

SDG7 Energy Compact of Cool Coalition

A next Decade Action Agenda to advance SDG7 on sustainable energy for all in line with the goals of the Paris Agreement on Climate Change

SECTION 1: AMBITION 1.1. Ambitions to achieve SDG7 by 2030. [Please select all that apply, and make sure to state the baseline of each target] (Member States targets could be based on their NDCs, energy policies, national five-year plans etc. targets for companies/organisations could be based on their corporate strategy) Target: The Cool Coalition will accelerate access to sustainable cooling for all by providing support to Rwanda and India on integrated sustainable cold chain solutions; **I 7.1.** By 2030, ensure universal access to Cambodia on passive cooling solutions for extreme heat; India and Vietnam on urban cooling, Indonesia on a National Cooling Action Plan, and Colombia on district cooling. affordable, reliable and modern energy Time frame: 2030 services. Context for the ambition: Today, over 3 billion people face cooling risks because their health and safety are threatened, or sustainable solutions are unaffordable. Lack of effective cold chain directly results in losses of 475 million tonnes or 13% of total food production, worth \$350 billion, enough to feed 950 million people. We need to rapidly expand access to cooling services, but these solutions must be efficient and climate-friendly to be able to simultaneously deliver on the Paris Agreement, the Sustainable Development Goals and the Kigali Amendment to the Montreal Protocol. Target: The Cool Coalition will accelerate the transition towards clean energy through shifting the cooling energy demand towards renewables based cooling solutions by **▼ 7.2.** By 2030, increase substantially the supporting Nigeria, Cambodia, India, and Vietnam in expanding the market share of cooling solutions powered by renewable energy. share of renewable energy in the global Time frame: 2030 energy mix. Context for the ambition: There are ample and unequivocal evidence that the planet has approached dangerous tipping points caused by unsustainable consumption and production patterns. One of such patterns is for cooling. The global energy demand for cooling is growing rapidly. According to the International Energy Agency, the worldwide installed capacity of air conditioning systems has increased from less than 4 000 GW in 1990 to more than 11 000 GW in 2016 and the energy consumption for space cooling is expected to more than triple until 2050 (IEA 2018). This will require finding alternative solutions that enable the use of low-GWP refrigerants, that are more efficient and that are driven by renewable energy sources. The switch to these technologies would facilitate the elimination of the production of HFCs, which would avoid an estimated cumulative emission of 53 GtCO2e during 2020-2060 and has the potential of to avoid between up to 0.5°C of warming by the end of the century. Target: The Cool Coalition will accelerate the global transition to efficient and climate-friendly cooling for all, a key process for climate action and sustainable development. **☐ 7.3.** By 2030, double the global rate of Time frame: 2030 improvement in energy efficiency. Context for the ambition: Climate-friendly cooling could cut 8 years-worth of global emissions by 2050 and reduce the cost of renewable energy build out by \$3.5 trillion by 2030. Quite simply, through transformational action on climate-friendly cooling, we get to zero faster and cheaper we get to zero faster and cheaper with efficient, climate-friendly cooling. A Climate Action Pathway for Net Zero Cooling lays out, for the first time, a vision for action and key milestones necessary to fully implement the Paris Agreement and achieve net zero cooling by mid-century, while also contributing to the Kigali Amendment and o the UN's Sustainable Development Goals. Target: Double the number of government entities as members of the Cool Coalition from both national and subnational levels from 90 to 180 members **I 7.a.** By 2030, enhance international Time frame: 2023 cooperation to facilitate access to Context for the ambition: predictable, affordable climate finance, The Cool Coalition has come together rapidly under the recognition that ensuring the transition to efficient, climate-friendly cooling for all is fundamental for climate investments in energy infrastructure and action and sustainable development. Cooperation is fundamental to accelerating this transition, and under its umbrella, the Cool Coalition facilitates collaboration on clean energy technology, technology science, policy, finance and technology to meet growing demands for cooling in a comprehensive manner, all aimed at raising climate ambition in the context of the transfer, clean energy research and Sustainable Development Goals while complimenting the goals of the Kigali Amendment to the Montreal Protocol and Paris Climate Agreement. Together with its technology, including renewable energy, partners, the Cool Coalition works around three key pillars to accelerate the global transition to efficient and climate-friendly cooling. These include Advocacy; Highlighting energy efficiency and advanced and benefits and opportunities of efficient, climate friendly cooling; Action: Mobilizing commitments to action and targets from leaders in government, business, and civil

cleaner fossil-fuel technology, capacity

building in the context of sustainable development and poverty eradication.	society and connecting these to global policy processes; and Knowledge Exchange: Building an active learning community that breaks down silos and promotes cross-cutting approaches.
	To join, stakeholders are requested to sign the Cool Coalition endorsement form indicating in which cluster they would like to participate. In addition, new members are requested to indicate which actions they will take to advance the goals of the Cool Coalition, with the aim of demonstrating action in line with their commitment in first year of joining.
☐ 7.b. By 2030, expand climate-resilient infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular, Least Developed Countries (LDCs), Small Island Developing States (SIDS), and land-locked developing countries, in accordance with their respective programs of support.	Target: Time frame: Context for the ambition:

1.2. Other ambitions in support of SDG7 by 2030 and net-zero emissions by 2050. [Please describe below e.g., coal phase out or reforming fossil fuel subsidies etc.]

