UN environment programme

Annual Global Cooling Pledge Progress Report November 2025

Cool Coalition

The Global Cooling Pledge, a first-of-its-kind political initiative dedicated to sustainable cooling, has three primary aims: to reduce cooling-related emissions by 68% relative to 2022 by 2050; to greatly increase access to sustainable cooling by 2030; and to increase the global average efficiency of new air conditioners by 50% by 2030 through raised ambition and international cooperation.

Introduction

Under the aegis of the COP28 UAE Presidency, the Global Cooling Pledge (GCP) was launched at COP28 in Dubai in December 2023 with high-level representation and support from more than 60 countries. This Annex is the second annual progress review of the Global Cooling Pledge Signatories and was prepared as part of the development of the Global Cooling Watch Report. Information was gathered through a questionnaire shared with countries between June to August 2025, complemented by desk research conducted through October 2025—that have been distilled here for GCP signatory countries.

Since the launch of the Global Cooling Pledge, the Signatories convened for the first and second Ministerial Dialogues on Delivering the Global Cooling Pledge at COP29 in Baku, Azerbaijan and COP30 in Belém, Brazil. These ministerial roundtables provide an opportunity to share the collective progress on the implementation of the Global Cooling Pledge, including mainstreaming cooling in the next round of nationally determined contributions and moving from Pledge commitment to delivery.

As of October 2025, one additional country endorsed the Pledge, bringing the total number of national Global Cooling Pledge Signatories to 72. Among these are 57 Article 5 countries according to the Montreal Protocol, 12 Small Islands Developing States, and 13 Least Developed Countries, with overlaps across categories. Furthermore, 9 additional sub-national cities/regions have endorsed the Pledge, bringing the total to 16, while 69 non-state actors have also officially endorsed it. The national Pledge Signatories represent a population of just over 2.1 billion people, of which more than half (57%) reside in developing countries.

This document is the second *Annual Global Cooling Pledge Progress Report*. Figures reflect Signatories' inputs in the 2025 cycle and may be updated in subsequent revisions as countries refine MRV systems and submit additional data.

Delivery of the Global Cooling Pledge COP30 Ministerial Roundtable
***H.E. Balarabe Abbas Lawal,** Minister of Environment, Nigeria*

Delivery of the Global Cooling Pledge COP30 Ministerial Roundtable
***Alice Amorim**, Director of Program, COP30 Presidency*

The overall needs assessment reflects a triple implementation challenge for some GCP countries: **(i) financing constraints, (ii) limited technical/institutional capacity, and (iii) regulatory/policy gaps**. These are compounded by market barriers (small markets, costly technologies, weak supply chains) and a lack of reliable data (**see Box 1**).

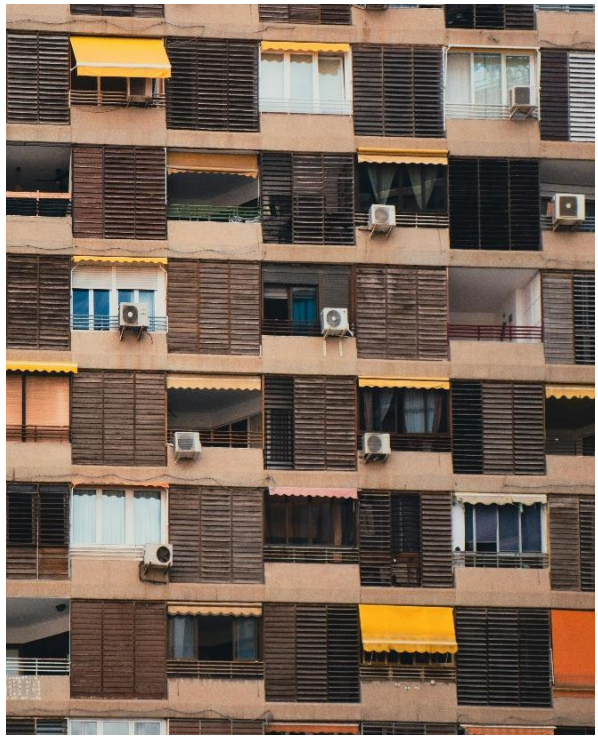
Analysis of the 2025 data indicates that limited financial resources remain the primary constraint, affecting more than 60 percent of GCP countries.

BOX 1: Barriers reported by countries

- Financial resource limitations
- Technical capacity limitations
- Regulatory/policy challenges
- Market barriers
- Access to technology

One country reported that the only barrier they have is "Regulatory/policy challenges", and another country reported "technical capacity limitations" as the only barrier. Ten countries reported encountering two barriers simultaneously, twelve reported three simultaneous barriers, eleven observed four barriers at the same time, and thirteen countries identified all five barriers concurrently.

