











PresentationNDC Cooling Guide Structure



Ben Hartley Programme Manager, Cooling for All SEforALL











Why are adaptation targets important?





Food, Nutrition and Agriculture

Cold chains for transportation and storage of perishable, nutritious crops to prevent food waste.



Health Services

Cold chains for transportation and storage of vaccines and blood products. Space cooling of health facilities to support better overall care and patient recovery.



Human Comfort and Safety

Cooling of homes and workplaces for health and wellbeing, leading to improved economic and social outcomes.



Cities

Reducing the urban heat island effect (UHIE), which can cause temperatures to be 1°C to 4°C higher than surrounding areas.



Translate cooling targets into NDCs Commitments



ESTABLISHED PROCESS

KIGALI AMENDMENT

HFC production and consumption reduction

Step-wise reduction schedule for production and consumption of HFCs, measured in CO₂eq

RECOMMENDED

NATIONAL COOLING ACTION PLAN

Cooling sector targets affecting several sectors:

MITIGATION: Energy and Industrial Processes and Product Use/HFCs ADAPTATION: Health, food, cities and sustainable development

GLOBAL COOLING PLEDGE

Collective reduction of 68% of cooling-related emissions by individual measures targeting refrigerant transition, appliance efficiency, buildings and research



- Integrate HFC reporting in national inventory report
- Align assumptions for business-as-usual and mitigation scenarios
- Define contribution to national targets



PARIS AGREEMENT

GHG emissions mitigation and adaptation

REQUIRED

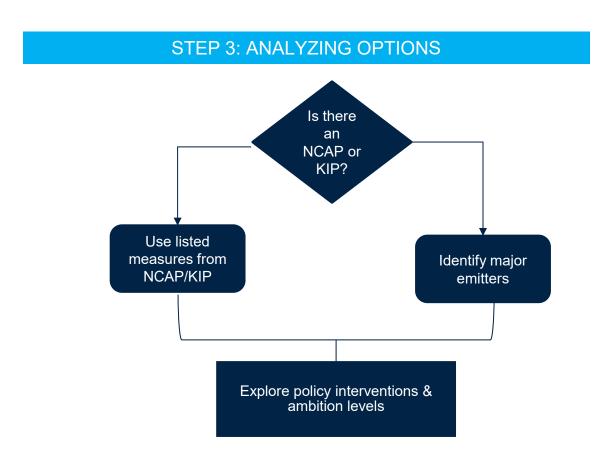
- National GHG emission mitigation target
- · National scenarios
- HFC emission reporting (in t CO₂eq) only mandatory for industrialized countries
- Plan of policies and measures to achieve target
- MRV system to track progress

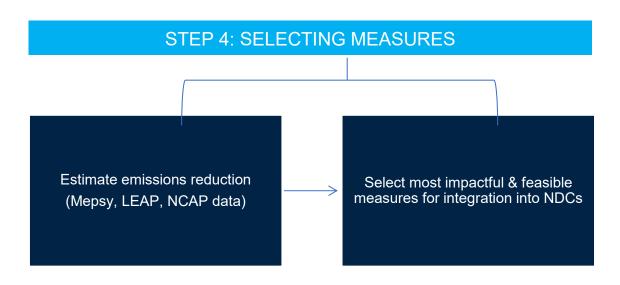
OPTIONAL

- National energy efficiency targets/ambitious and mandatory MEPS and labels for key cooling appliances
- HFC phase-out targets for sectors with established alternatives
- Reporting on adaptation measures

Stage 3: Target Formulation







Part 2: Adaptation Measures into NDCs



Starting with key **GUIDING QUESTIONS** can help surface the suitable leverage points and priorities for the country.

- How well understood is the lack of access to cooling in your country? What data gaps exist?
- What are the most vulnerable sectors in your country that would benefit from cooling adaptation measures?
- How can your country balance the need for advancing cooling access for *tomorrow* with the urgency of providing adaptation solutions *today*?
- What resources, networks and innovative models can be leveraged to achieve the necessary speed and scale for advancing adaptation solutions where they are needed the most: the poorest of the poor

Stage 1: Baseline definition

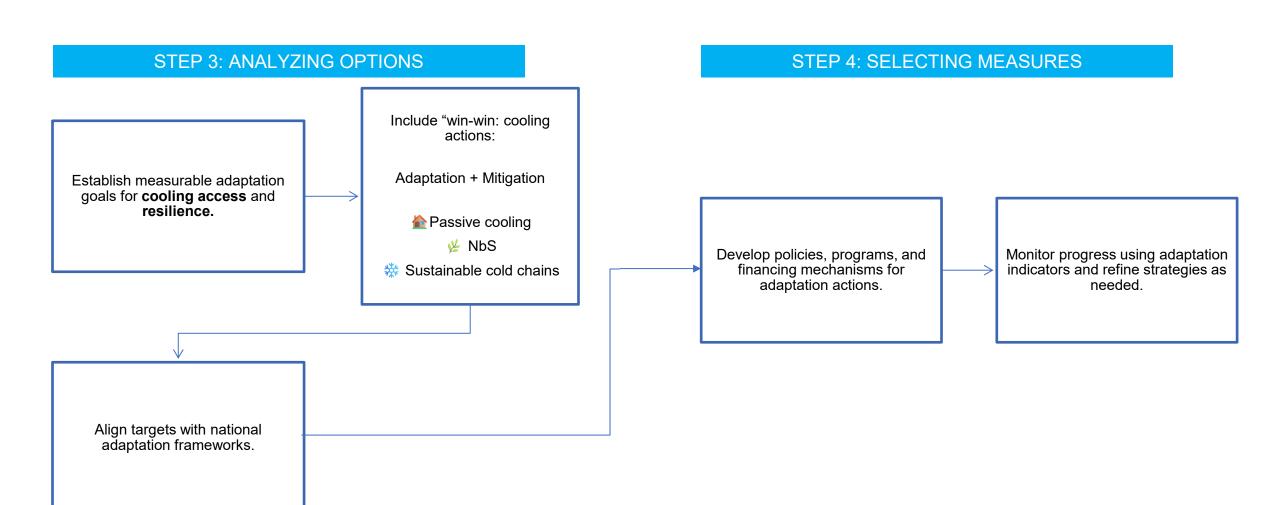


STEP 2: DEFINING THE BASELINE

			CEPT.
Population Group/Cooling needs	Comfort & Safety	Food & Nutrition	Health & Care
Rural Poor (high risk)	No fans or insulation	No cold chains for crops or livestock	No cold chains for vaccines or medicines
Urban Poor (high risk)	Poor housing, intermittent power	Inadequate food preservation infrastructure	Poorly equipped and built urban clinics
Lower-Middle Income (medium risk)	Low-cost, inefficient cooling devices	Variable quality and efficiency of cold chain access	Variable quality and efficiency of cold chain access

