

Megacities key to reaching global climate goals

December 1 2016, by Marlowe Hood



Cities like New York with high per capita levels of both wealth and CO₂ emissions will be expected to immediately and sharply cut carbon pollution, according to an analysis

The world's big cities must collectively cut their carbon footprint nearly in half within a decade if global climate goals are to be met, according to an analysis unveiled Thursday.

Mayors from 84 megacities gathering in Mexico City this week are mulling long-term commitments for slashing [carbon pollution](#) that are detailed in the report, said organisers of the C40 urban summit.

Urgent, make-or-break action is needed, they warned.

"The next four years will determine whether or not the world's megacities can deliver their part of the ambition of the Paris Agreement," said Mark Watts, executive director of C40, a global network of large cities.

Without aggressive measures by cities, the 196-nation climate pact—inked in the French capital last December—"cannot be realistically delivered," he told journalists ahead of the three-day summit.

The Paris deal, now in force, calls for capping global warming at two degrees Celsius (3.6 degrees Fahrenheit) above pre-industrial levels, and at 1.5 C (2.7 F) if possible.

National carbon-cutting pledges annexed to the agreement would still allow the [global average temperature](#) to rise by 3.0 C (5.6 F)—a sure-fire recipe for climate catastrophe, say scientists.

With only 1.0 C (1.8 F) of warming so far, the world has seen a deadly upsurge of extreme weather, including droughts, superstorms, heat waves and coastal flooding boosted by rising seas.

Countries are not scheduled to review their pledges for several years.

"If we are going to avoid the worst impacts of global warming, cities are going to have to play an even bigger role in the months and years ahead," said former New York Mayor Michael Bloomberg, a UN special envoy

for climate change and C40 board president.

"They know it is in their best interest," he told reporters by phone.

The 90 C40 cities, including four joining this week, account for a quarter of the global economy, and are home to more than 650 million people.

Sharp, immediate cuts

The 100-page report, entitled "Deadline 2020", outlines four urban roadmaps to a low-carbon future, tailored to different levels of wealth and CO2 emissions.

Cities with high per capita levels of both—such as Toronto, New York and Melbourne—will be expected to immediately and sharply cut carbon pollution.

Poorer cities with high per capita CO2 output would be given more leeway, with emissions allowed to briefly increase before dropping.

Cape Town or Durban in South Africa both fall into this category.

Rich cities such as Stockholm or Seoul that have already lowered emissions per habitat should manage a steady decline.

Finally, poor cities with low levels of carbon pollution—Quito or Caracas, for example—would be given a longer grace period before per capita CO2 output must begin to drop.

Charting a course consistent with these pathways could "become a condition of membership" to the C40 club, Watts said.

70% of greenhouse gases

To meet the 2.0 C target for [global warming](#), per capita emissions for cities would have to decline from an average of five tonnes of CO₂ or its equivalent (GtCO₂e) to under three within a decade.

And by 2050, that number would need to be 1.0 GtCO₂e, a hugely ambitious goal.

Even then, these scenarios assumes that scientists will have figured out by mid-century how to suck massive amounts of carbon out of the air.

Some 70 percent of global [greenhouse gas emissions](#) come from cities, which house just over half the world's population. Urban governments have direct influence over about half.

But C40 cities—many of which have transitioned to service and knowledge economies—only account for a small slice of total emissions from cities, about seven percent.

Bending the global curve of urban emissions, in other words, will depend not only on their efforts but also their example.

"These are the cities that lead the rest of the world," said Bloomberg.

© 2016 AFP

Citation: Megacities key to reaching global climate goals (2016, December 1) retrieved 23 April 2024 from <https://phys.org/news/2016-12-megacities-key-global-climate-goals.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.