

U20 2025 Webinar Concept Note

“Building the capacity of cities to withstand and adapt to impacts of climate change”

15 April 2025
13:00 to 15:00 (SAST)
Microsoft Teams

1. Contextual overview

In an era defined by escalating climate challenges and rapid urbanization, cities around the globe are emerging as critical battlegrounds for building resilience and advancing sustainable development. As centres of human habitation and economic activities, cities across the globe are particularly vulnerable to the adverse impacts of climate shocks, with the challenges of water scarcity, flooding, drought, and extreme heat disproportionately impacting the most vulnerable urban communities.

U20 cities, representing some of the world’s most populous and influential metropolitan areas, occupy a unique position at the intersection of opportunity and urgency. These urban hubs are not only engines of economic growth and innovation but also face distinct vulnerabilities, from extreme weather events, flooding, heatwaves, droughts, storms, sea-level rise, land degradation to resource scarcity, which demand bold and immediate action.

Integrating urban resilience with nature-based solutions into broader climate action strategies has become an imperative, as cities seek to balance growth with sustainability while safeguarding their populations and ecosystems. Given the framework established by multilateral agreements such as the New Urban Agenda, the Sustainable Development Goals, and the Paris Agreement, it is crucial to strengthen the role of cities in shaping national strategies. Effective decision-making at this level should extend beyond the government sector, engaging all key stakeholders across society.



The U20 platform offers a powerful mechanism for these cities to collaborate, share knowledge, and amplify their influence on the global stage. By fostering dialogue and cooperation, U20 cities can drive the adoption of low-carbon policies with a sense of urgency, enhance adaptive infrastructure, and champion innovative practices that mitigate climate impacts while enhancing quality of life. However, achieving these goals requires more than local efforts; it necessitates stronger commitments from national governments, the private sector, and international bodies to ensure that urban resilience remains a cornerstone of the global climate agenda. As the effects of climate change intensify, the role of cities in shaping a sustainable and resilient future has never been more pivotal.

2. Current challenges and trends cities face in relation to climate change

2.1. Climate Vulnerability and Extreme Weather Events

Cities face increasing risks from extreme weather events, flooding, heatwaves, droughts, storms, sea-level rise and land degradation due to their dense infrastructure and populations. Low-lying coastal cities like Jakarta and Miami are particularly susceptible to sea-level rise. The IPCC's Sixth Assessment (2022) highlights that urban areas are hotspots for climate impacts, with 1 billion people at risk from coastal flooding by 2050.

2.2. Infrastructure Deficits and Urban Sprawl

Aging infrastructure and unplanned urban expansion hinder resilience efforts, increasing energy consumption and emission. The World Bank (2021) estimated a \$4.5–5.4 trillion annual infrastructure investment gaps in developing cities. As indicated in the UNEP report (2024), floods and heat threaten water and energy systems, as seen in Kenya's \$500 million losses and damages, demanding urban planning innovation. In addition, aging bulk infrastructure faces heat stress and flooding, with Paris losing €1.5 billion annually to climate damages. Mitigation interventions falter as emissions cuts (37% since 1990) slow against 2030 targets (EEA, 2025).

2.3. Financial Constraints

The relevance of this webinar is underscored by a stark reality: climate change is no longer a distant threat but a present crisis reshaping urban life across every region. The evidence in various reports is undeniable. Cities often lack direct access to climate finance, relying on national governments or private sector partnerships, which limits their ability to implement large-scale resilience projects. The Cities Climate Finance Gap Fund (2023) noted that only 10% of global climate finance reaches local governments. The UNEP (2024) estimates a \$340 billion annual adaptation need by 2030, yet global funding lags at \$25 billion, with the Global South—home to the fastest-growing urban populations—bearing the greatest shortfall (CPI, 2022). Adaptation finance is scarce, with Sub-Saharan Africa receiving just 1% of global flows (WEF, 2023) while renewable energy investment (\$10 billion annually) falls far short of the \$133 billion needed by 2030 (IEA, 2024).

2.4. CHAMP, Multilevel Governance and Policy Fragmentation

Misalignment between national, subnational and local policies, coupled with limited municipal authority, slows climate action integration into urban planning. A 2023 Science Direct study on G20 subnational climate action highlights governance gaps as a key barrier. Improved multilevel cooperation for the planning and delivery of climate action across national, regional and local governments – through initiatives such as the Coalition for High Ambition Multilevel Partnerships (CHAMP) – is urgently needed to implement climate adaptation and resilience and strategies that keep urban communities safe.

