



May 12, 2023

Submitted via email: cbsc@dgs.ca.gov

Re: CalETC's Comments on the 2022 Intervening Code Cycle 45-Day Changes of the CalGreen Code

The California Electric Transportation Coalition (CalETC) respectfully submits the following comments on the 2022 Intervening Code Cycle 45-Day Changes for non-residential and residential electric vehicle (EV) charging. We greatly appreciate the Building Standards Commission's (BSC) and Department of Housing and Community Development's (HCD) commitment to improving EV charging standards in California and willingness to work with stakeholders on these improvements.

CalETC supports and advocates for the transition to a zero-emission transportation future to spur economic growth, fuel diversity and energy independence, contribute to clean air, and combat climate change. CalETC is a non-profit association committed to the successful introduction and large-scale deployment of all forms of electric transportation. Our Board of Directors includes representatives from: Los Angeles Department of Water and Power, Pacific Gas and Electric, Sacramento Municipal Utility District, San Diego Gas and Electric, Southern California Edison, Southern California Public Power Authority, and the Northern California Power Agency. In addition to electric utilities, our membership includes major automakers, manufacturers of zero-emission trucks and buses, electric vehicle charging providers, autonomous electric vehicle fleet operators, and other industry leaders supporting transportation electrification.

BSC's 45-Day Changes for Non-Residential Buildings

CalETC supports continuing to increase EV Ready requirements at non-residential buildings and recommends phasing out the use of EV Capable spaces, which would harmonize with the requirements for residential buildings. California is rapidly transitioning its light-duty vehicles to zero emission, with new EV sales reaching 20% of new car sales in the first quarter of 2023. Ensuring commercial buildings have sufficient charging will allow more Californians to take advantage of daytime workplace charging when solar power is plentiful and electricity rates are generally cheaper. We also support the code provisions that allow developers to install additional EV Ready charging to reduce the number of EV Capable spaces that must be installed.

CalETC strongly supports the inclusion of triggers for existing commercial buildings to install EV charging when making additions or alterations. We recognize that as a compromise, these buildings are allowed to install EV Capable spaces instead of EV Ready spaces given the additional costs. However, we urge BSC to consider requiring installation of at least one EV Ready space, or similar to the new construction requirements, provide a minimum number of EVSE in combination with EV Capable spaces for parking lots with 26 or more parking spaces as listed in Table 5.106.5.3.1. We are concerned that the EV Capable spaces will sit idle if there is no visible EV infrastructure installed at these buildings.

Finally, we support the CalGreen Code's inclusion of medium- and heavy-duty (MHD) truck charging and expanding the list of facility types that must install MHD charging to include office buildings and manufacturing facilities. The California Air Resources Board recently adopted the Advanced Clean Fleets Regulation which, in combination with the Advanced Clean Trucks Regulation, will significantly increase the number of battery electric MHD trucks on the road in California. We support the CalGreen Code's inclusion of MHD truck charging to meet their fueling needs.

HCD's 45-Day Changes to Residential Buildings

CalETC concurs with separating the requirements for multifamily housing from hotels and motels. We also support the transition away from EV Capable to EV Ready requirements and increasing the number of EV Ready spaces that must be installed at both multifamily housing, hotels, and motels. We applaud HCD for continuing to ramp up EV Ready requirements and encourage HCD to follow suit in the upcoming code cycle. CalETC also supports the inclusion of wiring the EV charging to the dwelling unit's electrical panel to ensure residents can access the cheapest electricity rates available to them. We recognize that there may be instances where a building's design does not make this economically feasible. Alternatively, submetering, which was recently approved by the California Public Utilities Commission, may be a more cost effective and scalable approach to hard wiring charging to the unit's panel. Finally, we support the recommendation detailed in the letter signed by Senators Becker, Skinner, Smallwood-Cuevas and more requesting a clarification that the mandatory measures can be satisfied by meeting the Code's Tier 1 or Tier 2 options, even if the resulting number of powered parking spaces (or the electrical power provided) is less than that required by the mandatory requirements.¹

CalETC continues to have concerns about the safety, capabilities, and long-term durability of using outlets for EV charging at newly constructed multifamily housing. We are supportive of accommodating innovative solutions that includes outlet based EVSE technology and we underscore the need for study and data to inform standards development in this space as new technologies, use cases, and solutions emerge. Some subject matter experts have expressed concern that 208/240-volt outlets may present safety hazards. Outlets must be regularly inspected for loose wires or signs of melting. Outlets allow residents to purchase and use adapters that may not be UL or ETL-certified and may not be compatible with the outlet and charging cable, creating a safety hazard, or tripping the ground fault circuit interruption (GFCI) protection. If the GFCI protection trips, the resident must be able to reset the GFCI, or power will not be restored until a building manager or maintenance person resets it. Weather proofing is also an issue for any outlets that are not installed under a covered area. Technology development and maturation of U.S.-based safety standards to accommodate EV charging (for example, via EVSE-equipped receptacles) is still fairly nascent. Additionally, cost savings for outlets over an EVSE are insignificant, especially considering regular inspections and weather proofing. We raise these concerns to call HCD's attention to a potential safety hazard and recommend HCD do a

¹ Sen. Josh Becker et al., May 15, 2023, *Public Comment on Item 5 of the Electric Vehicle Infrastructure, Residential, 2022 CALGreen Intervening Code Cycle*.

deep dive into this issue to determine whether outlets are the right option for EV charging at new multifamily housing. We would be happy to discuss this issue in greater detail.

CaETC encourages BSC and HCD to review the exceptions given to local governments to waive the requirements to install EV charging infrastructure (Sections 5.106.5.3, 5.106.5.4, and 4.106.4.2.2). We are concerned that these exceptions may be granted without oversight from BSC or HCD, may drive down the amount of EV charging installed, and impair access to charging for disadvantaged and low-income communities. CaETC recommends BSC and HCD collect and publish data on when, how often, and at what cost these exceptions are used. We recommend data collection occur as soon as possible so that stakeholders can review and discuss these exemptions during the next code cycle.

We greatly appreciate BSC's and HCD's efforts on the 45-Day Changes and look forward to continuing to work with you on developing EV requirements. Thank you for your consideration of our comments and do not hesitate to contact us if you have any questions.

Best regards,

A handwritten signature in blue ink, appearing to read 'KAC', with a long horizontal flourish extending to the right.

Kristian Corby, Deputy Executive Director, CaETC