Many countries explicitly link financial shortfalls to their ability to achieve their climate goals. For instance, **Cambodia** noted that implementing its updated nationally determined contribution (NDC) will require an estimated $7 billion in climate finance, while **Burkina Faso** faces a financial gap of $4.1 billion. The high upfront cost of sustainable cooling technologies is a recurring theme, with countries such as **Panama** highlighting the need for tailored financing and



Credit: Alisa Savickaja on pexels

subsidized credit programs. Even when financing is available, market-related issue
The higher cost of new technol
as is the "limited availability of e
One country noted that its small market size gives it little leverage to encourage manufacturers to introduce more energy-efficient products.

A common problem is the shortage of skilled labour. Panama struggles with a "lack of certified technicians for low-GWP systems," while Eswatini has identified a need for a "comprehensive capacity-building program." Additionally, several nations, including Chad and Djibouti, report a low capacity to generate the scientific climate data needed to inform policy and develop effective projects.

The need for stronger government action is also evident. The lack of mandatory energy efficiency building codes and National Cooling Action Plans was cited as a significant problem. In some cases, existing regulations were considered "inadequate and lack proper standards".

Progress Achieved During 2025

As of October 2025, one additional country joined the Pledge, bringing the total number of national **Global Cooling Pledge Signatories to 72**. Among these are **57 Article 5 countries according to the Montreal Protocol, 12 Small Island Developing States, and 13 Least Developed Countries**, with overlaps across categories. The national Pledge Signatories represent a population of just over 2.1 billion people, of which more than half (57%) reside in developing countries. Furthermore, 9 additional sub-national cities/regions have endorsed the Pledge, bringing the total to 16, while 69 non-state actors have also officially endorsed it.

The Pledge includes 14 commitments made by the national governments of each signatory. Progress related to each of these commitments is described below. It is important to recognize that most Signatories remain in the planning phase and have been identifying what actions need to be implemented to meet the commitments.

Among the 72 national signatories, 57 (59% of the total) are developing countries (Article 5 countries under the Montreal Protocol), including 13 least developed countries (18%) and 12 Small Island Developing States (17%).

Phnom Penh, Cambodia. *Credit: Norbert Braun on Unsplash*

1. *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.*

In Chapter 4 of the recently released Global Cooling Watch 2025 report, 5-year milestone emission reduction targets for cooling are suggested for Pledge Signatories to consider in order to reach the long-term global target—18% by 2030, 39% by 2035, 55% by 2040, and 63% by 2045, relative to 2022. Encouragingly, 22 of the 28 countries with targets for reducing cooling-related greenhouse gas emissions are GCP Signatories; **12 have targets for both energy and HFC reductions**, **10 have HFC targets only**, and **3 are developing their targets**.

By October 2025, 97% of all Pledge Signatories had ratified the Kigali Amendment.

2. *Commit to ratify the Kigali Amendment by 2024.*

Progress towards achieving this commitment is very good, with 70 Signatories (99% of GCP weighted population) having ratified the Kigali Amendment to the Montreal Protocol. The two Signatories that have not yet ratified the Kigali Amendment include **Antigua and Barbuda** and **Kazakhstan**.

3. *Commit to support robust action through the Montreal Protocol Multilateral Fund [MLF] for early action to reduce HFC consumption and to promote improved energy efficiency for the hydrochlorofluorocarbon [HCFC] phase-out and the HFC phase-down.*

This year, 26 GCP Signatories (13 Article 5 and 13 non-Article 5 Parties to the Montreal Protocol) have adopted HFC phase-down plans that are stricter than the Kigali schedule, while 27 Signatories (25 Article 5 Parties, 2 non-Article 5 Parties) are following the Kigali schedule. In addition, 13 Article 5 Parties who are also GCP Signatories are developing their Kigali Implementation Plans, and six are yet to develop any HFC phase-down plans (**see Box 2**).

Credit: Jose Antonio Gallego Vázquez in pexels

BOX 2: Several Pledge Signatories (in both developed and developing countries) are leading the way for rapid HFC phase-down

Across Parties, many are going beyond the Kigali Amendment under national or regional measures:

- **Germany, Italy, the Netherlands, Belgium** and **France** are implementing the EU F-Gas Regulation ((EU) 2024/573), which entered into force on 11 March 2024. The Regulation mandates a significantly steeper, quota-based HFC phase-down—more than 95% by 2030 and full phase-out by 2050—and introduces broad bans on high-GWP (≥150) equipment and stronger leak-prevention and end-of-life controls.
- **The United Kingdom** has already achieved a 69% reduction and is on track to reach 79% by 2030.
- **Japan** has set HFC limits approximately 10% more stringent than those set under the Kigali Amendment.
- **Norway** follows the Kigali Amendment step-down schedule but applies a stricter national baseline (set at 72% of the Kigali baseline), thereby effectively accelerating HFC reductions.
- **Ghana**'s Kigali Implementation Plan aims to leapfrog the Kigali schedule, reflecting the country's early transition away from HCFC.
- **The United States** continues phasedown through SNAP and related measures.

