C40 COOL CITIES ACCELERATOR

How C40 cities are protecting lives and leading the transformation to cooler, safer and fairer cities

December 2025

C40 CITIES

Freetown skyline. Photo © Bunting Kargbo / Unsplash / C40

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Introduction


Market in Ahmedabad. Photo © Aby Zachariah / Unsplash

Extreme heat is a deadly threat to cities around the world

Cities are on the front line of a lethal and accelerating climate threat. Extreme heat is currently the deadliest weather-related disaster, contributing to an estimated 546,000 deaths globally each year.[1] This silent killer is intensifying, driven by a combination of rising global temperatures and the urban heat island effect – a phenomenon caused by human-made materials such as concrete and asphalt absorbing and re-radiating heat. If we leave our cities to overheat, the number of urban residents exposed to life-threatening temperatures is projected to increase five-fold by 2050, threatening the wellbeing and prosperity of billions.[2]

This crisis is a multiplier of inequity. Extreme heat disproportionately harms the most vulnerable, including older adults, children, outdoor workers, women, people with disabilities, and those living in low-income communities.[3] Existing social and economic disparities are deepened, as these groups often lack access to cooling measures. They are more likely to live in buildings that are ill-equipped for extreme heat, and in neighbourhoods with less green space and fewer places to cool down.

The economic consequences of extreme heat are staggering, and present a direct threat to urban prosperity. Globally, extreme heat is projected to cause US$2.4 trillion in lost labour productivity by 2030, as it becomes too dangerous to work outdoors in key sectors like construction and agriculture.[4] Direct economic losses from heat stress for 12 of the world's major cities are already estimated at US$44 billion annually – a figure projected to nearly double by 2050.[5] These costs ripple through city economies, strain essential services, reduce overall economic activity, and are felt most by those already struggling to get by.

Mayors are responding

Mayors are already responding with creative and bold actions across cities, including increasing tree canopy, building shade, depaving streets, and working towards safer indoor temperatures. They are protecting vulnerable residents through programmes such as volunteer wellness checks and networks of public cooling centres. Cities are using climate projections to inform health policies. They are partnering with national health and meteorological agencies for coordinated response and preparedness.

However, city action must urgently accelerate to keep up with the pace and intensity of urban heating. This urgency will require cities to ensure that every city agency collaborates with other arms of government, the private sector and communities, to ensure collective, systemic and cross-cutting action against rising temperatures.

1. Romanello, Marina, et al. (2025). The 2025 report of the Lancet Countdown on health and climate change. The Lancet.
2. C40 Cities, GCoM, UCCRN, and Acclimitise. (2018). THE FUTURE WE DON'T WANT. How Climate Change Could Impact the World's Greatest Cities.
3. Matthies, Franziska (2008). Heat-health action plans: guidance. World Health Organization, Europe.
4. Kjellström, Tord., Maître, Nicolas., Saget, Catherine., Otto, Matthias., & Karimova, Takhmina (2019). Working on a warmer planet: the effect of heat stress on productivity and decent work. International Labour Organization.
5. Atlantic Council, Climate Resilience Center (2023). Hot Cities, Chilled Economies: Impacts of extreme heat on global cities.

C40 Cool Cities Accelerator

The **C40 Cool Cities Accelerator** provides the framework for cities to achieve strong, comprehensive heat leadership. It equips mayors with the tools and structure needed to deliver a strategic, coordinated and cross-departmental response.

A collective effort

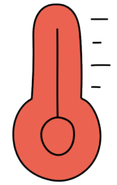
The Accelerator was created by cities and for cities, with significant input from experts and partners that are committed to addressing extreme heat in urban environments. C40 Cities received feedback and guidance from technical experts representing 17 cities in our network, alongside many organisations currently working to address heat, including the Global Heat-Health Information Network, Resilient Cities Network, Group on Earth Observations, UN-Habitat, the United Nations Secretary-General (UNSG), and World Resources Institute (WRI).

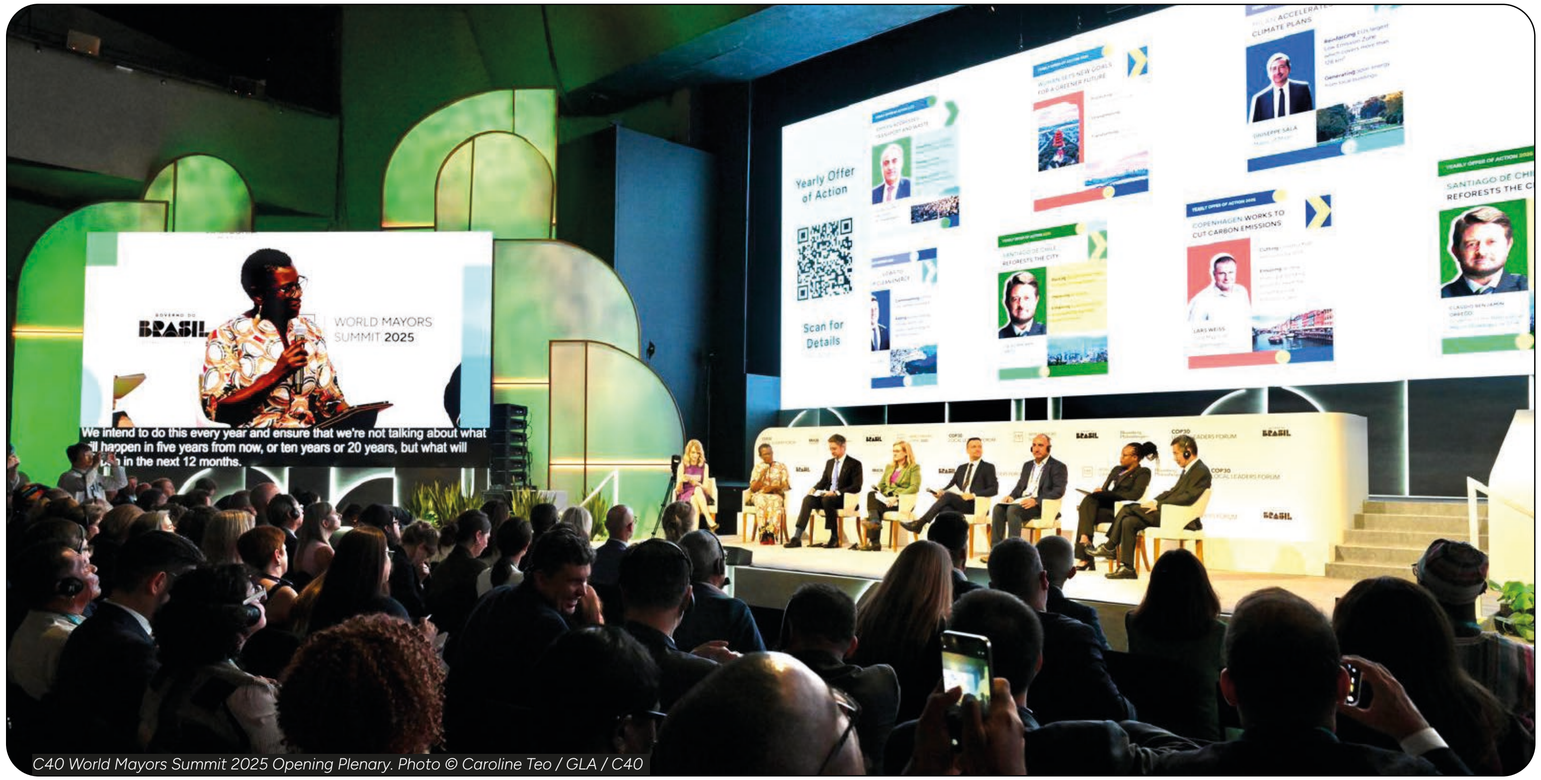
This Accelerator contributes to a global effort to address extreme heat. It responds to the United Nations Secretary-General's Call to Action on Extreme Heat launched in 2024, and helps to implement the Global Cooling Pledge, focused on sustainable cooling and launched at COP28 in 2023, as well as the Beat the Heat Implementation Drive that was launched at COP30 in Belém, led by the COP30 Presidency.

By signing this Accelerator, mayors commit to turning a climate crisis into an opportunity to build **cooler, safer, and fairer cities for all.**

> "Extreme heat is having an extreme impact on people and planet. The world must rise to the challenge of rising temperatures.
>
> – António Guterres, Secretary-General of the United Nations, 25 July 2024

> "On average, 84% of the heatwave days that people faced annually between 2020 and 2024 would not have occurred without climate change.
>
> – The 2025 report of the Lancet Countdown on health and climate change





C40 World Mayors Summit 2025 Opening Plenary. Photo © Caroline Teo / GLA / C40

C40 Cool Cities Accelerator

This is **our collective commitment**, in response to rising global temperatures and the UNSG Call to Action on Extreme Heat.[6] We will **protect our urban populations vulnerable to the immediate dangers of extreme heat** today, and **fundamentally redesign and transform our urban spaces to adapt to the increasing heat** of tomorrow, in order to ensure cooler, safer, and fairer cities for generations to come.

Commitments

Each signatory city to the C40 Cool Cities Accelerator has committed to achieving the following six actions within two and five years of signing on:

2 YEARS

1. PROTECT

We commit to protecting residents from extreme heat

1.1 Establish and authorise heat leadership and a cross-agency heat governance structure with clear coordination protocol.

1.2 Activate heat-health awareness outreach and early warning systems informed by climate data to protect the health and livelihoods of vulnerable communities.

1.3 Deploy cooling solutions during heat emergencies, such as at designated cooling centres and critical facilities, home and work based cooling support, and outdoor cooling pop-ups.

5 YEARS

2. TRANSFORM

We commit to cooling our city for the future by investing in medium and long-term solutions

2.1 Update building codes and promote cool buildings by implementing policies and regulations for safe indoor temperatures in a sustainable way, such as mandating cool or green roofs, improved insulation, or renewably powered active cooling for new and existing buildings.

