

Beating the Heat: Accelerating Access to Sustainable Climate Solutions in Cities

KEY TAKEAWAYS Opening

The climate is changing, and the heat is on

- The past 8 years are on track to be the **eight warmest on record** and **cities** in particular are on the frontline, heating twice as fast as surrounding areas
- **Extreme heat** is already a leading cause of death: **356,000 deaths** were linked to extreme heat in 2019 alone
- We cannot just air-condition ourselves out of this crisis as **emissions from conventional cooling** are expected to **double** by 2030 and triple by 2100

Cities are essential to beating the heat, but they need to think comprehensively

- **Integrate heat** into masterplans, **enforce building standards**, plan to rapidly scale up nature to cool cities down
- Deliver efficient cooling with climate-friendly refrigerants through **sustainable public procurement**
- Put in place **correct governance** to protect people, systems and infrastructure during heat emergencies and deliver long-term integrated plans for urban heat

Cities and countries are taking action, but we need to bring solutions to scale

- UNEP-led Cool Coalition has convened partners to drive advocacy on urban heat, co-develop tools and share best approaches across geographies
- With national and local governments we are devising comprehensive and creative solutions to urban heat

"Focusing on nature-based solutions is a sustainable method that contributes to saving on power expenses and emissions at the same time." – Manuel Pulgar Vidal, Climate & Energy Global Practice Leader, WWF International



Martina Otto
United Nations
Environment Programme



Manuel Pulgar Vidal
WWF International



Tuesday, 15 November 2022

13:30 – 15:30pm EET

Buildings Pavilion, Sharm el-Sheikh, Egypt



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KEY TAKEAWAYS

Sustainable Urban Cooling: From Theory to Practice

- ***Beating the Heat: A Sustainable Cooling Handbook for Cities*** launched at COP26 provides guidance on how to cool cities sustainably, with over 80 case studies from around the world
- For more practical uses, the ***Heat Action Platform*** was launched to tailor solutions to specific conditions in cities
- In this highly developed world, a large number of people die annually due to heat
 - We must **adapt** by developing **Heat Action Plans** to prepare **solutions** on how to collaborate facing increasingly frequent heat waves

*“Sustainable cooling is not only about having the right technologies, it is also about **mindset, regulations and investment.**”* – Umamaheshwaran Rajasekar, Chair, Urban Resilience, National Institute of Urban Affairs, India

- Urban heat is a major issue that creates **inequalities**:
 - Primarily in poor cities, there are very few nature investments resulting in a lack of shade and extremely high temperatures
- The main challenges to sustainable cooling are:
 - The health connection with climate needs to be more concrete, we need to demonstrate the **linkage between acting on heat and saving lives**
 - **Make sustainable cooling solutions affordable to all**: the need for investment and action on heat

Sustainable cooling solutions need to be **affordable** and **fair** to decrease inequalities in access and resilience.



From left to right:
Joanna Mclean Masic, World Bank;
Sameer Kwatra, NRDC India Programme;
Giorgia Rambelli, Mission Innovation;
Umamaheshwaran Rajasekar, National Institute of Urban Affairs, India



