Global Heat & Cooling Forum 2026: Advancing Equitable Heat Resilience and Climate-Friendly Cooling

The **Global Cooling and Heat Forum (GHCF), a leading international platform dedicated to advancing collaborative action to strengthen heat resilience, while expanding access to climate-friendly[1] cooling solutions.** Efforts to manage extreme heat and efforts to expand cooling access have typically evolved separately, resulting in missed opportunities to integrate planning, investment, and implementation. Heat resilience and climate-friendly cooling can be treated as a coupled, integrated system—two sides of the same coin—to address the "heat-cooling paradox" [2] and create a unified agenda for protecting lives, strengthening economies, and advancing sustainable development. This is the underlying premise of GHCF.

GHCF 2026 Forum is organized by the Natural Resources Defense Council (NRDC), in partnership with the National Disaster Management Authority (NDMA), the Department of Science & Technology (DST), Government of India, and the Coalition for Disaster Resilient Infrastructure (CDRI). It is supported by a network of partners, including the Global Heat Health Information Network (GHHIN), Alliance for an Energy Efficient Economy (AEEE), Ashok B Lall Architects, Harvard University, University of Oxford, Sustainable Energy for All (SEforALL), SouthSouthNorth (SSN), Sustainable Solutions for Africa (SSA), Council on Energy, Environment and Water (CEEW), Nabha Foundation, and Prayas Energy Group.

GHCF 2026 builds upon the success of the inaugural 2025 edition, which aimed to strengthen a coordinated global dialogue on heat preparedness and access to cooling. Discussions highlighted that cooling and extreme heat are deeply interconnected challenges, requiring integrated, multi-sectoral responses across health, energy, and urban systems. There was strong consensus on the need for proactive governance, institutional capacity, and inclusive approaches that prioritize vulnerable populations, alongside innovative financing and stronger narratives to accelerate action. A key forum outcome was the establishment of the Centre of Excellence for Heat Resilience and Sustainable Cooling (CEHSC) in Nagpur, housed at the State Institute of Disaster Management, Government of Maharashtra.

[1] "Climate-friendly cooling" (or "sustainable cooling") refers to methods that rely more on energy efficiency, green spaces, and thoughtful urban building design to provide cooling relief, replacing traditional air conditioners that often use refrigerants and emit pollutants that further contribute to climate change. Source: World Economic Forum, Oct 3, 2024, "What is sustainable cooling and how can it help tackle the climate crisis?" https://www.weforum.org/stories/2024/10/sustainable-cooling-refrigeration-climate-crisis/

[2] Heat-cooling paradox: rising heat intensifies cooling demand, which in turn drives higher electricity consumption, peak load stress, and increased greenhouse gas emissions, further accelerating warming. In effect, cooling delivered through inefficient and carbon-intensive pathways feeds back into the very warming it is meant to counter.

The Rising Global Heat Challenge: Scale, Risks, and Inequities

Extreme heat is one of the most consequential climate risks of the 21st century, and is intensifying.

- The past decade has been the warmest in recorded history, with 2023–2025 among the hottest years on record globally.
- Between 2000 and 2019, an estimated 489,000 heat-related deaths occurred annually.[i-ii]
- By 2100, even under the most aggressive carbon mitigation scenarios, 48% of the world's population, nearly 5 billion people, are projected to encounter lethal temperature-humidity combinations.[iii]

The Global South sits at the epicenter of this shift.

- Recent analyses estimate that 70% of the global workforce, over 2.4 billion people, is now at high risk of extreme heat, with Africa, Asia and the Asia–Pacific among the most exposed at roughly 93% and 75% of workers affected, respectively.[iv]
- Economic losses are similarly profound: heat-related productivity impacts could cost India 4.5% of GDP by 2030, with comparable damages predicted across Pakistan, Bangladesh, Nigeria, and Indonesia.[v]

Crucially, the burden of heat is not evenly distributed – nor is access to cooling – and India exemplifies the scale and urgency of these challenges.

- A recent global assessment shows that India faces the world's highest level of heat-related "livability limits"—hours when it is too hot for people to safely go about daily activities. When added across the population, this equals around 100 billion lost hours for younger adults and over 1 trillion for older adults annually.[vi]
- At the same time, access to cooling remains limited, and a growing "heat divide" reflects a widening gap between those who can protect themselves from extreme heat and those who cannot. A significant share of the population continues to live and work in environments that intensify heat exposure, such as densely built urban areas, informal settlements, and poorly ventilated housing. As of 2023, about 1.12 billion people globally were at high risk due to a lack of access to cooling for thermal comfort with 309 million of them in India.[vii]

Rising temperatures, fueled by climate change, are driving rapid growth in demand for cooling.

