

High-Level Solutions Dialogue on Accelerating Early Warning and Extreme Heat Solutions

Date: 22 September 2025, 9:00-10:30am, United Nations Headquarters

Convened by: The Secretary-General's Climate Action Team, WMO, UNDRR, IFRC, ITU, UNEP,

Brazil

Context

As global temperatures rise, the frequency and intensity of extreme events are increasing. Floods, droughts, wildfires, storms and heatwaves are claiming millions of lives, devastating ecosystems and undermining social and economic development. The costs are growing exponentially.

Early Warning Systems (EWS) are one of the most effective methods for reducing disaster deaths and losses. Countries with strong EWS have mortality rates nearly six times lower than those without, and even 24 hours' advance warning can cut damage by up to 30%. Yet, as of March 2024, 108 countries reported having such systems in place. Significant gaps and challenges remain especially in vulnerable regions such as Africa, the LDCs and SIDS.

The United Nations Secretary-General's Early Warnings for All (EW4ALL) initiative aims to ensure every person on Earth is protected by early warning systems by 2027. With two years remaining to meet this goal, it is critical to accelerate efforts on all fronts. Achieving EW4ALL requires more than technology: it demands high level political support within countries and national ownership, cross-sector coordination, financing at scale and the inclusion of all stakeholders — from at-risk communities to critical sectors that sustain resilience. Solutions must cover the full early warning value chain, from risk knowledge to actionable response, cover multiple hazards, and be embedded in development assistance to maximize impact and efficiency.

In addition, extreme heat has emerged as one of the deadliest, most far-reaching and often underestimated hazards of our time, with cascading impacts that disrupt health, labour productivity, food security, education and energy systems, particularly in urban contexts and informal economies. With emissions on the rise and changes in temperature patterns becoming the new norm, a three pronged approach is needed covering (i) emphasis on emission reductions and mitigation across all sectors including in the urban, buildings and cooling responses; (ii) redesign of urban centers and facilities to promote long term adaptation to new temperature profiles and embed passive cooling approaches; (iii) systemic governance responses, including integrated decision-making, heat action planning and investment informed by hazard science and early warning systems.

Objectives

This dialogue will bring together national governments, subnational authorities and regional partners, the private sector, philanthropy, Indigenous and youth representatives and civil society to take stock of progress and identify concrete, high-impact solutions that can be championed, replicated and scaled up. The goal is to mobilize political will and institutional momentum to deliver



early warnings, heat risk prevention and reduction and long-term redesign, planning and anticipatory measures to protect lives and livelihoods in the age of extremes.

The dialogue will:

- Take stock of progress and gaps in implementing Early Warnings for All (EW4All) and extreme heat resilience.
- Identify concrete, high-impact solutions ahead of COP30 in Belém.
- Mobilize political and institutional momentum to accelerate action on EW4All toward 2027.
- Identify how investments can be scaled for priority actions of the Secretary-General's Call to Action on Extreme Heat (social protection, labour, environment/science, low carbon cooling).
- Make links to upcoming political processes: WMO Congress, World Health Assembly, COP30 Beat the Heat Call to Action, ILO Tripartite process.

Format and Structure

- . Opening remarks and scene setting
- Session 1: Early Warnings for All (EW4All)
 - Video scene setter
 - Moderated discussion to identify priority investment areas (e.g. observation systems, digital infrastructure, last mile).
 - What and where are the critical gaps in delivering EW4All and what is holding it back?
 - What solutions can be scaled now? Through what mechanisms and in which contexts?

Session 2: Extreme Heat

- Moderated discussion
 - So many solutions to reducing heat exposure are well known and often low cost
 What are the barriers to scaling investment in heat risk solutions?
 - How can integrated policy, planning and investment approaches address systemic drivers, provide protections and prevent cascading impacts?
 - What new funding streams can be mobilized? (e.g. MDBs, private sector, philanthropies, food/water nexus)
- Closing of Solutions Dialogue

Outcomes

The dialogue will spotlight priority solutions to scale early warning systems, prevent and manage extreme heat, and protect communities. It will mobilise commitments from governments, partners, and the private sector to accelerate delivery. The discussions will be presented in the main program at the Secretary-General's Special High-level Event on Climate Action on 24 September and captured in a Chair's Summary, reinforcing adaptation and resilience as key pillars of the COP30 Action Agenda.