

May 15, 2023

California Building Standards Commission & Department of Housing and Community Development  
2525 Natomas Park Drive, Suite 130  
Sacramento, California 95833-2936  
Via Email: cbsc@dgs.ca.gov

RE: EVCAC requests approval of Items 1-4, 6-11, 13, 15-16 and amendments to Items 5, 12 and 14 in the 2022 CALGreen Intervening Code Cycle for Residential Construction (Title 24, Part 11)

Dear Commissioners and Staff:

The 40 organizations listed below would like to thank the California Department of Housing and Community Development (HCD) and the CA Building Standards Commission (CBSC) for your responses to suggestions by the Green Code Advisory Committee (Green CAC) and the public to your electric vehicle (EV) charging proposals for the 2022 CALGreen Intervening Code Adoption Cycle. We greatly appreciate that the initial express terms incorporated our proposed code language as voluntary options (Tier 1 Option B and Tier 2 Option B), converted EV Capable requirements to EV Ready, and will require direct wiring to each unit's electrical meter in cases where the units have dedicated parking spaces. We furthermore appreciate that, upon the recommendation of the Green CAC in response to our suggestion, you changed the language in Item 5, 1c from "where feasible" to "unless determined as infeasible by the project builder or designer."

**We recommend approval of Items 1-4, 6-11, 13, and 15-16. However, Items 5, 12 and 14 need amendment** because they are out of compliance with Health and Safety Code Section 18930(a)<sup>1</sup> Criteria 3 and 6. Most importantly, Item 5c needs clarification to remove ambiguity. **Please clarify that the builder will be in compliance by meeting the Tier 1 and Tier 2 requirements in lieu of the mandatory requirements, even if the resulting number of powered parking spaces (or the electrical power provided) is less than that required by the mandatory requirements.** See the rest of this letter for additional comments; especially review Appendix 1 for **specific amendment suggestions and justification** and Appendix 2 for key principles.

**In summary, in accordance with Criteria 3 and 6 of Health and Safety Code Section 18930(a), we ask HCD to take the following actions before finalizing the language for this Intervening Cycle (consulting Appendix 1 for specific suggested language):**

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<sup>1</sup> Health and Safety Code Section 18930(a): <https://codes.findlaw.com/ca/health-and-safety-code/hsc-sect-18930/#:~:text=Whenever%20a%20building%20standard%20promotes,Fire%20Marshal%20for%20prior%20approval>

- **Items 1 through 4, 6 through 11, 13, 15 and 16 - APPROVE**
  
- **Item 5 - EV Ready Parking Spaces with Receptacles\_ - APPROVE AS AMENDED TO:**
  - a. Resolve the ambiguity created by the term “assigned parking,”;
  - b. Provide each **dwelling unit** with an EV charging space rather than 40% of **parking spaces**. Use of a percentage of parking spaces will result in wildly varied outcomes based on the configuration and details of individual projects;
  - c. Permit the enhanced levels of charging in the Appendix 4 Voluntary Measures to be used to satisfy the requirements of the Mandatory Measures. **Clarify that the builder will be in compliance by meeting the Tier 1 and Tier 2 requirements in lieu of the mandatory requirements, even if the resulting number of powered parking spaces (or the electrical power provided) is less than that required by the mandatory requirements.**
  - d. Clarify the ambiguity on the requirements when the number of parking spaces is less than the number of dwelling units.
  
- **Item 12 - Electric vehicle charging for additions and alterations of parking facilities serving existing multifamily buildings. APPROVE AS AMENDED TO:**
  - a. Provide consistency with the other residential EV charging amendments that have eliminated the use of “EV Capable” spaces as a compliance option.
  
- **Item 14 - Appendix A4 Residential Voluntary Measures, Section A4.106.8.2 New multifamily development projects and hotels and motels. APPROVE AS AMENDED TO:**
  - a. Clarify the meaning of or remove this Exception language “. . . or parking facilities otherwise incapable of supporting electric vehicle charging.” If not amended, the ambiguity of this current language could be abused to avoid compliance with the EV charging requirements.

Thank you for your consideration of our concerns and comments. We are happy to answer any questions CBSC or HCD may have. We look forward to working with HCD and CBSC during the next Triennial code cycle to ensure 100% access to EV charging for residents of newly built apartments and condos as the pace of EV adoption skyrockets.