Stage 2: Target Formulation





Panel Discussion

Integrating Cooling into NDCs: Assessing Readiness and Next Steps



Leslie Smith
Director, Ministry of Climate
Resilience, the Environment
and Renewable Energy
Grenada



Uboho Ekpo
Principal Scientific Officer,
National Council on Climate
Change Secretariat
Nigeria



Le Ngoc Tuan
Deputy Director General
Department of Climate Change
Ministry of Agriculture and
Environment
Vietnam





Amr Seleem
Country Engagement &
Climate Policy Lead,
Cool Coalition, UNEP











Strategic Support We Provide

The NCAP working group:

- Co-chaired by UNDP and Cool Up, with members from international organizations, financial institutions, development agencies, and CSOs.
- Facilitate countries in developing and implementing holistic NCAPs using the NCAP Methodology.
- Promote alignment of NCAPs with broader climate and energy frameworks, including KIPs, NDCs, energy efficiency strategies, and net-zero plans.
- Foster capacity-building, knowledge-exchange, and technical guidance for stakeholders involved in cooling policy.
- Advance access to sustainable cooling by integrating unmet cooling needs into national planning.
- Facilitate matchmaking and guidance on resource opportunities e.g. MDBs, partners, etc.







Case Study

Cambodia - from piloting the methodology to lessons learned from NCAP implementation



H.E. Pak Sokharavuth
Under Secretary of State
Ministry of Environment, Cambodia











Cambodia's Leadership on Passive Cooling

Since early 2023, Cambodia has been implementing its NCAP through the project 'Passive Cooling Strategies for Sustainable Development,' aiming to integrate passive cooling into national policies and practices in collaboration with ESCAP & UNEP within the Cool Coalition framework

Outputs:

- 1. Policy recommendations incorporating PCS in building energy regulations
 - Typology technical analysis + Compendium of Passive Cooling Strategies (PCS) + Abridged Guidebook on PCS + Guidelines for PCS (under review)
- 2. Demonstration of PCS applications in a pilot building
 - Design Charrette in Borey Chankiri (two days)
 - Local data building with baseline & strategies, on site monitoring (1 year)
- 3. Awareness and capacity building for large-scale replication
 - Launch of a Community of Practice, provision of a series of workshops and technical trainings, including training of trainers
 - Regional knowledge exchange with Governments & Technical peers
- **4. Support for integration** of NCAP to Cambodia's CCSP 2024-2033 and the inclusion of GHG emission reductions from PCS in the target for Cambodia's Nationally Determined Contributions (NDC 3.0).





NCAP Kick-Off in Morocco

- The kick-off meeting for Morocco's NCAP was successfully launched on May 27, 2025, in Rabat, Morocco.
- The event convened key stakeholders, including representatives from Moroccan Ministries, the private sector, agencies, sustainable development organizations, and national experts, to mark the pivotal start of the NCAP's development.
- Opening speeches (UNEP Cool Coalition, Moroccan ministries, and CCAC)
 emphasized the global importance of NCAPs, Morocco's commitment to
 environmental sustainability, and the integration of the plan within national
 energy and climate goals, followed by an overview of the NCAP
 development process and interactive discussions.

Objectives of the meeting:

- i. to present the different components of the project,
- ii. to lay the foundations for a concrete action plan for sustainable cooling,
- iii. to share the expectations and priorities of the various stakeholders,
- iv. to initiate a participatory process.

















Morocco NCAP Inter-Ministerial Meeting

- The high-level meeting of the National Steering Committee for the NCAP project was held on **May 28, 2025**, at the Ministry of Energy Transition and Sustainable Development in **Rabat, Morocco**.
- Attended by key national stakeholders and consultant teams, the primary objectives were to establish a clear governance framework, define roles and responsibilities for committee members, and outline robust coordination mechanisms for the NCAP.
- Discussions focused on the Steering Committee's mandate, stakeholder identification and composition, clear role definitions for members, and the coordination mechanisms necessary for effective project oversight and seamless collaboration among all involved entities.











Morocco NCAP Consultation Mission

On May 29, 2025, a consultation mission took place in Casablanca, Morocco, which included three visits focused on collecting crucial data for the National Cooling Action Plan (NCAP).

- 1. 1st visit to Moroccan Association of Refrigeration Professionals (AMPF): A key organization promoting sustainable practices, collaborating on the Refrigair Expo, and actively supporting NCAP development through a focus on energy efficiency, climate-friendly refrigerants, and training.
- 2. 2nd visit to Ventec Maroc: A company with a significant history in Morocco's cooling sector since 1949. Initially focused on industrial ventilation, then, Ventec evolved into a major HVAC presence, representing Carrier and demonstrating expertise in advanced cooling systems like evaporative cooling.
- 3. 3rd visit to FROIDEL S.A.: A leading Moroccan company with over 44 years of experience in refrigeration and air conditioning. Recognized for its innovative and energy-efficient solutions, particularly in decarbonization, serving diverse sectors and manufacturing its own brand alongside international representations.







