

Date of Hearing: April 6, 2026

ASSEMBLY COMMITTEE ON REVENUE AND TAXATION
Mike Gipson, Chair

AB 2389 (Irwin) – As Introduced February 20, 2026

Majority vote. Tax levy. Fiscal committee.

SUBJECT: Property taxation: active solar energy systems: customer sited: extension

SUMMARY: Extends the repeal date of the active solar energy system (ASES) property tax exclusion by five years, and limits the type of ASESs that qualify for the exclusion. Specifically, **this bill:**

- 1) Extends, from lien dates occurring before January 1, 2027 to lien dates occurring before January 1, 2032, the operative date of the ASES property tax exclusion.
- 2) Requires that an ASES that qualifies for the exclusion for property tax lien dates occurring on or after January 1, 2027 and before January 1, 2032, be a "customer-sited" ASES that either has a "system size" of two megawatts or less, or is sited on the property of a "public entity customer."
- 3) Defines "customer-sited" as a system that is installed on the property of a customer for the purpose of managing the customer's own electrical needs.
- 4) Defines a "public entity customer" as a customer that is a "public entity," as defined in existing law.
- 5) Defines "system size" as the solar nameplate capacity measured in megawatts of alternating current.

EXISTING LAW:

- 1) Provides that all property is taxable unless otherwise provided by the California Constitution or federal law. (California Constitution, Article XIII, Section 1.)
- 2) Limits the maximum amount of *ad valorem* property taxation to 1% of the full cash value of the property. Generally, the Constitution restricts the full cash value of a property to the assessed value upon a change of ownership in, or new construction on, the property. The Legislature is authorized to exclude from the definition of new construction certain improvements, including the construction or addition of any ASES. (California Constitution, Article XIII, Sections 1 and 2 and Revenue and Taxation Code (R&TC) Section 73.)
- 3) Exempts from taxation property used exclusively for public schools, community colleges, state colleges, and state universities. This exemption is commonly referred to as the Public Schools Exemption. (California Constitution, Article XIII, Section 3.)

- 4) Provides that the Public Schools Exemption applies to an interest in property, including a possessory interest, belonging to the state, a county, a city, a school district, a community college district, or any combination thereof, that is used to provide rental housing for employees of one or more public school districts or community colleges. (R&TC Section 202(b)(2).)
- 5) Requires every electric utility, as defined, to develop a standard contract or tariff providing for net energy metering (NEM), among other provisions. An electric utility must make this contract or tariff available to eligible customer-generators, as defined. (Public Utilities Code Sections 2827 and 2827.1.)
- 6) Requires that certain percentages of all retail sales of electricity to California end-use customers be supplied by eligible renewable energy and zero-carbon resources by specified dates. (Public Utilities Code Section 454.43.)
- 7) Defines a "public entity" as the state, Regents of the University of California, a county, city, district, public authority, public agency, or any other political subdivision or public corporation in the state. (Civil Code Section 8036.)

FISCAL EFFECT: Pending an estimate by the State Board of Equalization (BOE), but likely in excess of this Committee's Suspense File threshold.

COMMENTS:

- 1) The author has submitted the following statement in support of this bill:

California is facing an affordability crisis. AB 2389 preserves a critical affordability incentive by ensuring Californians are not penalized with higher property taxes for adopting solar energy. Customer-sited solar helps households, schools, and local governments reduce reliance on the grid and better manage rising electricity costs. Without this extension, higher tax burdens and increased dependence on utilities could make energy less affordable for Californians across the state.

AB 2389 also maintains consistency in property tax policy, as homeowners are not reassessed for other modernization upgrades such as new windows, HVAC systems, or heat pumps. By continuing this approach, the bill supports affordability and energy resilience for all Californians.