Target: Secure 26 commitments from governments, cities and industry on the pathway to net-zero cooling by COP 26

Time frame: 2022

Context for the ambition: Cooling solutions must be efficient and climate-friendly to achieve the Paris Agreement goals and Kigali Amendment to the Montreal Protocol. Cooling already accounts for 7% of GHG emissions and emissions are increasing rapidly. Meeting future cooling needs sustainably and achieving the refrigerant transition can reduce the costs of renewable energy build out by up to \$3.5 trillion by 2030 and accelerate the global transition to net-zero by up to 8 years.

SECTION 2: ACTIONS TO ACHIEVE THE AMBITION

2.1. Please add at least one key action for each of the elaborated ambition(s) from section 1. [Please add rows as needed].

	Action 1a – Engagement in support of enhancing Nationally Determined Contributions (NDC), National Adaptation Plan (NAP) and Long-term low greenhouse gas emission development strategies (LT-LEDS)	Start and end date 2021-2023
	Action 1b – Support the development of National Cooling Action Plans through the development of a comprehensive NCAP methodology and regional NCAP capacity building workshops. Cambodia and Indonesia committed to develop an NCAP using this methodology	Start and end date 2021-2025
	Action 1c – Enable cooperation and increased ambition among members of the Cool Coalition on initiatives that enhance access to sustainable cooling for all	Start and end date 2022-2030
	Action 2a – Increase in the membership of the Cool Coalition through 2021-2023 through awareness raising activities and advocacy to highlight the benefits and opportunities of efficient, climate friendly cooling. In addition, facilitate knowledge exchange by building an active learning community that breaks down silos and promotes cross-cutting approaches.	Start and end date 2021-2023
	Action 2b – Increase in the ambition of the Cool Coalition through 2021-2022 by joining the Race to Zero initiative as an Accelerator, joining the Race to Resilience, becoming one of the transformative coalitions put forward by the UN Food System Summit.	Start and end date 2021-2023
	Action 3a – Engage Cool Coalition member countries and private sector operators to secure new commitments to secure new commitments to the path to net-zero cooling by COP 26.	Start and end date 2021-2023

SECTION 3: OUTCOMES

3.1. Please add at least one measurable and time-based outcome for **each** of the actions from section 2. [Please add rows as needed].

Outcome 1a/Action 1a:

• Advocacy and outreach to countries to secure commitments to include cooling in their NDC at COP 26. Countries that have already signaled this intent include: Viet Nam, Ethiopia, Cambodia, Nigeria, Ghana, Dominican Republic, Barbados, Saint Lucia, Jordan, Burkina Faso, Pakistan, Morocco, Chile, and Tunisia.

Outcome 1b/Action 1b:

- Countries interested in developing National Cooling Action Plans have access to a consistent methodology that reduces demand for cooling and emissions and supports access to cooling for all across all relevant sectors
- Cambodia and Indonesia are developing NCAPs using the Cool Coalition methodology.
- The African Development Bank expressed interest in supporting two African countries in developing their NCAP with the methodology and the support of the Coalition.

Outcome 1c/Action 1c:

- Countries work with Cool Coalition members to demonstrate new approaches in under-addressed areas: Rwanda and India on integrated sustainable cold chain solutions; Cambodia on passive cooling solutions for extreme heat; India on urban cooling for extreme heat; Vietnam on urban cooling and a national cooling fund; Colombia on district cooling; Burkina Faso on social housing and appliance efficiency; Nigeria on renewable cooling.
- Awareness and action on sustainable cold chains for food and vaccines is catalyzed to reduce emissions and realize SDGs benefits, including through pilot projects in India and active participation at the UN Food Systems Summit.

Outcome 2a/Action 2a:

- Membership in the Cool Coalition doubles from a baseline of 90 government entities following the 2019 Climate Action Summit to 180 by 2022. In order to join the Coalition, stakeholders must indicate which actions they will take to advance the goals of the Cool Coalition, with the aim of demonstrating action in line with their commitment in first year of joining.
- Increased Cool Coalition membership enhances the effectiveness of interventions, projects and advocacy and contributes the development of a deeper knowledge base on cooling.