Froidel S.A. Visit

Session Wrap-up

Sustainable Cooling in focus: Priorities for the road ahead



Mr. Amr Seleem
Country Engagement & Policy Lead
Cool Coalition – UN Environment Programme

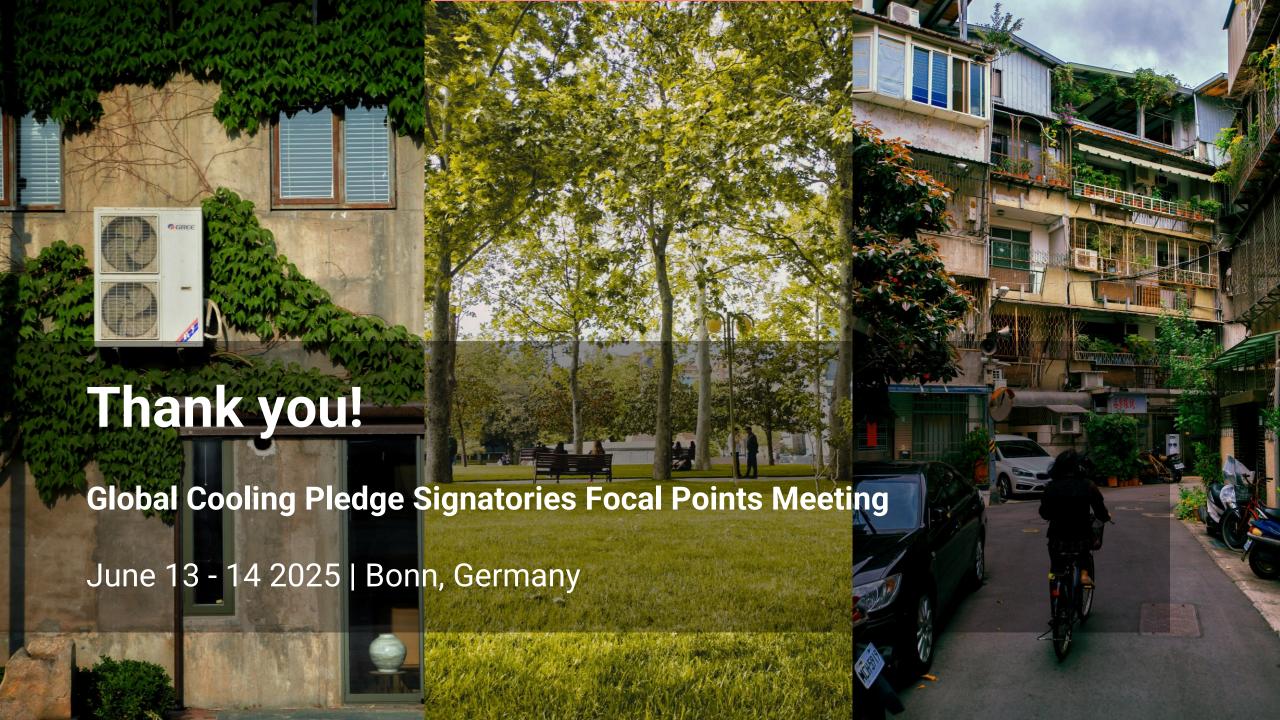














Welcome and Introduction Cooling in NDCs and NCAP methodology



Amr Seleem
Country Engagement
and Climate Policy Lead
Cool Coalition
Secretariat, UNEP







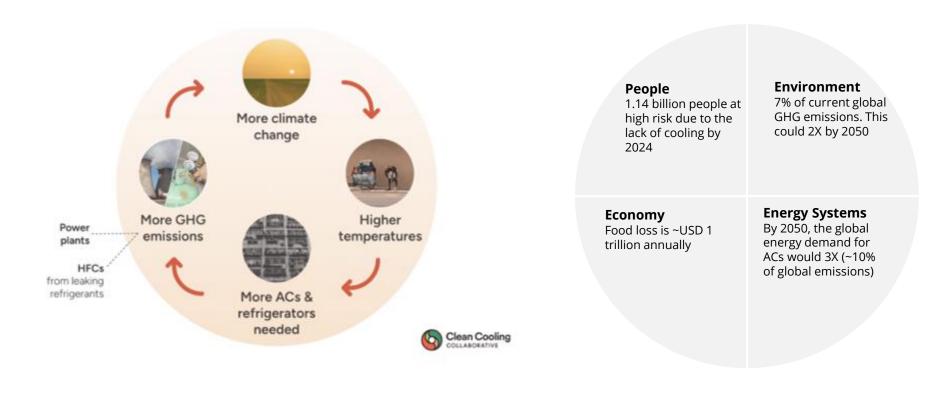




Cooling and Climate: A Vicious Cycle



The Vicious Cooling Cycle



Breaking this cycle with sustainable cooling is urgent.

Cooling and SDGs: A Development Imperative





Sustainable cooling enables **economic growth** for those in poverty



Cooling reduces food waste and increases nutritional value of food that reaches people



Cooling **reduces heat stress** and improves sleep, increasing physical and mental well-being



Cool schools **improve learning outcomes** and reduce fatigue



Cool cities, buildings and homes support equal opportunity for women and men













Sustainable cooling **reduces energy use** and peak demand, while enabling **more reliable energy access**

Cooling **increases worker productivity** and increases profits

Cool cities, cold chains and public institutions **reduce inequalities** based on gender, wealth or location

Cool cities **support urban populations** by improving their health and productivity

Cooling reduces **food waste, cuts emissions**, and supports **cleaner production**.

Sustainable cooling **emits no or minimal** energyrelated and refrigerant **emissions**

Why are mitigation targets important?