Other Parties are advancing within Kigali timelines: the **United Arab Emirates** (A5 Group 2) will freeze by 2028 and cut 85% by 2047; **Panama** (A5 Group 1) follows the standard Kigali schedule; and **Albania** is progressing under ExCom 80/50 and national F-gas plans.

Overall, these actions demonstrate strong momentum toward the Global Cooling Pledge's third commitment on accelerating refrigerant transition.

Hanoi, Vietnam. *Credit:* Bernd Dittrich on Unsplash

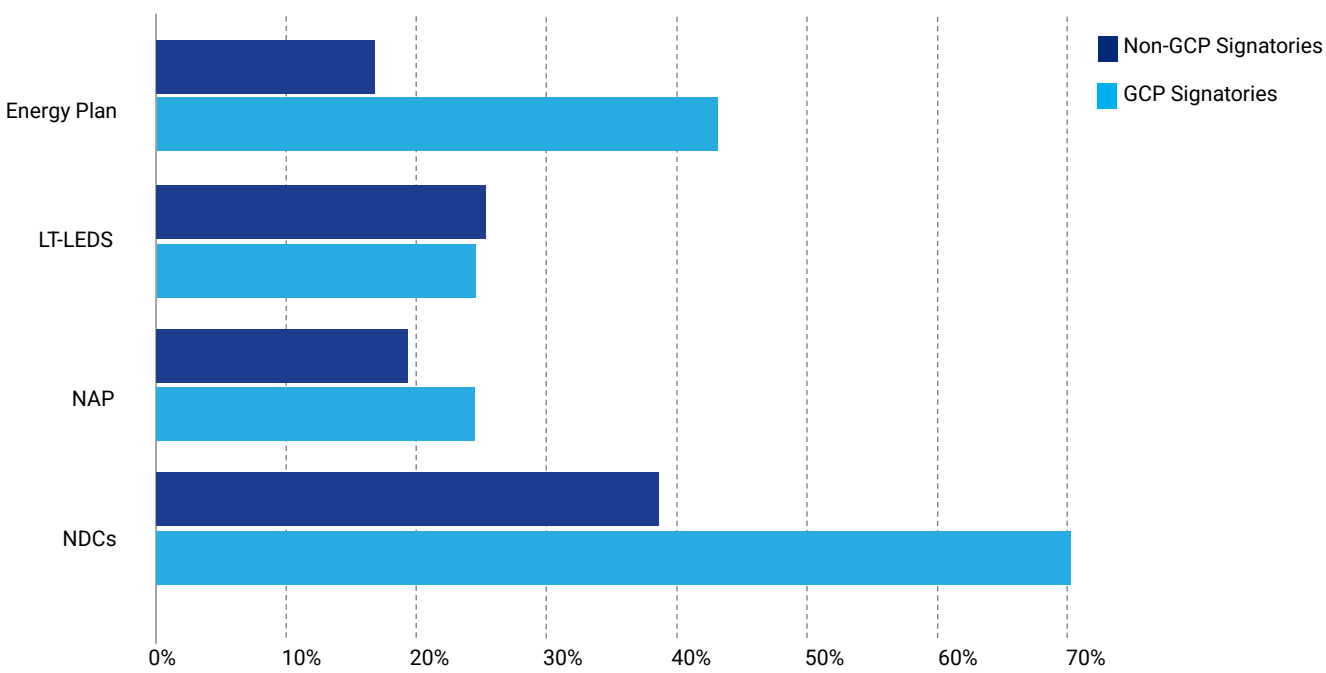
4. ***Commit to publishing a national cooling action plan [NCAP], considering cooling when publishing a national action plan, or publishing a regulation or equivalent by 2026 and to reflect relevant effort in designing nationally determined contributions [NDCs] under the Paris Agreement and HFC phase-down plans.***

50 out of the 72 GCP Signatories have published NDCs that reflect cooling (71% of the GCP weighted population).

GCP Signatories have some headway to complete their commitments on NCAPs, including integrating cooling considerations into national action plans, or publishing regulations or equivalent measures by 2026 (see Box 3). So far, only 25 of the 72 have a published plan and two are working on publishing theirs. Five more Signatories have recently submitted formal requests to the Cool Coalition Secretariat to begin developing their NCAPs, signaling growing momentum toward meeting the 2026 milestone (**see Box 3**).

On the other hand, GCP Signatories are progressing towards designing NDCs under the Paris Agreement with 50 published NDCs that reflect cooling (representing 71% of total population of GCP signatory countries). There has also been notable progress in integrating cooling into National Adaptation Plans, long-term low-emission development strategies (LT-LEDS), and energy plans, as shown in **Figure 1**.

