Global Cooling Pledge for COP28

Noting that, sustainable cooling can refer to actions across all cooling sectors and applications that move towards net zero emissions from cooling actions by 2050 such as through passive cooling, increased efficiency, and low − Global Warming Potential (GWP) refrigerants.

Recognizing that, getting on a pathway consistent with limiting global average temperature rise to 1.5°C will require delivering sustainable cooling which acts as both a climate mitigation and adaptation strategy by reducing greenhouse gas (GHG) emissions, providing protection from heat stress supporting human well-being, reducing food loss, and enhancing access to healthcare and medicines, and supporting just energy transitions;

Recognizing that, without a transition to sustainable cooling, cooling as an adaptation strategy will result in increased GHG emissions, and therefore, adaptation and mitigation strategies related to sustainable cooling must go hand in hand;

Recognizing that, to meet the Paris Agreement goal of holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C, significant emission reductions must be achieved globally by 2030 and addressing emissions from cooling activities is a key component of this effort and can help put us on a pathway to net-zero emissions from cooling by 2050;

Recognizing that, coordinated international action on sustainable cooling can save 78 billion tonnes CO2e between now-2050, improve the lives of hundreds of millions, and realize huge financial savings (UNEP 2023);

Recognizing that, sustainable cooling practices include safely transitioning to environmentally-friendly low-GWP refrigerants, including through implementation of the Kigali Amendment to the Montreal Protocol for the phase-down of hydrofluorocarbons (HFCs), to prevent up to an estimated 0.5°C of warming by 2100 and that coordinated action to improve cooling efficiency alongside the phase-down of HFCs could more than double those climate benefits (IEA-UNEP 2020);

Recognizing that, cities are warming at twice the global average due to the ‘heat island effect’, warming as much as 4°C by 2100 if GHG emissions continue at high levels (UNEP 2021);

Recognizing that, countries have different national circumstances, baselines, and potentials for improving cooling efficiency, including based on past efficiency actions;

Recognizing that heat-related deaths increased 68% between 2000-04 and 2017-21 (Romanello et al. 2022);

Recognizing that, over 1.1 billion people lack access to sustainable cooling and a further 2.9 billion have inefficient cooling, and that disproportionately women and girls are affected (SEforALL 2023);

Recognizing that, increased heat stress is projected to reduce total working hours worldwide by 2.2% and global GDP by US$2.4 trillion in 2030 (ILO 2019);

Recognizing that, the lack of sustainable cold chains results in the loss of 526 million tons of food production, or 12% of the total, and contributes to a significant reduction in smallholder farmers’ income (UNEP-FAO 2022);

Recognizing that, mechanical cooling accounts for 20% of global electricity consumption (UNEP 2023) and is a top driver of global electricity demand and of generation capacity additions to meet peak power demand;

Recognizing that, a growing number of renewables-based cooling technologies are technically viable, economically feasible and quickly deployable at scale in rural, remote and off-grid locations (IRENA 2022);
Recognizing that, while highly efficient air-conditioning units are available, most units purchased globally have two-to-three times lower efficiencies than the best available, and that to align cooling with the International Energy Agency's Net Zero Emissions by 2050 Scenario, the average efficiency rating of air conditioners sold would need to be at least 50% better than the current installed efficiency by 2030 in all markets, consistent with the concept of energy efficiency and savings as the "first fuel" to achieve net-zero emissions by 2050 at the latest and energy transitions;

Recognizing that, passive cooling strategies can reduce a building’s cooling load by more than 25% (World Bank Group, 2020).

We, the National Government Participants of the Global Cooling Pledge:

Commit to work together with the aim of reducing cooling-related emissions across all sectors by at least 68% globally relative to 2022 levels by 2050, consistent with limiting global average temperature rise to 1.5°C and in line with reaching global net-zero emissions targets with significant progress and expansion of access to sustainable cooling by 2030. This aim will be advanced through individual countries’ domestic actions as consistent with their domestic plans and priorities, and international collaboration;

Commit to ratify the Kigali Amendment by 2024 for those countries that have not already done so;

Commit to support robust action through the Montreal Protocol Multilateral Fund for early action to reduce HFC consumption and to promote improved energy efficiency for the hydrochlorofluorocarbons (HCFC) phase-out and HFC phase-down;

Commit to publishing a national cooling action plan, considering cooling when publishing a national action plan, or publishing a regulation or equivalent by 2026 and to reflect relevant efforts in designing nationally determined contributions under the Paris Agreement and HFC phase-down plans;

Commit to establish national model building energy codes that incorporate market appropriate measures such as passive cooling and energy efficiency strategies at the latest by 2030 for new and refurbished buildings as appropriate for those countries with jurisdiction of national building codes, or for those countries that do not have such jurisdiction, support adoption of building energy codes at the sub-national level;

Commit to work together to support increased market penetration of highly efficient air conditioning equipment and innovative technologies and collectively increase the global average efficiency rating of new air conditioning equipment sold by 50% by at the latest 2030 from global 2022 installed baseline;

Commit to establish Minimum Energy Performance Standards (MEPS) by at the latest 2030 and aim to routinely raise ambition and progress consistent with respective national laws with a view to achieve net-zero emissions by 2050 and noting best available technology and available model regulation guidelines;

Commit to establish or update public procurement policies and guidance for low-GWP and high efficiency cooling technologies and innovative solutions where feasible or ensure broader arrangements are in place that drive such approaches in public procurement at the latest by 2030;

Commit to support collaborative research, innovation, and deployment activities at the local and international level such as renewable energy-based cooling solutions in rural, remote, off-grid locations or research and development of cooling systems applying refrigerants with GWP less than 150;

Commit to support existing international cooling emission reduction and cooling access initiatives, such as those of the United Nations Environment Programme-led Cool Coalition, to advance global cooperation and domestic actions;

Commit to pursue the life cycle management of fluorocarbons in particular addressing HFCs banks, if feasible, such as through the Initiative on Fluorocarbons Life Cycle Management;
Commit to review progress towards the target of the Global Cooling Pledge on an annual basis until 2030 and have a dedicated high-level meeting at the UN Climate Change Conference;

Commit to maintaining up-to-date, transparent, and publicly available information on our policies and commitments to inform the progress reviews and relevant reports such as the UNEP Global Cooling Stocktake;

Commit to use as appropriate the national action agenda to make further progress towards the ambition of the Global Cooling Pledge and consider new commitments in the Global Cooling Pledge on an annual basis until 2030 as appropriate;

Call on subnational governments and non-state actors including the private sector, financial institutions, and philanthropies to help support the implementation of the Global Cooling Pledge;

Call on other states to join the Global Cooling Pledge.
We, the Subnational Government participants of the Global Cooling Pledge:

- Commit to incorporate cooling in an existing strategy or action plan, or develop a Heat Action Plan by 2026 to mitigate and adapt to urban heat through sustainable cooling solutions;
- Commit to significantly increase the area and quality of green and blue spaces in urban areas for cooling by 2030 in line with the Paris Agreement goals and Target 12 of the Kunming-Montreal Global Biodiversity Framework;
- Commit to pursue public procurement of low-global warming potential and high efficiency cooling technologies focused on the lowest lifecycle cost in government buildings by 2030.

1 as far as individual participants of this pledge will prepare a Nationally Determined Contribution (NDC) and not operate under an umbrella NDC.