2.2 Create a network of cool corridors and public spaces, such as by increasing tree canopy, green cover, and shading, cooling or depaving streets, and deploying water features to make public spaces and routes accessible and comfortable.

2.3 Future-proof critical infrastructure for increasing temperatures by assessing climate vulnerability and implementing design standards to ensure essential services like energy grids, water supply and public transportation.

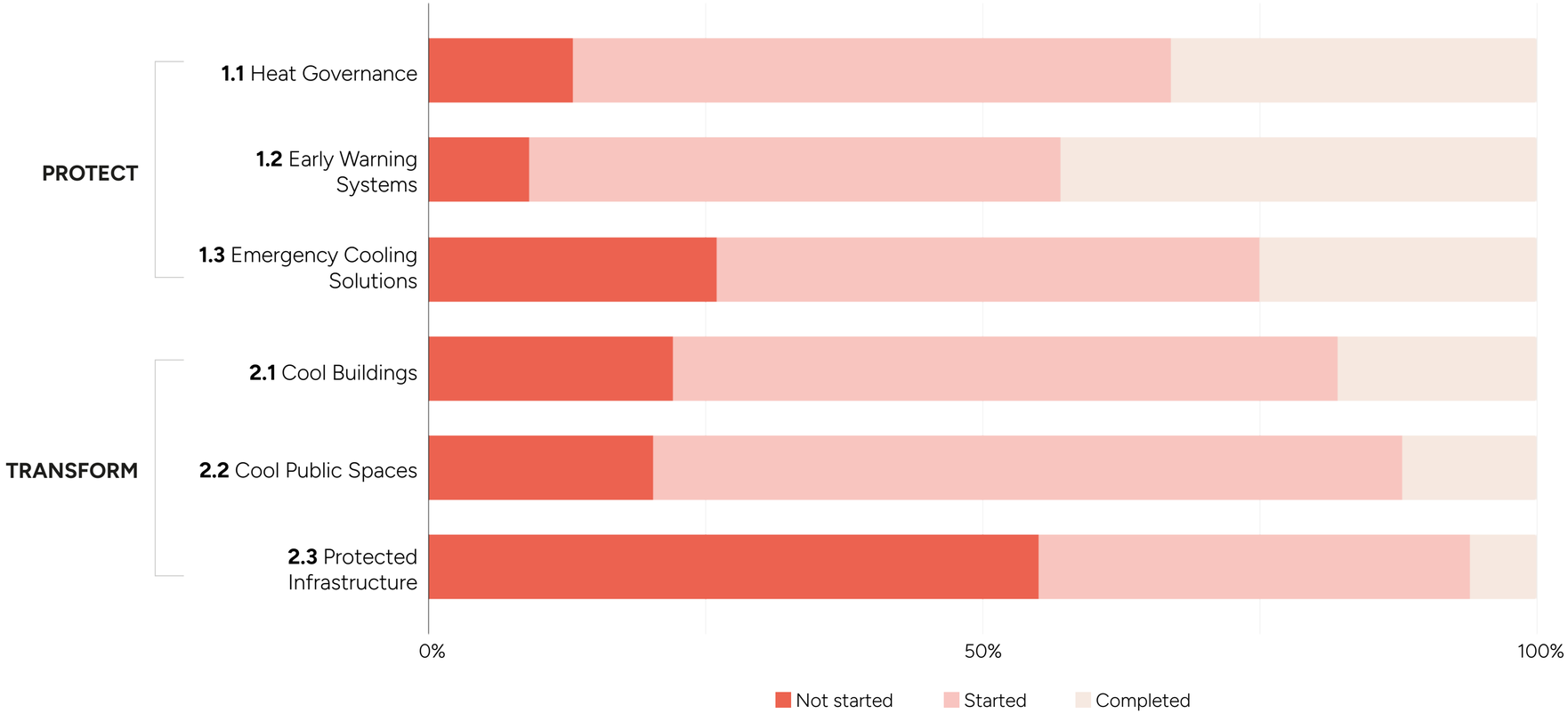
6. United Nations (2024). "Secretary-General's Call to Action on Extreme Heat." United Nations.

Progress towards Accelerator commitments

> Meeting growing cooling demand sustainably presents one of the biggest opportunities to protect people, prosperity and the planet.
>
> – UN Environment Programme (UNEP) Global Cooling Watch 2023

Most cities have already taken key actions on heat before signing the Cool Cities Accelerator, and are on their way to achieving all six sub-actions of the Accelerator.

Most cities have begun setting up early warning systems and methods of communicating to residents about the dangers of heat and how to stay cool. Cities are mostly just getting started on future-proofing infrastructure for a hotter future climate.



Key city actions

PROTECT

14

signatory cities have developed and adopted comprehensive Heat Action Plans
to safeguard residents from extreme heat.

Examples include Ahmedabad, Amsterdam, Freetown, Boston, and Rome, which are deploying long-term efforts to improve preparedness and response, and recognising heat as a central challenge to tackle.

14

signatory cities have established cooling shelters or designated cool spaces
to provide relief during heat emergencies.

Barcelona has created a network of more than 350 climate shelters in publicly accessible buildings, while Sydney is piloting mobile cooling hubs in public parks to expand access to cooling for vulnerable residents.

People in a market street, experiencing high temperatures as they go about their daily life. © Njung'e Wanjiru / C40 Cities

TRANSFORM

25

signatory cities are advancing large-scale urban greening initiatives
to reduce extreme heat and mitigate the urban heat island effect.

Singapore is intensifying greenery in urban areas through the OneMillionTrees movement, which helps to beautify and cool the surroundings. Guadalajara's implementation of 70 green corridors through its Strategic Tree Planting Plan has helped reduce the city's heat-island surface by 1%.

12

signatory cities have introduced or are implementing indoor thermal safety policies or actions
to protect residents from indoor heat risks.

Ahmedabad is improving indoor thermal safety through its Cool Roofs programme, which uses reflective coatings and materials to lower indoor temperatures by 2-5°C, while Chicago requires at least one air-conditioned common space in multifamily residential buildings, accessible free of charge to all residents.

33 cities

have signed onto the C40 Cool Cities Accelerator


Gardening in a green space in Accra. Photo © AFP / C40 Cities

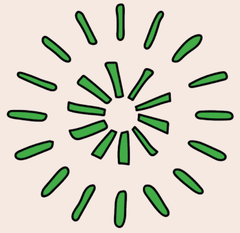
Accra

Accra is a hot and humid West African city that experiences high temperatures and high humidity consistently throughout the year. Urban expansion across the Greater Accra Metropolitan Area has caused land surface temperatures to rise by about 4°C since 1991.

Existing actions and achievements

Accra Metropolitan Assembly (AMA) is currently strengthening its city-wide heat governance framework through its Disaster Management Committee and Physical Planning Department. This structure coordinates closely with the Ghana Meteorological Agency and Ghana Health Service to align climate and health data. Existing cooling measures involve designating specific facilities as temporary cooling points during periods of extreme heat, such as markets, community halls, and selected health centres.

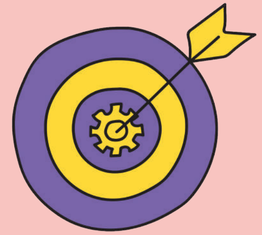
AMA has also implemented small-scale cool building initiatives, including green roofing and tree shading in new housing estates. Accra engages residents' associations and market leaders in co-designing green spaces and shading interventions.



Planned actions and commitments

Accra's future actions are focused on scaling up protective measures and infrastructure resilience. The city plans to roll out heat-specific training for frontline staff in health, sanitation, and emergency response to improve public health awareness and response. Planned retrofitting programmes include adapting schools and health facilities using reflective roofing materials.

To create cool public routes, AMA will collaborate with partners to establish shaded pedestrian walkways and bus corridors. The city is also in discussions to introduce climate-controlled public buses and shaded terminals. Further plans involve expanding water storage capacity to address fluctuations in demand caused by rising temperatures.



Cool roof project in an informal settlement in Ahmedabad. Photo courtesy of the City.

Ahmedabad

Ahmedabad has a hot, semi-arid climate where summer temperatures often exceed 40°C from March to July. In 2010, the city faced a devastating heatwave that caused 1,344 excess deaths. In response, the governing Amdavad Municipal Corporation launched South Asia's first municipal Heat Action Plan (HAP) in 2013, pioneering a model now replicated across India and internationally.

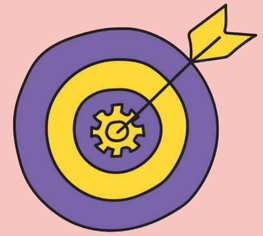
Existing actions and achievements

Ahmedabad's leading HAP features an extensive public awareness and outreach strategy and prioritises the protection of vulnerable communities. Working with stakeholders, Ahmedabad trains community healthcare workers, school staff, and local leaders in heat-health preparedness. The city's multilingual mass-media campaigns reach residents via public display boards, auto-rickshaw ads, LED temperature displays, radio, and newspapers.

Its flagship Cool Roofs programme applies reflective coatings and materials – such as white solar-reflective paints and mosaic tiles – to reduce indoor temperatures by 2-5°C. This pilot intervention has been implemented in over 3,000 low-income homes and public buildings, including hospitals. The city is also planting roadside trees, creating ten new urban forests, and further improving air quality in 150 existing parks and gardens. Ahmedabad has also introduced cooling centres and misting stations to provide temporary relief during heat emergencies.

Planned actions and commitments

In the coming years, Ahmedabad aims to increase its urban green cover to 15% from the current 10-12.5%, enhancing cooling and air quality benefits. The city also plans to expand its Bus Rapid Transit System (BRTS) to cover 60% of public transport by 2030, with a long-term goal of transitioning to 100% electric buses equipped with efficient climate control systems by 2050.