Outcome 2b/Action 2b:

• By becoming a Race to Zero accelerator the Cool Coalition will enhance the ambition of its members by supporting their members in their Race to Zero applications and by spreading awareness of the Campaign through messaging and events. Cool Coalition work is identified as Game Changing and Systemic Solution for the Summit by the Lead of the Food Systems Summit Action Track 1.

Outcome 3a/Action 3a:

- 26 commitments from governments, cities, and industry on the pathway to net-zero cooling are made prior to COP 26
- 16 country members have included commitments to reducing cooling emissions in their enhanced NDC. 3 major manufacturers have committed to HFC phase down plans and accelerate the switch to lower global warming refrigerants (Electrolux, Mabe and Engie), 2 announced deep decarbonization commitments (Danfoss, Carrier) and many more joined the EP100 Cooling Challenge (including Danfoss, Mabe and Godrej).

SECTION 4: REQUIRED RESOURCES AND SUPPORT					
4.1. Please specify required	If finance and investments for each of the actions in section 2.				
4.2. [For countries only] In	case support is required for the actions in section 2, please select from below and describe the required support and specify for which action.				
[Examples of support f	Examples of support for Member States could include: Access to low-cost affordable debt through strategic de-risking instruments, capacity building in data collection; development of integrated energy plans and energy transition pathways; technical assistance, etc.]				
Financing	Description:				
☐ In-Kind contribution	Description:				
☐ Technical Support	Description:				

☐ Other/Please specify	Description

SECTION 5: IMPACT

5.1. Countries planned for implementation including number of people potentially impacted.

The geographical coverage of this Energy Compact proposal is global since there is an incredible untapped potential for geothermal energy for heating and cooling. Nevertheless, the enabling activities will be developed with a particular interest in developing regions that showcase a substantial untapped geothermal potential.

- Sub-Saharan Africa
- Latin America and the Caribbean
- Southeast Asia
- Asia Pacific

Such regions are:

5.2. Alignment with the 2030 Agenda for Sustainable Development – Please describe how <u>each</u> of the actions from section 2 impact advancing the SDGs by 2030. [up to 500 words, please upload supporting strategy documents as needed]

In a warming world, cooling is an essential energy service that is crucial meeting many of the sustainable development goals including those related to health, nutrition, and productivity in the workplace. Today, over 3 billion people face cooling risks because their health and safety are threatened, or sustainable solutions are unaffordable. Lack of effective cold chain directly results in losses of 475 million tonnes or 13% of total food production, worth \$350 billion, enough to feed 950 million people. As demand for cooling grows, solutions must be efficient and climate-friendly to be able to simultaneously deliver on the Paris Agreement, the Sustainable Development Goals

5.3. Alignment with Paris Agreement and net-zero by 2050 - Please describe how <u>each</u> of the actions from section 2 align with the Paris Agreement and national NDCs (if applicable) and support the net-zero emissions by 2050.

[up to 500 words, please upload supporting strategy documents as needed]

Climate-friendly cooling could cut 8 years worth of global emissions by 2050 and reduce the cost of renewable energy build out by \$3.5 trillion by 2030. Quite simply, through transformational action on climate-friendly cooling, we get to zero faster and cheaper we get to zero faster and cheaper with efficient, climate-friendly cooling. A Climate Action Pathway for Net Zero Cooling lays out, for the first time, a vision for action and key milestones necessary to fully implement the Paris Agreement and achieve net zero cooling by mid-century, while also contributing to the Kigali Amendment and o the UN's Sustainable Development Goals. Cooling already accounts for 7% of GHG emissions and emissions are increasing rapidly. If left unchecked, growing demand for cooling and associated energy and emissions will jeopardize our ability to limit global warming to well under 2°C.

SECTION 6: MONITORING AND REPORTING

6.1. Please describe how you intend to track the progress of the proposed outcomes in section 3. Please also describe if you intend to use other existing reporting frameworks to track progress on the proposed outcomes.

We commit to reporting publicly every year to UN Energy on the progress made towards our goals, in a partnership with the Race to Zero. Monitoring is currently based on the Cool Coalition theory of change matrix, build on 4 components: governance, knowledge creation, advisory and demonstration, outreach and advocacy. Each of the components contains 3 specific outputs. The initiative's monitoring is conducted through donor reporting by the Secretariat and internal UNEP reporting in partnership with the Climate Action Summit team. A more formal monitoring structure is currently under discussion by the interim steering committee in conjunction with Race to Zero efforts.