2.5. Climate Justice: Inequitable Impacts and Social Inequality

Climate change disproportionately affects marginalized communities, exacerbating existing inequalities in access to housing, healthcare, and infrastructure. Research from the Urban Climate Change Research Network (UCCRN) shows that low-income urban residents are more exposed to heat stress and lack adaptive capacity.

3. Purpose of the webinar

The 2025 Urban 20 (U20) is convening a strategic webinar titled “*Climate Action and Urban Resilience*” with a focus on “*Building the capacity of cities to withstand and adapt to impacts to climate change*”. This webinar will serve as a dynamic forum for fostering awareness, collaboration, and forward-thinking planning. The event aims to bring together a diverse array of stakeholders such as urban leaders, climate experts, policymakers, and practitioners, to explore cutting-edge approaches to addressing climate change. The webinar will spotlight U20 cities as exemplars of scalable, actionable solutions, offering insights into the challenges they face, the strategies they employ, and the policies they implement to mainstream climate action.

The discussion will delve into a range of critical topics, including the development of adaptive infrastructure, the integration of nature-based solutions, and the formulation of policy interventions that balance environmental, social, and economic priorities. Through practical case studies and real-world examples, participants will gain a deeper understanding of how cities can transition to low-carbon systems, enhance their resilience to climate shocks, and contribute meaningfully to global climate goals. The webinar will also propose a forward-looking agenda for both the Urban 20 and the G20, emphasizing the need to elevate urban contributions to international climate efforts and ensure that the voices of cities are heard in shaping global policy.

Ultimately, this webinar aims to catalyze action by fostering a shared vision among its participants. By highlighting the leadership of U20 cities and encouraging cross-sector collaboration, the event seeks to accelerate the adoption of innovative solutions that not only mitigate the impacts of climate change but also adapt to its inevitable consequences. In doing so, it will reinforce the critical role of urban areas as agents of change, setting the stage for a more resilient, sustainable, and equitable future.

4. Objectives of the webinar

It is against this backdrop that this webinar will unpack the following:

- **Strengthening Urban Climate Resilience**
 - Explore effective strategies for cities to adapt to climate risks such as extreme weather, flooding, and resource scarcity.
- **Integrating Nature-Based Solutions into Urban Development**
 - Examine how green infrastructure, ecosystem restoration, and sustainable land use can mitigate climate impacts.
 - Showcase successful case studies from U20 cities implementing nature-based solutions.
- **Enhancing Multilevel Governance and Partnerships**
 - Discuss the role of cities in shaping national and global climate policies.
 - Explore how to promote collaboration among governments, private sector, and civil society to drive climate action.
- **Advancing Climate Finance for Sustainable Cities**
 - Identify funding mechanisms to support urban climate adaptation and mitigation projects.
 - Explore innovative financing models and public-private partnerships for resilient infrastructure.
- **Promoting Climate Justice and Inclusive and Equitable Climate Action**
 - How cities can ensure that climate resilience strategies address the needs of vulnerable and marginalized communities.

5. Target audience

The knowledge webinar targets mayors and municipal leaders from U20 cities, urban planners and policymakers, climate scientists and resilience experts and representatives from international organisations to explore cutting-edge approaches to addressing climate change.

The webinar will be held as follows:

- Date: 15 April 2025
- Time: 13:00 to 15:00 (SAST)
- Venue: Microsoft Teams

6. Expected Outcomes

- Participants gain insights into cutting-edge resilience strategies and replicable models from U20 cities.
- A concise report summarizing webinar discussions, including actionable steps for U20 cities, to feed into the U20 Communiqué joint position, which will be shared with G20 leaders .
- New connections among U20 stakeholders foster future collaborations on climate projects.
- A call to action for U20 cities to integrate at least one discussed strategy into their 2025-2026 urban plans.
- Increased global awareness of U20's leadership in climate action, amplified through post-webinar media and social platforms.

7.Key questions to be addressed

- What role should cities play in shaping national climate policies and global sustainability frameworks?
- How can cities accelerate the adoption of nature-based solutions to address both climate mitigation and adaptation, and what financing models have proven effective?
- What actions can be taken to create enabling frameworks and strengthen collaboration with businesses, civil society, and international organizations to accelerate climate action?
- What are the key challenges in implementing green infrastructure, and how can they be addressed?
- What innovative financing mechanisms can support climate resilience projects in cities?
- How can cities ensure that climate adaptation strategies prioritize marginalized and vulnerable communities?

