

**DOCKETED**

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## **Adopt a Single, All-Electric Baseline for All Building Types**

As a taxpayer in the state of California, I urge the CEC should move towards adopting a single, all-electric baseline for all building types because all-electric buildings are cheaper to build and operate, better for public health, and critical to protect us from the climate crisis.

At last week's workshop, the CEC presented information that indicated that in the 2022 code, the baseline would require one all-electric appliance for residential buildings, depending on climate zone. Additionally, all buildings would be required to be all-electric ready. In other words, the CEC plans to propose pathways to incentivize the partial electrification of residential homes in the 2022 code cycle. While this is an important step towards California's decarbonization goals, it would still be easily feasible for homebuilders to install natural gas appliances in homes. If the proposal were to require all-electric appliances for both space and water heating, then new would see substantial cost savings by avoiding the addition of new gas lines to buildings, which would also reduce stranded asset risk as California begins the process to electrify its building stock.

Based on research done by Rocky Mountain Institute for the City of Oakland, it is estimated to cost between \$2,400 to \$2,700 more per home to install two separate systems than it would be just to install a single heat pump. Even when taking into account the estimated \$1,050 cost premium over gas appliances to install a heat pump water heater and an induction stove, purchasing all-electric appliances results in a net savings of \$1,350 to \$1,650.

Appliance surveys have shown that the current market for heat pumps is ready for this requirement. According to the U.S. census bureau 2017 American Housing Survey, heat pumps are commonly installed, with an average of 40% of new homes installed with them. This number rises to over 60% in the South, where this technology has been a part of common construction practice for decades because it can both heat and cool a space. According to the soon to be released 2019 California Residential Appliance Survey, California continues to lag behind the rest of the country, with only 8% of new homes installing heat pumps, because our energy code has incentivized the installation of natural gas appliances until recent energy code cycles. The CEC should correct this by requiring heat pumps in all new homes, regardless of climate zone.

The Biden campaign has pledged to cut building sector emissions in half by 2035 and to eliminate all power sector emissions by the same year. If they achieve the power sector goal, then building sector emissions would automatically decline by about two-thirds.

Last November, the California Air Resources Board unanimously adopted a groundbreaking resolution committing to significant action to limit emissions from gas

appliances in buildings. The resolution commits CARB to support the CEC and other agencies to adopt standards in the 2022 code cycle that will result in stronger gas stove ventilation standards and electrification of appliances for all new buildings.

<https://calmatters.org/commentary/my-turn/2020/12/agencies-should-follow-carbs-leadership-on-emissions-from-gas-appliances/>

Please follow the lead of a growing number of cities (including the one in which I live) in facilitating building electrification, and lead the way for the rest of our nation.

Respectfully,

Igor Tregub

Former elected public servant in Alameda County, CA (in individual capacity)