



CNCA Game Changers | Decarbonizing Buildings & Renewable Energy

Topic. Building Electrification Funding Priorities

Leadership. The Carbon Neutral Cities Alliance (CNCA) members guiding this effort are Boulder, CO, USA; and New York City, NY, USA.

Problem statement. Building electrification can significantly reduce carbon emissions. Electrifying buildings and retreating methane gas brings many benefits¹ to communities, yet cities struggle to: (1) normalize electrification and gas retreat concepts across building sectors; and (2) ensure building electrification efforts include underserved and low-income communities. Key issues are:

- Addressing gaps in regulation on carbon emissions from the building sector at the local, state, regional/utility, and national levels
- Unlocking fiscal resources to accelerate the transition to all-electric buildings
- Creating partnerships both locally and regionally to support building electrification efforts, especially with utilities
- Retrofitting existing buildings with all-electric technology within timeframes that keep pace with scientific warming predictions
- Working with utilities to overcome technical challenges with going all-electric, and to understand roles and responsibilities
- Preventing the cost burden of building electrification from falling on underserved and low-income communities
- Raising community awareness about the health benefits of building electrification

Theory of change. As the grid becomes cleaner and moves toward 100% renewable energy, all-electric, non-methane powered buildings are increasingly critical for reducing emissions. However, many regions are not electrifying buildings proactively or keeping the required pace to meet the 1.5-degree target. A regulation pathway to require all-electric buildings is necessary to reach this goal. If these game changing actions are required, then the needed pace can be achieved:

- Developing, adopting, and implementing policies that promote building electrification as the grid become powered by renewable energy
- Using behavior change approaches to electrification that center on building user/occupant needs rather than leading with carbon
- Prioritizing an equitable electrification process that gives access to clean energy and health benefits for all
- Ensuring that low-income communities are not left behind with stranded assets and are empowered in the transition

¹ Including but not limited to health, equity, and resilience benefits, reduced noise pollution, and better interaction between buildings and other sectors like transportation and the electrical grid.



Funding priorities. The CNCA Game Changer Fund seeks to support city efforts that advance building electrification. Table 1 outlines funding priorities and targeted outcomes of successful building electrification efforts as identified by CNCA members. As funds are raised, CNCA will call for projects that advance these priorities in measurable ways.

Table 1. Building Electrification Funding Priorities and Targeted Outcomes.

Funding Priorities:	Targeted Outcomes:
<ul style="list-style-type: none"> ● Tools to design effective support services for electrification of existing building stock (retrofits), including funding and skills development ● Effective models for rapid deployment of building electrification ● Work that identifies and amplifies the city role and city policy options in advancing building electrification ● Identification and analysis of funding models to effectively support building electrification ● Engagement efforts that both educate and onboard community members to support building electrification ● Methods for deploying small-scale, distributed energy to advance building electrification efforts 	<ul style="list-style-type: none"> ● Electrification and gas retreat concepts are normalized ● New construction is electric only or electric ready ● Building electrification is deployed across building types and at scale ● Low- to moderate-income communities are not burdened with stranded gas assets, and are reaping the health benefits of electrification ● Stakeholders across sectors partner to advance building electrification initiatives ● Policies and codes are enacted to mandate building electrification and upgrades