Global









Phase down of climatewarming refrigerants

Passive cooling

Energy efficiency Grid decarbonizati on

- Implementing 3 key actions passive cooling, best practices could avoid up to 60% of projected cooling-related greenhouse gas emissions
- Equivalent to 3.8 billion tons of CO₂eq emissions 10% of project 2050 emissions

Examples

Indonesia	NCAP aims to avoid 128 MtCO2e by 2030
India	NCAP aims to reduce 118 MtCO2e by 2040
European Union	F-gas regulations aim to cut emissions by 310 MtCO2e by 2050
Kenya	NCAP aims to cut 23 MtCO2e by 2050



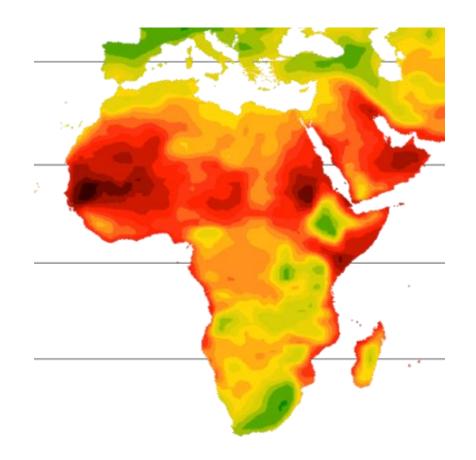


In a warming world, access to cooling is not a luxury. It is an issue of equity, necessary to adapt and thrive.

1.14 bn

People at high risk for the lack of cooling

Do you know the cooling access gap in your country?



Part 1: Mitigation Measures into NDCs



The cooling sector is <u>multi-dimensional</u>. Starting with key guiding questions can help surface the suitable leverage points and priorities for the country.

- What are the unique drivers and/or needs in your country? For example:
- UAE: Driven by the need to reduce building sector energy consumption and emissions
- Nigeria: Driven by need for adaptation to rising temperatures
- Grenada: Bold national vision (world's first HFC-free island nation)
- How can your country balance the need for increased cooling access with emission reduction goals?
- What existing governance structures could be leveraged to integrate cooling into your NDC?
- What data gaps exist in your country regarding cooling demand and access?

Methodology Guide for Mitigation



Stage I:

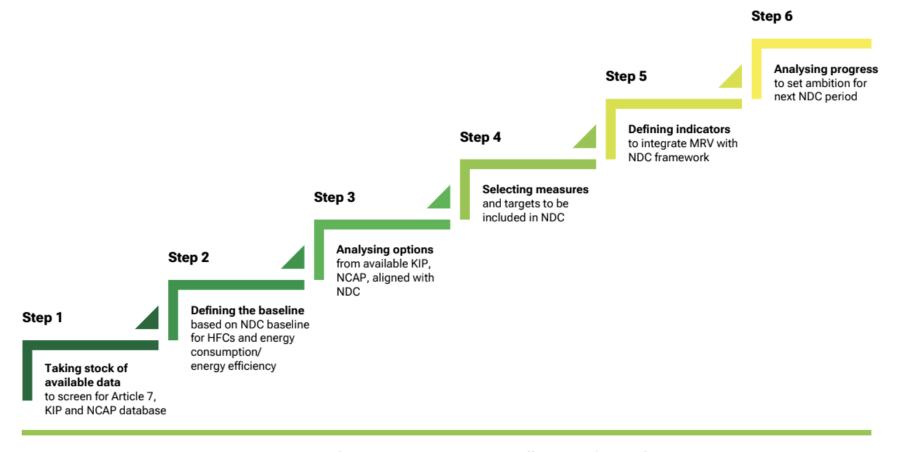
Baseline definition in alignment with NDC

Stage II:

Target formulation and integration in national NDC target

Stage III:

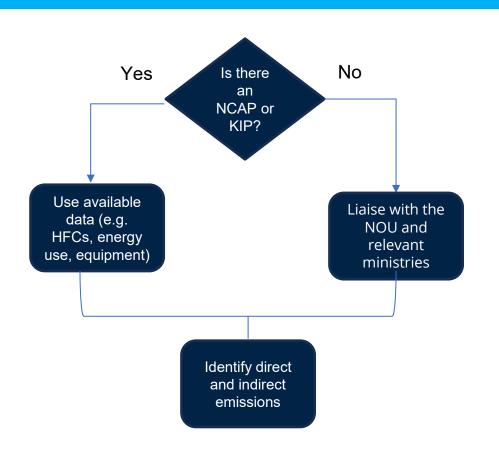
MRV of implementation and ambition review



Stage 1: Baseline definition (1/3)



STEP 1: TAKING STOCK OF DATA



- KIP focuses on reducing HFC emissions in line with the Kigali Amendment
- NCAP addresses both direct (HFCs) and indirect (energy use) emissions and includes broader goals like equitable access to cooling.

Stage 1: Baseline definition (2/3)



STEP 1: BASELINE DEFINITION (DIRECT)

Emissions from HFCs

NCAP data is not available

Use Article 7 data to report on HFC emissions

Include KIP targets in NDC

Track progress using KIP reporting

Work on NCAP data to have a disaggregated data set

Start the process again with next NDC update

NCAP data is available

Ensure that NCAP assumptions are aligned with national scenario assumptions

Ensure NCAP data is updated regularly

Use the same data base for NDC cooling targets

Ensure integration of NCAP data with Hydrofluorocarbons Phase Out Management Plan (HPMP)/KIP/Article 7 data

Maintain MRV system to track progress based on the same data set

Regularly revisit and improve data system

KEY CONSIDERATIONS:

- Align with national targets: Use the same baseline year and assumptions as your NDC and GHG inventory.
- **Leverage Kigali data:** Article 7 HFC reports are a primary source for setting baselines.
- Report non-cooling HFCs separately: Include uses like firefighting and foams; some may count toward NDC mitigation via KIP.