> "Heat remains underperceived as a major public health hazard among many government and non-government agencies and the broader public, limiting behavioural change and uptake of protective measures, particularly in informal settlements where economic constraints and literacy gaps hinder information access.
>
> – Amdavad Municipal Corporation

A hot day in Amsterdam when bridges need to be sprayed with water to prevent them from jamming due to extreme heat. Photo courtesy of the City.

Amsterdam

Amsterdam has a temperate maritime climate, influenced by its proximity to the North Sea, which makes it relatively humid, rainy, and windy. Winters are mild, averaging 5-7°C, while summers are warm, with average highs around 20-22°C. However, the city is experiencing extreme spikes reaching temperatures above 40°C, which pose serious risks for residents and sets the urgency for the city's response.

Existing actions and achievements

Amsterdam's approach to urban heat is grounded in data-driven tools. The city employs a Heat Stress Test, a neighbourhood-level Heat Risk Map, and a Climate Adaptation Hotspot Map to identify and prioritise vulnerable areas. It is also studying temperature-related excess mortality to guide future policy.

The city implements targeted outreach, such as Heat Action Day, where volunteers visit residents in heat-vulnerable housing complexes to co-develop personal cooling plans and install practical solutions like custom-fit sunshades and fans to ensure immediate usability. Amsterdam has established protocols for vulnerable groups, providing free swimming access for low-income residents with a Stadspas (City Pass) and offering additional support for homeless individuals during heatwaves.

Planned actions and commitments

Amsterdam plans to strengthen its heat governance by appointing a dedicated heat coordinator at the Public Health Service in 2026, who will lead city-wide coordination and embed heat preparedness into policy. To promote cool buildings, the city is preparing a sunshade subsidy for housing corporations and aims to train energy coaches to offer heat-related and cooling advice during home visits.

Through the new Cool Green Streets policy, Amsterdam will expand its green infrastructure by creating a connected network of green corridors and plans to increase its urban shade, including testing mobile share infrastructure in places where trees cannot be planted, ensuring that all residents live within 300 metres of a cool spot. Furthermore, the city actively involves residents, housing corporations, and businesses, fostering collaborative efforts to reduce heat risks at neighbourhood level.

A QR Code on a tree shares information about the tree and its ecosystem value, helping residents reconnect with urban nature. Photo courtesy of the City.

Athens

Athens is one of the most severely heat-impacted cities in Europe. The city is frequently beset by prolonged and severe heatwaves every year and the number of heatwave days is expected to double by 2050. Athens has recognised heat as the city's major climate risk.

Existing actions and achievements

Athens is focusing on immediate protection and design, including the appointment of a Chief Heat Officer and the operation of at least seven cool centres in Friendship Clubs for older people during heatwaves. They established a goal in 2024 of planting 5,000 trees a year, with almost 7,600 trees already planted in 2024.

Pocket parks and squares have been designed and planted in all seven municipal districts with plans to install more and provide appropriate maintenance. Green and blue infrastructure to combat heat and flooding has been or is in the process of being installed in areas such as the National Garden, Mount Lycabettus, and Philopappus, while microforests and cool misted gardens have been recently constructed in Elikonas area and Serafeio complex respectively.

Planned actions and commitments

Future efforts are focused on formalising governance and scaling cooling infrastructure. Athens plans to officially establish a cross-departmental working group and update the city’s Climate Vulnerability and Risk Assessment in the coming year.

The city is working on major transformational projects to create cool green routes in three city neighbourhoods, and establish the Hadrian Aqueduct metropolitan green route to connect the city with the northern west mountains and neighbouring municipalities, using the underground water for irrigation and cooling through a regional funding scheme. Additionally, Athens intends to initiate a programme using the EU Social Climate Fund to help residents retrofit their homes for improved thermal safety.

People cooling off on a hot August day at Barton Springs in Austin. Photo © Tomek Baginski / Unsplash

Austin

Austin has a humid subtropical climate characterised by hot summers and mild winters. The ten hottest summers on record have all occurred since 1998, and local heatwaves now last an average of two days longer than they did in the 1960s.

Existing actions and achievements

Austin coordinates its heat work through the Heat Resilience Playbook involving departments including Austin Parks & Recreation, Public Health, Energy, and Emergency Management, with a focus on vulnerable populations. Using temperature data, modelling, exposure data and the voices of residents, Austin developed a heat vulnerability assessment. For immediate relief, over 40 facilities are designated as cooling and warming centres.

The city enforces thermal safety in residential buildings via a maximum legal indoor temperature of 29°C (85°F) as of July 2025. Austin Energy supports cooling through home energy efficiency initiatives. Transformation efforts include contributing US$4 million to fund the planning and designing of new shaded park areas. A cool pavement pilot programme treated over 1.5 km (nearly 1 mile) of roadway; early results found nighttime temperatures 1-2°C (2-4°F) cooler than surrounding areas.

Planned actions and commitments

Austin is strengthening real-time, interdepartmental protocols for heat emergency warnings with clearer activation triggers. It is also developing heat-specific training for emergency responders, health professionals, and frontline social service workers. A key long-term goal and major initiative for the city is to expand its urban tree canopy to 50% by 2050, prioritising historically underserved neighbourhoods that lack natural shade.

Transportation plans include piloting cool corridors in low-income communities to connect to cooling centres, with CapMetro providing free transit rides for residents needing access to these safe spaces. Austin is also upgrading bus stops with shade, seating, and cooling features, as well as piloting broader outdoor cooling strategies to help residents cope with extreme heat.

Shade over a playground in Barcelona. Photo courtesy of the City.

Barcelona

Barcelona is particularly vulnerable to heat for several reasons. Scientific evidence shows that the Mediterranean basin, where the city is located, is warming 20% faster than the global average. Additional factors such as its high population density and geographic constraints make adaptation more difficult. The effects of heat on health and wellbeing in the city are increasingly evident, with a documented rise in heat-related mortality.

Existing actions and achievements

Barcelona is already implementing wide-ranging measures to tackle heat. The city's shade programme will add nearly 200 shade structures in public spaces over the next two years, prioritising playgrounds and schools. Water play-areas for children have doubled this year, and the shelter climate network has expanded to 450 locations.

The Climate School Plan aims to cool 170 public schools by 2029 using renewable energy. Additionally, the Transformamos los patios (Let's transform the playgrounds) initiative is creating greener, more inclusive, and accessible schools, with over 70 participating schools so far.

Planned actions and commitments

Barcelona is creating a protection plan for municipal outdoor staff, including adapted work schedules, protective equipment, and health and safety protocols. It also includes measures for pregnant or nursing workers and promotes similar protections for external service providers.

In parallel, the city is advancing reflective and permeable paving initiatives, including pilot tests on school roofs and pavements, a design contest for reflective paving stones, and a comparison of reflective and conventional asphalt. They will also explore new materials such as recycled glass.


Tree-lined street in Bengaluru. Photo © Raghavendra Prasad / Unsplash

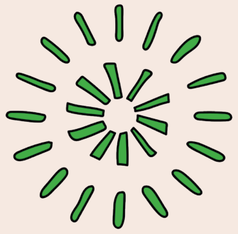
Bengaluru

Historically, Bengaluru has had a relatively mild climate. In recent decades, the city has experienced unprecedented heat, with temperatures rising at a rate of 0.23°C per decade, further accelerating in the last decade. Rapid urbanisation, degraded green spaces, and shrinking water bodies have exacerbated heat risks, making extreme heat a new challenge for the city.

Existing actions and achievements

Bengaluru is focused on increasing and improving green cover to mitigate heat exposure. BMTC (Bangalore Metropolitan Transport Corporation) and KRIDE (Karnataka Rail Infrastructure Development Company Limited) have initiated large-scale plantation drives at depots and stations, collectively adding over 280 acres of new green cover.

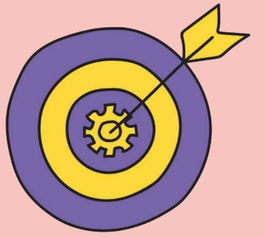
The Green Bengaluru initiative under Brand Bengaluru has earmarked approximately US$335,000 (INR 3 crore) for greening areas around lakes, planting over 200,000 saplings to date.



Planned actions and commitments

The city is integrating the National Energy Conservation and Sustainable Building Code (ECSBC) into its building bylaws, ensuring all new constructions prioritise thermal comfort and energy efficiency as a core performance requirement.

Bengaluru is also collaborating with C40 Cities to develop a data-informed heat-health protocol and Standard Operating Procedure (SOP) for extreme heat events, focusing on vulnerable neighbourhoods and populations.



> We need an Information, Education, and Communication (IEC) campaign to sensitise the public to adapt to emerging climate risks, especially the effects and risks of indoor heat.
>
> – Greater Bengaluru Authority

Green roof on a bus shelter along Malcolm X Boulevard in Boston. Photo courtesy of the City.

Boston

Boston has a continental climate, characterised by cold, snowy winters and warm to hot summers. Over the last decade, the city has experienced more hot days and nights than in any decade over the previous 50 years. Even with major global emissions reductions, the number of days above 32°C (90°F) in Boston is projected to rise from a historical average of 10 per year to as many as 46 by the 2070s. These projections underline the city's growing exposure to extreme heat and the urgent need for sustained adaptation measures.

Existing actions and achievements

The city is advancing a wide range of initiatives, including detailed heat vulnerability mapping, public awareness and communication campaigns, and urban forestry programmes aimed at expanding canopy coverage in heat-prone neighbourhoods. Boston's *Heat Resilience Solutions Report* (2022) serves as the foundation for its ongoing work to reduce heat vulnerability.

Currently, the city is conducting resilience node planning to identify critical service gaps near critical facilities, and ensure continuity of essential needs such as access to water, refrigeration for medication, and power for electrically dependent medical devices during extreme heat events.

Planned actions and commitments

Boston continues to invest in retrofitting public housing and municipal buildings to improve energy efficiency and thermal comfort. The city is preparing to launch Boston Energy Saver, a new programme designed to accelerate these efforts. In partnership with the Smart Surfaces Coalition, Boston is also modelling the potential impacts of cool surfaces, and exploring funding opportunities for implementation.

