UN CLIMATE CHANGE CONFERENCE COP 31 | ANTALYA, TÜRKIYE | 9-20 NOVEMBER 2026

SOLUTION AND DELIVERY EVENT

Beat the Heat in a Warming World: Adapting Cities and Decarbonizing the Built Environment

Date: Friday 13 November | Time: 17:00-18:00 GMT+3| Room: Special Event Room 3 (Amphitheatre)
Organized by: UN Environment Programme (UNEP) (Cool Coalition/Beat the Heat), Climate Heritage Network (CHN), Build Change – Climate Resilient Housing Initiative (CRHI)
Government of Brazil, and Beat the Heat partners Arup, C40 Cities and World Resources Institute (WRI)
Version: 12 October 2026

Background and Objective

The world is about to live above 1.5°C. UNEP's Limiting Overshoot report (September 2026) confirms that exceeding the threshold within the next few years is now unavoidable: even full implementation of current commitments and policies leads to at least 1.8°C, and the overshoot could last decades. The question is no longer whether 1.5°C will be exceeded, but how to keep the overshoot as low and as short as possible.

Overshoot carries two inseparable messages. First, climate adaptation cannot wait: heatwaves are already intensifying, impacts rise non-linearly beyond 1.5°C, and cities - where heat is amplified and most people live - are on the front line. Second, overshoot makes rapid decarbonization more urgent, not less: every tenth of a degree of peak warming avoided reduces risk, and bringing temperatures back down requires deep emission cuts now, with carbon removal only as a complement. Cities and the built environment sit at the centre of both: cities are home to nearly half of the world's population, account for around 70% of global greenhouse gas emissions and hold much of the potential to cut them, while the built environment drives nearly 40% of global emissions and largely determines how exposed people are to heat.

This Solution and Delivery Event brings together three initiatives already delivering at this intersection in cities, each working on a different dimension of urban action where adaptation and mitigation meet: city-wide heat resilience and sustainable cooling, the historic building stock, and the informal settlements where much of urban growth is taking place. Three short, results-focused mini panels will demonstrate how these solutions are already being delivered at scale and what is required to replicate them across hundreds of cities globally..

Extreme heat and sustainable cooling in cities (Beat the Heat). The Beat the Heat Implementation Drive, serves as a delivery platform for translating global cooling and heat resilience commitments into city-level implementation. A COP30 Action Agenda Plan to Accelerate Solutions (PAS), Beat the Heat brings together about 300 cities from 43 different countries and 100 partners to advance: heat-risk assessments, heat action planning, heat data and early-warning systems, nature-based cooling, as well as sustainable

procurement and building-code adoption. Through the 50@50 campaign, more than 50 cities across 49 countries have committed to showcase city leadership and readiness on extreme heat, with 21 of these cities undertaking heat stress tests to prepare for extreme heat events, while UNEP and partners support heat action plans, school retrofits and nature-based solutions. The Heat Resilience Roadmap for a Warming World, supported by Global Cooling Pledge signatories at the Singapore Cooling Assembly, provides a practical framework for scaling heat resilience in an overshoot world through city action, sustainable cooling, resilient infrastructure and integrated adaptation and mitigation strategies.

Heritage buildings: learning from the past to adapt and mitigate (DBTH). Historic and vernacular buildings hold centuries of knowledge on building and maintaining climate-responsive places, integrating passive ventilation, shading, thermal mass and climate-responsive design and built with traditional, repairable, low-carbon materials. Reusing and retrofitting existing buildings also avoids the embodied emissions and waste of demolition and new construction. The Plan to Accelerate Heritage-Informed Building Decarbonization builds the capacity of national, regional, and municipal governments to measure and report the direct and avoided emissions of these strategies. This panel will present the Five Principles of Heritage-Informed Decarbonization, the Decarbonizing the Built Environment through Heritage Toolkit launched in June 2026, and case studies from the Global North and South.