Stage 1: Baseline definition (3/3)



STEP 1: BASELINE DEFINITION (INDIRECT)

Emissions from electricity use

NCAP data is not available

Work on NCAP data to have a disaggregated data set

Ensure that NCAP assumptions are aligned with national scenario assumptions

Start the process again with next NDC update

NCAP data is available

Ensure that NCAP assumptions are aligned with national scenario assumptions

Ensure plausibility of modelled cooling sector's share of total energy consumption

Ensure NCAP data is updated regularly

Use the same data base for NDC cooling targets

Maintain MRV system to track progress based on the same data set

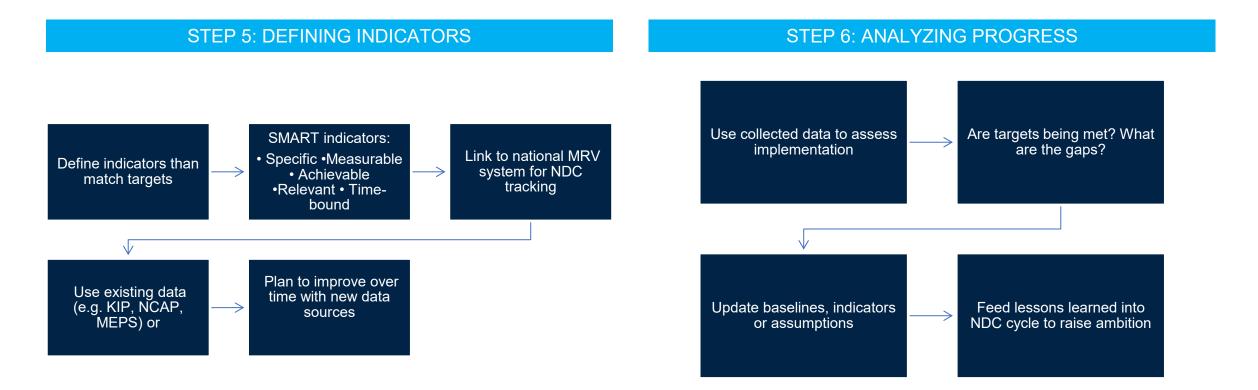
Regularly revisit and improve data system

KEY CONSIDERATIONS:

- **Ensure consistency:** Align cooling energy data with national scenarios to support accurate emissions tracking.
- Use existing sector analysis: Build on any available studies of energy demand (e.g. for lighting, refrigeration, AC) to improve the baseline.

Stage 3: MRV of Implementation and Ambition Review



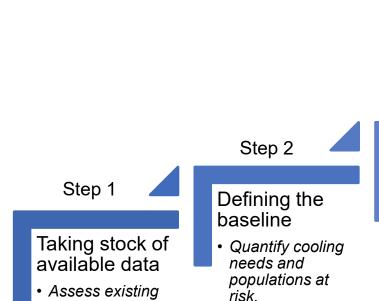


Methodology Guide for Adaptation

Stage I Baseline definition in alignment with NDC

Stage II Target formulation and integration in national NDC targets

Stage III MRV of implementation and ambition review



risks, data, and vulnerabilities.

Step 3 Selecting measures Analysing with highest options · Identify cooling

strategies to reduce heat risk. Prioritize actions adaptation value.

Step 4

Analysing progress Monitor implementation, adjust for greater impact.

Step 5

Defining

indicators

Develop metrics

to track cooling

adaptation.

Step 6

Stage 1: Baseline definition



STEP 1: TAKING STOCK OF DATA

Identify populations at risk due to extreme heat, considering: - Heat stress exposure - Energy access (on/off-grid) - Poverty rate *Consider gender-disaggregated data *Consider gender-disaggregated data

Use this as starting point for defining adaptation targets and tracking improved adaptive capacity

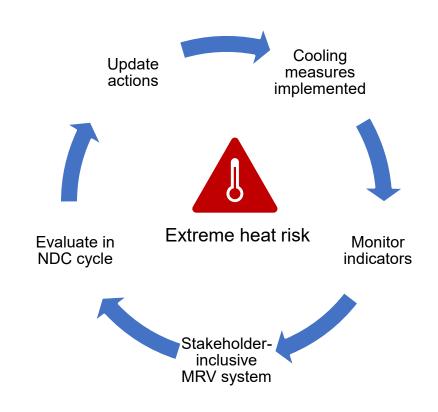
Stage 3: MRV of Implementation and Ambition Review



STEP 5: Defining Indicators

Human Comfort and Food, Nutrition, and **Health Services** Safety **Agriculture** % of buildings **Primary** % of households % and # of vaccines. Needsupported by passive with access to medicines and medical cooling refrigeration products lost annually based **Indicators** Heat-related % of food loss · # of health lacking cold illness/mortality storage facilities · % of households owning cooling devices · Workdays/GDP lost Volume and • % of the target population Secondary covered by all vaccines Needannually due to heat proportion of food included in the national based loss and waste in stress Indicators % of the urban the value chain program population with % of population access to public facing undernourishment green spaces or food insecurity

STEP 6: Analysing progress



Prioritize gender-disaggregated indicators to track equitable access to cooling and adaptation benefits.

Support Package



Are you a Global Cooling Pledge Signatory? If yes, then please reach out to the Cool Coalition Secretariat to schedule a call to arrange the NDC support to help you integrate cooling measures into the upcoming NDC submission.

Our support package for Global Cooling Pledge Signatories include:

- Support to compile and collect high-level cooling sub-sectoral data.
- Assess the GHG impact of sustainable cooling and develop long-term scenarios to provide recommendations for relevant NDC areas and assisting in formulating both qualitative and quantitative NDC targets for mitigation and adaptation.
- Support coordination among sectoral technical lead agencies (as per IPCC sectors, including Energy, IP, etc.)
- The NDC Cooling Working Group members can provide guidance and advisory support

Means of support are as per country requirement and resource availability can include local and international expert support to provide technical and coordination assistance.

Global Scale Up:

Applying NCAP methodology and Introduction to NCAP Working Group



Mr. Amr Seleem

Country Engagement & Climate Policy Lead

Cool Coalition – UN Environment Programme











The National Cooling Action Plan Methodology





















UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION









A great example of global cooperation, the development of a holistic NCAP methodology offers a standardized yet **adaptable framework that any country can apply** to guide the creation of comprehensive NCAPs.

Over 10 countries are already using the methodology, supported by a strong network of international partners.



