



HOW EIGHT COMMITTED CITIES ARE CUTTING CARBON EMISSIONS

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Urban areas account for roughly three-quarters of global carbon emissions, making local governments key players in the fight against climate change.

However, few studies have looked at the best municipal pathways to net zero.

WISE researcher Amelia Clarke and her collaborators set out to address that gap. After reviewing academic research, government documents and a global database of municipal carbon emissions, they validated their findings through case studies of eight municipalities committed to deep decarbonization.

Certain commonalities emerged. Most of the case cities have established strategies and targets for five sectors — electricity production, buildings, transportation, waste, and carbon sinks and storage — for community-wide emissions as well as emissions they control directly.

Bigger cities like Vancouver and New York tend to have policy tools that smaller centres lack, such as the ability to establish building codes. Smaller centres rely more on enabling and engagement strategies. For example, both Park City, Utah and Lahti, Finland have partnered with the private sector to build renewable energy generation facilities.

Most of the case cities are focusing on direct GHG emissions and emissions from electricity use within municipal limits. A few are even more ambitious, also targeting indirect emissions and embodied GHG. And while some cities are putting the priority on sectors with the biggest emissions, others are beginning with low-hanging fruit.

There's much more to learn. But by examining municipalities on the leading edge of decarbonization, Clarke and her collaborators have created an initial roadmap that others can build on.



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Current research project that builds on this study: Municipal Net-Zero Action Research Partnership (<https://uwaterloo.ca/implementing-sustainable-community-plans/municipal-net-zero-action-research-partnership-n-zap>)

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