November X, 2022

Residential Consensus Committee Members
International Code Council
500 New Jersey Avenue, NW
6th Floor,
Washington, DC 20001

Re: Public Comment Draft #1 for IECC-R

Dear Residential Consensus Committee Members,
As environmental and climate advocates, we applaud the Residential Consensus Committee for approving a draft of the residential 2024 IECC that represents a significant step forward in decarbonizing our homes, positioning our nation for an equitable transition to a carbon free economy and for meeting our climate goals. The provisions adopted into the residential 2024 IECC that promote building decarbonization are critical to keeping global average temperature rise below 2°-degrees Celsius to avoid the worst impacts of climate change. Specifically we thank the Residential Consensus Committee for incorporating the following measures into the 2024 IECC:

Incorporating Solar and EV Ready Requirements: Decarbonizing the nation's electric grid and transportation are key to an equitable transition to a carbon free economy and to meeting our climate goals. We applaud the Committee for establishing requirements to ensure that newly built homes will be able to cost effectively accommodate future installations of equipment for renewable energy generation and electric vehicle charging, protecting homeowners from costly upgrades as solar power generation and EVs become more prevalent. Complementary Residential and Commercial EV Ready requirements will create the opportunity for EV owners to charge both at home and at work.

Including Electric Ready Requirements: We appreciate the Committee's recognition that all new construction mixed fuel buildings should be electric-ready to the greatest extent possible. The cost of meeting electric-ready requirements when a building is under construction, walls are open, and the trades are already on-site, is small in comparison to the cost of retrofitting a building to install the same level of electric equipment.[1] The cost of retrofitting electrical panels, opening walls to install conduit, etc. can be orders of magnitude higher. Having electric-ready infrastructure in place gives building occupants the choice to shift to electric appliances at time of replacement or retrofit without incurring potentially high retrofit costs in the future. The California Building Energy Efficiency Standards 2022 update (Title 24, Part 6) has already moved in this direction, including electric-ready

[1] See the Home Innovation Research Labs Feb 2021 report "Costs and Other Implications of Electrification Policies on Residential Construction" which estimates the cost in Baltimore of installing an EV charger circuit during construction at $635 (Table 4) vs. $1,305 as a retrofit (Table 16) and Group14 Engineering's Nov 2020 report "Electrification of Commercial and Residential Buildings" found that retrofitting an existing home in Colorado equipped with gas equipment at the end of life of that equipment with electric equipment was estimated to cost $20,400 vs. $16,600 during new construction"

requirements for heat pump space heating, cooktops and clothes drying in both single family homes and multifamily buildings, and for water heating in single family homes.

Providing All-Electric Code as an Appendix: The purpose of a model code is to provide cities and states with a starting point on which each jurisdiction can base their energy code. Growing interest in establishing all-electric building requirements is evidenced by the number of cities and states that have already passed pro-electrification ordinances including Washington DC; New York City, Ithaca, New York; Brookline, Massachusetts; Berkeley, Massachusetts; Los Angeles, Sacramento, San Francisco, Oakland and San Jose, California and Washington State. Including an Appendix in the Residential 2024 IECC will streamline adoption and implementation of all-electric residential construction for policy makers and the building industry. We strongly encourage that the code language in this appendix provide common definitions on what constitutes an all-electric home and be applicable to all compliance paths available in the IECC 2024 so that any jurisdiction looking to take action can easily adopt this appendix. We also encourage that the code language minimize the use of electric resistance heat for space and water heating. Reliance on electric resistance heating can create conditions for high bills and negative impacts on local distribution grid systems.

We applaud the Residential Consensus Committee for taking these critical first steps to decarbonizing our residential built environment into the 2024 IECC. We look forward to future collaborations with the Committee to promote residential building electrification to help our country meet its climate goals equitably. Thank you for your leadership and for the opportunity to comment.

Signed,