



NDC Webinar #7

Why Cooling Matters:

A Step-by-Step Guide to integrating the Cooling Sector into NDCs

Online | 20 June 2024 | NDC4 webinar series



On behalf of:



of the Federal Republic of Germany



Agenda

Time (UTC)	Topic	Speaker
14:00-14:05	Opening Remarks	Tizian Pfeiffer, GIZ Proklima
14:05-14:20	Why the Cooling Sector matters for ambitious NDCs	Paola Bustillos Castillo, GIZ Proklima
14:20-14:40	Tools and guidance to integrate the Cooling Sector into NDCs – a Live presentation	Irene Papst, HEAT GmbH
14:40-15:00	Cooling NDC Consultation hour	All participants



Why the cooling sector matters for ambitious NDCs

Paola Bustillos Castillos
GIZ Proklima

Cool Contributions fighting Climate Change II

20/06/2024 | Paola Bustillos



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Supported by:



Federal Ministry
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Nuclear Safety and Consumer Protection



based on a decision of
the German Bundestag

Why the cooling sector is important?

- Based on current policies, between now and 2050 the installed capacity of cooling equipment globally will almost triple
 - more than doubling of electricity consumption
 - 6.1 billion tons of carbon dioxide equivalent (CO_{2e}) in 2050

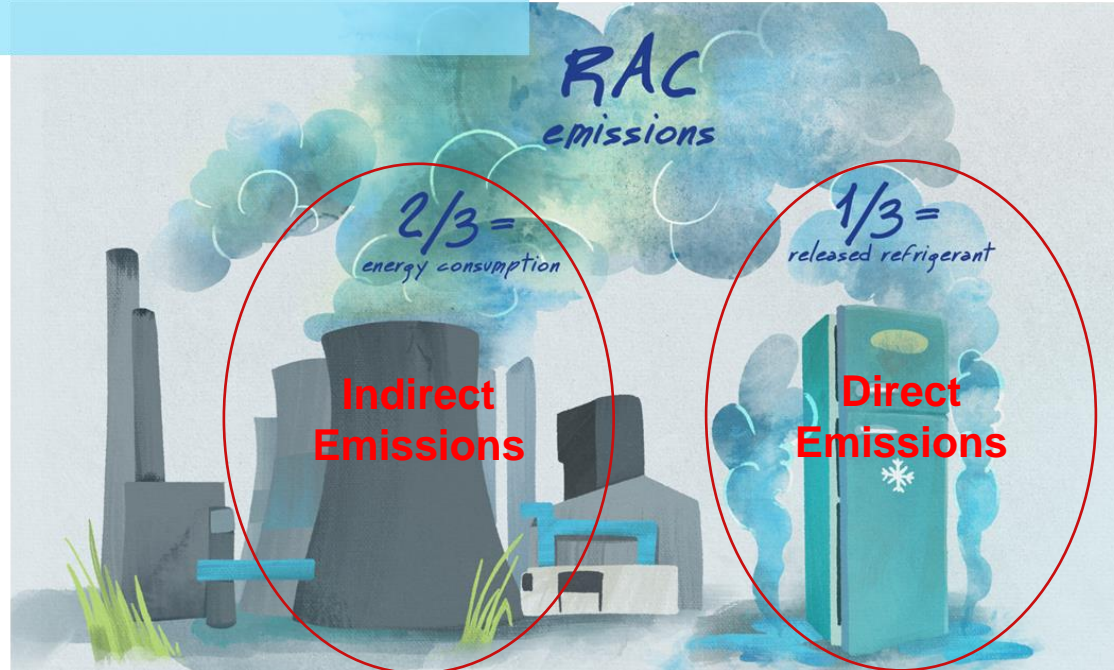


Source: *Global Cooling Emissions Model, Global Cooling Watch 2023, UNEP*

Why the cooling sector is important?

