

### **MOP34**

Shedding light on a blind spot through the Climate and Ozone Protection Alliance: leveraging the vast emissions reduction potential of correct disposal of ODS and HFC banks 2 November 2022, Montreal



### AGENDA

Welcoming Remarks	Ajiniyaz Reimov, UNDP
The Climate and Ozone Protection Alliance	Ellen Michel, GIZ Proklima, Head of COPA Secretariat
COPA activities in Ghana and the general need for ODS and HFC banks management	Philipp Denzinger, GIZ Proklima
Solutions for ODS and HFC banks management	Maria José Gutierrez, Tradewater
Q&A	All
Conclusion and closing remarks	Ole Nielsen, UNIDO



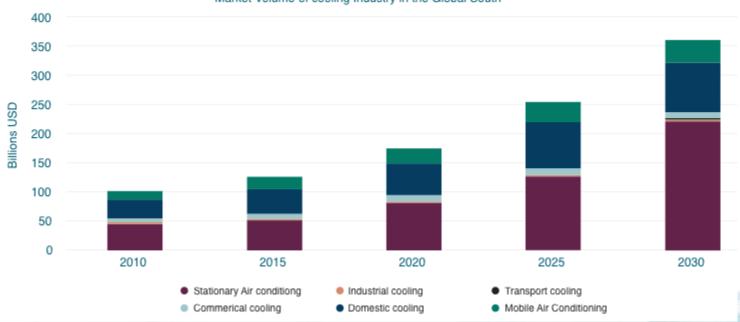
Welcome Remarks
 Ajiniyaz Reimov – UNDP



2. The Climate and Ozone Protection Alliance Ellen Michel, GIZ



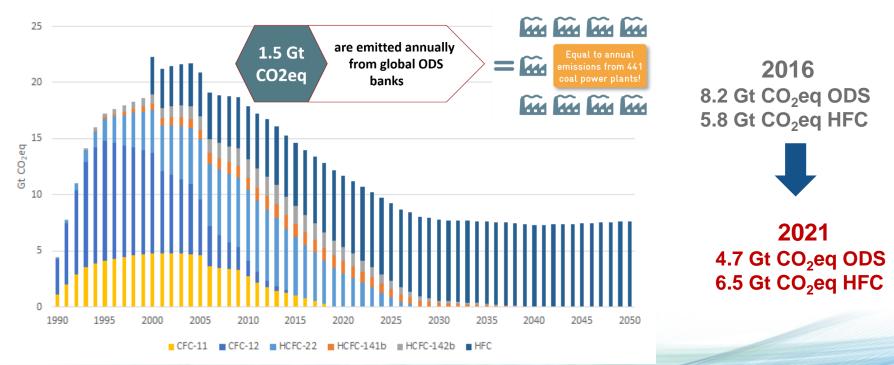
#### **THE CHALLENGE**



Market Volume of cooling Industry in the Global South



#### **GHG EMISSIONS FROM GLOBAL ODS AND HFC BANKS**



Source: GIZ – Global banks of ozone depleting substances (2018)



#### **THE GAP**



Policy Framework Financing Mechanism Collection Infrastructure Recycling and Destruction Infrastructure

Due to a general lack of appropriate political and regulatory frameworks as well as infrastructure, the collection, recycling and destruction of waste containing ODS and HFC presents a major challenge.

Neither the Montreal Protocol nor any other international environmental convention regulates the management and destruction of existing ODS banks.

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### INTRODUCTION

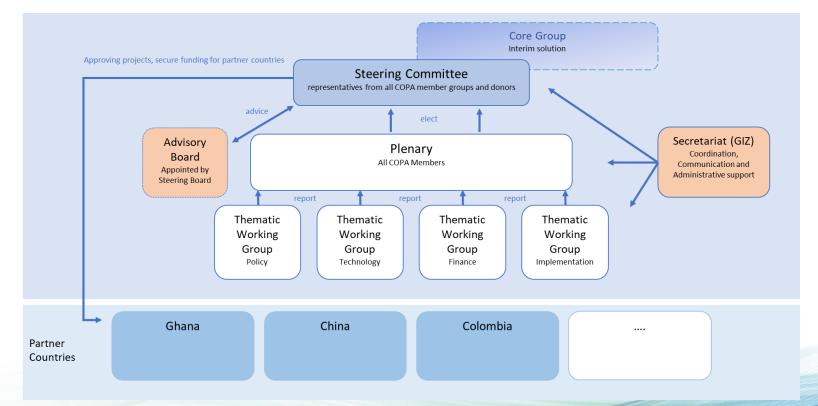
#### Approach

COPA works jointly with partner countries and diverse actors across private and public sectors to advance the holistic solutions needed to reduce ODS and HFC banks, and ultimately complete the shift in the cooling sector to sustainable refrigerant management.

mplemented by:		In cooperation with:	Supported by:
giz	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	UNITED NATIONS	Federal Ministry for Economic Affairs and Climate Action
			on the basis of a decision by the German Bundestag



#### **COPA GOVERNANCE STRUCTURE**





### **IMPACT THROUGH ACTION**

- Raise global awareness
- Bring actors together
- Advance holistic solutions
- Promote a global shift

Closing the loop to a circular economy in the cooling sector through sustainable refrigerant management





#### FIRST RESULTS & WORK IN PROGRESS

#### **Global Activities**

 Set-up of an international Alliance
 → COPA 2. Establish Thematic Working Groups (TWGs) 3. Promote International dialogue & knowledge transfer



#### **Technical advice & Mutual learning**

Mobilize financial capacities for continuous sector emission mitigation

#### **Partner Countries activities**

### Pilot project development:

- Status Quo Analysis
- Concept development
- Assistance in acquiring international finance

**Pilot project implementation** in selected metropolitan regions:

- · Services and infrastructure
- Training of technicians
- MRV systems

Pilot projects advance...