- 2) A coalition of environmental advocates and solar energy producers, writing in support of this bills, state, in part:

For 40 years, the state Legislature has ensured that property taxes won't go up if residents put solar on their roof or a battery in their garage. However, the property tax exemption is scheduled to sunset at the end of 2026. If the rooftop solar property tax exemption sunsets, then California homeowners could face higher property taxes in 2027, just as more and more people are struggling with the cost of living in our state.

If the legislature does not pass AB 2389, then a higher property tax could be triggered for consumers who add a battery to their rooftop solar system, add panels to their rooftop

solar system, or invest in rooftop solar for the first time. In addition, schools that lease their solar system could be charged a new property tax through the third-party owner.

3) The Coalition of California Utility Employees writing in opposition to this bill, states, in part:

Extending 100% tax breaks for any period of time for rooftop solar will exacerbate an already unsustainable wealth transfer. Under NEM, customers receive large economic incentives to install rooftop solar. Solar customers sell power into the grid at the full retail rate (even though the value of renewable generation is far less) and they also avoid paying their share of the cost of distribution and transmission service. This creates a revenue shortfall that, in turn, leads to extra costs imposed on non-solar customers since utilities must recover the costs of grid service.

4) Committee Staff Comments:

- a) *History of the ASES exclusion:* In 1980, voters approved Proposition 7 (Prop. 7), which constitutionally authorized the Legislature to exclude from the definition of new construction the installation or addition of any ASES, as defined by the Legislature. In the Ballot Pamphlet issued for the November 4, 1980 election, voter materials described the arguments for and against the proposed proposition. Proponents of the proposition noted that "[w]e need to take short-term steps to reduce the cost and create a demand for solar energy equipment. Eventually the demand on its own will cut the cost, and tax incentives will no longer be needed."

Since its authorization over 40 years ago, the ASES exclusion has been clarified by the Legislature. These clarifications have provided that certain uses of an ASES are eligible, and that certain components of an ASES are excluded up to a specified percentage of their full cash value. Additionally, the Legislature authorized the transfer of the ASES exclusion from a developer to an initial purchaser, bypassing the normal reassessment practice when a property changes ownership.

- b) *Aggressive climate change goals:* In 2018, the Legislature passed SB 100 (De León), Chapter 312, Statutes of 2018, which required that retail electricity sales in California be supplied by certain percentages of renewable and zero-carbon sources. Specifically, existing law requires the state to supply 60% of sales from renewable and zero-carbon sources by 2030, 90% by 2035, 95% by 2040, and 100% by 2045.
- c) *Rooftop solar mandate:* In the 2019 triennial edition of the California Building Standards Code, a new requirement mandated that all new construction occurring after January 1, 2020 include photovoltaic rooftop solar arrays. Thus, any newly constructed home, as defined, built during or after 2020 must include a photovoltaic solar energy system in its construction.
- d) *Net billing tariff (NBT):* In December 2022, the California Public Utilities Commission (CPUC) adopted the NBT to replace the net energy metering (NEM) program. A comprehensive analysis of those programs and their differences is beyond the scope of this analysis, but a brief understanding of their operation is insightful. Both NEM and NBT act as a reimbursement mechanism for solar energy producers. Thus, electric utility customer-generators, customers that produce electricity, are entitled to compensation for the production of that energy, under existing law. The transition from NEM to NBT

appears to have been intended to reduce the amount of compensation provided to customer-generators. As noted by the CPUC, "the value of export compensation is usually lower than the retail rate, but can rise above the retail rate on late summer evenings."¹

- e) *One Big Beautiful Bill Act (OBBBA)*: The OBBBA rescinded numerous "clean energy tax credits." Among these rescinded credits was the Clean Energy Credit, which provided a credit on 30% of the costs of building or installing new, qualified clean energy improvements on eligible properties.
- f) *Demographics of solar adopters*: The author's office has provided a report published by the Lawrence Berkeley National Lab evidencing that 44% of US households that installed solar in 2023 had incomes below \$100,000 and point to this as evidence that residential solar system installations are not predominantly installed on the property of wealthier households. That same report, however, notes that other important demographic characteristics do show that higher shares of wealthier households tend to have solar installations. According to the report:

Compared to all households in their respective state, solar adopters are more likely to be college educated, live in a rural area, have higher home values, reside outside a disadvantaged community, be middle-aged, identify as non-Hispanic white, work in a business or financial occupation, and own a single home.