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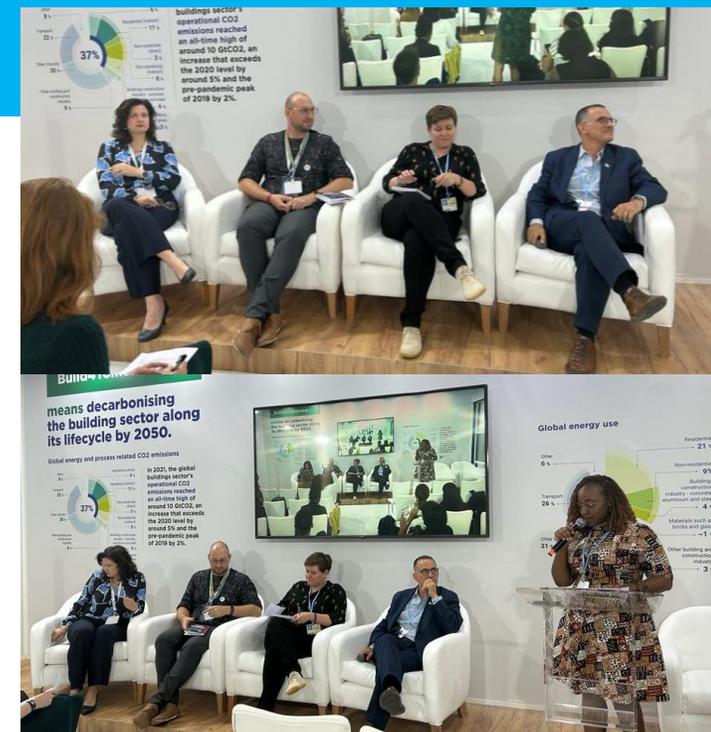
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KEY TAKEAWAYS - Nature for Cool Cities Challenge

- Due to the **Urban Heat Island Effect**, cities are warming twice as fast as the global average
 - We must encourage cities, particularly in the Global South, to **invest in nature** to reduce local temperatures
 - Cities such as Medellin or Seoul invested in NbS and witnessed temperatures reductions up to 6°C
- The Nature for Cool Cities Challenge seeks to catalyze this goal by supporting a cohort of global south cities committed to developing and implementing nature-based solutions to deliver on heat resilience and cooling benefits.
- It will ask participants (municipalities, groups of municipalities, or regional governments) will **pledge** to increase or enhance the proportion of high-quality nature-based cooling solutions within their cities by 2030, with **demonstrable progress** by 2025
- The Challenge's global objectives are:
 - Demonstrate urban nature-based solutions' ability to mitigate the urban heat island effect, avoid emissions, and reduce energy demand
 - Drive finance for replication and upscaling
 - Send a demand signal to project developers and financiers
- NbS are creating values inside cities in terms of **health, environment, economic and social**
- More awareness needs to be raised about **how deadly extreme heat is** every day and how we can address this issue.
- Hopes towards COP28: make it a **Cool COP** and learn how to cooperate towards this goal



From left to right:
Kathy Baughman McLeod, Adrienne Arsh-Rockefeller Foundation Resilience Center;
Paul Currie, ICLEI Africa;
Cassie Sutherland, C40 Cities;
Dr. Boaz Kedar, Municipality of Tel Aviv Yafo, Israel;
Elizabeth Wangeci Chege, SEforALL



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KEY TAKEAWAYS: Growing Urban Nature to Its Potential: Opportunities for Climate Mitigation & Closing

- In a warming world, cooling is an essential part of economic growth and is required across different sectors of the economy
- Business-as-usual generates a **vicious cycle**: cooling contributes to **climate change** by increasing demand for electricity and refrigerants
- Investing in **passive cooling** (NbS) lowers the need for mechanical cooling, hence reducing building energy consumption, peak demand, and energy costs
- Cities are constrained in their **budgets** and sources of finance. Support on external finance is needed
- Local and national governments, for example in **India**, are working together to roll out **ambitious plans and implementation actions** to reduce extreme heat risks, create greener cities, and increase access to thermal comfort
- Left unchecked, emissions from cooling are expected to **double by 2030** and **triple by 2100**, driven by heat waves, population growth, urbanization and a growing middle class
- Over the next 12 months, the Cool Coalition members will work together **to rally commitments to transformative actions**, such as the ones we heard today, to bring big action on cooling in November 2023 at COP28 in UAE.



From left to right:
Rohit Sen, ICLEI; Aditi Maheshwari, IFC;
Julia Meisel, RMI



Graeme Maidment, Advisor to Mission Innovation, Department for Business, Energy and Industrial Strategy (BEIS)



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