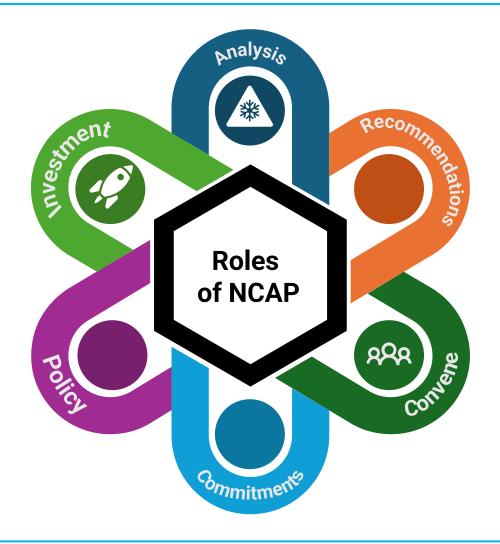


Key Role of NCAP

Establish a strong **political will** and meaningful **nationwide directives**

Drives governance and market signals for investment

Drive a synergistic approach
leveraging inter-linkages with other
government agendas, aligning
cooling policies across multiple
sectors and dimensions



Set actionable targets to improve cooling access, while reducing environmentally harmful impacts maximizing the socio-economic benefits

Bring together the actors required to coordinate energy efficiency and conservation with the refrigerant transition incl.

HFC phase down

Evidence base for increasing climate ambition and to integrate cooling in NDCs and climate change policies





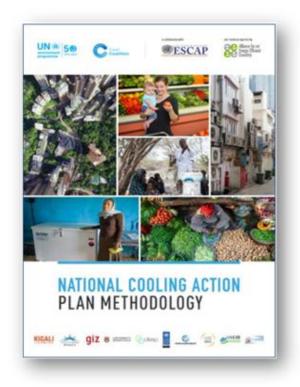
NCAP Methodology: Supporting Cooling Action at a 'National' Level

PURPOSE: A **holistic but modular** 'guidemap' for the development of NCAPs that –

- Drives integrative action across multiple sectors of cooling and considers access to cooling for all
- Sets direction and actionable targets for addressing access to cooling while reducing its environmentally harmful impacts & maximizing the socio-economic benefits

DESIGN: Recognizing the **diverse needs and context** across countries, the Methodology is:

- Highly customizable to a country's priorities and capacities
- A process that is within the reach of most countries TODAY and can enable immediate and prioritized action towards climate-friendly cooling
 - Not a prescriptive approach; not a modeling framework



NCAPs establish sectoral baseline and long-term policy scenarios with policy, finance and technology recommendations





Underlying Principles of the Methodology

To support its objectives, three fundamental characteristics are present in every step of the Methodology:

1. Adaptability is critical.

 Methodology provides guidance while affording NCAP development teams high levels of discretion and flexibility to adapt to countries' unique context and needs

2. Simplification and prioritization are important.

- The methodology has to be simple and logical; enabling countries to prioritize (and/or phase out) the steps based on their resource availability/constraints
- Data collection has to be kept simple; excessive data requests can overwhelm the stakeholders and add unnecessary complexity (even resistance!)

3. Multi-stakeholder and collaborative development right from the start

- Mechanisms for effective inter-government and triple-sector engagement
- Importance of a nodal/coordinating entity that owns and drives the process







Private sector & industry



Government entities







Integrated Approach to Addressing Cooling

- First, reduce the cooling loads to the extent possible
 - Such as, through thermally efficient building design and construction, and passive cooling practices in case of the building sector
- Then, serve the cooling loads efficiently & with low-climate impact
 - Such as, with appropriate and efficient cooling equipment and solutions that use environment-friendly refrigerants to deliver the required amount of cooling with less energy and lower overall emissions
- And, optimize the cooling operations and behaviors
 - Such as, through good O&M practices, user adaptations etc. to ensure that cooling is delivered only to where and when it is needed

Right-size the demand for cooling and optimize the supply of cooling; apply both strategies in conjunction





Underlying Characteristics of the Methodology

STAGE I: CONTEXTUAL ASSESSMENT & PLANNING STAGE II: COOLING DEMAND ASSESSMENT

STAGE III: SYNTHESIS & NCAP CREATION

* NCAPs Data Collection Framework STEP 1

COUNTRY-CONTEXT MAPPING

High-level mapping of cooling landscape using existing data & knowledge

STEP 2

NCAP PLANNING AND PRE-WORK

Establishing core guiding components of the development process, such as broad priorities, key stakeholders, and engagement and governance structures

* NCAPs Data Collection Framework

STEP 3

SECTOR-WISE CURRENT AND FUTURE COOLING DEMAND ASSESSMENT

Conducting thorough data-driven assessments of the current and future cooling demand for each of the chosen cooling sectors STEP 4

SECTOR-SPECIFIC RECOMMENDATIONS & SOLUTIONS

Identifying solutions and future pathways for each of the cooling sectors using the sector-wise analysis STEP 6

DEVELOPMENT OF

Developing and

prioritising NCAP

impact of NCAP

recommendations

recommendations;

mapping the expected

INTEGRATION NCAP RECOMMENDATIONS

Consolidating sectorspecific assessments into a cohesive cooling assessment; identifying crosssectoral synergies

STEP 5

STEP 7

NCAP REPORT & IMPLEMENTATION GUIDANCE

Creating an actionable NCAP report, embedded with an implementation and governance framework

MULTI-STAKEHOLDER COLLABORATION





Current and Future Cooling Demand Assessment

STAGE I:

CONTEXTUAL ASSESSMENT

& PLANNING

STAGE II:

COOLING DEMAND

ASSESSMENT

STAGE III:

STAGE III:

SYNTHESIS & NCAP

CREATION

- Utilization of Data Assessment Frameworks to identify and collect key data indicators for quantifying the current and future cooling demand for each sector
- Key analytical steps:
 - Establish Baseline: provides a baseline for the Country's cooling demand (and impacts)
 - Determine BAU growth: gives an informed view onto the impacts of the future growth and the 'cost of doing nothing'
 - Determine Intervention scenario: gives an informed view into the impact of readily accessible interventions, and the gaps and opportunities to consider
- This analysis is pivotal for identifying and developing the NCAP recommendations and pathways to accelerate the country's transition towards low climate-impact cooling

Intended outcome:

- Baseline cooling energy demand for each cooling sector; related emissions
- Energy saving potential and emission reduction potential through readily accessible interventions
- Identification of priority interventions & critical gaps to address