4.1 billion tons of carbon dioxide equivalent (CO_{2e}) in 2022 (*Global Cooling Watch 2023, UNEP*)

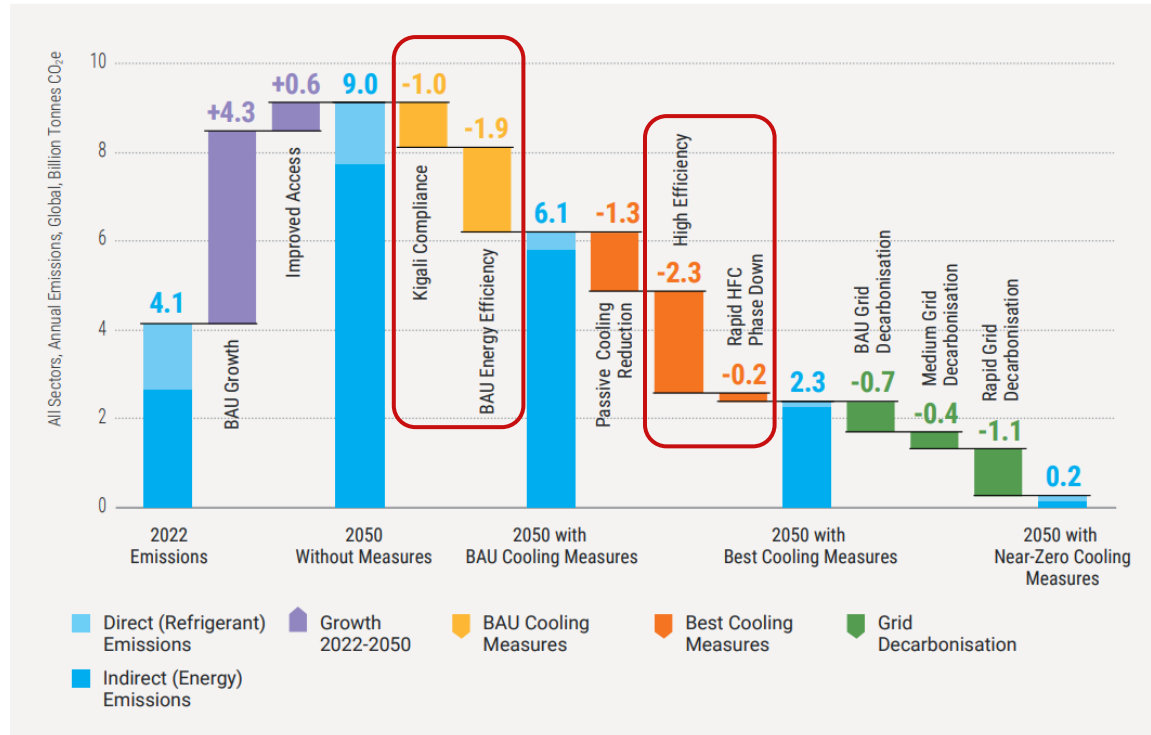
Emissions from the RAC sector



Integrated action is needed

1. Passive strategies to address extreme heat and reduce cooling demand in buildings and in the cold chain.
2. Higher energy efficiency standards and norms for cooling equipment.
3. A phase down of climate-warming hydrofluorocarbon (HFC) refrigerants at a faster rate than is required under the Kigali Amendment to the Montreal Protocol, while improving the energy efficiency of cooling equipment.

Figure ES-1: Global pathway and key steps to achieve near-zero GHG emissions from cooling, 2022-2050



Cool Contributions fighting Climate Change II (C4 II)

Commissioned by: German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) within the International Climate Initiative (IKI)

Partner Countries: Grenada, Costa Rica, Philippines

Project Budget: 2,900,000 EUR

Project Duration: 07/2021 – 06/2025

- Support to the three partner countries in improving national structures for the implementation of NDC strategies in the RAC sector
- Supporting further countries in the application of best practices and methods in the development of NDC measures for the RAC sector
- Development of concepts, strategic approaches and publications in cooperation with relevant institutions



Cool Contributions Fighting Climate Change II (C4 II)



C4 II is a continuation of the project C4 and builds on the successful cooperation with international organizations as well as public and private partners in the target regions



C4 II is a transregional project

- continues the cooperation with the established partner countries Costa Rica, Grenada and the Philippines
- ad-hoc requests from other countries are to be processed



C4 II considers holistic climate protection strategies for the refrigeration sector as a contribution to national climate protection plans (NDCs)



C4 II contributes to the harmonization between measures of the Montreal Protocol (MP) and the Framework Convention on Climate Change (UNFCCC).

