

**DOCKETED**

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**Sierra Club CA comments on 2022 Energy Code Workshop on  
October 6, 2020**

*Additional submitted attachment is included below.*



October 20, 2020

*Via online submission*

California Energy Commission  
Dockets Office, MS-4  
1516 9th Street  
Sacramento, CA 95814-5512

**Re: Sierra Club Comments on 2022 Energy Code Solar Photovoltaic and Electrification Workshop on October 6, 2020 (Docket No. 19-BSTD-03)**

Dear Commissioners and Staff:

Sierra Club, on behalf of our over 500,000 members and supporters in California, appreciates the opportunity to comment on the California Energy Commission's ("CEC") 2022 Energy Code Pre-Rulemaking Workshop on Solar Photovoltaic and Electrification requirements.

The CEC and its staff have made substantial and much-needed code changes this cycle to encourage the electrification of California's homes and buildings. These changes will help correctly assess the benefits of electrification and encourage new construction in California that protects our climate and human and environmental health. However, this cycle of the code must go further. Sierra Club encourages the CEC to expand these reforms to the 2022 code, as bold changes are needed to move statewide construction practices where we need to be, at the speed we need to get there.

The impact of rapidly accelerating climate change on California has never been more clear. This August and September were the hottest on record, and October has also brought stiflingly hot temperatures. Wildfires have devastated over 3 million acres of our land, reddened our skies, and polluted the air we breathe. These impacts are unprecedented and will continue to worsen as global temperatures rise. California policy leaders must be aggressive now. Governor Newsom stated that our clean energy goals are "inadequate to the reality we are experiencing" and vowed to accelerate efforts to decarbonize the economy.

The CEC has the opportunity to help. We urge the CEC to follow the sentiment expressed by Governor Newsom and accelerate efforts to decarbonize our homes and buildings at a speed that reflects the crisis we are facing. The following recommendations will help those efforts.

**I. A single, all-electric baseline in the 2022 Building Code is necessary to move the market to all-electric construction.**

We appreciate the steps the CEC is taking towards building electrification. Specifically, we support the CEC's proposal to include electric space and water heating baselines for select building types and to provide compliance credits to low-rise residential designs that use electric space and water heating. While these efforts are steps in the right direction, more assertive action is needed to drive decarbonization at a pace that reflects the climate crisis.<sup>1</sup>

In the 2022 code, the CEC should adopt a single baseline for all building types that includes only electric appliances. In the October 6 workshop, CEC staff presented new, separate electric space and water heating baselines, but stated that “[t]he mixed fuel baseline will not be affected.” These proposed changes make it slightly easier to build all-electric, but do not tighten any requirements on gas buildings. This business-as-usual scenario will be insufficient to accelerate the adoption of clean electric technologies.

Instead, all building types should have a single baseline option that incorporates all electric appliances. This change, while not making it impossible to build with gas, will ensure that any building that does use gas emits no more greenhouse gases than the all-electric alternative. It levels the playing field by having the same greenhouse gas reduction expectations of gas buildings as of those that are all-electric.

The time for the CEC to make this change is now, in this code cycle. California is adding more new gas customers faster than any other state in the country: From 2013-2017, the state added nearly 250,000 new gas customers, and in 2018 alone 75,000 new California homes were built with gas infrastructure.<sup>2</sup> This expansion of gas infrastructure--a 60- to 80-year asset--is counterproductive and a wildly foolish investment when we know California is on a path to be completely decarbonized within the next 25 years.