NCAP Report and Implementation Guidance

STAGE I: CONTEXTUAL ASSESSMENT & PLANNING STAGE II: COOLING DEMAND ASSESSMENT STAGE III: SYNTHESIS & NCAP CREATION

- Key expected outcomes of the NCAP & how they support the country's climate commitments and development priorities
 - Impacts in terms of: energy savings, emissions reduction, supporting access to cooling, other socio-economic co-benefits aligned with the country's priorities and/or SDGs (example: jobs required in the future servicing sector)
- Embedding 'implementation guidance' into the NCAP important considerations:
 - Establish an institutional framework to monitor the progress of NCAP implementation – such as, an 'NCAP Cell' within the nodal government entity
 - **Identify a recalibration protocol** Provision to review and update NCAP at interim milestones of 3-5 years to review implementation progress and to update NCAP using latest information
 - To the extent possible, provide a ballpark estimate of the cost of implementing the NCAP to inform the distribution of government budget

Intended outcome:

An actionable document that has the 'ownership' and a governance structure in place for guiding and monitoring future actions (and as-needed calibration) towards sustainable cooling





NCAP Methodology Regional Approach

Why a Regional Approach?

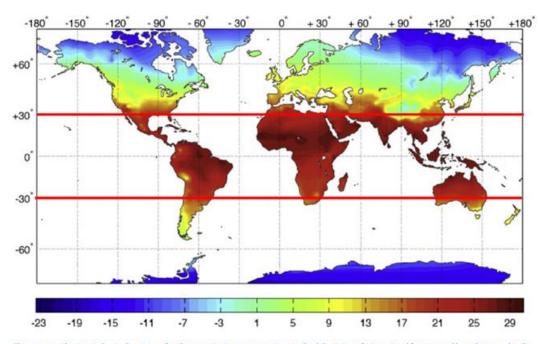
- Similar ambient temperature conditions
- Developing economies
- Potential similar interventions (passive cooling, alternative refrigerants, energy efficiency options)
- Culture perspective

Regional contextualization of NCAP methodology

- UNEP and RCREEE within the Cool Coalition framework are developing a regional NCAP methodology for the MENA region jointly with SEforALL, UNDP, AfDB, and Cool Up, supported by CCAC
- The methodology is being guided by a Regional Technical Advisory Group for NCAP, constituted with MENA countries as members

▶ Building regional partnerships to accelerate NCAP adoption

- Established Regional Technical Advisory Group for NCAP for the MENA region joined by 12 member states
- Forged partnerships among UNEP, AfDB and RCREEE to support 5 NCAPs in Africa



This map is without prejudice to the status of or the sovereignty over any territory, to the delimitation of international frontiers and boundaries, and to the name of any territory, city, or area

