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## **Industry Coalition Comments - October 6th Workshop**

*Additional submitted attachment is included below.*



California  
Business  
Properties  
Association



International Council of Shopping Centers



CALIFORNIA  
ASSOCIATION  
OF REALTORS®

NAIOP

COMMERCIAL REAL ESTATE  
DEVELOPMENT ASSOCIATION  
NAIOP OF CALIFORNIA



CAIFORNIA  
BUILDERS ALLIANCE

Date: October 19, 2020

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From: California Building Industry Association  
California Business Properties Association  
Building Owners and Managers Association  
International Council of Shopping Centers  
NAIOP of California, the Commercial Real Estate Development Association  
California Apartment Association  
California Association of Realtors  
California Builders Alliance  
Sacramento Regional Builders Exchange

Re: **Docket Number 19-BSTD-03: Industry Coalition Comments Regarding  
October 6<sup>th</sup> Workshop: Proposed 2022 Energy Code: Solar Photovoltaic & Electrification**

The groups cited above, hereafter referred to as the Industry Coalition, respectfully submit these comments in response to the CEC Staff presentation on October 6, 2020. Specifically, these comments focus on the staff proposals to encourage greater use of electric heat pump technologies for low-rise residential buildings and proposed updates of requirements for photovoltaic systems and batteries to address identified implementation issues.

### **Separate Baselines for Mixed-Fuel and All-Electric Homes**

The Industry Coalition supports the CEC Staff proposal to maintain separate baselines for mixed-fuel and all-electric homes for the 2022 Update. The Coalition is fully aware of California's ambitious goals to reduce greenhouse gas emissions and believes that the most effective way to decarbonize the residential dwellings is by first increasing the market share of all-electric homes through robust compliance options and incentives.

The recent market transition to rooftop solar and high-performance attics and walls serves as excellent code transition examples. In 2012, the market penetration of rooftop solar on new homes was less than 1%. However, the availability of incentive funding from the New Solar Home Partnership program followed by regulatory compliance incentives took that low level of market penetration and moved it above 25% within just five years. This allowed for a much smoother transition to the nation's first statewide mandate for rooftop solar. **And with the rest of the country watching, the importance of a smooth transition cannot be understated.**

A very similar set of circumstances applies to the shift towards a decarbonized building stock. At present, the statewide market penetration of electric heat pump water heaters is less than 2%. Like solar, that number needs to increase significantly, and it will. But first, contractors need to become familiar with the technology.

The Industry Coalition supports the CEC Staff proposal to provide robust compliance incentives for builders who choose to move towards electrification of the home or apartments they build. Similar to how the PV compliance credit incentivized rooftop solar installation, the provision of "electrification" compliance credit provides the needed encouragement for the industry to start incorporating these emerging technologies into their projects.

Lastly, the Industry Coalition also supports the CEC Staff proposal to offer a stand-alone, all-electric package for consideration by builders. The availability of this will be hugely beneficial in providing the builders and designers of new homes with an easy-to-understand example of what it takes for an all-electric home to comply with the standards.

### **Community Solar Compliance Option**

The Industry Coalition reaffirms its support of the community solar compliance option and encourages the CEC to streamline and stabilize the application process. The minimum requirements must be clear and reasonable. The decarbonization of new multifamily and commercial buildings will depend on a mix of both rooftop and community solar. And the availability of community solar will be a critical component in the decarbonization of our existing building stock. An unsure or contentious process for community solar certification will discourage most from considering such a project. The planning, financing, and construction of these projects can be a significant undertaking. If the certification process lacks clarity and certainty, this critically needed compliance option will see little use.

And once a community solar application is certified, it should not be required to be recertified at each successive code adoption if the project continues to meet the initial certification requirements. Proponents of such projects are considering a financial investment for something intended to operate for decades to come. If changes are allowed that could subsequently decertify a community solar farm which, in good faith, was constructed to the rules that were in place at the time, that would significantly increase the financial risk of such a venture.

The Industry Coalition supports the deployment of renewable energy across the state and firmly believes that community solar adds a degree of flexibility that will both increase the amount of renewable energy created and keep housing costs down by allowing builders to choose the most appropriate options based on their circumstances. This is especially true for infill development and the existing building stock.

CEC Staff indicated they might seek to add language specifying the need for the community solar farm to be within close proximity to the homes or apartments receiving the farm's renewable energy. Once again, Industry cautions the CEC to consider the implication of such a requirement on a statewide basis. Most local jurisdictions would not allow the construction of a solar farm near (or within) urban development. And if the cost of the project is to be kept at a minimum, requiring the solar farm to be constructed on expensive land (more suitable for housing) could once again jeopardize the financial well-being of such a project.

