

PANEL 3: Commercial Buildings: Technologies, Design, Operations, and Industry Trends

To support the conference theme of “Climate Solutions: Efficiency, Equity, and Decarbonization,” this panel will cover a range of U.S. and international topics relevant to equitably improving energy efficiency outcomes and reducing greenhouse gas impacts in commercial, multifamily, institutional, municipal, and industrial buildings, including the following:

- Strategies, approaches, and technologies to decarbonize existing buildings through benchmarking and performance analysis/modeling/monitoring, building retrofits, electrification, system commissioning/fault detection, and operational improvements
- Innovative and impactful new construction strategies and technologies, including embodied carbon measurement/mitigation and integrated design approaches
- Smart, innovative controls, energy management and information systems, mechanical equipment, and other technologies that improve energy efficiency while enhancing building-grid integration, resiliency, occupant comfort and well-being, or other benefits
- Efficient, zero-carbon systems and smart controls for space-conditioning, water heating, ventilating, lighting/daylighting, miscellaneous electrical loads, cooking, and process loads
- Electrification of commercial building end uses
- Prefabrication and modular construction techniques
- Management and dispatch of distributed energy resources within and beyond the single-building scale, such as on-site renewable generation, energy storage, electric vehicles, and community-level energy management
- Other important commercial buildings industry and market trends