The Office of Green Infrastructure is leading further policy development and implementation of green infrastructure, including permeable materials, while exploring additional opportunities for cool pavement adoption across the city.

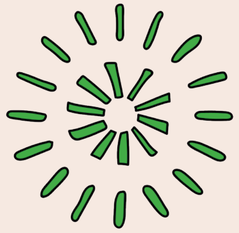
Launch of the 2025 Climate Shelter Network in Buenos Aires. Photo courtesy of the City.

Buenos Aires

Buenos Aires has a humid subtropical climate, with hot, humid summers and cool, drier winters. Between 1960 and 2018, average temperatures rose by about 1°C, minimum temperatures by 1.7°C, and heatwaves doubled compared to the 1990s.

Existing actions and achievements

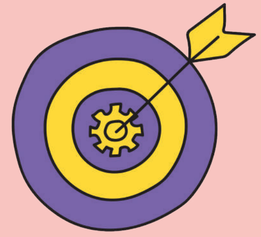
Buenos Aires' updated Climate Action Plan includes a comprehensive Climate Risk Analysis, which assesses the projected frequency and intensity of heatwaves under different climate scenarios, comparing them to historical trends. The city's Climate Shelter Network protects residents from extreme heat, inspired by Barcelona's Climate Refuges. These shelters provide safe havens during heatwaves, and serve as community hubs for heat-risk awareness and education. Plans are underway to expand and strengthen this network.



The city is also a regional leader in protecting vulnerable groups, particularly older adults. Gerontological assistants are trained to recognise and respond to heat-related health impacts during emergencies. Buenos Aires' communication campaigns promote preventive measures and health guidance during heatwaves, particularly for vulnerable populations.

Planned actions and commitments

Buenos Aires is committed to advancing energy efficiency in homes and sustainable construction. Since 2024, the Energy Management team has worked with the National Housing Labelling Programme (PRONEV) to improve residential energy performance. Technical committees under the Climate Change Cabinet are developing projects on sustainable construction and housing.



The city is also developing regulations for sustainable design principles, which will be incorporated for the first time in the new Building Code. Measures to reduce heat stress and promote urban resilience include solar gain and protection, natural ventilation, thermal insulation, green roofs and walls, water and energy efficiency, visual and acoustic comfort, indoor air quality, sustainable materials, environmental management of construction processes, and renewable energy integration.


People cooling off at the Crown Fountain in Millennium Park. Photo © Esther Westerveld / Wikimedia Commons

Chicago

Chicago has a seasonal climate with warm summers averaging 27°C (80.6°F) and cold winters averaging -4°C (24.8°F). It experienced a heat wave in 1995 that killed almost 700 residents, and served as a motivator for the city to improve emergency preparedness and resilience to the climate crisis.

Existing actions and achievements

Chicago's work is guided by its 2022 Climate Action Plan, which embeds heat mitigation and adaptation across city operations. The City is participating in Defusing Disasters, an academic-government partnership pairing a community and data-driven approach to identify Chicago's most heat-vulnerable communities and develop policy recommendations. With NOAA Heat Watch support in 2023, Chicago used resident scientists for temperature mapping and created 2,000 Cool Chi Campaign palm cards on heat illness risks and signs.

Chicago provides public cooling at 79 libraries, 7 colleges, 6 community service centres, 21 senior centres, 43 park fieldhouses, and all 22 police stations, which are open 24 hours daily during extreme heat. The Green Homes Chicago retrofit programme provides free energy upgrades and heat pumps to income-eligible homeowners to reduce utility bills and improve indoor air quality.

Planned actions and commitments

Chicago plans to develop an interdepartmental standard operating procedure for public communications during heat and air quality emergencies. The city plans to expand the Our Roots Chicago tree-planting programme, which has already planted over 68,000 trees, ensuring 40% of trees are planted in priority neighbourhoods vulnerable to extreme heat.

A revised Green Infrastructure Strategy, due in February 2026, will focus on high-temperature and urban heat island areas. Chicago plans to launch a dashboard in early 2026 to provide residents and agencies with real-time, neighbourhood-level air quality and climate data. The mayoral administration and City Council are currently discussing legislation that would facilitate worker protections during heat episodes.


Riverside park in Durban/eThekwini. Photo © C40 Cities Finance Facility

Durban/eThekwini

Durban has a humid subtropical climate, characterised by hot, humid summers and mild, dry winters. Average summer temperatures reach around 24°C, while winter temperatures average 17°C. The city experiences increased heat stress risks due to the climate crisis, which will only worsen with projected temperature increases and more frequent extreme heat events.

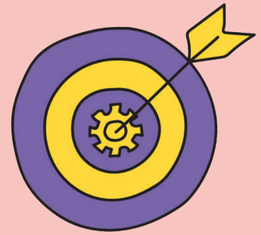
Existing actions and achievements

The city's eThekwini Municipality has acknowledged extreme heat as a significant and escalating threat to public health, particularly affecting vulnerable communities. This recognition is embedded in the Durban Climate Action Plan.

To address extreme heat, the city has established a cross-departmental Heat Working Group to enhance coordination among municipal bodies. Durban has introduced pilot projects to test urban greening and cooling strategies, though sustained technical and financial support is needed for full-scale implementation.

Planned actions and commitments

Durban is committed to developing a comprehensive Heat Data and Risk Atlas to better inform planning and emergency response. Other key future actions include formalising protocols for designated cooling centres during heat emergencies, alongside updating land-use codes to integrate nature as a key element, such as tree planting and green spaces.



"eThekwini aims to mainstream urban greening and cooling options into land-use planning, by-laws, and infrastructure standards.

– eThekwini Metropolitan Municipality


People enjoying a leisurely day in a park in Fortaleza. Photo © Sr. Francisco Fontenele

Fortaleza

Fortaleza, on Brazil's northeastern coast, has a tropical climate with average temperatures of 24-31°C. Its rainy season is from January to July, and dry season is from August to December. Atlantic winds moderate the heat, especially during the dry season.

Existing actions and achievements

Fortaleza's Climate Governance Office, led by the Secretariat of Urban Planning and Environment, coordinates the city's climate framework. The Civil Defence operates a real-time Meteorological Monitoring System with ten monitors, enhancing responses to extreme weather and heat, and the Fortaleza Research and Planning Institute (IPPLAN) coordinates the Fortaleza Climate Risk Observatory and the Working Group on Urban Heat and Health.

Fortaleza has successfully implemented its Urban Microparks project, redeveloping 14 areas across 11 neighbourhoods, which benefits approximately 160,000 people and contributes to mitigating heat islands. The entire community was involved in the construction of the facilities. The city has also invested in cool pavements, urbanising more than 750 streets (approximately 300 km) with interlocking concrete, a material that can reduce the local thermal sensation by up to 10°C.

Planned actions and commitments

Fortaleza is planning several initiatives to advance its long-term resilience goals, informed by its studies showing extreme heat concentrated in precarious settlements. A key commitment is to develop the Municipal Contingency Plan for Climate Disasters, which will consolidate clear protocols and activation triggers for heatwaves.

The city is initiating the Green Corridors project, starting with a 6 km pilot in vulnerable neighbourhoods, which has the potential for expansion to 108 km and an estimated temperature reduction of between 3°C and 5°C. The city is planning specific training for emergency, health, and social service professionals to address heat stress. Fortaleza also plans to launch its Municipal Climate Budget in 2026, to ensure financial resources are allocated for adaptation and mitigation actions against rising temperatures.


Freetown residents and City Council members with saplings for a Freetown the Treetown event. Photo courtesy of the City.

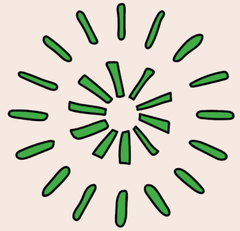
Freetown

Freetown is very hot and humid year-round, with temperatures typically ranging from 23°C to 31°C. Recent analyses from Sierra Leone's meteorological agency show a clear heating trend in Freetown, with average annual high temperatures rising from about 29°C in 2021 to 32°C by 2024, alongside a pronounced urban heat island effect.

Existing actions and achievements

Freetown established a formal heat governance framework by launching Africa's first Chief Heat Officer and implementing its inaugural Heat Action Plan in February 2025. Mayor Yvonne Aki-Sawyerr's Freetown the Tree Town project has achieved the planting of 1.2 million trees to increase urban canopy cover and provide shading in heat-vulnerable areas.

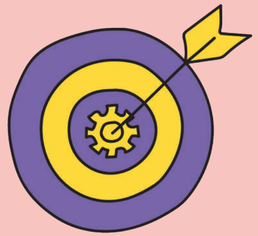
The city has introduced community cooling measures, including Heat Pavilions and the market shade cover project, which were shaped by input from residents. A cool roof pilot project in the Kroobay community successfully demonstrated measurable reductions in indoor temperatures for residents using reflective sheets.



Planned actions and commitments

The city plans to significantly expand its greening efforts by planting an additional 5 million trees by 2030 through the Freetown the Tree Town project, with a focus on coastal communities, public spaces, and backyards. In collaboration with the Ministry of Health, Freetown will train 500 healthcare workers on heat education, early symptom recognition, and response protocols.

Freetown aims to reach 60% of residents with community-wide heat education campaigns by 2028. The city will also scale the Climate Resilient Market Hub model across all 42 markets. Future transformation efforts involve retrofitting initiatives focused on passive cooling, such as scaling cool roofs and installing green roofs, particularly in vulnerable communities.



Mayor Vero Delgadillo planting a tree in an area that was covered by concrete, contributing to the recovery of public space. Photo courtesy of the City.

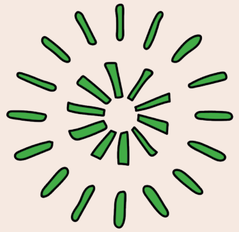
Guadalajara

Guadalajara has a semi-warm, sub-humid climate, with maximum temperatures that regularly exceed 30°C during the warm season and occasional extreme episodes reaching 38°C. The city's average annual rainfall is 998 mm, with dry winters and humid summers.