Questions & Answers

Tools and Guidance to integrate the Cooling Sector into NDCs – a live presentation

Irene Papst
HEAT GmbH



Tools and guidance to integrate the Cooling Sector into NDCs – a Live presentation

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Content

Rationale and Barriers

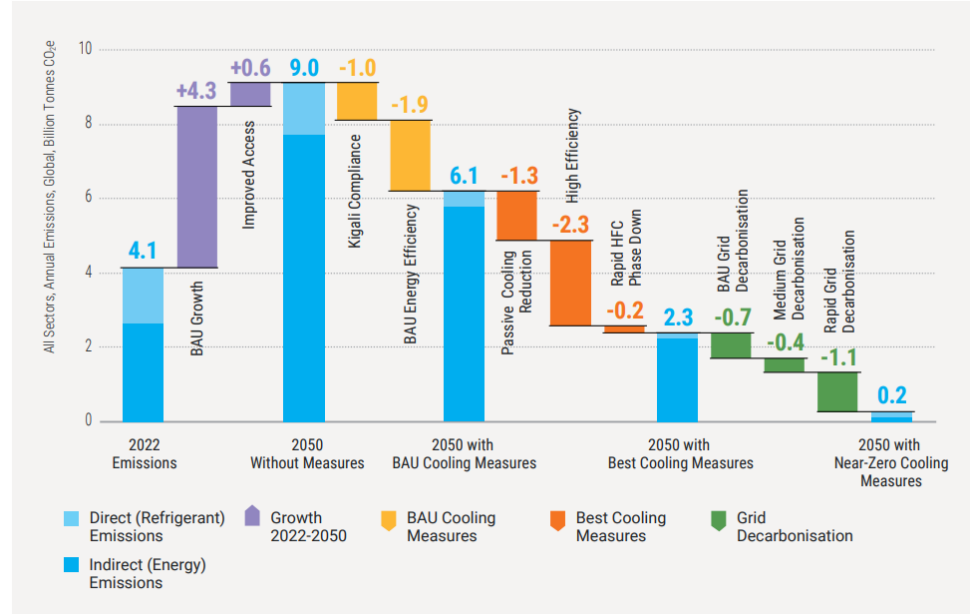
Partner Country Example

One step at a time

Rationale

- Growing cooling demand and thus emissions from refrigeration and AC
- Integrated topic that requires mainstreaming into development policy and climate policy
- Policy options are clearly outlined
- Global Cooling Pledge

Figure ES-1: Global pathway and key steps to achieve near-zero GHG emissions from cooling, 2022-2050



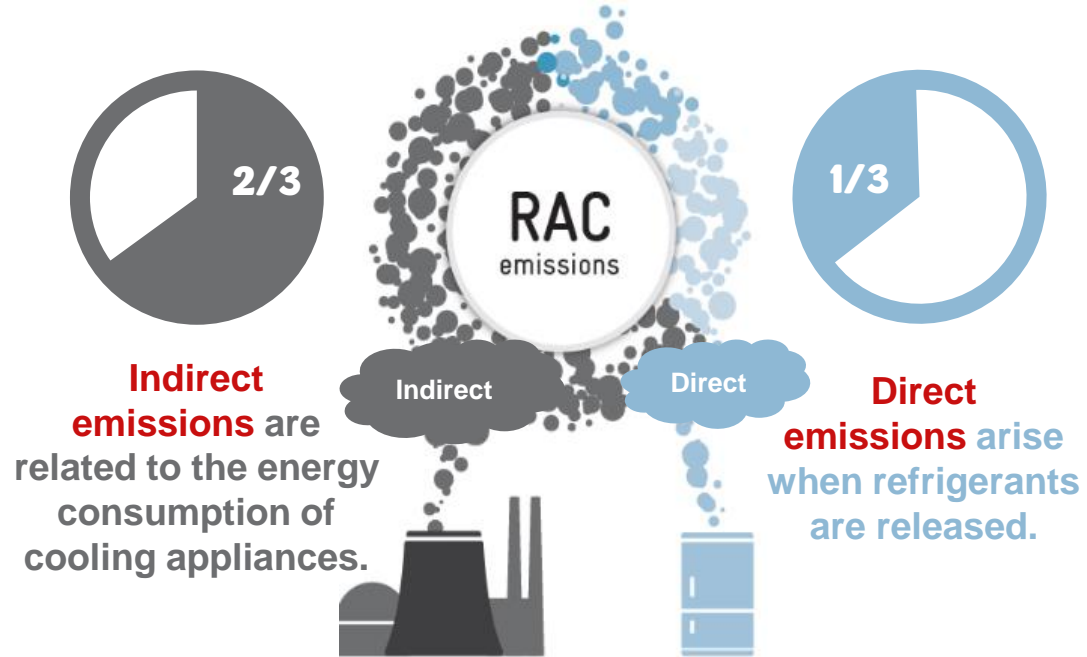
Note: Blue bars show emissions in 2022 and 2050. Purple bars indicate growth. Yellow bars indicate BAU Cooling Measure emission reductions. Orange bars indicate Best Cooling Measure emission reductions. Green bars indicate emission reduction due to electricity grid decarbonisation.