FIGURE 1: Percentage of countries in different categories (GCP Signatories, non-GCP Signatories) with cooling mentioned in the different national strategies



BOX 3: Progress toward the Global Cooling Pledge's fourth commitment is evident across multiple Parties

- In the **EU**, Member States participate under a single EU NDC (European Union and its Member States 2023) (European Parliament 2025) rather than individual national NDCs.
- **Italy** anchors cooling-relevant action in its long-term strategy (European Parliament 2024) for climate neutrality by 2050 and its updated 2030 National Energy & Climate Plan (NECP) (Italian Ministry of the Environment and Energy Security, 2024).
- **The Netherlands** does not have an NCAP but embeds heat-risk and energy measures across a long-term climate strategy (Ministerie van Klimaat en Groene Groei 2025) and energy plan (Ministerie van Economische Zaken en Klimaat 2023 a.) (Ministerie van Economische Zaken en Klimaat 2023 b.) as well as a National Adaptation Strategy (Ministerie van Infrastructuur en Milieu 2016) and a National Heat Plan (Rijksinstituut voor Volksgezondheid en Milieu 2025).
- **Norway**'s NDC (Norway 2025) (Norwegian Ministry of Climate and Environment 2020) covers F-gases (including HFCs, PFCs and SF_6) within its broader GHG reduction commitment.
- The **UK** addresses cooling via mitigation and adaptation policies linked to its NDC (UK Government 2025) (which reaffirms Kigali HFC phase-down), NAP3 (UK Government 2023), carbon budgets (Department for Business, Energy & Industrial Strategy, 2016), and the Clean Power 2030 Mission (UK Government 2024).
- The **UAE** explicitly incorporates efficient cooling under its National Demand Side Management programme (UAE Government 2024) and references cooling in its NDC (United Arab Emirates Ministry of Climate Change & Environment, 2024) and Long-term low emission development strategy (LT-LEDS) (United Arab Emirates Ministry of Climate Change & Environment, 2023).
- **Somalia** and **Nigeria** explicitly referenced their commitments to the Global Cooling Pledge in their most recent NDC updates, demonstrating formal alignment between national climate targets and the Pledge's commitments.

Taken together, these examples show Parties increasingly embedding cooling within NDCs, LT-LEDS, NECPs/energy plans, and national adaptation/DSM programmes. This advances the Pledge to mainstream sustainable, efficient, and climate-aligned cooling.

5. ***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 jurisdictions 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.***

In 2025, 30 Signatories have codes that support the implementation of passive cooling.

In 2025, 30 Signatories have codes that support the implementation of passive cooling, 16 encourage the use of high-efficiency cooling equipment, and 8 include requirements for low-GWP refrigerants (**see Box 4**).

Signatories report steady progress on this commitment. They have actively mainstreamed passive/urban-cooling and building-efficiency actions into policies and programs. In 2025, 30 Signatories have codes that support the implementation of passive cooling, 16 encourage the use of high-efficiency cooling equipment, and 8 include requirements for low-GWP refrigerants.

BOX 4: Several countries are introducing ambitious national building energy codes

- **Germany** is advancing nature-based cooling co-benefits via its Federal Action Plan on Nature-based Solutions (Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection, 2023).
- **Italy** runs an experimental urban-adaptation program (~€80 million) funding green/blue/grey measures such as green roofs/walls, shading trees, climate-responsive buildings, and permeable squares (Italian Institute for Environmental Protection and Research, 2023).
- **Nigeria**'s Building Energy Efficiency Code (BEEC) sets minimum performance requirements for envelopes, lighting and AC across building types to lower cooling demand (Federal Republic of Nigeria 2017). The BEEC aims to ensure buildings are energy-efficient from design to decommissioning, promoting comfort and sustainability.
- **Norway**'s code emphasizes high insulation/airtightness and indoor-environment standards, which also mitigate summer overheating (Federal Republic of Nigeria 2017).
- In the **UAE**, municipal green-building rules require minimum ventilation (ASHRAE-aligned), filtration (min. MERV 6), reflective shading (SRI ≥ 29), and low-ODP/low-GWP refrigerants in HVAC&R (Government of Dubai, 2020).
- **Belgium**'s Antwerp mandates green roofs on suitable new or renovated roofs to cool buildings and urban microclimates (European Environment Agency, 2020).
- **Bhutan**'s traditional rammed-earth architecture (Pieter and Van Jaarsveld, 2019) offers thermal mass benefits, with research showing modern insulation improves comfort to contemporary standards.