Existing actions and achievements

Guadalajara has focused on data analysis and nature-based solutions to mitigate heat risk. The Environment Directorate currently leads the city's heat mitigation actions and has developed and implemented the 2019-24 Strategic Planting Plan, identifying priority and strategic areas for reforestation to reduce heat islands and their impact.

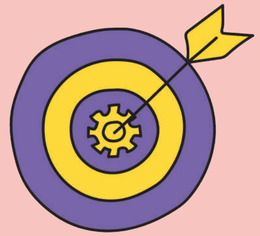
Through the Strategic Planting Plan, the city has consolidated 70 green corridors along major avenues, planting more than 20,000 trees annually. As a result, the area affected by heat islands has reduced by 1%, despite rising temperatures driven by the climate crisis.



Planned actions and commitments

Guadalajara is committed to actions that formalise heat governance, expand awareness, and establish more cooling infrastructure. The city plans to form an Inter-institutional Committee for Climate Action Governance to coordinate heatwave response and prevention strategies. Heat mitigation goals are expected to be included in the annual budget and operational programmes.

Guadalajara is actively working to develop an interdepartmental early warning protocol for heatwaves with clear indicators, and intends to create a network of climate shelters, including enabling municipal buildings as temporary shelters during emergencies. Additionally, a climate education programme will be implemented, offering environmental workshops to promote self-care and health protection during extreme heat.



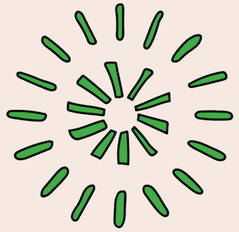

Karachi cityscape. Photo © Muhammad Owais Khan / Getty Images

Karachi

Karachi is a coastal city with a tropical climate. Summers, lasting from March to June, are hot and humid. The city is highly vulnerable to extreme heat. The 2015 heatwave caused 1,200 deaths and approximately 50,000 heat-related illnesses, while a 2024 event reportedly caused over 400 deaths.

Existing actions and achievements

The Karachi Heatwave Management Plan (KHMP), developed by the Commissioner's Office, defines government roles during heatwaves. The KHMP focuses on providing timely public information, empowering implementation agencies, and increasing knowledge of heat-related outcomes. The city is also investing in its green spaces and restoring its first urban forest in Clifton. It has also established a Mangrove Biodiversity Park at Korangi Creek.



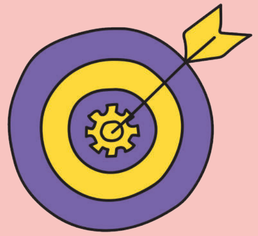
"One of the strategies of the Heat Management Plan is to focus on providing support and resources to community health workers during a heatwave emergency.

– Karachi Metropolitan Corporation

Planned actions and commitments

Karachi is expanding its network of cool outdoor spaces through initiatives like the Karachi Neighbourhood Improvement Project (KNIP), which upgrades parks and public spaces. The city is improving green belts along two major roads, and trees are being planted along Bus Rapid Transit routes and stations.

The city is making improvements to its cooling centres, to ensure they remain functional and retain a secure power supply during extreme weather events. The Municipal Corporation's office is powered by solar energy, and the city is also in the process of installing solar panels to power markets and hospitals.




London skyline seen from Primrose Park. Photo © Gwengoat / iStock

London

London has a temperate maritime climate with high humidity and mild temperatures year-round, typically ranging from 4°C in winter to 23°C in summer. The city experienced an unprecedented heatwave in 2022, which pushed the Greater London Authority (GLA), in collaboration with boroughs and faith and community organisations, to establish cool spaces that help protect Londoners from extreme temperatures.

Existing actions and achievements

The Cool Spaces initiative provides equitable access for residents to stay safe during heatwaves. As temperatures in London have steadily increased in recent years, more people are seeking information and places for heat relief. During the Level 4 heat alert in 2022, visits to the GLA's environment web page surged to 36,000 (compared with a daily average of 2,200), with the Cool Spaces page attracting more than 30,000 views. Between June 1st and September 30th 2025, 249 indoor cool spaces were available across London, offering residents safe, accessible places to cope with extreme heat.

London also pioneered the first Properties Vulnerable to Heat Impacts assessment, used by boroughs alongside its Climate Risk Map to identify interventions to mitigate urban heat impact and address the needs of populations most vulnerable to extreme heat. Boroughs have reliably reported the effective local application of this assessment. The city is also working with C40 to develop a Cooling roadmap and critical infrastructure.

Planned actions and commitments

Through the Pathways2Resilience project, London is developing a Heat Risk Plan, which includes a vision statement for managing heat risk in the context of the climate crisis, a Heat Health Action Plan, and an Investment Plan to support funding for the identified actions.

The city is exploring cool pavement projects using reflective and permeable materials to reduce the urban heat island effect, integrating these methods into new building codes and infrastructure projects where possible. London is also continuing to improve data-driven tools, community outreach, and cross-sector collaboration to protect residents during extreme heat events.

Community members accessing a Cool Place and using Cool Kit items. Photo courtesy of the City.

Melbourne

Melbourne has a variable climate, with warm to hot summers. In recent decades, the city has experienced increasing periods of extreme heat, with temperatures occasionally exceeding 30°C and even 40°C.

Existing actions and achievements

Between 2023 and 2024, Melbourne piloted its Heat Lab, an innovative programme that tested service and infrastructure interventions to reduce heat risk for vulnerable community members. The Heat Lab's interventions, developed with Council staff, business leaders, public health officials, and community representatives, focused on testing community-centred and place-based heat solutions.

Interventions included provision of ten ‘Cool Places’ for community, outreach and distribution of Cool Kits and Heat Smart Sessions, a HeatSens tech trial to inform the city’s operations, heat-safe pocket brochures and geotargeted communications, creative engagement through games and artistic programming, and trials of shading and surface treatments. Successful outcomes from the project have informed the expansion of heat programmes for future summers.

Planned actions and commitments

Melbourne is developing the Cool Melbourne Plan to provide clarity for the community, organisations, and partners on its approach to tackling extreme heat. The city is creating a new programme for apartment dwellers – who make up 83% of the population – to support residents and businesses with energy costs, efficiency, renewables electrification, resilience, and net zero goals, and seeks to unlock affordable cooling. The Cooling Opportunities Project, currently in development, will identify urban heat hotspots to prioritise investments in public cooling infrastructure where it is most needed, complementing the Urban Forest Precinct Plans.

> “We aim to improve Melbourne’s preparedness, response, and recovery from extreme heat events. By raising awareness about the risks of heat, advocating for stronger protections, and promoting equitable solutions, we’re working toward a future where all communities are safer and more resilient in the face of rising temperatures.
>
> – City of Melbourne


Launch of the first School Oasis in Milan. Photo © C40 Cities

Milan

Milan has a temperate climate with long, hot, humid summers and cold, foggy winters. The city experienced a severe heatwave in July 2025, with temperatures reaching 44°C. Future climate scenarios predict an average temperature increase of approximately 3°C by 2050, with the possibility of reaching 5°C by the end of the century.

Existing actions and achievements

Milan created its first Potential Heat Risk Map in 2025 by combining land surface temperatures with a vulnerability map based on six socio-economic indicators from census data. The risk map guides the active depaving programme, which identifies high-risk areas to convert hard surfaces into accessible green spaces.

Under the Green and Thriving Neighbourhoods for Resilient Communities (GTNRC) programme, the city established the first three School Oases in 2025, transforming schoolyards into shaded, multifunctional cooling hubs. GTNRC also successfully implemented tactical shading by installing shading structures in two pedestrian school streets to raise heat risk awareness. The existing Milano Aiuta Estate service provides assistance and telephone monitoring to vulnerable older people and people living with disabilities during heat emergencies.

Planned actions and commitments

Milan plans to finalise a comprehensive shading strategy and expand its network of cool spaces indoors and outdoors, which will include upgrading existing community hubs (Case di Quartiere) into official climate shelters. Milan is committed to replicating effective solutions from the Green and Thriving Neighbourhoods for Resilient Communities (GTNRC) programme, notably expanding the School Oasis initiative into a larger network of cool public spaces.

The city guidelines for the sustainable design of buildings and public spaces are being updated to encourage the development of buildings that are thermally comfortable and resilient to climate change. This includes promoting features such as nature-based solutions and reflective, cooling materials. Milan has also introduced mandatory climate resilience checks for public infrastructure projects, ensuring new investments withstand impacts of the climate crisis.

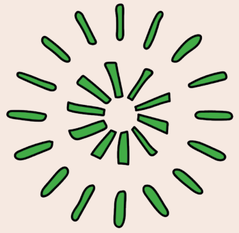

Mumbai skyline. Photo © Sanjeev / Adobe Stock

Mumbai

Mumbai is a coastal city with a tropical climate, hot and humid year-round, especially during summer and the pre-monsoon months, March to May. Nearly 40% of residents live in informal settlements with heat-trapping materials and limited ventilation or green space, increasing vulnerability to extreme heat.

Existing actions and achievements

In 2024, the Brihanmumbai Municipal Corporation (BMC) instructed medical officers in all 24 wards to report heat-related illnesses via the national Integrated Health Information Platform (IHIP). This real-time, web-based reporting system enabled monitoring disease trends, which is crucial for detecting and responding to outbreaks. It was possible to detect three official heat-related cases in 2024 through the reporting system. The procedure will be followed by Mumbai every subsequent year, especially during high heat periods.