Source: Keeping it chill, UNEP 2023



Barriers

- Low political support
- Different government bodies are involved. E.g.
 - National Ozone Unit
 - Energy Efficiency Dept.
 - Physical Planning
- GHG reporting of F-gases is still voluntary for developing countries
- Limited data availability



Some countries are more advanced than others...

- The RAC NDC in Grenada is implemented following the National Cooling Action Plan (NCAP)
- The NCAP was developed under the C4 I Project and endorsed in 2021
- Currently, the NCAP is revised to include progress made
- An implementation plan is under development
- The National Climate Change Committee acknowledged the contribution of the RAC sector during a workshop in 2024



National Cooling Action Plan for Grenada

A sector mitigation strategy in contribution to Grenada's Nationally Determined Contribution (NDC)



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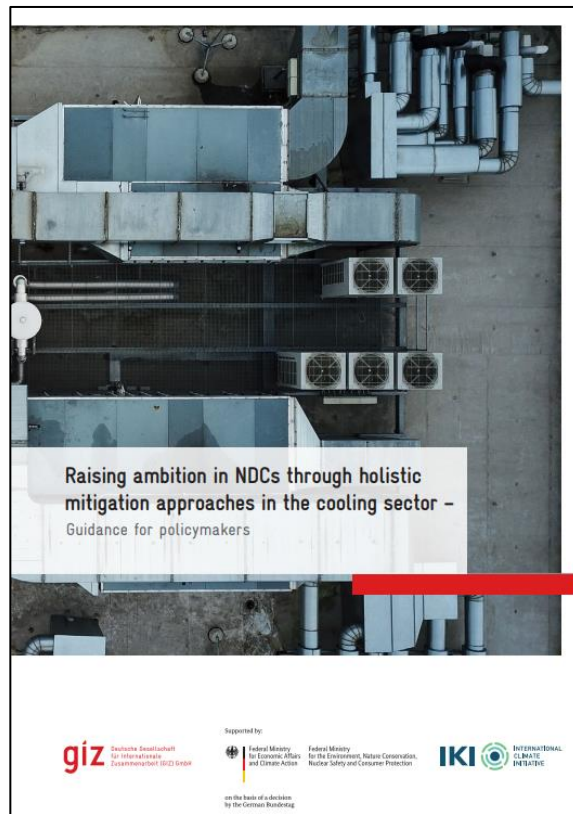
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How to get started

Guideline for policy makers

5 – Step approach to integrate cooling sector targets into the NDCs

- Extensive list of possible measures
- Benchmarking tool
- Links to background information



Consultation Hour

Join our Alliances

Join the Green Cooling Network



The members of the

Green Cooling Network

are all committed to energy-efficient and climate-friendly refrigeration & air conditioning.

Join the network and become part of the Green Cooling community today!

www.green-cooling-initiative.org/network

Become a COPA member



The **Climate and Ozone Protection Alliance (COPA)**

is open to all countries and organisations willing to support the global shift to sustainable refrigerant management and closing the loop to a circular economy in the cooling sector.

Find more information on the COPA Website:

[Climate and Ozone Protection Alliance - Become a Member \(copalliance.org\)](http://copalliance.org)

NDC Helpdesk for the cooling sector

The NDC Helpdesk is your resource for expert guidance in the field of Green Cooling. Our mission is to assist policymakers in designing and implementing ambitious Nationally Determined Contributions (NDCs) in the cooling sector.

Areas of Support

- ❄️ Development and implementation of National Cooling Action Plans
- ❄️ NDC cooling sector integration and formulation of trackable mitigation targets
- ❄️ HFC emission calculation and reporting under the UNFCCC (Tier 1 and Tier 2)
- ❄️ GHG Inventories in the cooling sector
- ❄️ Development of a Monitoring, Reporting and Verification (MRV) system in the cooling sector
- ❄️ Any question concerning our provided tools and guidelines

Request our support here:



Contact: ndc4@giz.de

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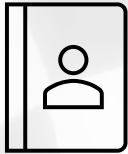
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The NDC helpdesk for the cooling sector is provided by the global project Cool Contributions fighting Climate Change II (C4 II) which is part of GIZ Proklima. C4 II is funded by the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) under the International Climate Initiative (IKI).

Contact

Thank you for your participation!
Please do not hesitate to contact us with any concerns, questions or requests.



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