Indeed, according to data presented in the report, of solar adopters, 64% owned a single-family home and 35% were higher income².

- g) *Public-sector entities and power-purchase agreements(PPA)*: Background material provided by the author's office points to the predominance of PPAs amongst public schools. A PPA is an agreement where an entity agrees to purchase electricity from a developer-generator for a set period of time at certain rates. PPAs can take many forms. In some instances, the system is installed on the purchaser's property and directly transmits electricity to the entity, bypassing the grid. In other constructions, the developer-generator owns an offsite system that sells to the purchaser.

The background material provided to this Committee, in the form of a report issued by Generation180, notes that 87% of the solar installations used by public schools were financed through some third-party financing structures, which include leases, energy service agreements, and subscriptions to off-site community solar, in addition to PPAs³. The author notes that allowing the ASES exclusion to expire would increase the cost to third-party financiers who would recuperate that cost through increased rates to public entities, such as public schools.

¹ CPUC, *NEM and NBT*. <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/customer-generation/net-energy-metering-and-net-billing> (accessed March 2026).

² Lawrence Berkeley National Laboratory, *Residential Solar-Adopter Income and Demographic Trends*, (December 4, 2024). [New Berkeley Lab report on solar-adopter income and demographic trends | Energy Markets & Planning](#) (accessed March 2026).

³ Generation 180, *Brighter Future: A Study on Solar in US K-12 Schools* (September 2022). [Brighter-Future_-A-Study-on-Solar-in-U.S.-K-12-Schools-1.pdf](#) (accessed March 10, 2026).

- h) *Property tax rule 463*: Under existing law, new construction to real property is generally considered assessable, unless the construction is specifically excluded from the definition of "new construction" in the state constitution. The BOE, in their promulgation of regulations, clarifies the statutory definition of new construction in Property Tax Rule 463. Under that rule, one type of new construction that is not considered assessable is the repair and maintenance of existing features of the property. Improvements are generally considered assessable new construction, regardless of whether that improvement is an addition or an alteration. Alterations are assessable if the alteration rehabilitates the property to a like new condition or converts the property to a different use. Thus, the action of carrying on, preserving, or retaining real property fixtures in proper condition constitutes normal maintenance that is not assessable.

The BOE publishes direction to county assessors on how to administer property tax law in the Assessors' Handbook. According to Section 410 of the Assessors' Handbook, the "installation of a new shake roof that replaces an existing composition shingle roof," routine painting, or "replacements or repairs that are periodically required during the life of the improvement, such as replacement of rain gutters" are all improvements considered normal maintenance that do not constitute assessable new construction. An important caveat is that property purchased in poor condition and rapidly improved is considered assessable. Section 410 notes the "timing and scope of work must be considered to determine when maintenance and repair becomes rehabilitation and renovation that brings an improvement (or a portion) to the substantial equivalent of new." Ultimately, however, the assessor is responsible for determining what is an assessable improvement and what is non-assessable repair or maintenance.