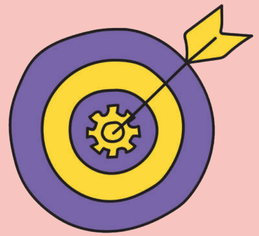


> “BMC has released the second climate budget for the financial year 2025-26. The budgetary allocation supports activities designed to combat heat risks in the city. The city has allocated INR 383 crore (US$43.5 million) for urban greening, and INR 226 crore (US$25.7 million) for initiatives in the energy and buildings sector.
>
> – Brihanmumbai Municipal Corporation (BMC)

Planned actions and commitments

Mumbai is planning to develop a city-level Heat Action Plan and implement related initiatives to tackle the impacts of urban heat. Cool roofs and green roofs will be piloted in municipal buildings, particularly schools in heat hotspots, with plans to scale citywide.

Approximately 53 hectares of public open spaces along the Mumbai Coastal Road will be developed, incorporating the planned Green Shore, Nature Cove, and Park Line zones. These expanded shaded and nature-rich public areas are projected to cost US$44.5 million (INR 400 crore), funded through corporate contributions. Mumbai is committed to meet 50% of the city’s water demand via localised water conservation by 2030, while securing additional water supply for future needs, strengthening future-proof critical infrastructure to ensure reliable and equitable water access as temperatures rise.




Nairobi skyline. Photo © imsogabriel stock / Unsplash

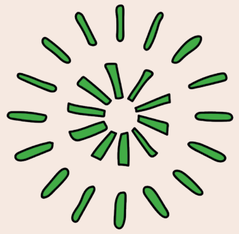
Nairobi

Nairobi's high altitude makes it a more temperate climate than other cities near the equator, with temperatures ranging from 12°C to 27°C throughout the year, depending on the season. The city is in the early stages of integrating heat management into its operations.

Existing actions and achievements

Nairobi has begun collecting data to inform its heat resilience strategy. In February 2025, the city conducted its Heat Watch Nairobi mapping exercise, covering an area of approximately 500 km² to identify high-resolution Urban Heat Islands and vulnerability clusters.

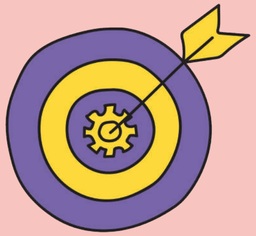
Heat risk prevention is formally integrated into the Nairobi Climate Action Plan 2020-2050. The city is leveraging this data, collaborating with the World Resources Institute (WRI) through the Cool Cities Lab to develop targeted greening and cooling strategies.



Planned actions and commitments

Nairobi is working to formalise a City Heat Governance Framework, co-chaired by the Climate Change and Air Quality Unit and the Health Department. This framework will use a tiered trigger system tied to Kenya Meteorological Department forecasts for real-time alerts. A key planned action is the pilot of cool roofs and insulation retrofits for schools, clinics, and markets located in the top ten hotspots identified by the Heat Watch study.

Additionally, the city will roll out short courses to train health workers and Community Health Volunteers on heat illness recognition and cooling protocols. To improve urban cooling, Nairobi will prioritise hotspot wards for developing shaded walking routes to critical destinations like schools and clinics.



In Summer 2025, New York City hosted pop-up cooling stations on hot days in its most heat-vulnerable neighbourhoods, including Queens. Photo © Amanda Ikert / C40 Cities

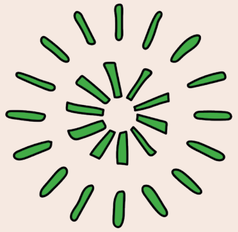
New York City

New York City has hot, humid summers with frequent thunderstorms, and moderately cold winters. By 2050, the city is projected to have between 54 and 69 days each year with a heat index of 32°C (90°F) or higher – up from an average of 17 days annually between 1981 and 2010. The New York City Department of Health reported, on average, more than 525 heat-related deaths per year.

Existing actions and achievements

New York City Health Department provides world-leading data on heat by monitoring heat-related illnesses, producing an annual heat mortality report, and maintaining the Heat Vulnerability Index (HVI). The city's robust public communication system alerts the public about extreme heat in 14 languages. The city conducts public heat awareness programmes reaching over 10,000 New Yorkers and involving more than 35 community organisations in 2025.

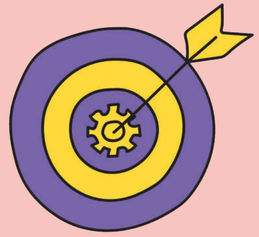
New York City has developed a resource that helps residents locate cool spaces, featuring over 1,550 active sites, including over 600 cooling centres. NYC also enacted ambitious new emissions limits for buildings over 25,000 square feet from 2024, encouraging improved heat resilience in updated buildings. Council also passed a new bylaw to install 50 water fountains near parks and test cool pavements in five heat-vulnerable neighbourhoods.



Planned actions and commitments

New York is taking the first steps to introduce a maximum indoor heat policy for new and existing buildings, a commitment made in its PlaNYC climate action plan. The city is also developing its ten-year NYC Urban Forest Plan to increase tree canopy, and implementing its updated Climate Resiliency Design Guidelines for public infrastructure.

The NYC Department of Transportation has started a contract to develop shade structures for streets and plazas. Advocacy efforts will continue to expand home energy cooling assistance to also cover utility costs and reduce bills. Additionally, there is interest in exploring a way to better protect workers from occupational heat exposure.



A school oasis courtyard in Paris, redesigned as a multi-functional space for community resilience. Photo © Josephine Breuder / City of Paris

Paris

In July 2025, a red heatwave warning affected 16 regions, including Île-de-France. The Eiffel Tower summit closed due to extreme heat, highlighting the growing risk for urban populations.

Existing actions and achievements

The Parisian Heatwave Plan is active from June 1st to September 15th annually. It uses four alert levels triggered by Météo France and involves coordination between the city, the state, and social and health services. Paris has achieved its 2021 goal of ensuring 100% of Parisians live within a seven-minute walk of a cool spot. It now has over 1,400 cool spots, including parks, gardens, and public facilities, along with a multi-lingual online map. Paris extends opening hours for parks, swimming pools, and public baths during heatwaves. Alerts use multi-channel communication, including targeted outreach to older people and people experiencing homelessness through the distribution of water bottles.

The city mobilises a network of 27,000 climate volunteers to raise awareness within their communities of the climate crisis and heatwave adaptation strategies, alongside preventive actions. A crisis exercise, 'Paris at 50°C,' was organised in October 2023 to test the responsiveness of the municipality and its partners, as well as improve planning and coordination to future heat emergency responses. This has inspired other cities to plan similar exercises.

Planned actions and commitments

Paris is developing a comprehensive Heat Emergency Plan (Plan Grand Chaud) that mirrors the city's cold weather emergency system, providing enhanced support for the residents that need it most. The Parisian Environmental Health Plan, adopted in late 2024, strengthens action through formal scientific monitoring of climate health consequences, climate impact training for health services employees, and observation protocols on local climate impacts.

Transformational goals include reaching 30% permeable area in the city by 2030 and 40% by 2050 (up from 26.2% in 2023). The long-term goal is to achieve 10 m² of green area per inhabitant by 2040. Paris continues to install shade structures in areas where trees are not suitable, with a goal to deploy more than a hundred pergolas by 2030. Paris is committed to renovate 40,000 homes annually starting in 2030, and completely renovate all 631 schools and 454 nurseries by 2050. The city is also retrofitting 5,000 social housing units each year to improve energy efficiency and thermal comfort during summers, with additional new cool outdoor spaces.

A shade structure provides shelter during hot days in Phoenix. Photo courtesy of the City.

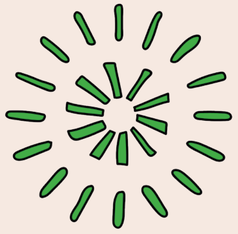
Phoenix

Phoenix is one of the hottest cities in North America. It has a hot, dry desert climate with extremely long, hot summers averaging 37°C (98.6°F), and short, mild winters, experiencing minimal rainfall and humidity.

Existing actions and achievements

Phoenix is implementing a broad portfolio of actions aimed at addressing short and long-term challenges linked to extreme heat as guided by its Heat Response Plan, Shade Phoenix Plan, and Climate Action Plan.

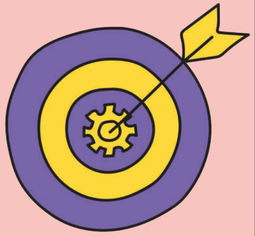
Phoenix opened Arizona's first and only 24/7 heat respite centre in 2024, and extended operating hours at three cooling centres. These centres recorded over 30,000 annual visits in the two years since opening, during which heat-related deaths have declined for the first time in a decade. Phoenix planted more than 7,200 trees in the past fiscal year, with new programmes focused on low tree canopy neighbourhoods and schools. Citywide initiatives are coordinated by Phoenix's Office of Heat Response and Mitigation, established in 2021.



Planned actions and commitments

Phoenix is committed to continue strengthening its summer heat response efforts, with special attention to operating 24/7 and extended-hour heat relief sites with comprehensive support staff. A new Energy Access Plan, which includes strategies for indoor cooling and energy efficiency, will be considered by the City Council in late 2025. Staff at municipal heat relief locations will receive improved training from 2026.

Longer-term measures are guided by the Shade Phoenix Plan, prioritising actions related to tree and shade operations and maintenance.
Other notable near-term tree and shade commitments include the implementation of neighbourhood and school-based tree planting programmes, and the launch of a new Community Tree Stewards programme, with the support of a US$10 million Urban and Community Forestry grant from the US Forest Service. Local funds will enable the construction of 19 new shade structures at frequently used intersections and crosswalks.



Quezon Memorial Circle with QC Pylon. Photo courtesy of the City.

Quezon City

Quezon City is the most populous city in the Philippines. It faces extreme heat due to high population density, a heavily built-up landscape, and alongside its projected growth, the demand for energy and cooling. Heat risk is expected to worsen as the climate crisis increases the frequency and intensity of hot periods, with temperatures exceeding 40°C during the summer months, from March to May.

Existing actions and achievements

The city prioritises nature-based solutions to address urban heat and participates in the UN Environment Programme's Generation Restoration project, aiming to connect major parks with all green spaces. Quezon City manages major cool outdoor locations, with more than 200 community parks, improved and green key walkways, and partnerships with local organisations for tree planting activities under the One Million Trees Initiative.