Upgrading informal settlements for climate resilience (CRHI). Some 1.1 billion people live in informal settlements, a number set to grow as Global South cities expand: Africa's urban population will roughly double to 1.4 billion by 2050, and 80% of the buildings needed by then are not yet built. Residents of informal settlements are among the most exposed to extreme heat and other hazards, and most housing programs that aim to house these populations focus on building new rather than incremental upgrading, despite evidence that in situ upgrading is the most affordable and sustainable option, and better for communities overall. Additionally, building sector climate goals focus solely on formal housing stock, leaving the majority of urban residents out of the picture. This mini panel will show that upgrading is already a proven solution: Build Change's homeowner-driven retrofit and incremental-construction model in Colombia, Haiti, the Philippines, Indonesia and Nepal; UN-Habitat's Participatory Slum Upgrading Programme, in funded delivery across dozens of African, Caribbean and Pacific cities; the Cities Alliance-led Informality Task Force, localizing the Global Action Plan for Accelerating the Transformation of Slums and Informal Settlements by 2030; and the community-led slum upgrading work spearheaded by Slum Dwellers International.

The event showcases the PAS "Greening Cities to Beat the Heat: Harnessing nature-based solutions" (AG 13), the Plan to Accelerate Heritage-Informed Building Decarbonization (AG 19), and Plan of Acceleration of Solutions: Adequate, Sustainable and Resilient Informal Settlements and Urban Peripheries Against Environmental Racism - Ministry of Racial Equality and Ministry of Cities, Brazil (AG 13). It contributes to Axis 4 (AG 12 – Sustainable and resilient constructions and buildings; AG 13 – Resilient urban development, mobility and infrastructure) and Axis 5 (AG 19 – Culture, cultural heritage protection and climate action) of the Global Climate Action Agenda, and supports the COP 31 priorities on Climate Resilient Cities and Zero Waste.

Expected Outcomes

- A shared understanding, grounded in UNEP's Limiting Overshoot report, that a world above 1.5°C requires accelerated adaptation and decarbonization simultaneously, and that cities and the built environment are critical arenas for delivering both .
- Concrete, replicable solutions showcased across cities and the built environment: city-wide heat resilience and sustainable cooling through Beat the Heat, including heat stress tests under the 50@50 campaign, heat action plans, school retrofits and nature-based cooling; heritage-informed decarbonization principles, toolkit and case studies; and informal-housing retrofit and upgrading models delivered at scale.
- Recognition of urban heat resilience, heritage assets and existing informal building stock, as essential components of resilient urban infrastructure, with clear implications for NDC 3.0 implementation, building-sector targets, urban planning and city heat action plans
- Increased awareness of the need to place informal settlements at the centre of climate and built environment strategies, alongside practical pathways, partnerships and delivery models for doing so.

Segment
1. Opening and framing: limiting overshoot *Speaker: Mirey Atallah, Chief, Adaptation and Resilience Branch, Climate Change Division, UNEP (moderator)*
Mini panel 1: Extreme heat and sustainable cooling in Cities (Beat the Heat) - 15 min **Panelists:** • Dr. Eleni Myrivili, Global Chief Heat Officer and Strategic Advisor to the Cool Coalition, UNEP (Moderator) • Ms. Pauline Lavaud, Director of Ecological Transition and Climate, City of Paris • Mr. João Vicente Leitão, Secretary of Urban Planning and Environment of Fortaleza
Mini panel 2: Decarbonizing the Built Environment Through Heritage - 15 min **Panelists:** • Ms. Billie Faircloth, Cornell Atkinson Center for Sustainability/Built Buildings Lab/CHN (Moderator) • Dr. Meredith Wiggins, World Monuments Fund • Ms. Riin Alatalu, International Council on Monuments and Sites
Mini panel 3: Upgrading informal settlements for climate resilience (CRHI) - 15 min **Panelists:**

- Ms. Samia Nascimento Sulaiman, Coordinator for Partnerships and Stakeholder Engagement, National Secretariat of Urban Peripheries, Ministry of Cities, Brazil (Moderator)
- Mr. Joseph Muturi, SDI President, Slum Dwellers International
- Mr. Minar Pimple, Founder, Youth for Unity & Voluntary Action (YUVA)

5. Closing: the way forward

Speaker: Lily Riahi, Head, Buildings and Cooling Unit, Mitigation Branch, Climate Change Division, UNEP