- i) *Proposition 98 (Prop. 98)*: In 1988, California voters approved Prop. 98, which guarantees a certain level of educational funding for schools and community colleges based on certain calculations that vary with General Fund revenues and changes in per capita personal income. Three types of calculations, or tests, are stipulated in the law, and these tests impact the overall amount of revenue reserved for schools in any given year. In Test 1 years, "changes in property tax revenue have dollar-for-dollar effects on the guarantee." According to the Legislative Analyst's Office (LAO), Test 1 remains operative for the 2026-27 FY⁴. Thus, extending the ASES exclusion would forgo potential increases in the Prop. 98 minimum guarantee as property taxes revenues increase from the ASES exclusion expiring.
- j) *This bill*: As currently drafted, this bill would extend the ASES exclusion by five years and limit eligible systems to customer-sited ASESs. Customer-sited ASESs must have a rated nameplate capacity of 2 MW or less. This generation capacity limitation does not apply to customer-sited ASESs on public entity property.
- k) *Subsidizing commercially viable technology*: Arguments in favor of Prop. 7 (1980) that were included in background material to voters note that the ASES exclusion was intended to incentivize the adoption of a nascent technology; and that at some future point, the incentivizing exclusion would be no longer necessary. According to a Massachusetts Institute of Technology report, the cost of solar panels has dropped by

⁴ *Proposition 98 and K-12 Education, The 2026-27 Budget*, Legislative Analyst's Office (February 4, 2026). <https://lao.ca.gov/Publications/Report/5110> (accessed March 2026).

99% since the 1970s⁵. According to Lazard, a multinational financial advisory and asset management firm, the levelized cost of energy generation for each additional MW per hour is \$38 to \$78 for utility-scale, photovoltaic (PV) solar generation, and \$37 to \$86 for onshore wind generation⁶. Thus, the average cost for generating each additional MW per hour of electricity by utility-scale PV solar is the cheapest form of electrical generation. By extending the ASES exclusion, California would be subsidizing one of the cheapest forms of electric generation through the state's property tax system.

- l) *Subsidizing compliance with existing law*: As noted above, the Building Standards Code requires that newly constructed homes must include a rooftop solar system. Given this requirement, this bill would subsidize compliance with existing law. Generally, when the Legislature enacts a law to support a societal good, there are often attendant costs. The Legislature is almost always made aware of these costs, but may determine that the wider benefits outweigh the costs. If the Legislature begins subsidizing compliance with these laws via the tax code, some may contend it undermines the purpose of having a mandatory law and it may set a precedent with no limiting principle. For example, if the state bans the manufacturing of certain chemicals, should the state reimburse those impacted producers for the associated loss?

While not reflected in the current version of the bill, the author has indicated their intent to apply the exclusion to existing structures only.

- m) *Parity?* The author notes that this bill is intended to bring parity in the property tax treatment of installing ASESs with other types of property improvements, such as high-volume air-conditioning systems or heat pumps. While it is not abundantly clear given the brief reference, it appears that the improvements to which the author refers would generally qualify as repair and maintenance that is nonassessable new construction. Importantly, this differs from the installation of an ASES that would bring new utility to the property, not simply repair or maintain existing functionality of the property.
- n) *Public schools*: The author notes that the rescission of the ASES exclusion could lead to increased costs for public schools with PPAs resulting from developer-generators charging higher rates for generated electricity. It is not abundantly clear that this would be the case. Pursuant to the California Constitution, property used exclusively for public schools, community colleges, state colleges, and state universities is exempt from taxation. As noted by the BOE, "the property is exempt from taxation on the basis of its exclusive use for public school purposes." The courts have opined that exclusive use includes facilities that are reasonably necessary to further the primary educational purpose of a university or college, such as a college- or university-provided faculty and student housing. The Legislature provided further clarity regarding the public schools exemption by including rental housing provided to faculty of a public school district or community college district. Thus, it is not unreasonable to conclude that generation activities providing power necessary for instructional activities may be considered as

⁵ Zewe, *Surprisingly Diverse Innovations Led to Dramatically Cheaper Solar Panels*, MIT News (August 1, 2025). <https://news.mit.edu/2025/surprisingly-diverse-innovations-led-to-dramatically-cheaper-solar-panels-0811> (accessed March 2026).

⁶ Lazard, *Levelized Cost of Energy* (June 2025). <https://www.lazard.com/media/uounhon4/lazards-lcoeplus-june-2025.pdf> (accessed March 2026).

being used exclusively for public school purposes. Should that prove insufficient, the Legislature may wish to consider clarifying that generation activities for public schools is within the public schools exemption.

