

PANEL 10: New Construction: From Codes to Net Zero

This panel requests papers that explore current decarbonization and net-zero-energy efforts/initiatives in new construction as well as in energy codes and in utility-based programs at the local and state levels. New construction and major renovation remain a critical area for intervention to ensure that energy- and carbon-intensive buildings are not locked in through 2050 and beyond. Studies that showcase deficiencies and barriers in this market and suggest significant new solutions are valued. Preference will be given to papers that can either provide evidence of successful practice or that develop concepts that represent disruptive (as opposed to incremental) innovation in codes, programs, or design.

Some specific areas of interest include the following:

- Incorporation of electrification and/or grid interactivity in energy codes or utility programs
- Balancing envelope efficiency versus HVAC efficiency or renewable energy
- Approaches that make net-zero design easier and more cost-effective
- Evaluation of social cost of GHG emissions
- Disruptive new program paradigms or interventions
- Strategies to improve code enforcement practice
- Advanced stretch codes
- Tactics or strategies for state/local stretch code adoption
- Equity in building energy codes
- Thermal or battery energy storage
- EV charging in codes
- Demand flexibility in residential buildings
- Performance-based utility incentive programs for new construction