Quezon City created a Task Force El Niño in 2024 as an immediate response to the phenomenon of higher temperatures, implementing key water and energy conservation measures and increased health surveillance for heat-related illnesses. Focus groups are underway with city stakeholders, including local villages (barangays), as well as education, health, economic, social welfare, transportation, and civil society sectors to gain insight on the effects of extreme heat, while co-designing a localised heat action plan and cooling strategies.

Planned actions and commitments

By the end of 2025, Quezon City will issue an Executive Order designating a Chief Heat Action Officer and organising a cross-agency Heat Action Team, providing updates to the mayor-led Climate Action Council. To kick off preparation in the 2026 Summer Season, the city plans to launch its Cooling Roadmap developed with C40 Cities, distribute heat stress kits for home and workplace heat-relief and protection, and conduct a Heat and Drought Summit.

Quezon City aims to develop a comprehensive Heat Action Plan that will build on the Enhanced Local Climate Change Action Plan, prioritising inclusivity, protection of vulnerable groups, and a communication strategy to reach those most at risk, including the elderly, youth, and exposed workers.

> "Being part of this movement will help us develop programmes and policies to become heat-resilient, protecting all our residents, including those who belong to the most vulnerable populations.
>
> – Joy Belmonte, Mayor of Quezon City

A splash park in the Journalista Susana Naspolini Realengo Park in the West Zone of Rio de Janeiro, providing relief during hot days, and a space for community to congregate. Photo courtesy of the City.

Rio de Janeiro

Rio de Janeiro has a hot tropical climate, averaging 22°C with high humidity. In 2023 and 2025 the city experienced severe heatwaves, reaching 41°C with a perceived temperature of 58.5°C. The 2023 heatwave caused over 1,000 deaths, highlighting serious community health impacts despite the Carioca culture embracing the heat.

Existing actions and achievements

Rio de Janeiro established a governance framework in June 2024 by creating the Committee for Development of Protocols for Coping with Extreme Heat (CDPECE). The committee established a pioneering Protocol for Coping with Extreme Heat, classifying heat levels for interdepartmental responses.

The Municipal Health Secretariat uses real-time meteorological data and predictive models from six international agencies (including the US National Oceanic and Atmospheric Association (NOAA), German Weather Service, and Environment and Climate Change Canada) for early warnings and risk detection. During high-alert scenarios, public facilities such as knowledge centres, cultural facilities, parks, and Olympic Villages are activated as designated cooling points for the public.

Planned actions and commitments

Rio de Janeiro's Sustainable Development and Climate Action Plan (established in 2021) sets out a series of goals and actions that Rio will adopt to reduce the impacts of heatwaves and the urban heat island effect and other climate hazards by 2030. The city is committed to improving its heat index methodology and executing 100% of the action plan to combat extreme heat in high-impact areas by 2028.

In urban forestry, the city plans to produce 30,000 tree seedlings per year starting in 2026, and plant 80,000 seedlings by 2028. Rio is prioritising afforestation in the northern region, which is most affected by heatwaves. The city will implement a pilot cool route to gather inputs for the creation of a broader cool route programme. They are working to establish a Sustainable Building Code, which sets energy efficiency parameters for both new constructions and major renovation projects, contributing to improved indoor thermal safety.


Rome cityscape. Photo © Spencer Davis / Unsplash

Rome

Rome's Mediterranean climate faces more frequent heatwaves, with summer temperatures reaching 40°C. Extreme heat significantly impacts daily life and the city's tourism.

Existing actions and achievements

Existing heat actions are coordinated by the Climate Office within the Mayor's Office, which manages an internal working group and has strengthened collaborations with national research institutes like the Euro-Mediterranean Centre on Climate Change Foundation.

Rome was an early adopter of the Ministry of Health's Heat Health Watch Warning System, which issues specific bulletins indicating risk levels. The highest risk activates extraordinary activities by Civil Protection and the Department of Social Policies, including setting up information stations at hotspots such as the historic centre, to reach the large tourist population. Rome monitors microclimates by installing sensors on 20 public buses. The city has also made significant progress on urban reforestation, planting nearly 30,000 trees and 115,000 new plants from 2021 to 2025.

Planned actions and commitments

Rome is committed to developing new infrastructure and monitoring systems, guided by the Adaptation Strategy approved in January 2025. The city plans to strengthen its operations by establishing an integrated monitoring system combining data from Civil Protection, the Lazio Region's Department of Epidemiology, and adaptation strategy indicators to study cenarios and guide actions.

A key objective is the creation of a network of indoor and outdoor climate shelters by summer 2026. Rome also plans to approve a plan to adapt urban areas at greatest risk, and is looking to expand the network of drinking water fountains in public spaces, prioritising the most vulnerable areas during heatwaves. New guidelines will be introduced for public space interventions and buildings, starting with schools, to reduce the heat island effect.


Salvador cityscape. Photo © Gustavo Frazao / Adobe Stock

Salvador

Salvador, one of Brazil's hottest cities, is hot and humid year-round, with average daytime highs around 29-30°C and minimums rarely below 21-22°C.

Existing actions and achievements

Salvador uses its Civil Defence Alert and Alarm Monitoring Centre to monitor temperatures and trigger the High Temperature Contingency Plan. The municipality has refurbished and delivered 643 green squares and expanded urban parks to promote cooling and comfort in public spaces.

The city's programme providing property tax incentives (through IPTU Verde) for properties adopting sustainable practices such as green roofs and thermal insulation has certified 72 buildings to date.

Planned actions and commitments

Salvador has committed to significant cooling initiatives for long-term transformation. The newly launched Green Corridors programme will add vegetation to seven busy roads by 2028, creating shaded routes for pedestrians and cyclists. The city is committed to prioritise tree planting and the installation of green structures in areas identified as most vulnerable by their Heat Watch study.

Salvador also plans to air-condition 100% of its urban bus fleet by 2028. Salvador will also expand inclusive alert communications by incorporating multilingual resources, including Brazilian Sign Language, English, and Spanish, to reach vulnerable groups.

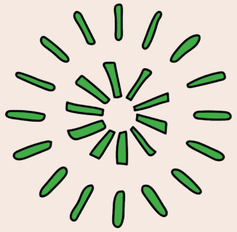

Santiago de Chile cityscape. Photo © JoseLuis / Adobe Stock

Santiago

Santiago experiences long, dry summers with daytime temperatures often exceeding 30°C and mild, wetter winters. However, due to the climate crisis, the city now faces increasingly frequent and intense heatwaves, along with significantly reduced winter rainfall.

Existing actions and achievements

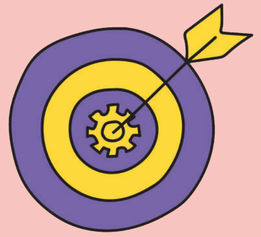
The city is institutionalising a formal, high-level governance framework for heat response. At its core is the appointment of a Chief Heat Officer (CHO), reporting directly to the Regional Governor and leading an Intersectoral Technical Committee. This committee coordinates preventive and emergency response actions, including the operationalisation of the 'Code Red' from the Regional Extreme Heat Protocol, which defines tiered alert levels based on temperature thresholds.



Santiago also employs advanced heat-mapping tools like SantiagoHOT and the Extreme Heat Territorial Viewer to inform decision-making and guide targeted cooling interventions. These tools help prioritise the most heat-vulnerable areas for initiatives like the Bosque de Bolsillo (Pocket Forest) programme, which increases urban greenery and localised cooling capacity.

Planned actions and commitments

In the medium and long term, Santiago is integrating heat resilience criteria into its Metropolitan Regulatory Plan. New and existing buildings will be required to include cool or green roofs and improved insulation. The city also plans to create a robust network of cool corridors and shaded public spaces through large-scale green infrastructure efforts, like increasing tree canopy and vegetation cover, all under regional planting programmes such as Brotar and Bosque de Bolsillo.



To strengthen climate resilience, Santiago aims to secure its water supply by establishing a basin organisation for the Maipo River, ensuring critical services remain operational and sustainable during future high-temperature events.

Singapore cityscape. Photo © Mike Enerio / Unsplash

Singapore

Singapore's climate shows relatively little variability through the year and is characterised by consistently high heat and humidity. Based on Singapore's Third National Climate Change Study, the annual average daily mean temperature for Singapore could increase by up to 5.0°C by 2100. As a city-state, Singapore's system of governance is unique among Accelerator signatories.

Existing actions and achievements

Singapore launched a Heat Stress Advisory to help residents make more informed decisions on undertaking prolonged outdoor activities, so they can minimise the risk of heat stress and heat-related illnesses. The advisory is based on wet-bulb globe temperatures, and is supported by sector-specific guidelines and targeted education for vulnerable populations, including children in preschools and schools, older adults in residential facilities, and outdoor workers.

> "Singapore leverages research and development to deepen our understanding of the science behind how rising temperatures affect Singapore and our residents, as well as to design more effective heat resilience strategies.
>
> - City of Singapore

Planned actions and commitments

By 2030, Singapore plans to implement heat-reflective paint across all existing public residential estates. The city will continue to explore innovative cooling solutions to further improve overall thermal comfort for residents.

The city is conducting an Infrastructural Heat Resilience Study to assess the impacts of extreme heat on critical infrastructure, including energy grids, water supply, and public transport. Efforts toward sustainable indoor cooling include the Go25 initiative, which encourages residents to set indoor air-conditioning temperatures to 25°C or higher to tackle overcooling, reduce energy demand, and build long term climate resilience.

Public-accessible green roof on the entrance building of Ichilov Hospital in Tel Aviv. Photo courtesy of the City.

Tel Aviv-Yafo

Tel Aviv-Yafo has a Mediterranean climate with warm, humid summers and mild, wetter winters. Average daily high temperatures reach around 26°C, rising to 30-32°C in peak summer months.