Sincerely,

**EV Charging for All Coalition (EVCAC),** Linda Hutchins-Knowles, Co-Lead

**350 Bay Area,** Elena Engel, Transportation Committee Co-Chair

**350 Petaluma**, Annie Stuart, Steering Committee Member

**350 Ventura County Climate Hub**, Jan Diestrick, Policy Team Lead

**Acterra: Action for a Healthy Planet**, Lauren Weston, Executive Director

**Bay Area Clean Air Coalition**, Kristel Riestesel, Administrator

**BeniSol, LLC**, Sven Thesen, CEO

**Berkeley Electrification Working Group**, Tom Graly, Co-Leader

**CADEM Renters Council**, Igor Tregub, NorCal Vice Chair

**California Environmental Voters**, Aaron McCal, Federal Advocacy Coordinator

**Carbon Free Palo Alto**, Bruce Hodge, Founder

**Carbon Free Silicon Valley**, Bruce Hodge, Chair

**Center for Community Energy**, Jose Torre Bueno, Executive Director

**Citizens Climate Lobby**, Elaine Salinger, Co-leader of the San Mateo Chapter

**Climate 911**, Wendy Ring, Convenor

**Climate Action California**, Janet Cox, CEO

**Climate Reality Project, San Fernando Valley Chapter**, Kathy Shaeffer, Legislative Director

**Climate Reality Project, Silicon Valley Chapter**, Adam Sweeny, Chapter Co-Chair

**Cool the Earth**, Carleen Cullen, Executive Director

**Elders Climate Action (ECA) NorCal Chapter**, Todd Weber, Chapter Co-Leader

**Electric Vehicle Association**, Elaine Borseth, President, and Guy Hall, Policy Chairperson

**Electric Vehicle Association California Central Coast Chapter**, Beverly DesChaux, President

**Golden Gate Electric Vehicle Association**, Ray Kutz, President

**GreenLatinos**, Andrea Marpillero-Colomina, Sustainable Communities Program Director

**Inland Empire Electric Vehicle Association**, Michelle Pierce, Co-leader

**Let's Green CA!, an initiative of the Romero Institute**, Leslie Austen, Climate Action Organizer

**Liquid Website**, Thom Filippelli, Owner

**LUCITA**, Birgitte Rasine, CEO

**Mothers Out Front Northern California**, Andrea Slater, California Senior Organizer

**Ocean Outfall Group**, Joseph Racano, Director/Co-founder

**Plug In America**, Ingrid Malmgren, Policy Director

**Project Green Home**, Kathleen Kramer, MD, Co-founder

**Public Citizen**, East Peterson-Trujillo, Clean Vehicles Campaigner

**San Francisco Bay Physicians for Social Responsibility**, Robert Gould, MD, President

**San Mateo Climate Action Team**, Michelle Hudson, Co-Leader

**Santa Cruz Climate Action Network**, Pauline Seales, Organizer

**Sierra Club California**, Brandon Dawson, Director

**Sunflower Alliance**, Janet Johnson, Co-Coordinator

**Sustainable Mill Valley**, Marilyn Price, Co-Chair

**The Climate Center**, Woody Hastings, Phase Out Polluting Fuels Program Manager

## **APPENDIX 1:**

### **Suggested Amendment Language and Justification for Approve-as-Amended Agenda Items**

#### **Item 5 - EV Ready Parking Spaces with Receptacles - APPROVE AS AMENDED**

##### **Comments:**

- The EVCAC commends HCD for their work and progress to ensure EV charging is made available to all Californians on a fair, affordable, and equitable basis. We have several concerns about the language of the proposed amendments in Item 5 and believe they should be clarified to better carry out the intent of rulemaking.
- The first concern is that the requirements of **4.106.4.2.2 Multifamily dwellings** are based on a percentage (40%) of “assigned” parking spaces. **This creates an ambiguity under Item 6 of the 9-point Health and Safety Code criteria.** The proposed language is silent on the requirements for “unassigned” parking and permit applicants seeking to avoid compliance could argue that parking for their development was “unassigned” and the requirements for EV charging would not apply. After working closely with HCD and other stakeholders during the earlier stages of the rulemaking, we believe not providing EV charging when parking is unassigned is clearly not the intent of the proposed regulations.
- Our second concern is that the 40% requirement, while an improvement, still could leave many multifamily housing occupants without access to EV charging through their dwelling’s electrical service. Charging at home provides the most equitable costs, convenience, reliability and predictability and is vital for the transition to electric vehicles.
- Our third concern is to clarify the ability of building officials to work with applicants to utilize the enhanced provisions in the Appendix 4 Voluntary Measures to satisfy the basic requirements. This was discussed with stakeholders and HCD during the rulemaking process. Making the Voluntary Measures provisions explicitly permissible will allow applicants to proceed with certainty to provide EV charging for all dwelling units. The Voluntary Measures were extensively discussed during the rule making and we believe making them available as part of the Mandatory Measures would be a clarification and not a substantive change.
- Our fourth concern is the situation when the number of parking spaces provided for residents is less than the number of units. In this instance Exception 2 applies and as currently written could be construed to provide relief from the Mandatory Requirements. This requires clarification that in this situation every parking space will have a low power Level 2 EV charging receptacle.

