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Title: Multifamily Opportunities and Challenges to Energy, Environmental and Equity Outcomes

Abstract: Multifamily markets are booming and will continue to be an important market segment. Built more like commercial but used like residential buildings, code and programs often leave multifamily energy issues under- or un-addressed. Multifamily creates opportunities and challenges for achieving energy efficiency and reliable comfort. More than other building types, these issues intersect critical considerations of indoor air quality and water use.

As communities continue to turn to multifamily for housing and the advantages of strategic urban density, pursuing energy efficient and healthy multifamily projects is essential. This session brings four professional's views on the intersection of three factors that are at times congruent and at other times competing in the multifamily building area: 1) Building Design and Technology - best practices that result in low and zero-energy outcomes, 2) Decarbonization Trends and Policies how an all-electric multifamily building differs and the carbon impacts at the building and at the generation source, and 3) Occupants and Equity the relationship of the energy costs and the indoor environmental quality and related health impacts on residents, particularly those in affordable housing.

Drawing from work developing a Multifamily Guide, the forthcoming ASHRAE Multifamily Guide, and an in-process Multifamily Electrification Guide in California NBI will discuss the technologies and strategies for achieving greater energy efficiency and targeting improved indoor environmental quality. Earth Advantage will share their biggest obstacles in advancing design and building practices and successful strategies drawn from their multifamily green certification program. Redwood Energy will discuss options for electrification and the integration of renewable energy into multifamily projects.

The panel will be expertly moderated to probe complex societal issues of equity, energy, health and decarbonization / electrification. The panelists will use their presentations as the foundation for a robust discussion and exchange on issues with session participants. Going beyond Q&A, participants will have the opportunity to share their own challenges and successes with the panelists and each other prompted by queued up questions and example issues. The group will explore practical applications of best practices and identify issues and possible resolutions in the three factor identified above.