- **France**'s National Health-Environmental Plan (PNSE 4) (Ministère de la Santé, de la Famille, de l'Autonomie et des Personnes handicapées 2024) includes public-building demonstrations and broader efficiency actions. France's RE2020 code (Ministère de la Transition écologique 2024) embeds summer-comfort thresholds (DH indicator) to drive passive cooling.
- The **Czech city of Ostrava** is expanding green infrastructure such as trees, flowerbeds, and other nature-based cooling.
- **Denmark**'s BR15 tightened efficiency and sets limits on overheating hours; studies show natural ventilation strategies can dramatically cut cooling loads (Afshari et al. 2023).
- **Eswatini** is documenting and integrating Traditional & Indigenous Knowledge into adaptation planning, including heat-risk responses (Tfwala et al. 2023).
- **Uruguay** has an Energy Efficiency Fund that finances building and appliance measures to reduce their energy consumption. This fund is applicable to every sector and has a wide range of measures.
- In **Burkina Faso**, the Global Green Growth Institute (GGGI) has supported the country in the development of projects in areas such as green cities. A workshop was held in 2022 to raise awareness among public procurement actors on the importance of considering energy efficiency and low-GWP refrigerants in the purchase of refrigeration and air-conditioning equipment for government buildings (Global Green Growth Institute 2022).
- **Brazil**'s Green/Resilient Cities initiatives are supporting ~50 cities in planning greener and more heat-resilient urban spaces (C40 Cities, 2025).
- **Cabo Verde**'s National Programme for Energy Sustainability (PNSE) has included pilot demonstration projects in public buildings to improve them with energy-efficient solutions (Governo de Cabo Verde 2022).
- **Guatemala**'s Emissions-Reduction Program Benefit-Sharing Plan provides non-monetary supports (e.g., machinery, fire-control supplies, agroforestry inputs) to enhance cooling co-benefits via green cover and shade.

Together, these actions demonstrate how signatories are integrating building codes, green and blue infrastructure, traditional know-how, sustainable procurement, and financing mechanisms to reduce cooling loads and urban heat while improving thermal comfort.

6. ***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.***

In order to increase the market penetration of highly efficient air-conditioning equipment and innovative technologies, GCP Signatories use a combination of a market push-pull mechanism using MEPS to eliminate the least-efficient equipment (push) and labelling to pull the market towards higher energy efficiency and innovative equipment. Tracking this commitment is of particular importance since it requires setting the global installed average in 2022 as a baseline and aiming to improving the efficiency by 50% by 2030.

According to CLASP, some markets have already established MEPS that are well above 50% of the global installed average in 2022 (e.g., the **China** Cooling MEPS and the upcoming **Brazil** Cooling MEPS). In addition, 58 GCP Signatories have an established RAC Labelling program to pull the market towards higher energy efficiency. However, only 9 Signatories are actively tracking the market penetration of equipment sale by energy efficiency. Most of these countries saw more than 50% increase in the sales of efficient inverter driven technology. They also reported that R-410A remains the baseline refrigerant technology, except in **Ghana**, which has undergone a significant transition to HFC-32. The Cool Coalition suggests that Signatories may be able to track the market penetration of higher energy efficient new air-conditioning equipment through three priorities (**see Box 5**).

BOX 5: The Cool Coalition suggests that Signatories may be able to track the market penetration of higher energy efficient new air-conditioning equipment through one of the following priorities

1. **Market survey**: statistical review of local market to understand sales by energy label.
2. **Comtrade data** (UN Comtrade 2025):
   - Inverter compressors (e.g., 8414308150)
   - Fixed speed compressors (e.g., 84143040, 84143080, 84149090)
3. **Expert opinion**: requesting input from stakeholders on their opinion on the current market landscape.

7. ***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.***

MEPS are important to ensure that the momentum towards efficient cooling is sustained. This market push mechanism ensures that lowest efficiency units are always eliminated and that once the market matures, a new level of efficiency becomes the norm. MEPS and labelling are usually designed as complementary regulatory instruments so that this market push-and-pull mechanism works in harmony; and in some cases, automatically progresses with time (i.e., MEPS advance regularly every 3 years). **Table 1** below summarizes the current landscape of MEPS and labelling across cooling equipment among GCP Signatories, highlighting notable progress.

COOLING EQUIPMENT	MEPS	LABELLING	REGULARLY UPDATED	GWP LIMITS INTEGRATED
Domestic Refrigerators and Freezers	49 (+1 Voluntary)	49	43	21
Self-Contained Commercial Refrigeration	34 (+1 Voluntary)	35	35	5
Room Air Conditioning	53 (+1 Voluntary)	58	45	17
Central Air Conditioning	39	5	17	10

TABLE 1: MEPS and labelling landscape for cooling equipment

8. ***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.***

Signatories are advancing the eighth commitment through the use of taxes, procurement, grants, and public-sector retrofits to stimulate markets for efficient and clean cooling solutions. Input from Signatories and desk research indicates good momentum on this commitment; however, further progress is needed. **Table 2** below summarises existing public procurement policies and guidance promoting low-GWP, high efficiency cooling technologies and innovative solutions where feasible.