##### **Recommendation of Amendment to Item 5:**

In accordance with Items 3 and 6 of the Health and Safety Code Section 18930(a) criteria, the following amended proposal would clarify the requirements and address our concerns:

**1. EV Ready Parking Spaces with Receptacles.**

**a. Hotels and Motels. . .**

**b. Multifamily Parking Facilities.** For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit. Each dwelling unit shall have a parking space with a low power Level 2 EV charging receptacle. EV charging receptacles required by this section shall be located in at least one parking space per dwelling unit where parking is provided. The provisions of **A4.106.8.2.1 New multifamily dwellings, hotels and motels** shall be permitted to satisfy the basic requirements.

**Exceptions:**

- 1.** Areas of parking facilities served by parking lifts-, including but not limited to automated mechanical-access open parking garages as defined in the California Building Code,
- 2.** Provide a low power Level 2 EV charging receptacle for each parking space where the number of parking spaces available for residents is less than the total number of dwelling units.

**c. Receptacle Power Source.** EV charging receptacles . . .

**Item 12 - Electric vehicle charging for additions and alterations of parking facilities serving existing multifamily buildings. APPROVE AS AMENDED TO:**

**Comments:**

- HCD has eliminated the use of “EV CAPABLE spaces in new construction, see Item 5 of this Rulemaking, which sets forth HCD’s “. . . concurrence that EV capable parking spaces do not provide an actual or immediate opportunity for EV charging.” We believe the continuation of EV capable in Item 12 was an oversight.

**Recommendation of Amendment to Item 12:**

In accordance with Item 3 of the Health and Safety Code Section 18930(a) criteria, we request the proposal be approved amended as follows:

- **4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multifamily buildings.** ~~When~~ Where new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be electric vehicle charging spaces ~~(EV spaces) capable of supporting future with Low Power Level 2 EVSE~~-receptacles.

**ITEM 14 - Appendix A4 Residential Voluntary Measures, Section A4.106.8.2 New multifamily development projects and hotels and motels. APPROVE AS AMENDED TO:**

**Comments:**

- There are seven instances of the following language that provide relief from the requirements in the Exceptions of this Section:
  - **“Exception: Areas of parking facilities served by parking lifts, including but not limited to automated mechanical-access open parking garages as defined in the California Building Code; or parking facilities otherwise incapable of supporting electric vehicle charging.”**
- There is no guidance as to what would make a parking facility “otherwise incapable of supporting electric vehicle charging.”

**Recommendation of Amendment to Item 14:**

To preclude this language being used to avoid compliance with the intent of the code, **it should be clarified to provide guidance to applicants and building officials OR it should be deleted as shown in our suggested revised language below.**

- **In accordance with Item 6 of the Health and Safety Code Section 18930(a) criteria, which requires that “*The proposed standard is not unnecessarily ambiguous or vague, in whole or in part*” our suggested amended language for Item 14 is as follows:**
  - **“Exception: Areas of parking facilities served by parking lifts, including but not limited to automated mechanical-access open parking garages as defined in the California Building Code.**

**APPENDIX 2:**  
**First Principles**

**First Principles for EV Infrastructure in New Construction**

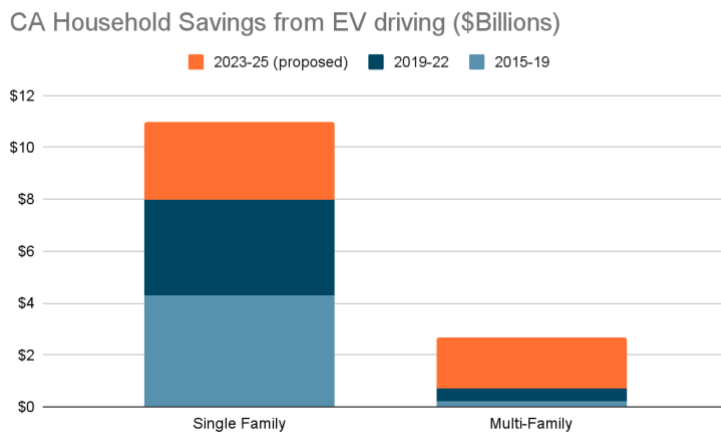
As Housing and Community Development (HCD) and the California Building Standards Commission (CBSC) move forward in this intervening code cycle, we encourage both agencies to adopt these “first principles” for EV infrastructure.