SECTION 7: GUIDING PRINCIPLES CHECK LIST
Please use the checklist below to validate that the proposed Energy Compact is aligned with the guiding principles.
I. Stepping up ambition and accelerating action - Increase contribution of and accelerate the implementation of the SDG7 targets in support of the 2030 Agenda for Sustainable Development for Paris Agreement
I. 1. Does the Energy Compact strengthen and/or add a target, commitment, policy, action related to SDG7 and its linkages to the other SDGs that results in a higher cumulative impact compared to existing frameworks? ⊠Yes □No
I.2. Does the Energy Compact increase the geographical and/or sectoral coverage of SDG7 related efforts? ⊠Yes □No
I.3. Does the Energy Compact consider inclusion of key priority issues towards achieving SDG7 by 2030 and the net-zero emission goal of the Paris Agreement by 2050 - as defied by latest global analysis and data including the outcome of the Technical Working Groups? ⊠Yes □No
II. Alignment with the 2030 agenda on Sustainable Development Goals – Ensure coherence and alignment with SDG implementation plans and strategies by 2030 as well as national development plans and priorities.
II.1. Has the Energy Compact considered enabling actions of SDG7 to reach the other sustainable development goals by 2030? ⊠Yes □No
II.2. Does the Energy Compact align with national, sectoral, and/or sub-national sustainable development strategies/plans, including SDG implementation plans/roadmaps? ⊠Yes □No
II.3. Has the Energy Compact considered a timeframe in line with the Decade of Action? ⊠Yes □No
III. Alignment with Paris Agreement and net-zero by 2050 - Ensure coherence and alignment with the Nationally Determined Contributions, long term net zero emission strategies.
III.1. Has the Energy Compact considered a timeframe in line with the net-zero goal of the Paris Agreement by 2050? ⊠Yes □No
III.2. Has the Energy Compact considered energy-related targets and information in the updated/enhanced NDCs? ⊠Yes □No
III.3. Has the Energy Compact considered alignment with reaching the net-zero emissions goal set by many countries by 2050? ⊠Yes □No
IV. Leaving no one behind, strengthening inclusion, interlinkages, and synergies - Enabling the achievement of SDGs and just transition by reflecting interlinkages with other SDGs.
IV.1. Does the Energy Compact include socio-economic impacts of measures being considered? ⊠Yes □No
IV.2. Does the Energy Compact identify steps towards an inclusive, just energy transition? ⊠Yes □No
IV.3. Does the Energy Compact consider measures that address the needs of the most vulnerable groups (e.g. those impacted the most by energy transitions, lack of energy access)? ⊠Yes □No
V. Feasibility and Robustness - Commitments and measures are technically sound, feasible, and verifiable based a set of objectives with specific performance indicators, baselines, targets and data sources as needed.
V.1. Is the information included in the Energy Compact based on updated quality data and sectoral assessments, with clear and transparent methodologies related to the proposed measures? ⊠Yes □No

V.3. Has the Energy Compact considered issues related to means of implementation to ensure feasibility of measures proposed (e.g. cost and financing strategy, technical assistant needs and partnerships,

V.2. Has the Energy Compact considered inclusion of a set of SMART (specific, measurable, achievable, resource-based and time based) objectives? \boxtimes Yes \square No

SECTION 8: ENERGY COMPACT GENERAL INFORMATION

policy and regulatory gaps, data and technology)? ⊠Yes □No

8.1. Title/name of the Energy Compact

Cool Coalition Energy Compact

8.2. Lead entity name (for joint Energy Compacts please list all parties and include, in parenthesis, its entity type, using entity type from below)					
The Cool Coalition in partnership with its members and entities supporting the Secretariat (UNEP, the Race to Zero. Clean Cooling Collaborative)					
8.3. Lead entity type					
☐ Government	☐ Local/Regional Government	☑ Multilateral body /Intergovernmental Organization			
□ Non-Governmental Organization (NGO)	☐ Civil Society organisation/Youth	☐ Academic Institution /Scientific Community			
☐ Private Sector	☐ Philanthropic Organization	☐ Other relevant actor			
*Lily Riahi, Coordinator, Cool Coalition: lily.riahi@un.org *Sophie Loran, Lead, Advocacy and Outreach, Cool Coalition: sophie.loran@un.org					
8.5. Please select the geographical coverage of the Energy (Compact				
□ Africa □ Asia and Pacific □ Europe □ Latin America and Caribbean □ North America □ West Asia □ Global					
8.6. Please select the Energy Compact thematic focus area(s)					
☑ Energy Access ☑ Energy Transition ☐ Enabling SDGs through inclusive just Energy Transitions ☑ Innovation, Technology and Data ☐ Finance and Investment.					

SECTION 9: ADDITIONAL INFORMATION (IF REQUIRED)

Please provide additional website link(s) on your Energy Compact, which may contain relevant key documents, photos, short video clips etc. https://coolcoalition.org/