8.Conclusion

Climate action and urban resilience are inseparable from the future of sustainable cities. By addressing current challenges with integrated strategies, robust policies, and proven solutions, cities can lead the global fight against climate change. This will position the U20 to drive G20 commitments, ensuring equitable resilience futures. The proposed webinar series will unpack these issues, leveraging expert insights to drive actionable outcomes.

9. References

1. Cities Climate Finance Gap Fund. (2023). Cities Climate Finance Gap Fund Annual Report 2023
2. Climate Policy Initiative (CPI). (2022). Global Climate Finance Flows: Bridging the Gap in the Global South
3. European Environment Agency (EEA). (2025). Progress Towards 2030 Emissions Targets
4. International Energy Agency (IEA). (2024). Renewable Energy Investment Outlook 2024
5. Intergovernmental Panel on Climate Change (IPCC). (2022). Sixth Assessment Report
6. ScienceDirect. (2023). Assessing Subnational Climate Action in G20 Cities
7. United Nations Environment Programme (UNEP). (2024). Impacts of Climate Change on Urban Infrastructure
8. Urban Climate Change Research Network (UCCRN). (2023). Urban Climate Vulnerability and Social Inequality
9. World Bank. (2021). Infrastructure Investment Needs in Developing Cities
10. World Economic Forum (WEF). (2023). Climate Finance Allocation in Sub-Saharan Africa



10. Speaker profiles

Facilitator:



Ms. Noxolo Mtembu is a Sector Specialist with experience in Renewable Energy and Climate Change Mitigation. She holds Bachelors, Honours and Post Graduate degrees in the Environmental Sciences from WITS University; and a Master's Degree from the University of Cambridge (UK). She began her career in the construction sector finally fulfilling the position of Group Environmental Manager. At the Department of Economic Development, she headed up the Green Economy Programme Management OQice (PMO), this oQice was tasked with implementation of the Green Economy Strategy for Gauteng.

The PMO was tasked with conceptualizing of key economic infrastructure for green economy projects and creating employment opportunities in the Green Economy sector through Innovation and market interventions. She is an International speaker, has coauthored several Provincial Policies and serves the UNECE in the drafting the Guide on Promoting Climate Resilient PPP and Infrastructure Projects in Support of the SDGs. Currently, she manages the Alternative Waste Treatment Technologies Projects for Gauteng and Alternative and Renewable Energy Projects at the Gauteng Infrastructure Financing Agency (GIFA). GIFA supports local government and departments in preparing, financing and implementation of key Economic infrastructure Projects in the Gauteng Province.

Professional Membership/Directorships

Institute of Directors: Sustainable Development Forum, (2009-2014), Climate Leadership Programme Advisory Alumni (2010- Present), National Empowerment Fund- SEC Board Member (2019- Present), Bokamoso Ba Rona Agri Industrial Programme - Board Member (2019-Present)

Speakers



Cllr Nasiphi Moya is the Executive Mayor of Tshwane and U20 Co-chair for the 2025 cycle. She graduated with a Bachelor of Social Science Politics and Public Policy and Administration from the University of Cape Town (UCT) in 2007. She furthered her studies at UCT and was awarded with an honours degree in Social Science, specialising in Public Affairs and Administration in 2008.

In 2011, she obtained her Master of Philosophy from UCT, specialising in Public Policy and Administration. She later obtained her PhD in Political Science from the University of the Western Cape in 2021. She is an action-oriented leader who is passionate about service delivery.



Ms. Jessica Kavonic is C40's Head of Implementation for Africa. In this role, she supports the African region cities in accelerating the implementation of the most impactful climate actions, and in facilitating learning from their peers across other C40 cities. She works closely with teams across C40 as well as other city and climate organisations in the region to ensure cities have access to the most relevant and effective technical assistance. Jess oversees all C40 led delivery programmes offering technical assistance in the region, working with the CSN, CAI, CAPI, Climate Finance and the Business teams.

With an MSc degree in Climate Change and Sustainable Development from the University of Cape Town, her work with local governments started at the City of Cape Town and later with ICLEI Africa where she spent seven years as part of the Climate Change, Energy and Resilience workstream.



Ms. Matshepo Molala is a PhD researcher at Western Sydney University, where she graduated with her Master of Research in 2022. Her research focuses on investigating the nexus between faith and climate change, and its impacts on resilience and adaptation amongst marginalised communities. She is a passionate sustainability professional and has led award winning sustainability projects at local and state governments and private sectors in Australia and overseas.