**1. Equity**

If California hopes to meet our ambitious but necessary climate targets, it will require everyone to participate. Longstanding systems of oppression have no place in a just transition to a clean energy economy. Lack of access to charging precludes EV adoption by millions of California residents; broad access requires power for *every new home with parking* -- be it a single family home, apartment or condominium. Where incremental steps are required, **lower power with ubiquitous access is preferable to creating “haves” and “have-nots” with partial access.**

Charging at home through one’s own electrical panel and electricity meter is the least expensive, most convenient, and most reliable way to fuel an EV. Since 2015, CALGreen has provided residential EV charging access to 100% of new single-family homes, but to only a small percentage of multi-family homes. Residents of multi-family homes statistically have lower incomes and are disproportionately people of color; denying them the same access to affordable, convenient EV charging is unfair, and holds back mass EV adoption.

Figure 1 compares the household savings from EV driving for single family dwellings and multifamily dwellings, as a result of CALGreen code implementation in the indicated years.



*Fig. 1 - Current and historical CALGreen code provides the most household cost savings to single-family homeowners and much less to multi-family residents.*



We urge the Commission to adopt **equitable building codes which acknowledge that parking access and decision-making power for multi-family residents is different than it is for single family homeowners.**

## **2. Low cost at all stages for all stakeholders**

Mass EV adoption requires prioritizing infrastructure that ensures low costs to land developers, building owners and EV drivers, without compromising the other first principles. California faces a giant and expensive problem of retrofitting our existing parking infrastructure, particularly in multi-family housing. **Since *the least expensive way to install EV infrastructure is during new construction*, the code must stop adding to the state's retrofit burden by adding to the stock of buildings that are unprepared for EVs, particularly in Disadvantaged Communities<sup>2</sup>.**

Making EVs affordable for all Californians requires both *affordable electric cars* and *access to affordable electricity* for charging. The Building Standards Commission needs to work with CARB, HCD, the CPUC, and the Energy Commission to incentivize and/or mandate access to *\*low-cost electricity\** for multi-family housing (MFH) residents, and particularly those in low-income and disadvantaged communities.

Simply installing DC Fast Charging stations in low-income communities is not equitable, as the price of electricity for commercial EV charging is not regulated and the price of electricity from those charging stations often equals or exceeds the cost of gasoline. Under the proposed CBSC code structure, wealthy homeowners -- who are disproportionately white -- will continue to enjoy convenient access to at-home charging at the lowest utility rates; meanwhile tenants of multi-family housing will continue to pay higher prices -- or, more likely, to simply continue driving gas cars.

## **3. Dwell time**

Efficient and low cost solutions require consideration of how long EVs are parked in certain locations. Long dwell times -- such as at home overnight, and at the workplace -- allow low-powered access to meet the state's goals, and drivers' needs, with less impact on the electrical grid and lower cost to all.

## **4. Direct control over charging access**

To address the pernicious 'split incentive' problem for EV charging in multi-family housing<sup>3</sup>, buildings should be designed, whenever possible, with a direct connection from the electrified parking space to the housing unit's electrical panel and meter. This will also help to ensure access to lowest cost utility rates (see point 2 above), and eliminate the cost and headache for property managers and HOA's of having to manage charging centrally.

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<sup>2</sup> "Disadvantaged Communities" as defined by CalEnviroScreen: <https://oehha.ca.gov/calenviroscreen/sb535>

<sup>3</sup> Split incentives are defined as "a circumstance in which the flow of investments and benefits are not properly rationed among the parties to a transaction, impairing investment decisions." See: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4819331/>

## **5. Signage and True Access**

Signage indicating the potential for EV charging is a simple, easy to implement, and very low cost strategy for increasing EV adoption and meeting the state's EV targets. For EV Ready spaces, signage provides a highly effective means of educating the public about the types of EV charging, and the increased visibility helps potential drivers to overcome one of the biggest barriers to adoption: range anxiety. Signage for EV Capable spaces also alerts drivers to the existing potential for EV charging, thereby increasing the likelihood of fully implementing potential EV infrastructure (and achieving a return on this investment). We encourage CBSC, DSA, and HCD to work with CalTrans to update Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Marking) to appropriately address the signage needs for EV Capable and assigned residential EV Ready spaces.

Note that in multi-family housing, all charging access should be "EV Ready" and not "EV Capable". Hidden in the walls, EV Capable is not true access: it requires significant effort and financial outlays to render operational -- barriers which are often insurmountable for multi-family residents. This position has been spelled out in prior comment letters from our coalition.<sup>4</sup>

## **6. Ensure High-Road Jobs**

Building out California's EV infrastructure provides an opportunity to create local, high-road careers which pay family sustaining wages and benefits. Engaging a trained workforce will ensure the highest level of safety, quality and reliability.

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<sup>4</sup> See our letter to HCD of Feb. 19, 2021: <https://docs.google.com/document/d/1Y0-GFH1xt3NPxcizWRQLueNb0TWKTu6bjV8cf3BhBGs/edit>