



CNCA Game Changers | Decarbonizing Buildings & Renewable Energy

Topic. Energy Efficiency Funding Priorities

Leadership. The Carbon Neutral Cities Alliance (CNCA) members guiding this effort are Helsinki, FI; and Sydney, AU.

Problem statement. Energy efficiency (EE) strategies that address both new construction and building retrofits can offer substantial carbon emission reductions, yet cities struggle to: (1) implement policies that can address a variety of building types; and (2) deploy energy efficiency that do not disproportionately impact underserved and low-income communities. Key issues are:

- Acknowledging that cost-efficient EE measures are still important to undertake even as grids become more reliant on renewable energy
- Addressing retrofits across a city's portfolio of buildings, including applying what has been learned from commercial retrofits and behavior change measures to the residential sector
- Applying energy efficiency updates to dramatically improve rental properties and multi-family housing
- Developing programs that monitor energy use in privately-owned buildings
- Identifying financing options that support energy efficiency without placing the cost burden on low-income households

Theory of change. Depending on location, CNCA members believe it would be game changing to:

- Implement policies that mandate performance standards for both new and existing buildings to achieve measurable energy and carbon reductions
- Expand district heating networks at scale
- Municipalize or re-municipalize district heating companies to engage in the local energy market more actively
- Partner with local housing associations to advance deep building retrofits
- Continue to focus on and fund energy efficiency measures across sectors as an effective tool to meet climate goals

Challenges connected to energy efficiency policies that must be overcome are:

- The split incentive. Regulating new buildings in tandem with a comprehensive retrofitting strategy will be key to reaching local emission reduction targets
- Inequitable rate increases that push low-income households into more energy inefficient homes



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

Table 1. Energy Efficiency Funding Priorities and Targeted Outcomes.

Funding Priorities:	Targeted Outcomes:
<ul style="list-style-type: none"> ● Efforts to design replicable support services for scaling deep retrofits ● Coordination between city and utility programs to scale deep energy efficiency upgrades ● Pilots that integrate the municipal water and wastewater supply for heating and cooling ● Use of building analytics software to identify low-cost building management opportunities ● Methods to involve the private sector and motivate building owners to complete retrofits ● Community engagement to improve local awareness about efficiency programs and the direct benefits of emission reduction to individuals ● Projects to address energy efficiency through the lens of climate justice ● Work that identifies viable financing mechanisms to support energy efficiency efforts at scale ● Ways to address energy efficiency holistically based on the full life cycle of buildings ● Identification of best practices for retrofitting historic city centers to increase energy efficiency ● Methods to deploy renewable district heating at scale 	<ul style="list-style-type: none"> ● Energy efficiency performance standards are enacted for existing buildings and rental properties ● Historic city centers are retrofitted to meet energy efficiency standards ● Renewable district heating is implemented at scale ● Incentive programs are offered to dramatically improve the efficiency of low occupancy building stock ● Mandated performance standards for individual buildings cause measurable energy and carbon reductions ● Utilities offer efficiency programs that drive emission reductions from building stock ● The cost of energy efficiency upgrades is subsidized to take the cost burden off of underserved and low-income individuals