

CNCA Game Changers | Carbon Neutral Districts

Topic. Carbon Neutral Districts (CND) Funding Priorities

Leadership. The Carbon Neutral Cities Alliance (CNCA) members guiding this effort are Helsinki, FI; London, UK; and Rio de Janeiro, BR.

Problem statement. CNDs can transform how carbon neutrality is approached in urban areas by addressing multiple carbon emitters at once, yet cities struggle to: (1) garner both financial and community support for CNDs; and (2) effectively demonstrate that this holistic approach provides greater benefit than uncoordinated climate action efforts. Key issues are:

- The CND concept needs more data to support its viability and replicability, so that coordination across sectors can be effective
- CND work needs to involve multiple city departments to secure municipal funding in addition to external private-sector investments
- Carbon neutral re-zoning is needed to support CND development
- Deeper engagement is necessary to understanding the societal benefits CNDs will bring to impact different communities
- Effective CND governance models need to be established at the local level

Theory of change. The implementation of a CND means transformation of urban dynamics. It represents a game changing, yet great multidisciplinary challenge for cities. CNDs offer a shift from thematic work that focuses on one system only, to thinking across systems to change how a place operates. The main pillars that guide the CNDs are:

- Addressing all aspects of heat and power in buildings, industry, and transport in a specific geographic area
- Evaluating supply chains and developing costed delivery plans to make holistic changes over a 10-, 20-, or 30-year period
- Creating and mapping a portfolio of projects within CNDs, so that investors can understand carbon offsets and payback periods
- Approaches that encompass multiple areas of the energy system, like:
 - o Considering energy sources and production methods as cities move to electrify building and transit
 - o Energy distribution (e.g., electricity, heat, and gas)
 - o Smart platforms and technologies at the system and building-levels
 - Buildings, consumer types, and consumption patterns
- Implementing an integrated plan for a demand-led energy system that is clean, smart, and ultimately zero carbon
- A dramatic reduction in single occupancy vehicles and encouragement of active transport, like:
 - o Ensuring clean and efficient public transport through implementation of CND mobility plans



- o Creating socially just means for people to move around
 - For example: incentivizing electric vehicles for working drivers and making more bike lanes and bus stops
- A focus on people, health and urban quality

CNDs are game changing because they are living labs for testing:

- Technology and planning solutions
- Smart resource management
- Inclusive, co-creative planning approaches
- Experimentation in close cooperation with residents, companies, city officials and academia
- Desired outcomes, such as more time in the day for residents saved by improved commuting practices

Funding priorities. The CNCA Game Changer Fund seeks to support city efforts to develop CNDs as urban laboratories that can help people prosper in a healthy economy and environment while reducing carbon emissions. Table 1 summarizes funding priorities and targeted outcomes for CND efforts. As funds are raised, CNCA will call for projects that advance these priorities in measurable ways.

Table 1. CND Funding Priorities and Targeted Outcomes.

Funding Priorities:

- Evaluation and monitoring tools for CNDs, so that design elements and carbon budgets can be compared
- Methodologies that feature a combination of scenarios, accounting for challenges and showing opportunities
- Cross-sector messaging to clarify the role of each sector and more deeply engage communities around CND design and implementation
- Development of communication tools to engage and build community buy-in / co-ownership of the concept
- Design of CND funding streams
- Mapping tools to the project-level within CNDs, which can be used to inform re-zoning policy creation, deeply engage CND residents for behavior change, and help investors understand carbon offsets and payback periods
- Pilot programs that focus on the whole system rather than keeping the focus on the individual parts that comprise it

Targeted Outcomes:

- CND energy and financing plans are clearly established
- A costed delivery plan to get to carbon neutrality is developed
- The value of CNDs matches the investment needed to create them
- Communities are engaged in a meaningful way throughout the process to understand the impact of their choices
- Replicable projects and models are produced
- Proof of concept examples are being shared to scale CNDs