Existing actions and achievements

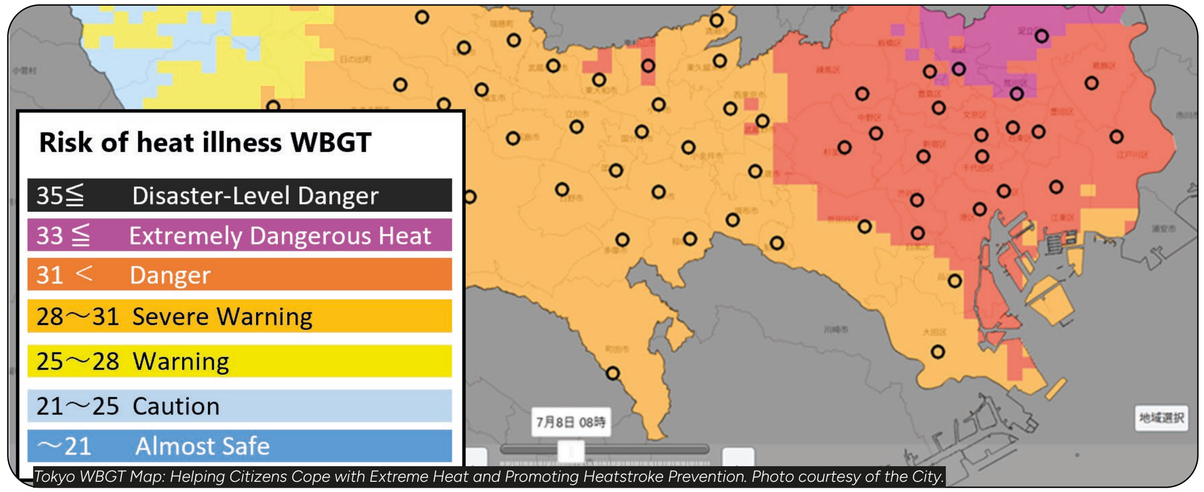
Key initiatives include strategic urban forest expansion and management, as well as artificial shading in public spaces for immediate heat relief. The city has introduced an advanced urban shading standard for all street upgrades and new public spaces. New developments must now include at least one tree per 50 square meters and meet green building requirements.

Tel Aviv-Yafo's climate adaptation strategy, Cooling the City, leverages the 2025 centennial of Patrick Geddes' plan for the city, emphasising shaded paths, community gardens, and open spaces. Tel Aviv-Yafo is committed to planting 10,000 trees annually until 2030 to increase shade, reduce temperatures, and mitigate the urban heat island effect. The city is also reducing anthropogenic heat emissions and promoting climate-resilient, energy-efficient building materials.

Planned actions and commitments

The city is establishing Energy Independent Resilience Centres to provide immediate cooling and power during heat emergencies. The first, the Neve Eliezer Community Centre, features a 400-kilowatt energy storage facility, allowing air-conditioned shelter, device charging, and medication storage. Centres will be established in every neighbourhood by 2030.

These measures include targeted support for vulnerable populations to ensure equitable access to cooling solutions. Collaboration with the health sector is being strengthened through targeted training programmes for professionals and community workers, localised response mechanisms, and community education. This integrated approach, combining education, health, and community infrastructure, will provide more effective protection for vulnerable groups during extreme heat events.



Tokyo WBGT Map: Helping Citizens Cope with Extreme Heat and Promoting Heatstroke Prevention. Photo courtesy of the City.

Tokyo

Tokyo has a climate with hot, humid summers. Increasing urbanisation and global heating have intensified heat risks, with 2025 witnessing a record ten consecutive days of temperatures at or above 35°C. These conditions pose serious health risks, particularly for the city's 14 million residents.

Existing actions and achievements

The City of Tokyo is promoting a variety of measures to combat heat. The city has developed a wet-bulb globe temperature (WBGT) heat map to identify hotspots and guide targeted outreach, with initiatives supporting the health of older people and others in need.

Key city programmes include Wisdom for Everyday Life, which collects and promotes simple heat stroke prevention measures for children and students, and Heat Stroke Prevention Guidelines, distributed to schools and families to enhance awareness, and safeguard health and safety. In addition, Tokyo is advancing a range of initiatives focused on nature-based cooling solutions, and support for both commercial, industrial and residential buildings.

Planned actions and commitments

Tokyo has strengthened a programme to promote thermal insulation and energy efficiency in rental housing since 2025. The city will provide financial support for insulation, renewable energy adoption, and replacement of windows and doors, alongside consultancy services to assist with retrofits and energy performance diagnostics. These measures aim to improve indoor thermal safety and resilience for homeowners and apartment dwellers.

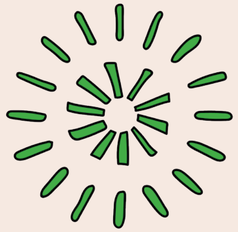

Tshwane cityscape. Photo © Edwin Remsberg / Getty Images

Tshwane

Tshwane has a humid subtropical climate with hot, rainy summers and cool, dry winters, with temperatures typically ranging from 5°C to 21°C in winter and 18°C to 29°C in summer. Humidity is low in winter but moderate in summer.

Existing actions and achievements

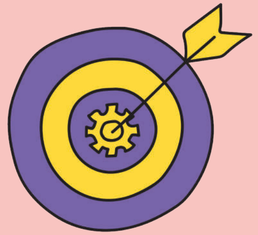
Tshwane has established a formal heat governance structure, with leadership designated within the Emergency Services Department and a cross-agency team involving departments like Health, City Sustainability, and Environmental Management. The city has already completed an urban heat island study to identify heat-stress zones. A key ongoing initiative is the mayoral commitment to plant 300,000 trees by 2027 to increase shade and reduce the urban heat island effect.



Tshwane currently has a Green Building Bylaw that includes cooling provisions and utilises a multi-channel, multilingual communication system through its Disaster Risk Management Centre to issue warnings in local languages, including Setswana, Sepedi, and English. The A Re Yeng Bus Rapid Transit (BRT) system utilises air-conditioned buses and sheltered stations.

Planned actions and commitments

Tshwane is formalising its heat response by finalising its draft Heat Mitigation Plan and seeking council approval. A major future policy goal is the development of an urban cooling and shading bylaw, which will aim to mandate shading in public spaces, schools, clinics, and workplaces.



To address existing infrastructure, the city is committed to creating a Green Building Guideline specifically focused on retrofitting existing buildings with passive and decarbonised cooling solutions. Tshwane also intends to develop and roll out a targeted heat-specific training programme for all frontline staff, including emergency responders, health workers, and social service teams, to ensure they can recognise and treat heat-related illnesses.

Cool Kits distribution in Vancouver. Photo courtesy of the City.

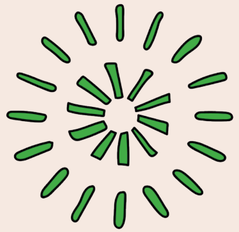
Vancouver

Vancouver, known for its mild climate, experienced a record-breaking heatwave in June 2021 that was caused by a heat dome that settled over the Pacific Northwest. This heatwave led to hundreds of deaths.

Existing actions and achievements

Vancouver activates its Extreme Heat Seasonal Readiness Plan on an annual basis and coordinates cross-departmental and inter-agency responses to extreme heat. Measures include 38 civic cooling centres in community centres and libraries, over 200 permanent drinking fountains, 14 spray parks, and 31 misters in public spaces. In 2022, the city successfully developed its Cool Kits – low-cost, low-barrier cooling supplies, based on feedback from the Persons with Disabilities Advisory Committee. This programme was subsequently adopted by other jurisdictions.

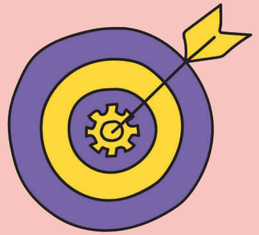
Vancouver is also retrofitting 420 non-market housing units for cool and clean air by the end of 2025. As of September 2025, new residential units are required to be fitted with cooling infrastructure to maintain indoor temperatures below 26°C in at least one room.



Planned actions and commitments

To improve safety in existing housing, Vancouver plans to expand its retrofit programmes to fund passive or active cooling and air filtration solutions for at least 200 units.

In public spaces, the city intends to accelerate urban greening by planting approximately 16,000 seedlings in parks and 3,050 more mature trees along streets via federal grant funding. Vancouver also plans to install 20-40 new street tree pits annually in low-canopy areas and initiate 2-4 multi-block pavement-to-greenspace conversion pilot projects in vulnerable neighbourhoods.



Acknowledgements

We would like to thank The Rockefeller Foundation for providing funding for the development and launch of this Accelerator.

The Accelerator was reviewed by public servants and technical staff working for 17 of C40's member cities – Athens, Austin, Barcelona, Boston, Fortaleza, Freetown, Guadalajara, London, Miami, Milan, Montréal, New York City, Paris, Phoenix, Quezon City, Rio de Janeiro, and Washington, D.C.. These reviewers are all members of the Cool Cities Network and have been actively working on heat resilience in their respective cities for many years. This Accelerator has greatly benefitted from their experiences and expertise.

We have been supported by many experts working with cities on heat. We would like to thank our colleagues Alejandro Saez Reale from the Global Heat-Health Information Network (GHHIN), Karl Astbury from R-Cities, the UN Secretary-General's office, Martyn Clark from Group on Earth Observations (GEO), UNEP's Cool Coalition, the World Resources Institute (WRI), Eleni Myrivilli, and Kurt Shickman for their invaluable feedback over many months.

Many colleagues from the following teams from across C40 have contributed to the creation of the Accelerator – Inclusive Climate Action, Urban Planning, Energy and Buildings, Air Quality, and Communications. The Regional Teams in particular have been crucial to the process of ensuring the Accelerator reflects the perspectives and needs of their cities. We would also like to acknowledge the contributions of consultants Ellie Drenth, Dheeya Rizmie, and C40's scholar-in-residence Quinn Adams, who have supported us in creating and reviewing the Accelerator and its associated technical materials.

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