At most, requiring construction within the utility district could be feasible for many projects, but once again, there are parts of the state where that could be problematic. For example, this could unreasonably restrict the application of community solar compliance option in much of the northern part of the state where a large area of clear space does not exist within that utility district's boundaries. Lastly, there are vast areas in California that are perfect for solar installation yet are not appropriate for housing construction. Why limit the use of such land?

California currently has at least 13 million homes and apartments that lack a source of on-site renewable energy. Besides, more and more local jurisdictions are seeking high-density and/or infill construction when it comes to new residential projects. Looking ahead, how can the community solar option be feasible for many of these dwellings if the administrative rules governing certification unreasonably restrict the location such that the financial viability of the project is questionable.

### **General Code Clean-Up**

Industry strongly supports the CEC's effort to streamline and simplify the Building Energy Code Standards. While we make some suggestions below, we are certainly open to alternate ideas the CEC Staff may have regarding some of the newer provisions in the Standards.

Specifically, the Industry Coalition supports simplifying some of the Exceptions found in Section 150.1(c)14 Photovoltaic Requirements. To simplify this section, the Coalition recommends that Exception 1 be amended as follows:

*No PV system is required if the effective annual solar access is restricted to less than 80 contiguous square feet by shading from existing permanent natural or manmade barriers **both** external to the dwelling **and including the building's design features**, including but not limited to trees, hills, adjacent structures, **occupiable roof area, and any required fire and life safety measures**. The effective annual solar access shall be 70 percent or greater of the output of an unshaded PV array on an annual basis.*

Additionally, the Coalition supports the addition of an exception where no solar system should be required where the conditioned floor area (CFA) is 500 sq. ft. or fewer. This could also be accomplished by setting a limit on the smallest size of a PV system required to be installed. For example, CEC Staff has indicated that there may be cost-effectiveness issues associated with the installation of PV systems less than 2.0kW in size.

Lastly, the Coalition recommends that no exception be applicable when community solar is readily available.

## Battery Readiness

With the increasing occurrence of Public Safety Power Shutoffs and the need to rapidly address grid harmonization and reliability, the Industry generally supports the adoption of battery-ready standards into the California Green Building Standards. However, CBIA cautions that there is presently an insufficient understanding of both the market availability and the costs of acquiring and installing battery systems.

Also, there is still a lack of understanding of what adjustments need to be made to a typical production-style home's electrical system. For example, all new homes in California must comply with the Department of Housing & Community Development's EV-Ready requirements. This requirement took effect in July of 2015. Since that time, the CEC has implemented a mandate for rooftop solar, and there is growing interest in moving to all-electric design in a future code-cycle.

All of this will serve to place an increased demand for capacity on what has been the typical use of a 200-amp electrical panel. Will this 200-amp panel need to be increased in size? If so, what is the availability and cost of these larger-sized panels? Are there safety issues that need to be considered and addressed by the Office of the State Fire Marshal? As such, Industry recommends the CEC work with HCD and the SFM and adopt a **minimal** battery-ready standard in Chapter 4 of CalGreen and to complete further analysis in this area before a complete set of battery-ready code requirements are adopted. In the meantime, additional provisions could be placed in the Cal Green Appendix (Chapter A4) for voluntary use by builders, designers, and local jurisdictions until such time that the CEC and other agencies complete their investigation.

## Closing Comments

The Industry Coalition is aware of and understands many participants in this proceeding desire to move rapidly to an all-electric mandate for new construction. However, thousands of designers, builders, contractors, and building officials must become familiar with this technology if, at the state level, we are to make a smooth transition to the decarbonization of new residential construction. The CEC staff is proposing to offer incentives in the form of compliance credit. Like the PV compliance credit (2017-2019), this "carrot" approach works very well.

California is the first (and only) state in the nation to require rooftop solar, and this mandate was implemented in a reasoned and thoughtful manner. Simply put, the California Energy Commission worked with stakeholders and figured out a way to implement this first-of-its-kind mandate while minimizing the impact on housing construction. California's solar mandate **now serves as a great example to the rest of the country on implementing such a significant change to conventional construction.** The Industry Coalition strongly supports the CEC Staff proposal to incorporate regulatory incentives to provide a similar pathway to decarbonization.