- Globally, the stock of air-conditioners is projected to rise from 2 billion units today to 5.6 billion by 2050, with the fastest growth occurring in the Global South.[viii]
- Cooling demand in India is projected to grow eightfold by 2037 (compared to the 2017-18 baseline), driven by urbanization, rising incomes, and increasing heat exposure.[ix]

GHCF 2026: Priority Areas for Action and Impact

This year's discussions center on practical pathways to enable delivery, adoption, and scale across diverse settings. GHCF 2026 is designed to move beyond problem framing toward actionable priorities—bringing together diverse stakeholders to identify what works, what can scale, and how to accelerate implementation across contexts. The Forum's agenda is anchored in a set of key priorities that reflect both emerging evidence and on-the-ground realities, spanning lived experience, infrastructure, and global collaboration:

Centering Lived Experience in Heat & Cooling Action: Advancing heat resilience and equitable access to cooling must begin with those among the most exposed to rising temperatures: informal and gig workers, women, and children. GHCF 2026 brings these perspectives to the forefront, not only to highlight lived realities but to elevate the knowledge, practices, and solutions emerging from these communities. A dedicated session on occupational heat exposure examines how worker-led insights can inform more responsive systems by improving heat metrics, strengthening health surveillance, and establishing safeguards that more accurately reflect lived experience. Complementing this, a session focused on women and children highlights the role of community-driven and gender-responsive approaches in advancing access to cooling and heat resilience. It showcases how locally grounded strategies, rooted in everyday practices, social networks, and adaptive capacities, can inform more inclusive and effective interventions.

Heat-Resilient Infrastructure: This year, we are also deepening our focus on infrastructure as a critical but often overlooked dimension of heat resilience. As cities expand and urbanization accelerates, current building practices risk locking in higher indoor temperatures and rising cooling demand, while heatwaves simultaneously strain electricity systems, increasing peak loads and the likelihood of disruptions at the moments when reliable power is most essential. GHCF 2026 will feature two sessions dedicated to this theme: one on advancing building regulations that enable passive cooling, climate-responsive design, and showcase case studies where such approaches have been effective; and another on strengthening power sector resilience through improved planning, operations, and regulatory frameworks.

South–South Learning: Governance and Implementation Pathways: A strong Global South focus is central to GHCF 2026, recognizing that the most acute impacts of extreme heat, and the most urgent implementation challenges, are concentrated in these regions. Dedicated sessions on governance pathways and South–South cooperation highlight both the barriers and the emerging solutions shaping heat resilience efforts across low- and middle-income countries. Discussions on governance will explore how integrated approaches can be institutionalized and strengthened. Complementing this, the Forum's focus on South–South collaboration, particularly between India and countries in Africa, draws on case studies ranging from India's heat action planning to

community-based adaptation efforts in African cities. Together, these exchanges underscore the value of practical, context-responsive solutions and the role of cross-regional partnerships in accelerating implementation at scale.

Over two days, GHCF 2026 convenes six thematic deep-dive sessions, each co-developed with expert partners and designed as interactive workshops. Insights from the discussions will be synthesized and presented at the close of Day 2, followed by audience Q&A. A post-Forum Synthesis Report will distill a shortlist of high-impact, actionable solutions emerging from GHCF 2026, providing a clear agenda for implementation over the coming year.

At its core, GHCF 2026 is grounded in the recognition that addressing extreme heat requires more than technical solutions alone. It demands coordinated institutional alignment, innovative financing mechanisms, and inclusive approaches that center the needs, knowledge, and agency of the most heat-exposed communities. By strengthening collaboration across sectors and elevating implementation pathways, the Forum aims to move beyond fragmented efforts toward integrated systems that deliver equitable cooling and resilient heat response at scale.

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[i] World Meteorological Organization (WMO), "WMO Confirms 2025 Was One of Warmest Years on Record," January 14, 2026.

[ii] World Health Organization (WHO), *"Heat and Health,"* Fact Sheet, May 28, 2024.

[iii] Mora, Camilo, B. Louise McKenzie, Iain R. Caldwell, et al. "Global Risk of Deadly Heat." *Nature Climate Change* 7, no. 7 (2017): 501–506.

[iv] Flouris, Andreas, M. Azzi, H. Graczyk, B. Nafradi, and N. Scott, eds. Heat at Work: Implications for Safety and Health. A Global Review of the Science, Policy and Practice. Geneva: International Labour Organization, 2024.

[v] Working on a warmer planet: The impact of heat stress on labour productivity and decent work International Labour Office – Geneva, ILO, 2019

[vi] Parsons, L. A., J. W. Baldwin, G. Guzman-Echavarria, O. Jay, P. Kalmus, H. Staudmyer, J. K. Vanos, and N. H. Wolff. "Intensifying Global Heat Threatens Livability for Younger and Older Adults." *Environmental Research: Health* 4, no. 1 (2026): 015013.

[vii] Sustainable Energy for All (SEforALL). *Chilling Prospects: Access to Cooling Gaps 2023 – Risk Profiles.* Vienna: SEforALL, 2023.

[viii] International Energy Agency (IEA). The Future of Cooling: Opportunities for Energy-Efficient Air Conditioning. Paris: IEA, 2018.