUMENTS IN SUPPORT: According to the author:

SB 48 directs the Energy Commission, in coordination with the State Water Resources Control Board, to develop a strategy for leveraging benchmarking data to help achieve the state's targets for efficiency improvements and GHG emissions reductions. California can follow the example of other cities and states (including Washington, Maryland, Colorado, New York City, and Washington, DC) who have enacted building performance standard programs, leveraging benchmarking data, to improve efficiency in older buildings. The state already has a benchmarking program for energy usage of large commercial and residential buildings, and SB 48 bill adds water data into that program.

A strategy that encourages investment in older buildings can create job opportunities, strengthen climate resilience, and result in healthier, more durable, and less expensive spaces in which to live, learn, and work. SB 48 takes a first step in achieving those outcomes by starting an inclusive process to develop a strategy for cleaner, more efficient buildings.

ARGUMENTS IN OPPOSITION: In opposition to the bill, the Association of California Water Agencies (ACWA) and the California Municipal Utilities Association (CMUA) contend that the proposed requirements in SB 48 to have water utilities maintain water usage data are "largely duplicative of existing efforts by the State to track water usage and set water efficiency and drought planning goals and requirements." ACWA and CMUA claim "water retailers are already subject to a significant water efficiency and drought preparedness reporting framework." They oppose SB 48, unless amended to remove water and water efficiency goals, arguing that their inclusion in this bill would not provide additional water efficiency benefits. The California Association of Realtors opposes the bill unless the bill is amended to be consistent with the exemption in AB 801 intent language to limit the program to 50,000 square feet or more.

-- END --