

ASSEMBLY THIRD READING

AB 1738 (Boerner Horvath)

As Amended April 25, 2022

Majority vote

SUMMARY

Creates mandatory building standards for certain existing residential structures to require electric vehicle (EV) charging stations when retrofits are done.

Major Provisions

- 1) Requires the California Building Standards Commission (CBSC), by the next triennial edition of the California Building Standards Code, effective January 1, 2026, to adopt, approve, codify, and publish mandatory building standards for the installation of specified electric vehicle charging stations at cost-effective trigger points in existing multifamily dwellings, hotels, motels, and nonresidential development during retrofits to existing buildings.
- 2) Directs the Department of Housing and Community Development (HCD) to propose mandatory building standards for installation of electric vehicle charging stations with specified equipment in existing multifamily dwellings, hotels, and motels.
- 3) Specifies that HCD must do all of the following when proposing the mandatory building standards specified in this bill:
 - a) Use California Green Building Standards Code Sections 4.106.4 and 5.106.5.3 (Part 11 of Title 24 of the California Code of Regulations) as the starting point for the mandatory building standards;
 - b) Consult with interested parties, including, but not limited to, the State Air Resources Board, the State Energy Resources Conservation and Development Commission, investor-owned utilities, municipal utilities, vehicle and electric vehicle supply equipment manufacturers, local building officials, commercial building and apartment owners, and the building industry;
 - c) Invite the participation of the public at large in the development of those building standards; and
 - d) Propose standards that only apply to retrofits, additions, and alterations of existing parking facilities when a building permit is required and other significant construction, retrofits, or repair action is taking place.
- 4) Provides that HCD and the commission must review the building standards proposed and adopted pursuant to this section every triennial code cycle and, if needed, update those building standards with increasing percentages of parking spaces required to have electric vehicle supply equipment installed, to ensure that the building standards support statewide needs for electric vehicle charging stations that align with the state's zero-emission vehicle targets until specified goals are met.

COMMENTS

Background on Building Standards: The California Building Standards Law establishes the process for adopting state building standards by CBSC. Statewide building standards are intended to provide uniformity in building across the state. CBSC's duties include the following: receiving proposed building standards from state agencies for consideration in each triennial and intervening building code adoption cycle; reviewing and approving building standards submitted by state agencies; adopting building standards for state buildings where no other state agency is authorized by law; and publishing the approved building standards in the California Building Standards Code (California Code of Regulations, Title 24).

There are approximately twenty state agencies that develop building standards and propose them for adoption to CBSC. The Department of Housing and Community Development (HCD) is responsible for the standards for residential buildings, hotels and motels. The Division of the State Architect (DSA) proposes building standards for schools and community colleges. Updates and changes to building standards are adopted on two timelines: through the triennial code adoption cycle which occurs every three years and through the intervening code adoption cycle which provides an update to codes 18 months after the publication of the triennial codes. Regulatory activities for each cycle begin over two years before the effective date of the codes. The standards adopted in the next intervening code cycle will be effective on July 1, 2024 and the next triennial cycle's standards will be effective on January 1, 2026.

In 2010, the CBSC adopted CALGreen, which included both mandatory and voluntary building standards. The CALGreen Code establishes standards for the installation of Electric Vehicle (EV) charging infrastructure and EV charging stations in new multifamily buildings and nonresidential structures. In December of 2021, CBSC adopted updated standards which go into effect on January 1, 2023 and will require all new construction of multifamily housing, hotels, and hotels to contain a certain percentage of parking spaces which are EV capable and EV ready. "EV capable" refers to parking spaces with electrical panel capacity, a dedicated branch circuit and a raceway to the EV parking spot to support future installation of charging stations while "EV ready" goes a step further and also requires a receptacle (outlet) to be installed.

For smaller buildings with less than 20 units, at least 25% of parking spaces in new multifamily development must be EV ready while 10% must be EV capable. Larger buildings with 20 or more units of residential housing (or 20+ rooms for hotels and models) must follow the same building standards as smaller buildings while also including the actual EV charger on 5% of parking spaces. The new standards also require EV capable spaces be added when there are additions and alterations to parking facilities that would require a building permit. In cases when an existing multifamily building or hotel or model does an addition or alteration, at least 10% of the spaces altered or added must be EV capable.

Climate mitigation efforts and EV charging need: The California Global Warming Solutions Act of 2006 was passed as AB 32 (Núñez), Chapter 488, Statutes 2006, and established targets for reducing climate change and greenhouse gas (GHG) emissions such that GHG emissions in 2020 would be at 1990 levels (a reduction of approximately 30%), and then an 80% reduction below 1990 levels by 2050. The state has implemented many strategies to help meet these targets, including the requirement for regions to create Sustainable Communities Strategies SB 375, (Steinberg), Chapter 728, Statutes 2008 to help integrate land use, transportation, and housing decisions.

An ongoing challenge of meeting our GHG targets is the transportation sector. This sector accounts for approximately 40% of California's GHG emissions the greatest of which comes from passenger vehicles. Decreasing emissions from the transportation sector is essential to the state meeting its GHG emission reduction targets. However, despite efforts in this area, emissions continue to increase; according to the California Air Resources Board's *2018 Progress Report – California's Sustainable Communities and Climate Protection Act*, since the end of the 2008 recession vehicle miles traveled per capita have increased substantially with a commensurate increase in carbon dioxide emissions per capita.