Source: Moniur Mourshed. 2016

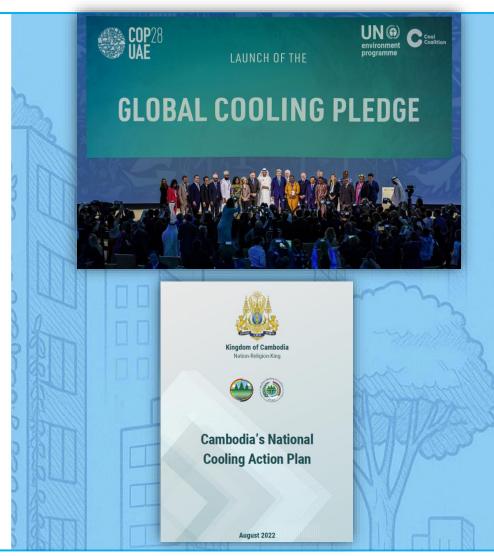




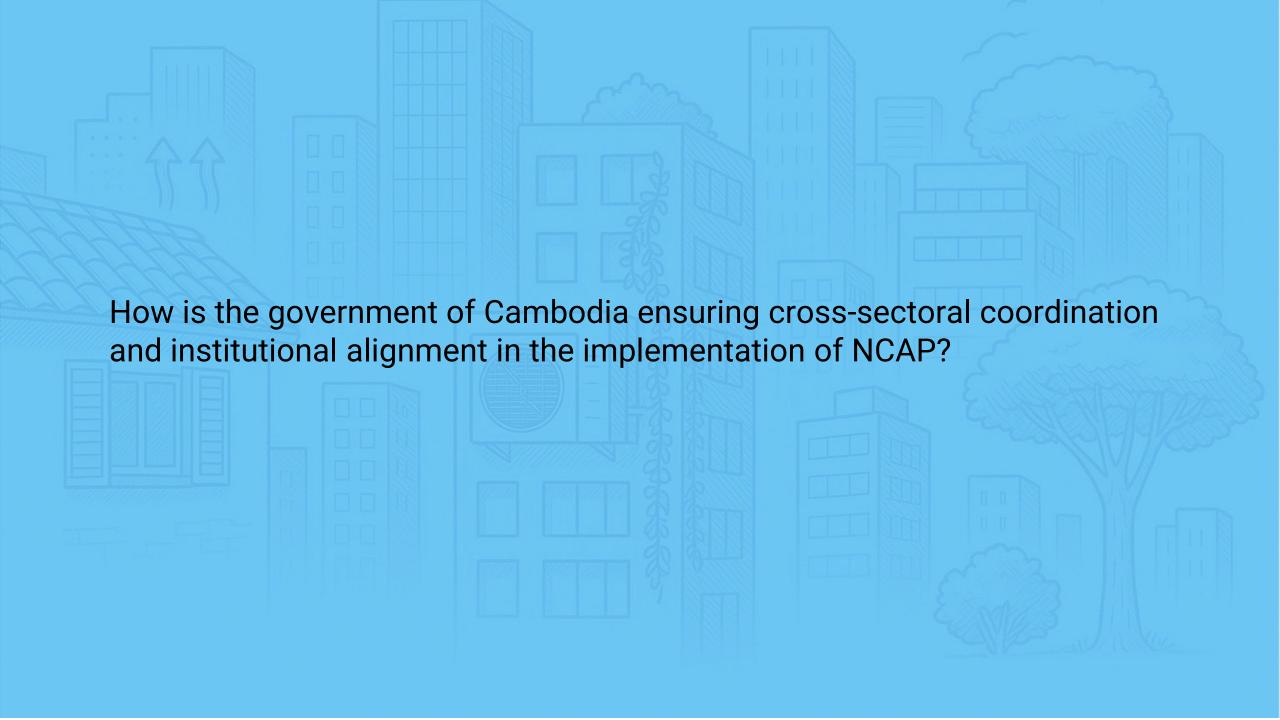
Cambodia's National Cooling Action Plan

- Cambodia has been strong advocate for promoting sustainable cooling globally and being a part of 71 signatories of the Global Cooling Pledge at the COP 28 in 2023.
- Cambodia is the first country to adopt NCAP methodology and launched its National Cooling Action Plan with vision to tackle extreme heat and handle the cooling challenge comprehensively in an integrated manner.
- National Cooling Action Plan (NCAP) supports Cambodia's long-term development vision in building a sustainable, clean, green, and low-carbon society based on climate-friendly strategy and energy-efficient technology in the cooling sector.

NCAP focuses on five main areas: (1) Building Space Cooling, (2) Food Cold Chain, (3) Healthcare Cold Chain, (4) Mobile Air Conditioning, and (5) Process Cooling.







Cambodia's Strategy for Cross-Sectoral Coordination in NCAP Implementation

- The Ministry of Environment (MoE) is leading the coordination with Inter-ministerial such as NCSD, MLMUPC, MME, MISTI, and strategic engagement with development partners;
- Integration with national Policies, Strategy, and Plan
 - ✓ Cambodia's Long-Term Strategy for Carbon Neutrality (LTS4CN)
 - ✓ Cambodia Climate Change Strategic Plan (CCCSP) 2024–2033
 - ✓ Cambodia's Nationally Determined Contributions (NDC 3.0)
- Inter-Ministerial Consultations and Workshops: hosted a series of inter-ministerial workshops to gather inputs, build consensus, and validate the NCAP and related guidance documents;
- Capacity Building and Sectoral studies: worked with ITC University, and national and international experts to conduct cross-sectoral technical studies on passive cooling strategies, at building level (building efficiency and resilience) and city level (to tackle urban heat island effect (UHIE);
- Partnership with the Private Sector and Development partners such as UNEP's Cool Coalition, UN-ESCAP, Energy Foundation China, GlobalABC, Climateworks Foundation, and Urbanland.
- **Monitoring and Reporting**: The MoE will play a coordinating role in tracking progress and facilitating regular inter-agency dialogue.





Case Study

Morocco's NCAP development and vision for implementation



Dr Mouna Benmabrek

Head of Gas Emissions Service - Department of
Sustainable Development

Ministry of Energy Transition & Sustainable
Development











National Cooling Action Plan (NCAP)

Introduction

- The National Cooling Action Plan (NCAP) is a vital operational framework designed to implement sustainable cooling measures through targeted policies, programs, and technologies, aiming to address the country's growing cooling demands in a sustainable, equitable, and climate-resilient manner.
- The project is implemented by the UN Environment Programme (UNEP) Cool Coalition and the Regional Centre for Renewable Energy and Energy Efficiency (RCREEE), with the support of the Climate & Clean Air Coalition (CCAC).
- <u>Cool Coalition</u> is establishing a methodological framework that adopts global NCAP Methodology to the region's specific cooling context of the MENA region.







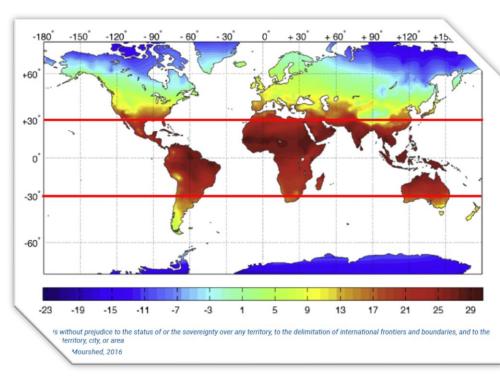




Why Morocco?

Morocco Context

- Growing cooling demands across multiple sectors (space, healthcare, food, industrial processes) are driven by increasing temperatures due to climate change and rapid urbanization.
- The NCAP perfectly aligns with Morocco's national priorities and its international commitments, including the Global Cooling Pledge, the Kigali Amendment, and its engagements with CCAC.
- Tackling environmental challenges and advancing a sustainable energy future, positioning the NCAP as a crucial tool to achieve these broader national development and climate objectives.
- Continuing of the implementation process for the action plan targeting short-lived climate pollutants (CH4, HFCs, BC, O3) that was developed in 2021 with technical and financial support from the CCAC.
- Morocco NDC: A set of energy-saving measures, including the implementation of MEPS for refrigerators and air conditioners.









Vision of Morocco NCAP

Scale up and mobilize all stakeholders—public authorities, industry, experts, civil society—to build a concrete and integrated roadmap for sustainable, socially, technologically advanced, and environmentally friendly cooling through:

- Satisfaction of cooling demand.
- Improving energy efficiency.
- Promoting eco-friendly refrigeration and air conditioning technologies.
- ❖ Training for professionals in the cooling sector: skills in system maintenance and also in the design and development of new technologies.
- ❖ Developing standards and regulations to encourage both the use of more efficient technologies and the promotion of research and development of energy-efficient technologies.













Open Discussion

Advancing NCAPs: Strategies for Implementation, Financing, and Monitoring



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Q&A Session

- 1. What is your status on NCAP?
 - a) Exploring/preparation phase b) Development phase c) Implementation phase
- 2. What are the challenges in developing comprehensive NCAPs (e.g. data availability, integrated assessment, inter-sectoral coordination) And what strategies can governments adopt to effectively address these obstacles?
- 3. How can we translate NCAPs into an effective finance mobilization tool?
- 4. How can governments ensure effective implementation and monitoring of NCAPs? Please share mechanisms that may have proved to be successful (in your experience).