Rio G20 Side Event
UCCRN Climate Change and Cities Expert Meeting

Scaling Up and Speeding Up:
New Recommendations for Climate Action in Cities

Rio de Janeiro, Brazil
March 27, 2024

The Urban Climate Change Research Network (UCCRN) hosted a Rio G20 side event at the Pontifical Catholic University of Rio de Janeiro, Brazil on March 27, 2024. Sponsored by the Columbia Global Center | Rio de Janeiro, UCCRN Education, and UCCRN's Latin American Hub, the Expert Meeting brought together international urban experts – as part of UCCRN's *Year of Climate Action* – to engage in the global discourse on climate change and cities. The meeting stimulated breakthrough thinking, ignited opportunities for collaboration, and generated actionable strategies ahead of the upcoming G20 Summit, IPCC AR7's Special Report on Cities, and Innovate4Cities.

Cities, climate change and the urbanization process itself are at a crossroads. While the world's urban population continues to grow, cities are increasingly pressed by chronic and acute stresses such as heightening inequity, polluted air and water, limited governance and financial capacity, insecurity, conflict, and – not the least – crises such as the COVID-19 pandemic. Climate change has now exacerbated these problems and in many cases created new ones, at a time when cities are asked to be the bulwark for climate solutions.

With over 2,000 scholars and experts from cities around the world, UCCRN has conducted city-centered assessments since its founding in 2007. Currently, 300 UCCRN authors - over half of which are women and from the Global South - have now advanced this research agenda and other critical topics through the *Third Assessment Report on Climate Change and Cities* (ARC3.3), which consists of 12 peer-reviewed monographs to be published as *Cambridge University Press Elements,* both separately and together, throughout 2024 and 2025.

Building on the ARC3.3 process and the UCCRN Expert Meeting held this week, recommendations for urgently needed climate action in cities are:

1. **Create a shift in mindset for climate change action in cities.**
   ● New ways forward are through transformative changes in environmental, social, urban development, infrastructure and governance strategies.
   ● Goal is to achieve equitable resilient net-zero cities through just and inclusive transitions, respecting all species and protecting and restoring biodiversity.

2. **Foster innovative ways to connect multiple urban scales and systems from neighborhood to metropolitan regions**.
   ● Conduct advanced risk assessments (see map of city climate projections) to inform new building standards and codes and land use planning to orient public and private actors to include climate in their core activities.
   ● Housing and infrastructure (such as water supply, drainage, sanitation, transport, waste, and energy systems, as well as physical, social, and nature-based interventions) are key focus areas for cities to build resilience and reduce GHG emissions while enhancing well-being and equity.
   ● New conceptualizations of urban systems such as water-energy-food and climate-pollution-biodiversity, can help understand material flows in more dynamic and cross-scalar ways, informing integrative and transformative solutions.

3. **Align and coordinate city actors, investments, and regulatory policies.**
   ● Finance, insurance, real estate as well as other private sector and multi-level government actors, have key responsibilities in enabling city transformations.
   ● Conditions should be created to give access to finance for all, with a particular focus on the Global South.
   ● Strengthening regulatory governance and aligning actors to mobilize resources and human capital will help to mainstream climate adaptation and mitigation.

4. **Co-create indicators, metrics, monitoring tools, and environmental sensing technologies for city-specific, multi-scalar, and multi-temporal learning on how to achieve resilient net-zero cities.**
   ● Develop user-friendly and accessible data systems and tools that are interoperable to monitor diverse policy domains/issues.
   ● Local and contextualized tools are needed to understand urban systems and facilitate implementation on the (relevant) city level including informal settlements.
   ● Link current forecast models with longer-term climate scales for urban drainage, coastal flooding, heat and air quality, and health.

5. **Deliver neighborhood climate action by testing innovative concepts bridging community priorities and climate science.**
   ● Acknowledge existing power relations and engage a full range of stakeholders in climate resilient development at the neighborhood scale.

- Understand specific needs of local authorities, communities, and the private sector to synergize effective coordination and flexibility in planning.
- Define opportunities for rapid transferability to other neighborhoods and scales while recognizing differences in contexts.

Temperature Change 2080s under SSP2-4.5
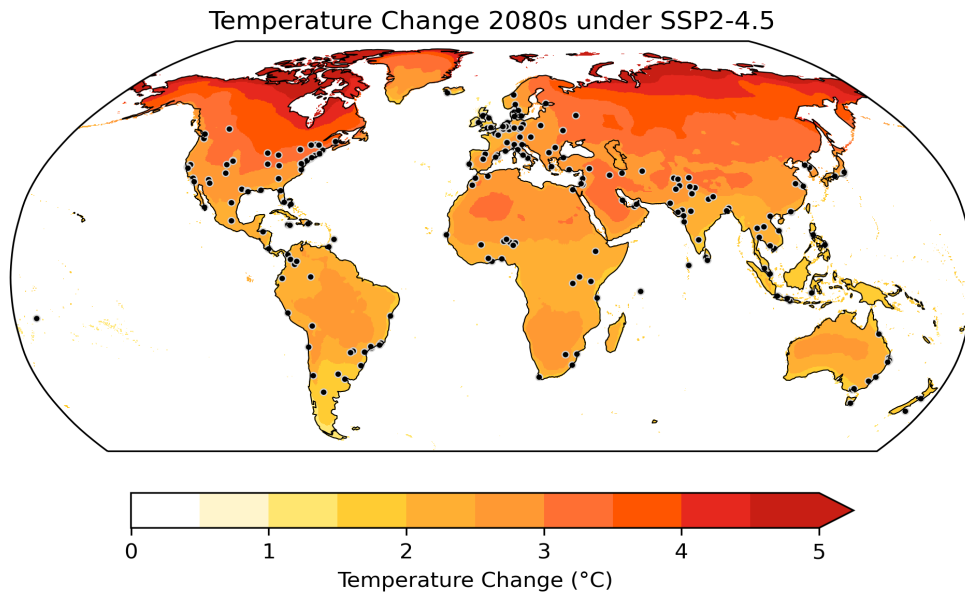
City Climate Projections. Forecasts of warming in the 2080s from CMIP6 SSP2-4.5 scenario; Baseline period is 1981-2020. Black dots indicate cities associated with UCCRN's Regional Hubs and case study cities.

It's time to scale up and speed up

Radical scaling up and speeding up urban climate action are needed now. The five urban climate action recommendations from the UCCRN Climate Change and Cities Expert Meeting in Rio de Janeiro are sign posts showing crucial pathways to effective entry-points for climate mitigation and adaptation interventions. Following these recommendations will empower planners, implementers, and many other city actors as they undertake climate action in their own urban communities.

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