To help address the issue, in 2018 Governor Brown issued Executive Order B-48-18, establishing new GHG reduction goals and a \$2.5 billion investment plan over eight years to reduce carbon emissions from transportation. The plan includes the goals of five million zero-emission vehicles (ZEV) on the road by 2030 (\$1.6 billion over eight years); and 250,000 ZEV chargers, including 10,000 fast charging stations and 200 hydrogen fueling stations by 2025 (\$900 million over eight years).

There are currently about 1 million light-duty EVs on the road in California. According to the California New Car Dealers Association, fully electric vehicles made up 9.5% of market share and plug-in electric vehicles made up 3.3% of market share during the last quarter of 2021¹. Governor Newsom signed an Executive Order N-79-20 in 2020 to require that, by 2035, all new cars and passenger trucks sold in California be zero-emission vehicles.

California is making modest but steady progress towards increasing the number of electric and hydrogen charging stations. According to the 2021 California Energy Commission's AB 2127 Electric Vehicle Charging Infrastructure Assessment, "the state will need nearly 1.2 million public and shared chargers by 2030 to meet the fueling demands of the 7.5 million passenger plug-in electric vehicles (EVs) anticipated to be on California roads."² The costs to install a charger can vary from \$1,500 to \$300,000, depending on the type of charger and access to power.

Additional requirements for retrofits of buildings: This bill proposes to expand on the residential, hotel, and motel EV charging building standards for retrofits adopted in December of 2021 that will go into effect January 1, 2023. Specifically, this bill would require the adoption of building standards that involve installation of an EV charger and not simply a requirement for "EV capable" spaces. CBSC NS HCD would be required to adopt the standards specified in this bill as part of the next triennial code adoption cycle. Moreover, the bill would mandate future updates at each triennial code adoption cycle that prescribe increasing percentages of parking spaces each time.

According to the Author

"Transitioning the transportation sector to zero-emission technology is critical to achieving California's public health protection goals, minimizing air pollution exposure, and mitigating climate change impacts. As passenger vehicles alone account for more than 28 percent of California's statewide greenhouse gas emissions, deployment of light-duty ZEVs is essential. To support this transition, more electric vehicle charging stations are needed. Installation of EV

¹ <https://www.cncda.org/wp-content/uploads/Cal-Covering-4Q-21.pdf>

² <https://www.energy.ca.gov/programs-and-topics/programs/electric-vehicle-charging-infrastructure-assessment-ab-2127>

charging stations is most cost-effective when it is concurrent with retrofits, additions, or alterations to parking spaces or the electric supply for an existing building. AB 1738 seeks to close the projected EV charging gap of approximately 975,000 Level 2 EV charging stations by 2025."

Arguments in Support

This bill is supported by California Environmental Voters who write that, "While California is making modest, but steady progress in installing EV charging stations, the CEC estimates that nearly 975,000 more EV chargers will be needed in addition to the EV chargers installed and projected to be installed by 2030. AB 1738 would direct the BSC to add provisions to the CALGreen Code that require existing multifamily dwellings, hotels and motels, schools, and nonresidential buildings to have an increasing percentage of parking spaces that are 'EV installed,' with Level 2 EV charging stations or direct current fast chargers installed."

Arguments in Opposition

A number of property owner groups including the California Apartment Association, the California Building Industry Association, and the California Hotel and Lodging Association oppose this bill. In a joint letter of opposition, they note, "the Legislature has a longstanding policy of not placing building standards in statute. And, given the actions cited above and already underway, these agencies have clearly shown they can deal with the complex and expensive issue related to EV-charging retrofit standards."

FISCAL COMMENTS

According to the Assembly Appropriations Committee:

- 1) HCD estimates one-time costs of \$180,000 (General Fund (GF)) annually, for fiscal years 2023-24 and 2024-25, for one limited-term staff to conduct technical research, draft proposed rulemaking documents, solicit stakeholder feedback and collaborate with other state agencies to develop the standards for existing buildings.
- 2) HCD anticipates approximately \$200,000 (GF) in contracting costs to conduct a study of existing conditions related to EV charging and to determine if existing infrastructure can support the increased demand.
- 3) CBSC indicates costs are absorbable within existing resources.

VOTES

ASM HOUSING AND COMMUNITY DEVELOPMENT: 6-1-1

YES: Wicks, Carrillo, Gabriel, Kalra, Quirk-Silva, Ward

NO: Seyarto

ABS, ABST OR NV: Kiley

ASM EDUCATION: 5-1-1

YES: O'Donnell, Bennett, Lee, McCarty, Quirk-Silva

NO: Megan Dahle

ABS, ABST OR NV: Chen

ASM APPROPRIATIONS: 12-4-0

YES: Holden, Bryan, Calderon, Carrillo, Mike Fong, Gabriel, Eduardo Garcia, Levine, Quirk, Robert Rivas, Akilah Weber, Wilson

NO: Bigelow, Megan Dahle, Davies, Fong

UPDATED

VERSION: April 25, 2022

CONSULTANT: Sandra Nakagawa / H. & C.D. / (916) 319-2085

FN: 0002685