Credit:Ashkan Forouzani on Upsplash

	PASSIVE COOLING			HIGH EFFICIENCY			LOW-GWP			OTHER INNOVATIVE TECHNOLOGIES		
Number of GCP Signatories	PPP	G	Both	PPP	G	Both	PPP	G	Both	PPP	G	Both
	1	3	8	4	3	16	6	5	8	-	2	5

TABLE 2: Green building procurement policies and guidance landscape

*PPP: Public Procurement Policy Only
*G: Guidance Only

*Both: Public Procurement and Guidance

Spain is pulling multiple levers to deliver on this commitment. On the demand side, households can claim personal income-tax deductions for energy-efficiency renovations that lower heating/cooling demand and primary energy use (Agencia Tributaria 2024). Regarding public procurement, the Ley de Contratos del Sector Público (LCSP) allows environmental criteria and performance conditions across tender stages—powerful for specifying high-efficiency, low-GWP cooling solutions (Jefatura del Estado 2017). On supply-side investment, Royal Decree 1124/2021 (Ministerio para la Transición Ecológica y el Reto Demográfico 2021) channels recovery-plan funds to Spain's regions to support the deployment of reversible heat pumps and district heating/cooling micro-grids. At network scale, Order TED/707/2022 (Ministerio para la Transición Ecológica y el Reto Demográfico 2022) establishes incentive programmes for renewable heating and cooling networks under the Recovery, Transformation and Resilience Plan, helping cities and campuses cut cooling emissions and peak loads. Complementing these measures, Royal Decree-Law 7/2025 (Jefatura del Estado 2025) introduced urgent steps to strengthen the electricity system and facilitate electrification (including building climatization), supporting the reliability needed for efficient electric cooling to scale.

The **United Kingdom** promotes high-efficiency cooling in public and business procurement through the Government Buying Standards (GBS) for electrical goods, (GBS hub) (Department for Environment, Food & Rural Affairs 2012) which include mandatory and best-practice criteria. The GBS specify minimum efficiency requirements for air conditioners (≤12 kW A++ mandatory; A+++ best practice) and cold-appliances, and encourage passive-cooling-aligned measures such as covers, doors, and curtains for refrigerated displays (Department for Environment Food and Rural Affairs 2008). The UK also maintains a government-backed Energy Technology List (Department for Energy Security and Net Zero 2015) with ~8,000 vetted high-efficiency products across 62 sub-technologies, including refrigeration and HVAC backed by the Department for Energy Security and Net Zero (DESNZ) (Climate and Clean Air Coalition 2024a).

Côte d'Ivoire is developing sustainable public-procurement guidance for room ACs and refrigerators via a Climate & Clean Air Coalition project to integrate high-efficiency, low-GWP cooling into government purchasing (Climate and Clean Air Coalition 2024b).

Credit: CP Khanal on Pexels

9. ***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.***

In 2025, 67 GCP Signatories participated in international cooling initiatives and/or activities. Renewable energy-based cooling solutions using low-GWP refrigerants are currently supported by 12 Signatories, while 2 others are actively developing such programs. In addition, 9 Signatories reported ongoing research activities on low-GWP refrigerants (see **Box 8**).

California, United States *Credit:* Noah Buscher on Unsplash

10. *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.*

The joint efforts of the 72 GCP Signatories showcase their strong commitments to strengthening global cooperation and domestic action to advance sustainable cooling. Their actions are well recognized within the climate change community – as demonstrated through the high-level participation in COP 28, COP 29, and the upcoming COP30.

BOX 8: Signatories are advancing this commitment through trainings, pilots, and technology deployment

1. In **Denmark**, support to the Cool Coalition's "Beat the Heat" city program advances passive and nature-based solutions, while the Danish Technological Institute's 25+ years of work on natural refrigerants strengthens the innovation pipeline and workforce skills for lower-GWP cooling.
2. In **Mauritius**, the Université des Mascareignes uses donated CO_2 refrigeration demonstration equipment for hands-on student training, with lecturers publishing related research to build local capacity in natural-refrigerant technologies.
3. In **Nigeria**, the UNEP–U4E and Rural Electrification Agency pilot on off-grid refrigeration addresses critical rural gaps in cold chains for food, health, and livelihoods, demonstrating scalable and efficient cooling solutions beyond the grid.
4. In the **United Arab Emirates**, authorities and developers are boosting cooling efficiency by expanding District Cooling (DC)—central plants (e.g., Empower, Tabreed)—and Efficient Cooling (EC) "mini-DC" systems at development scale, including retrofits of existing buildings to district networks.

The UNEP-Cool Coalition, together with key stakeholders including the Ozone Secretariat, the Montreal Protocol's Multilateral Fund, the Climate and Clean Air Coalition (CCAC), the Clean Cooling Collaborative, the International Finance Corporation, and the International Institute of Refrigeration (IIR) provide unique support to ensure sustainable cooling becomes a reality. In-kind and financial contributions from several GCP Signatories further support the GCP objectives.

The GCP's success is strengthened by direct and in-kind support to the UNEP-led Cool Coalition from countries, philanthropies and the inputs from the 66 non-state actors that collectively support the Pledge.

This commitment is best tracked through the inclusion of cooling targets in the NDCs. This year, 12 countries have developed cooling-related GHG reduction targets for energy and HFCs, 10 have developed cooling-related GHG reduction targets for HFCs only, and three countries are developing their targets. In addition, cooling was mentioned in the NDCs of 50 GCP Signatories.

