

### **PANEL 13b: Scaling Whole Building Retrofits**

Roughly 70% of US buildings that exist today will exist in 2050. Therefore, whole building retrofits are required to decarbonize the US building sector. According to the 2019–2020 Team Zero Inventory of Net Zero Homes in the US and Canada, roughly 1% of net zero projects were retrofits. Moreover, current retrofit rates are too low to meet the imperative to decarbonize the building stock. Multiple barriers are preventing existing building retrofits from being mainstream. This panel will focus on innovations being used to target these barriers and scale whole building zero carbon aligned\* retrofits. Papers of specific interest will fall into four main categories: - technological innovations that enable scaling of whole building zero carbon retrofits; - financial innovations to unlock retrofit markets; - portfolio or programmatic level innovations that allow projects to be replicated at scale; and - integrative innovations that facilitate retrofit adoption in disadvantaged communities and communities experiencing long-term disinvestment. The aim of this panel is to facilitate a rich dialogue amongst panelists and attendees that explores a suite of strategies for scaling retrofits to create holistic, transformational solutions to building decarbonization. \* The Advanced Building Construction Collaborative's definition of a zero-carbon-aligned building: has no on-site carbon emissions (i.e., all end uses are electrified); minimizes thermal loads; sources all energy from a carbon-neutral grid and/or local source—or will do so before 2050 under a reasonable targeted scenario; supports decarbonization of the grid by minimizing its grid impact through reduced peak loads; energy-efficient operation and grid interactivity (or, alternatively, off-grid operation); and uses low embodied carbon materials in its construction.