Additionally, it is important to keep in mind that the 2022 code will not go into effect until January 1, 2023. Buildings that are permitted for construction after that time will likely begin construction between 2024 and 2026. Especially for large projects, construction may take several years. In effect, new gas buildings may still be finishing construction as we near 2030, openly defying California's 2030 climate targets. Postponing electrification until the next code cycle would result in an additional three million tons of avoidable carbon emissions by 2030 -

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<sup>1</sup> As stated in E3's recent report, "Achieving Carbon Neutrality in California", aggressive building electrification is considered a "least regret" strategy to achieve our climate targets in a cost-effective manner. Energy+Environmental Economics, Achieving Carbon Neutrality in California (Aug. 2020), [https://ww2.arb.ca.gov/sites/default/files/2020-08/e3\\_cn\\_draft\\_report\\_aug2020.pdf](https://ww2.arb.ca.gov/sites/default/files/2020-08/e3_cn_draft_report_aug2020.pdf).

<sup>2</sup> U.S. Energy Information Administration, *Number of Natural Gas Consumers*, [https://www.eia.gov/dnav/ng/NG\\_CONS\\_NUM\\_DCU\\_SCA\\_A.htm](https://www.eia.gov/dnav/ng/NG_CONS_NUM_DCU_SCA_A.htm); Green, et al., California Should Go All-Electric in New Construction - State's Largest Utility Agrees, RMI (June 26, 2020), <https://rmi.org/california-should-go-all-electric-in-new-construction-states-largest-utility-agrees/>.

the equivalent of putting 650,000 more cars on the road for a year - as well as \$1 billion in unnecessary spending on new gas connection infrastructure.<sup>3</sup>

Moreover, the negative health impacts associated with gas use in our homes and buildings must be avoided. Research has shown that replacing all residential gas appliances with clean electric alternatives would cut outdoor air pollution enough to save 350 lives and \$3.5 billion in health costs annually.<sup>4</sup> Thus, a single, all-electric baseline would also protect the health and safety of Californians.

California is ready for building electrification. Thirty-five California cities and counties have already adopted clean electric buildings codes, with more cities joining all the time. And 70% of Californians have stated that they prefer all-electric appliances as opposed to gas appliances.<sup>5</sup> By setting an all-electric baseline, the CEC would be setting policy that is clearly supported by Californians and is the exact type of accelerated action encouraged by Governor Newsom.

## **II. Community Solar**

We appreciate that the CEC is considering making revisions to Title 24, Section 10-115's definition of "community solar." As stated in our comments submitted on February 7, 2020, we urge the CEC to revise the definition under Title 24, Section 10-115 to encourage projects that will have the specific size, location, and economic benefits representative of true community solar. Specifically, true community solar should (1) not be larger than 1-5MW in size, (2) be located in the community of the homes and buildings it will serve and as close to those homes and buildings as possible and (3) resulted in benefits to the community such as resilience, reliability, and energy efficiency.<sup>6</sup>

## **III. Conclusion**

Sierra Club appreciates the CEC's efforts to transition the building code to support electrification through select electric baselines and compliance incentives. However, the state will not achieve our climate or air quality goals without a complete shift off of gas. Therefore, we urge the CEC to set a single baseline for all building types in the 2022 Building Code that reflects the building type with the lowest greenhouse gas emissions: an all-electric building. We look forward to continuing to work with the CEC on these efforts.

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<sup>3</sup> Grab, et al., *California Can't Wait on All-Electric New Building Code*, RMI (July 28, 2020), <https://rmi.org/california-cant-wait-on-all-electric-new-building-code/>.

<sup>4</sup> UCLA Fielding School of Public Health, "Effects of Residential Gas Appliances on Indoor and Outdoor Air Quality and Public Health in California | COEH - Center for Occupational & Environmental Health," coeh.ph.ucla.edu, April 2020, <https://coeh.ph.ucla.edu/effects-residential-gas-appliances-indoor-and-outdoor-air-quality-and-public-health-california>.

<sup>5</sup> Matt Vespa, *Californians Want to Stop Burning Gas in their Homes*, (Mar. 16 2020), <https://earthjustice.org/from-the-experts/2020-may/californians-want-to-stop-burning-gas-in-their-homes>.

<sup>6</sup> Sierra Club California written comments on SMUD's SolarShares Program, Docket 19-BTSD-08 (Feb. 7, 2020).

Sincerely,

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