Matshepo is the co-convenor of the environment and society thematic group of The Australian Sociological Association. She works as a sessional academic in the School of Social Science at Western Sydney University. She is a Senior Research Assistant working on projects including a social study on LGBTIQ+ identifying African Christians in Australia. She is co-author of report responding to the United Nations Working Group of Experts on People of African Descent Recommendations Report following their mission to Australia, commissioned by African Australian Advocacy Centre and Royal Melbourne Institute. She is the recipient of the Humanities, Arts, and Social Sciences Doctoral Internship Program bursary to engage end-user industry partners in developing climate change responses and support resilience initiatives at a local level in South Africa.



Mr. Carlos de Freitas has over 25 years of experience advising and collaborating with ministers, mayors, governors, CEOs of national and subnational development banks, and other high-level decision-makers worldwide. Since 2011, he has served as co-Director of FMDV-Global Fund for Cities Development, focusing on designing and implementing multistakeholder urban finance strategies, programs, and advocacy at key global platforms, including the UN Climate Summits (COPs), Financing for Development conferences, Habitat, and the UNSG SDG and Climate Summits. As FMDV's Executive Director since April 2023, he gives continuity to the influential pilot programmes developed and implemented by the network, especially on the « Finance Your Cities » Country Platforms for Localizing Finance.

A former Strategy Director of an Asset Management Company and a fellow researcher at the Veblen Institute for Economic Reforms, Carlos was honored with the AVINA Award in 2008 for investigative journalism. He regularly co-authors influential articles, reports, and publications, notably "Viva Favela! When the Poor Take Their Destiny into Their Own Hands," highlighting Brazil's remarkable Community Development Banks experience.



Ms. Amanda Gcanga is a Country Lead for the Climate Resilience and a Senior Urban Policy Analyst working with WRI teams in Africa and the headquarters. She also oversees all WRI Cities related initiatives in South Africa, including climate action and Just Energy Transition.

As a Country Lead, she guides the implementation of the climate resilience initiative in South Africa, including leading the development of South Africa's strategy, identification of strategic intervention, collaboration areas, represent the cities work in South Africa, and management of partnerships.

In her capacity as a policy analyst, she plays a central role in liaising with key stakeholders at the national government and local government level to create conducive ground for WRI's support on the urban development policy, providing technical support to key partners and identification of WRI's policy-level interventions in Africa.

Amanda has experience in water governance as a practitioner and a researcher. Prior to joining WRI, Amanda headed a water programme at the Western Cape Economic Development Partnership based in Cape Town. Before joining the Western Cape

Economic Development Partnership, she managed water governance projects with the Water Institute of Stellenbosch University, Wageningen University and Research, and the Centre for Water and Sanitation Research. Amanda holds a master's degree in international Land and Water Management at Wageningen University in the Netherlands.

For further information about this webinar, please contact:

Ms Thabisa Mbungwana – ThabisaMb@tshwane.gov.za

Ms Pearl Maponya – pearlmap3@tshwane.gov.za and

Ms Kamogelo Molekwa – Kamogelom@tshwane.gov.za

11. Programme

Facilitator: Ms Noxolo Mtembu (Climate Scientist, Gauteng Infrastructure Financing Agency)		
Time Slots	Item	Role
5 Min	Welcome Remarks	Dr Nasiphi Moya Executive Mayor & Urban20 Co-Chair City of Tshwane, South Africa
5 mins	Introduction and Scene Setting	Ms Jessica Kavonic C40: Head of Implementation (Africa region)
15 Mins	Panellist 1: Asia-Pacific Perspective The Global Climate Crisis: Cities as Catalysts for Climate Action	Ms Matshepo Molala PhD Candidate: Western Sydney University Australia
15 Mins	Panellist 2: Global South Perspective Financing Urban Resilience: Innovative finance mechanisms and closing the investment gap	Mr Carlos de Freitas Executive Director: Global Fund for Cities Development
15 Mins	Panellist 3: African Perspective Nature-Based Solutions for urban resilience and adaptation: practical application and scalability on NBS in urban settings	Ms Amanda Gcanga Country Lead: Cities Programme in South Africa and Urban Water Resilience Initiative World Resources Institute (WRI)
45 Min	Facilitated Panel Discussion	Facilitator
5 Min	Summary and Conclusions	Ms Jessica Kavonic C40: Head of Implementation (Africa region)