- o) *Making cents of the dollars*: Proponents of this bill note that property owners would experience increased costs in the form of higher taxes resulting from the expiration of the ASES exclusion. Given this contention, it is important to quantify the potential cost implications. According to EnergySage, an online comparison marketplace for clean energy products, the cost of a 9.13 kilowatt (kW) system, the average system size in California, is less than \$23,000⁷. Applying the constitutionally limited property tax rate of 1% to this figure results in an increased annual property tax of less than \$230. While the amount that a 9 kW system outputs on an hourly basis varies based on solar intensity and availability according to Residential Solar Panels, a solar panel installation service, a 9 kW system corresponds to a larger family home with multiple bedrooms, regular use of air conditioning, and several energy-hungry appliances⁸.
- p) *What is a "tax expenditure"?* Existing law provides various credits, deductions, exclusions, and exemptions for particular taxpayer groups. In the late 1960s, United States Treasury officials began arguing that these features of the tax law should be referred to as "expenditures" since they are generally enacted to accomplish some governmental purpose and there is a determinable cost associated with each of them (in the form of forgone revenues). This bill would extend an existing property tax exclusion, thereby constituting a tax expenditure.
- q) *Committee's tax expenditure policy*: SB 1335 (Leno), Chapter 845, Statutes of 2014, added R&TC Section 41, which recognized that the Legislature should apply the same level of review used for government spending programs to tax credits introduced on or after January 1, 2015. AB 263 (Burke), Chapter 743, Statutes of 2019, extended the requirements in R&TC Section 41 to all tax expenditure measures under the Personal Income Tax Law, the Corporation Tax Law, and the Sales and Use Tax Law introduced on or after January 1, 2020. This Committee's policy is to treat all tax expenditures similarly, and requires that all proposed property tax expenditures likewise comply with R&TC Section 41.

A tax expenditure proposal must outline specific goals, purposes, and objectives that the tax expenditure will achieve, along with detailed performance indicators for the Legislature to use when measuring whether the tax expenditure meets those stated goals, purposes, and objectives. In addition to the R&TC Section 41 requirements, this Committee's policy also requires that all tax expenditure proposals contain an appropriate sunset provision to be eligible for a vote⁹. Sunsets are required because eliminating a tax expenditure generally requires a 2/3rd vote. These requirements must be satisfied before a

⁷ Walker, *How Much Do Solar Panels Cost in California in 2026?*, Energy Sage (March 19, 2026). <https://www.energysage.com/local-data/solar-panel-cost/ca/> (accessed March 2026).

⁸ Residential Solar Panels, *9kW Solar System: The Perfect Size for Your Growing Home's Energy Needs* (May 20, 2025). <https://www.residentialpanels.org/core-products-and-services/9kw-solar-system-the-perfect-size-for-your-growing-homes-energy-needs/> (accessed March 2026).

⁹ An "appropriate sunset provision" shall mean five years, except in the case of a tax expenditure measure providing relief to California veterans, in which case "appropriate sunset provision" shall mean 10 years.

bill can receive a vote in this Committee. This bill contains a five-year sunset, but does not comply with the requirements of R&TC Section 41.

r) *Prior legislation:*

- i) SB 710 (Blakespear), Chapter 238, Statutes of 2025, clarified the repeal date of the ASES exclusion.
- ii) SB 1340 (Hertzberg), Chapter 425, Statutes of 2022, extended the repeal date of the ASES exclusion to January 1, 2027.
- iii) AB 1157 (Mullin), Chapter 717, Statutes of 2017, included within the Public Schools Exemption interests in property, including possessory interests, belonging to the state, a county, a city, a school district, a community college district, or any combination thereof, if that property is used to provide rental housing for employees of one or more public school districts or community college districts, among other provisions.
- iv) SB 871 (Committee on Budget and Fiscal Review), Chapter 41, Statutes of 2014, extended the repeal date of the ASES exclusion to January 1, 2025.

