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

Bill No:	AB 738	**Hearing Date:**	7/7/2025
Author:	Tangipa		
Version:	4/9/2025 Amended		
Urgency:	No	**Fiscal:**	Yes
Consultant:	Nidia Bautista		

SUBJECT: Energy: building standards: photovoltaic requirements

DIGEST: This bill requires, by January 1, 2028, residential construction intended to repair, restore, or replace a residential building damaged or destroyed as a result of a declared disaster to comply with any requirements for solar photovoltaic (PV) at the time the building was originally constructed, if certain conditions are met.

ANALYSIS:

Existing law:

1) Authorizes the State Energy Resources Conservation and Development Commission (CEC) to prescribe, by regulation, lighting, insulation, climate control system, and other building design and construction standards that increase efficiency in the use of energy and water for new residential and new nonresidential buildings, and energy and water conservation design standards for new residential and new nonresidential buildings. (Public Resources Code §25402)

2) Requires the CEC to establish building design and construction standards that increase the efficiency in the use of energy and water for new residential and new nonresidential buildings. The CEC must periodically update the standards. Six months after the CEC certifies an energy conservation manual, cities, counties, and state agencies are prohibited from issuing a building permit for a building that does not comply with the current standards created by the CEC. (Public Resources Code §25402(a)(1))

3) Requires the CEC and the Department of Housing and Community Development (HCD) to issue a joint finding that a building water efficiency standard is equivalent or superior in performance, safety, and for the protection of life, health, and general welfare to existing standards. The finding must also ensure that the standard does not unreasonably or unnecessarily impact

Californians' ability to purchase or rent affordable house by taking into account the overall benefit derived from the standard. (Public Resources Code §25402(a)(2))

4) Requires the CEC's building efficiency standards to be cost-effective when taken in their entirety and amortized over the economic life of the structure compared with historic practice. When determining cost-effectiveness, the CEC must consider the value of the water or energy saved, impact on product efficacy for the consumer, and the life-cycle cost of complying with the standard. The CEC must consider other relevant factors, including, but not limited to the standards' cost on house costs, the total statewide costs and benefits of the standard over its lifetime, economic impacts on California businesses, and alternative approaches and their associated costs. (Public Resources Code §25402(b)(3))

5) Requires electric utilities to procure 60% of their retail sales of electricity from renewable energy by 2030. This is known as the Renewable Portfolio Standard (RPS). (Public Utilities Code §399.11 *et seq.*)

6) Requires every electric utility (other than a local public owned utilities (POU) that serves more than 750,000 customers and that also conveys water to its customers) to offer net energy metering (NEM) to eligible customer-generators, upon request, on a first-come-first-served basis until the total rated generating capacity used by eligible customer-generators exceeds five percent of the electric utility's aggregate customer peak demand. (Public Utilities Code §2827)

7) Directs the California Public Utilities Commission (CPUC) to develop a standard tariff or contract, known as the "successor tariff," for eligible customer-generators with a renewable electrical generation facility no later than December 31, 2015. Requires, for each large electrical corporation, using the successor tariff, to continue to offer NEM to its customers on July 1, 2017, or upon reaching the five-percent NEM program limit, whichever is earlier. (Public Utilities Code §2827.1)

This bill:

1) Requires, until January 1, 2028, residential construction intended to repair, restore, or replace a residential building damaged or destroyed as a result of a disaster in an area in which a state of emergency has been proclaimed by the Governor to comply only with the requirements regarding photovoltaic systems pursuant to those regulations, if any, that were in effect at the time the damaged

or destroyed building was originally constructed and would prohibit that construction from being required to comply with any additional or conflicting photovoltaic system requirements in effect at the time of repair, restoration, or replacement.

2) Applies this bill to the construction of a building if certain conditions are met, specifically:

   a) The income of the owner of the residential building is at or below the median income for the county in which the residential building is located, as determined by HCD state income limits;
   b) The square footage of the residential building after the new construction will not exceed the square footage of the residential building at the time is was damaged or destroyed; and,
   c) The new construction is located on the site of the residential building that was damaged or destroyed.

3) Sunsets this bill's provisions on January 1, 2028.

4) Imposes a state-mandated local program because a local agency would be required to determine whether any older applicable PV requirements are met. Provides that no reimbursement is required by this act, pursuant to Article XIIIB of the California Constitution, 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 bill.

