

DOCKETED

Docket Number:	19-BSTD-03
Project Title:	2022 Energy Code Pre-Rulemaking
TN #:	235343
Document Title:	Ann Harvey for Climate Health Now Comments - Climate Health Now comments for Staff Workshop - 2022 Energy Code Pre-Rulemaking - Proposed 2022 Energy Code Solar Photovoltaic
Description:	N/A
Filer:	System
Organization:	Ann Harvey for Climate Health Now
Submitter Role:	Public
Submission Date:	10/20/2020 12:12:29 PM
Docketed Date:	10/20/2020

*Comment Received From: Ann Harvey for Climate Health Now
Submitted On: 10/20/2020
Docket Number: 19-BSTD-03*

Climate Health Now comments for Staff Workshop - 2022 Energy Code Pre-Rulemaking - Proposed 2022 Energy Code Solar Photovoltaic

See attached

Additional submitted attachment is included below.



October 19, 2020

California Energy Commission
Docket Office, MS-4
Re: Docket No. 19-BSTD-03
1516 Ninth Street
Sacramento, CA 95814
docket@energy.ca.gov

Re: Staff Workshop: 2022 Energy Code Pre-Rulemaking – Proposed 2022 Energy Code on Electrification

Dear Commissioners:

On behalf of Climate Health Now, we thank you for the opportunity to comment on the California Energy Commission's (CEC) proposed 2022 Building Energy Efficiency Standards (Energy Code) on Electrification. Climate Health Now is an organization of nearly 400 doctors, nurses, and other health professionals and health professional students who recognize climate change as the public health emergency of our lifetimes.

As health professionals, we know and have seen that the substantial health impacts of global warming and fossil fuel co-pollutants are not equal-opportunity. Low-income people and people of color suffer excess morbidity and mortality due to excessive heat exposure, as they more often perform outdoor manual labor, inhabit poorly insulated homes without access to air conditioning, and live in in the Central Valley and urban heat islands throughout the state. Higher ambient temperatures accelerate the formation of lung-damaging smog, which particularly harms children and outdoor workers. Indoor toxins produced directly by gas appliances such as PM, CO, and NO₂ are more concentrated in small crowded residences and are associated with worsening of respiratory diseases like asthma and chronic obstructive pulmonary disease, cardiovascular disease, cancer, neurologic disease, and even adverse pregnancy outcomes.

We applaud the CEC's position as stated by Bill Pennington at the introduction of the workshop: "the Energy Commission has a strong policy to pursue decarbonization as its highest priority goal." We appreciate your efforts to encourage adoption of heat pumps and other non-combustion appliances. However, the consultant reports and commissioner replies to public questions seemed to reflect a narrow focus on individual appliances in individual buildings in both TDV calculations and incentives. We believe that this restrictive approach is unnecessary and that it favors continued natural gas build-out, because the resulting increased emissions of GHGs and co-pollutants not only harm public health but also, in a positive feedback loop, increase building energy use.

Building new natural gas infrastructure will accelerate global warming through significant year-round methane leaks in addition to CO₂ and increased methane emissions when heaters and other gas appliances are in use. Acceleration of global warming, in turn, adversely impacts building energy use. Excessive ambient heat leads to more air conditioner use. Global warming-fueled wildfires prompt those who can to close windows and turn on air conditioners and air filters on warm days, when windows could otherwise be comfortably open and air conditioning not required. These responses to global warming involve increased use of energy by each new building, as well as existing buildings, particularly during our hot, peak energy-use seasons. Cooking with gas also necessitates more electricity use for hood vent fans to decrease indoor PM, CO, NO₂ and other toxins.

We understand that Title 24 limits the CEC to cost-effective changes. However, we encourage you to have your consultants attempt to account for these impacts on building energy use in the TDV calculations. This approach may allow you to regulate more forcefully (or incentivize more generously) at the crucial level of gas infrastructure as opposed to that of single appliance substitutions.

We would like to highlight one exchange during the workshop that we think illustrates this undue restraint on the Commissions' authority. Megan Cordes of ConSol Corporation asked, "Have you considered adding on to that [measures to encourage heat pumps] if folks do electric cooking and just completely avoid gas to the site at all?" Mazi Shirakh of the CEC replied "No" and stated that gas versus induction cooking would only have a marginal impact. He went on to note that builders could voluntarily install induction cooktops and gain a credit. His response only addressed the impact of changing out a single appliance while ignoring the much more effective approach embedded within Ms. Cordes' question--avoiding new gas infrastructure altogether. Limiting credits to per-appliance provides insufficient incentive to eliminate new gas infrastructure entirely, as is necessary to meet California's climate goals and the CEC's highest priority goal of decarbonization.

Mr. Shirakh continued, stating that both homeowners and builders would be less interested in homes without gas cooktops. This consideration appropriately reflected the CEC's emphasis on feasibility and avoidance of halting new construction. However, we believe his conclusion is flawed: when all new buildings are equipped with induction cooktops, no builder will be placed at a sales disadvantage. Indeed, eliminating natural gas systems will streamline construction and decrease builders' expenses. Architects and builders presented sound economic and feasibility arguments during the workshop. Californians will quickly become more familiar and comfortable with induction cooking, volume of sales will bring prices down, and more people will buy induction cooktops when old gas cooktops require replacement.

We also encourage you to increase the pace of decarbonization and protection of residents by including many more types of buildings in the update, particularly day care centers--both in-home and stand-alone--and all public sector buildings. Children are particularly vulnerable to the effects of gas appliances, and electrification would help to protect them from these health hazards.

In sum, we applaud your goals and efforts, consistent with the CEC mission 'to reduce energy costs and environmental impacts of energy use while ensuring a safe, resilient, and reliable supply of energy.' However, we strongly urge you to take stronger, swifter decarbonization measures given the years-long delay from new code development to new construction and the decades of impact of new natural gas

appliances, buildings, and infrastructure, and the public health emergency of climate change. The most effective approach would be a single all-electric code, phased in as quickly as possible. Short of that, and in the interim, substantial compliance credits for gas-free construction are needed. With these interventions, the CEC will make a true difference in protecting the health and future of all Californians.

Sincerely,

Ann Harvey, MD and Christine James, MD, MSc
Climate Health Now