Signatories of the GCP have formally committed to supporting established international initiatives aimed at reducing cooling emissions and improving access to cooling, including those led by the UNEP-led Cool Coalition. Their efforts seek to enhance both global collaboration and national policy actions (see **Boxes 9 and 10**).

Bangkok, Thailand. *Credit: Markus Winkler on Unsplash*

BOX 9: Signatories have formally committed to supporting established international initiatives aimed at reducing cooling emissions and improving access to cooling

1. **Albania** has set a target to reduce its CO2 emissions by 20.9% by 2030 compared to a 2016 baseline, **Antigua and Barbuda** aims to achieve an economy-wide reduction of 30% of GHG emissions below the Business As Usual (BAU) scenario by 2030, and **The Bahamas** aims for an economy-wide reduction of GHG emissions of 30% compared to its BAU scenario by 2030. The Bahamas' target is part of a broader plan that includes a national target to achieve a minimum of 30% renewables in the energy mix by 2030.
2. As part of the **European Union**'s Effort Sharing Regulation (ESR), **Belgium** is required to reduce its non-ETS sector emissions, which include buildings and transport, by 47% compared to 2005 levels by 2030.
3. **Cambodia**'s National Cooling Action Plan (NCAP) sets a target to reduce emissions from the cooling sector by 17% and electricity consumption by 20% by 2040.
4. **Chile** has a multi-pronged approach which is set to create and implement pilot programs on low climate impact devices in public procurement by 2027 at the latest, create national regulation on the use of HFC in large-scale air conditioning and refrigeration projects by 2028 at the latest, and establishing regulations and incentives program for HFC replacement in transportation and domestic air conditioning from 2030. Chile has a well-established MEPS program that will continue to strengthen.
5. **Ghana**'s early actions target 6.4MtCO2e HFC emission reductions by 2030 along with the promotion of energy efficient residential refrigerators and room air conditioners by 2030.
6. **Japan** targets 60% reduction in HFC consumption by 2030 and 77% reduction by 2040 compared with 2013 levels.
7. **Lebanon** is considering an accelerated KIP that targets 40% HFC Phase down by 2032.
8. **Mauritius** plans to reduce its carbon emissions in the Refrigeration and Air Conditioning sector by 66,596 CO2eq tonnes by 2029 which represent 10% of the country's baseline (average HFC consumption for year (2020-2022).
9. **The Netherlands** is following the EU F-gas regulations; however, it has further developed a plan for 55% emissions reduction in 2030 and climate neutrality in 2050.
10. In **Spain**, the NECP 2023–2030 sets for Spain an annual increase in the share of renewables in heating and cooling of 1.42% for the period 2021–2025 and 2.36% for the period 2026–2030. In addition, Spain is subject to the HFC phase-down quota system established within the European Union, which aims to reduce HFC emissions by 95% by 2030 compared to 2015 levels.
11. **UAE** has developed targets under the National Demand Side Management Program to reduce emissions by 3.5 mtCO2 by 2030 and 14 mtCO2 by 2050 as well as energy savings of 10 TWh by 2030 and 38 TWh by 2050.

BOX 10: Signatories to the GCP are backing established initiatives—such as UNEP's Cool Coalition—while advancing concrete national actions that cut cooling-related emissions and expand access

1. **Albania** targets a 20.9% CO_2 reduction by 2030 (vs. 2016).
2. **Antigua and Barbuda** aims for an economy-wide 30% GHG cut below BAU by 2030.
3. **The Bahamas** targets a 30% GHG cut below BAU by 2030 and at least 30% renewables in the power mix by 2030.
4. **Belgium**, under the EU Effort Sharing Regulation, will reduce non-ETS emissions (including buildings and transport) 47% by 2030 compared to a 2005 baseline.
5. **Cambodia**'s National Cooling Action Plan aims to cut cooling-sector emissions 17% and electricity use 20% by 2040.
6. **Chile** will: pilot low-climate-impact devices in public procurement by 2027; adopt national HFC rules for large AC/refrigeration projects by 2028; and, from 2030, introduce regulations and incentives to replace HFCs in transport and domestic AC; building on a strengthened MEPS programme.
7. **Ghana**'s early actions target 6.4 $MtCO_2e$ HFC reductions by 2030 and promote efficient residential refrigerators and room ACs.
8. **Japan** targets HFC cuts of 60% by 2030 and 77% by 2040 compared to 2013 baseline.
9. **Lebanon** is considering an accelerated KIP targeting a 40% HFC phase-down by 2032. Mauritius will reduce RAC-sector emissions by 66,596 tCO_2e by 2029 (≈10% of the 2020–2022 baseline).
10. **The Netherlands** follows EU F-gas rules and plans a 55% emissions reduction by 2030 and climate neutrality by 2050. Spain plans to increase the renewable share in heating and cooling by 2.36%/year between 2026 and 2030.
11. **The United Arab Emirates'** National Demand Side Management Programme targets emissions reductions of 3.5 $MtCO_2e$ by 2030 and 14 $MtCO_2e$ by 2050, alongside electricity savings of 10 TWh by 2030 and 38 TWh by 2050.