Background

California's building energy efficiency standards. California's building energy efficiency standards are updated on roughly every three years cycle. The CEC adopted the 2019 Building Energy Efficiency Standards, which went into effect on January 1, 2020. The standards are the first in the nation to require solar PV systems for new construction. The standards also include improved thermal building envelope standards (i.e., insulating the interior), residential and nonresidential ventilation requirements, and nonresidential lighting requirements. For residential buildings, according to the CEC, the standards will result in about 53 percent less energy use than under the 2016 standards. The CEC further estimates that the new standards will reduce greenhouse gas emissions by 700,000 metric tons over three years. The CEC's energy efficiency standards are adopted by Building Standards Commission as part of the *California Building Standards Code*, which serves as the basis for building and construction in California. The CEC first adopted building energy efficiency standards in 1977 under the authority of the Warren-Alquist Act. The CEC reports that the energy efficiency building

standards have saved Californians billions of dollars since their first adoption, avoided the need for powerplants and transmission lines, and helped keep California's per-capita energy consumption flat. The CEC has since adopted the 2022 Building Energy Efficiency Standards which, after January 1, 2023, require newly constructed residential buildings to be electric-ready (including 240-volt outlets and space for electric appliances to replace installed gas appliances). The 2022 standards also allow exceptions to the solar PV standards when roof area is not available. The standards also establish combined solar PV and battery storage standards for select businesses. The CEC has more recently updated the standards for 2025 Energy Code, at their September 2024 business meeting, which is scheduled to take effect January 1, 2026. The 2025 Energy Code updates solar PV and energy storage standards for assembly buildings, including religious worship, sport, and recreation buildings.

Statute requires that CEC's standards must be "cost-effective." CEC had estimated that based on a 30-year mortgage, the 2019 standards add about $40 per month in costs and result in about $80 per month in reduced energy costs. According to the CEC, on average, a solar system adds about $9,500 to the cost of a new home and will result in a savings of $19,000 in energy costs over 30 years (largely based on pre-COVID numbers). Although current prices tend to range in $15,000 to $20,000 based on news reports. The CEC established a few exemptions to the solar PV requirement. Primarily, homes that are shaded by trees, hills, other structures, etc. are not required to install solar. This may exclude a number of homes impacted by fires in wooded areas. Homeowners in areas with community solar programs are also exempt from the requirement. Additionally, reduced system size is permitted for low-rise residential with two stories and for low-rise multifamily or single-family homes with three or more stories. As noted above, the CEC made additional changes in the 2022 Energy Code Update.

Emergency declarations. Unfortunately, California has been no stranger to disasters in recent years, with the Governor making over three dozen emergency declarations in recent years. Many of these declarations are in response to wildfires which have destroyed tens of thousands of homes across many communities. These fires include the Tubbs and North Bay fires in Sonoma and Napa counties in 2017, the 2018 Camp Fires in Butte County, and the 2021 Caldor Fire in El Dorado, Alpine and Amador Counties. In January of this year, multiple wildfires erupted concurrently in Los Angeles County that killed 28 people, and damaged or destroyed nearly 16,000 structures, according to CalFire, in the Altadena and Palisades areas.

Incentives for residential solar and storage. The state Legislature and Governor have budgeted $280 million to fund incentives for low-income residents to install

solar and storage for eligible low-income residents across the state. The program is administered by the CPUC, pursuant to AB 209 (Committee on Budget, Chapter 251, Statutes of 2022) and budget appropriations in AB 102 (Committee on Budget, Chapter 28, Statutes of 2023), though future funding may be affected by state budget negotiations. Additionally, the compensation for solar energy exports to the electric grid have been adjusted by the CPUC under a new version of the NEM tariff adopted in December 2022. As a result, customers with solar installations who export electricity back to the electric grid receive a reduced amount of compensation from systems that were installed prior to April 15, 2023. The CPUC decision revises the NEM tariff to improve price signals by better aligning them with the electric grid's conditions, both day and night. The updated billing structure of the tariff is designed to optimize grid use by the tariff's customers and incentivize adoption of combined solar and storage systems. The CPUC intends for the changes to help meet California's climate goals and increase reliability, while promoting affordability across all income levels. However, opponents to the CPUC Decision filed a lawsuit which is currently pending at the California Supreme Court, with a possible decision within the next 90 days.