REGISTERED SUPPORT / OPPOSITION:

Support

350 Bay Area
 350 Conejo/San Fernando Valley
 350 Contra Costa Action
 350 Humboldt
 350 Santa Barbara
 Acterra
 Albany Climate Action Coalition
 Alliance of Nurses for Healthy Environments
 Altadena Energy and Solar
 Audobon California
 Ballona Institute
 Bay Area Clean Air Coalition
 Brighten Solar
 Brightline Defense
 Calcom Energy
 California Interfaith Power and Light
 California League of Conservation Voters
 California Solar and Storage Association
 Californians for Energy Choice
 CALPIRG
 Camrosa Water District
 Center for Biological Diversity
 Center for Community Energy
 Center for Sustainable Energy
 Central California Asthma Collaborative
 Citadel Roofing and Solar

Citizens' Climate Lobby, Santa Clarita
City of Fresno
Clean Coalition
Cleaneearth4kids.org
Climate Action California
Climate Action California (UNREG)
Climate Action Campaign
Climate Action Campaign of the Humboldt Unitarian Universalist Fellowship
Climate Action Mendocino
Climate Breakthrough
Climate Reality Project, Orange County Chapter
Community Corporation of Santa Monica
Cool OC
Davis United Methodist Church
Defend Ballona Wetlands
Democratic Club of West Orange County
Eco Equity
Eco San Diego
Elders Climate Action Northern CA Chapter
Elders Climate Action Southern CA Chapter
Electric Vehicle Association
Environment California
Environmental Center of San Diego
Environmental Working Group
First Unitarian Church of San Diego
Forefront Power, LLC
Fossil Free UC Davis
Grid Alternatives
Hammond Climate Solutions Foundation
Hes Renewables
Howard Jarvis Taxpayer Association
Indivisible Marin
Indivisible San Jose
Indivisible Santa Cruz County
Indivisible Sonoma County
Indivisible South Bay LA
James Irrigation District
JKB Energy
Kern-Tulare Water District
Linda County Water District
Local Government Sustainable Energy Coalition
Long Beach Alliance for Clean Energy
Los Angeles Climate Reality Project
Natomas Central Mutual Water Company
Neighbors for Progressive Action
Oil and Gas Action Network
Our City San Francisco
Our Green Challenge
Panoche Water District

Physicians for Social Responsibility
Prodemocracy Workgroup, Grassroots Institute
Qcells
Quitcarbon
Redwood Energy
Redwoods Community College District
Rio Hondo College
Rise South City
Rootsaction
Sacramento Climate Coalition
Samual Lawrence Foundation
San Diego 350
San Diego Community Power
San Francisco Climate Emergency Coalition
San Luis Obispo Mothers for Peace
San Pedro Peninsula Homeowners Association
Santa Cruze for Bernie
School Energy Coalition
SCV Eco Alliance
Self-Help Enterprises
Sierra Club California
Silicon Valley Youth Climate Action
Simply Solar
SLO Climate Coalition
SoCal 450 Climate Action
Social Compassion in Legislation
Socioenergetic Foundation
Solar Gain West
Solar Rights Alliance
Solar Technologies
Sonoma County Climate Activist Network
Stand.earth
Sun Light and Power
Sunflower Alliance
Sustainable Systems Research Foundation
The Climate Center
Third ACT Bay Area
Third ACT SoCal
Town of Apple Valley
Tri County Chamber Alliance
Tubb Canyon Desert Conservancy
US Green Building Council
Undauntedk12
Uniting the Central Coast for Action
Utility Consumers Action Network
Ventura Climate Coalition
West Berkeley Alliance for Clean Air and Safe Jobs
Western Watersheds Project
White Pine Renewables

Opposition

Coalition of California Utility Employees

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