Credit: CHUTTERSNAP on Unsplash

11. *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.*

Progress on life cycle refrigerant management (LRM) was assessed through a review of Signatories' policies and regulations related to refrigerant management, servicing requirements, import and export controls, and refrigerant recovery and recycling requirements. The survey results indicate that 18 countries have established refrigerant management and service requirements, 4 have servicing requirements only, while 2 are in the progress of developing their requirements. Import and export control are a more established practice, with 33 countries having both measures in place, while 3 countries apply controls only for import. Finally, refrigerant recovery and recycling requirements are comparatively well established: 33 countries having established such requirements, 9 applying them only at end-of-life, and 4 applying them only during servicing.

Credit: Dominik on Unsplash

12. *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.*

A streamlined survey questionnaire was distributed to all GCP Signatories, with 29 countries submitting complete responses. Desk research was conducted to assess progress in the remaining 43 Pledge countries. This represents significant progress compared to the previous year; however, it remains important to improve feedback and ensure that participating countries provide timely and accurate information to the Cool Coalition to enable continued monitoring of progress towards the GCP target (**see Box 11**).

BOX 11: GCP Signatories actively participate in high-level meetings and technical trainings to implement the Pledge and drive collective progress

- **COP Annual Ministerial Roundtables:**

  Each year, Ministers and Heads of Delegation convene at the UN Climate Change Conference for the Global Cooling Pledge Ministerial Roundtable to review progress and set priorities. At COP29 (Baku, November 2024), more than 40 Signatories participated at a high level (minister or vice minister) in the COP29 Ministerial Roundtable where they formally adopted the Annual Global Cooling Pledge Progress Report 2024 and the 2030 Implementation Strategy. The upcoming COP30 Ministerial Roundtable (Belém, November 2025) will adopt the terms of reference for the Intergovernmental Committee on Cooling (IGCC), the Belém Communiqué on Extreme Heat, and the *Global Cooling Watch 2025* report, and will launch the operationalization of the Enabling Pledge Implementation for Cooling (EPIC) facility.

- **Annual Focal Points Meetings:**

  Signatory countries participate in technical meetings to facilitate structured dialogue, technical exchange, and coordinated planning. The first Global Cooling Pledge Signatories Focal Points Meeting (Bonn, June 2025) brought over 50 countries together to focus on discussing the IGCC governance, the Cool Champions initiative, and identify COP30 priorities. Also, Signatories engaged in technical capacity-building sessions, and thematic dialogues. These focus on integrating cooling into NDCs, developing National Cooling Action Plans (NCAPs), and unlocking climate finance through GEF and GCF, ensuring that countries are equipped to translate commitments into action.

- **Governance Development:**

  Signatories have played an active role in shaping the governance structure of the Pledge by meeting virtually. Following the proposal at COP29, focal points engaged in Bonn and in virtual meetings to finalize the IGCC Terms of Reference, which will provide formal coordination, peer learning, and accountability among Signatories, with adoption expected at COP30.

Through these channels, GCP Signatories ensure robust annual review, peer learning, and collective action, driving the implementation of the Global Cooling Pledge.

13. *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.*

During 2025, the UNEP-Cool Coalition provided Signatories with a streamlined questionnaire that include the relevant data required to track their commitments. The Cool Coalition has compiled all the 29 received responses in addition to the desk research conducted into a comprehensive database to be updated annually.

14. ***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.***

Early reported data on NDC, NAP, LT-LEDS, and Energy Plans suggest that many GCP Signatories are leveraging their Pledge targets to include cooling in different national, regional, and international climate commitments. To further accelerate progress, the operationalization of the EPIC facility is a key step. EPIC provides countries with technical and financial assistance to move from planning to implementation-supporting the development of National Cooling Action Plans (NCAPs), linking these plans to investment frameworks, and facilitating the adoption of MEPS and labelling updates. As countries work towards the 2026 cycle, EPIC will play a central role in helping Signatories agree on intermediate milestone targets, mainstream passive and urban cooling in building codes and procurement, and deploy sustainable cold-chains.

Priority Actions for 2026 Cycle

1. Agree on intermediate milestone targets for the 68% pathway—such as those suggested by the Global Cooling Watch 2025 report–and publish a common dashboard of indicators/proxies.

2. Scale NCAP development and implementation, linking to investment frameworks and MEPS/labelling updates.

3. Mainstream passive/urban cooling in building codes and procurement; expand sub-national uptake.

4. Operationalize LRM: technician certification, leak-testing, recovery/reclamation, and end-of-life enforcement.

5. Improve data/MRV systems: sales volumes, efficiency distributions, refrigerant banks/leaks, and cooling access; engage UNEP-hosted Cooling and Refrigeration Energy and Emissions Data (CREED) Working Group and IRR partners.

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