Comments

Exemptions from solar requirements. This bill would provide that homes that are being rebuilt due to a disaster will not be required to install the rooftop solar if all the condition are met, including: that the homeowner's income is below the county's average median income (AMI), the homeowner lacked code upgrade insurance coverage, the home is being built on the same location as the home that was destroyed, and the size of the new home is the same as the destroyed home. With regards to the AMI, the HCD establishes the annual state income limits. The AMI for each county varies, as an example the AMI for Lassen County is $87,900 for a four-person household and $186,600 in Marin County. This bill would require the local building permitting agency to account for these requirements. In the case of the size of the home and whether the new home is on the same land as the destroyed home, the building permitting agency could easily verify this information. However, in the case of the income and lack of insurance coverage for code upgrades, the building permitting agency would likely need to provide a self-certification document for the resident to attest to the information.

Cost-effectiveness depends on many variables. While the costs of solar had been declining rather dramatically over the past 10 years or so, more recently, COVID supply constraints, federal tariff issues, and labor costs may have increased the costs for solar PV. The price of solar installations will depend on variables including national trade tariffs policy, marketing and permitting costs, and the costs of the labor and hardware. It is widely assumed that solar installations on

new residential construction can be less expensive as compared to on an existing home. However, these savings may be more limited if solar PV is installed on individual new residential construction, not afforded the economies of scales of a housing development with multiple new homes. Additionally, savings from solar installations may also depend on the NEM tariffs afforded by the respective utility which allow solar customers to sell excess energy to the grid, as well as any fees or charges on the systems. The NEM tariff rates have been declining in compensation from the original tariffs which were more generous as they were intended to help spur the solar market.

Protecting victims. This bill attempts to reduce the burden on victims of disasters when they rebuild or repair their homes. As the author notes, there are many challenges for victims to rebuild their homes after a disaster, including the impacts of lacking sufficient insurance coverage to replace the damaged properties. Similar to recent bills that were vetoed by the Governor which require all four conditions are met before the local permitting agency can allow a residential building owner to rebuild without the solar requirement. While the solar PV installation may provide savings to the resident in the long term, the initial costs would increase the costs to rebuild by about $10,000 (and likely more). As such, it seems reasonable to provide these victims with the option to forgo these costs as they attempt to rebuild their lives, while still preserving the building owner's option to install solar PV.

Prior/Related Legislation

AB 2787 (Joe Patterson) of 2024, would have exempted, until January 1, 2028, from the Solar Mandate, as part of the state's building standards, residential construction to repair or replace a residential building destroyed or damaged as a result of a disaster, where the Governor has declared a state of emergency, and instead requires residential construction to comply with the state's requirement for PV systems that were in effect at the time the building was originally constructed. The bill was vetoed.

AB 1918 (Wood) of 2024, would have exempted a building constructed in the service territory of the Trinity Public Utility District from the building standards requirements that such a building be solar-ready or have PV and battery storage systems installed. The bill was vetoed.

AB 704 (Jim Patterson) of 2023, was substantially similar to this bill. The bill was held in the Assembly Committee on Appropriations.

AB 1078 (Patterson) of 2022, would have extended the exemption established by AB 178 for one year, until January 1, 2024. The bill was vetoed.

AB 178 (Dahle, Chapter 259, Statutes of 2019) exempted, until January 1, 2023, residential construction from complying with the solar requirements in the recently adopted building standards when the construction is in response to a disaster in an area in which a state of emergency has been proclaimed by the Governor.

AB 693 (Eggman, Chapter 582, Statutes of 2016) created the Multifamily Affordable Housing Solar Roofs Program, to provide financial incentives–up to $100 million annually, for qualified solar installations at multifamily affordable housing properties funded from IOU greenhouse gas allowances.

AB 217 (Bradford and De León, Chapter 609, Statutes of 2013) extended the low-income programs of the California Solar Initiative from 2016 until 2021, authorizes the collection of an additional $108 million for these programs, and adds additional standards to the program, as specified.

AB 327 (Perea, Chapter 611, Statutes of 2013) restructured the rate design for residential electric customers and revised the NEM program.

SB 1 (Murray, Chapter 132, Statutes of 2006) established the electric portion of the CSI with a 10-year budget of $2.2 billion collected from ratepayers.

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

SUPPORT:

California Apartment Association
Rural County Representatives of California

OPPOSITION:

None received

ARGUMENTS IN SUPPORT: The California Apartment Association states:

> Since 2020, California has required PV systems on all new construction. Additionally, the 2019 Building Energy Efficiency Standards include improved thermal building envelope standards, residential and nonresidential ventilation requirements, and nonresidential lighting requirements. Older homes were not subject to these requirements when they were built and thus were not insured to

cover the costs associated with these building materials. AB 738 would provide homeowners devastated by disaster with an exemption from these energy efficiency requirements upon repair saving them thousands of dollars in building costs. This is a crucial policy to help homeowners quickly rebuild after utter devastation.

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