- 1. Technical and financial capacities (reclamation and destruction technologies, skilled servicing industry, recovery and collection infrastructure)
- 2. Policies and regulations on sustainable ODS / HFC banks management
- 3. NDCs inclusion of HFC (ODS) banks management & emission reduction ambitions



#### **COPA SERVICES**

#### Expertise

- Fostering expertise across all sectors
- Provide access to technical know-how and mutual learning
- Prepare market studies and concepts for the pilot implementation of mitigation measures in diverse regions.

#### Networking

- Create a platform to network with all relevant actors from private sector, public sector, civil society and academia
- Connect experts on sustainable refrigerant management
- Enable international positioning
- Setting the scene: achieve amplified reach and enhanced impact

#### Mitigation Action Support

#### For COPA partner countries<sup>1</sup>:

- Support in conceptualization of mitigation action
- Support in mobilizing finance
- Support in implementing action

#### Working Groups

**COPA Tools** 

**COPA Services** 

The core of **COPA's** work is driven by membersled working groups on:

- Policy measures
- Financing mechanisms
- Implementation models
- Recovery, reclamation and destruction technologies
- for the management of ODS and HFC banks

#### International Alliance

- Organisation of regular exchange and network meetings
- Participation in international events
- Organisation of Study Tours
- Raising awareness on the topic of ODS and HFC banks through global dialogue and exchange.

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### Technical Support

- Baseline
   Assessment
- Project
- conceptualization
- Implementation
   Support

Financing Mechanism

- Assistance in applying for international climate finance
- Access funding through COPA financing mechanism

<sup>1</sup> COPA partner countries must commit to meeting the minimum criteria of the Climate and Ozone Protection Alliance. For more information, see the section "Become a member"



### **THEMATIC WORKING GROUPS (TWG)**

#### **OUR WORKING GROUPS**

Together with partners and stakeholders from academia, the private sector, civil society and policy makers, we are working on the following topics:



Policy Framework

For an effective management of refrigerants and foams at end-of-life, suitable policy measures are required like venting bans or mandatory recovery



Technology Solutions

Working towards the best technical solutions for ODS and HFC recovery, reclamation and destruction



Financing Mechanism

The infrastructure for and operation of a collection scheme and the destruction or reclamation of ODS and HFCs needs to be based on a sustainable financing mechanism.



Implementation Models

Putting theory into practice and demonstrating how sustainable refrigerant management can be implemented.



### **COPA PILOT ACTIVITIES IN**



Ghana

First COPA partner country



China



Colombia



#### **COPA MEMBERS**





### **BECOME A MEMBER**

#### Enjoy the following benefits

- Membership free of charge
- Many networking opportunities
- Shape the future of COPA
- Technology and solution exchange
- Early access to publications, newsletters, events
- Support in designing and implementing mitigation actions

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 our Website: <u>https://www.copalliance.org/</u>





COPA activities in Ghana and the general need for ODS and HFC banks management
Philipp Denzinger, GIZ Proklima



### **GHANA AND COPA**

- Ghana is the **first partner country of COPA** (signature of declaration of enrollment in June 2022)
- Working on ODS banks management together with GIZ since 2014
- Cooperation with BMZ funded e-waste projects (GIZ and Kfw)





### PAST ACTIVITIES ON ODS BANKS MANAGEMENT IN GHANA

- 1) Compilation of ODS bank inventory
  - a. review of existing data and information
  - b. using data from the Green Cooling Initiative inventory (equipment data for conducting a detailed Tier 2 inventory approach) + from the e-waste inventory to determine ODS banks in Ghana
  - $\rightarrow$  Close cooperation between different units required
- Technology transfer: Detailed analysis of technical needs for foam/blowing agent destruction. Technical and financial assessment of local rotary kiln for foam destruction. Piloting of foam destruction containing ODS and HFC, with environmental lab analysis of residues.
- 3) Series of trainings for e-waste sector and other stakeholders on the proper dismantling of refrigerators, ODS bank inventories and sustainable alternatives.
- 4) Development of a Ghanian roadmap on ODS Banks Management
  - Regional workshop on transboundary movement of ODS waste conducted



### **ACTIVITIES UNDER COPA IN GHANA**

- Further evaluation of the piloted ODS destruction
- Development of financially and ecologically sustainable ODS waste stream
- Development and implementation of pilot activity regarding ODS destruction and HFC management in Ghana
- Support Ghana in implementing the ODS banks roadmap



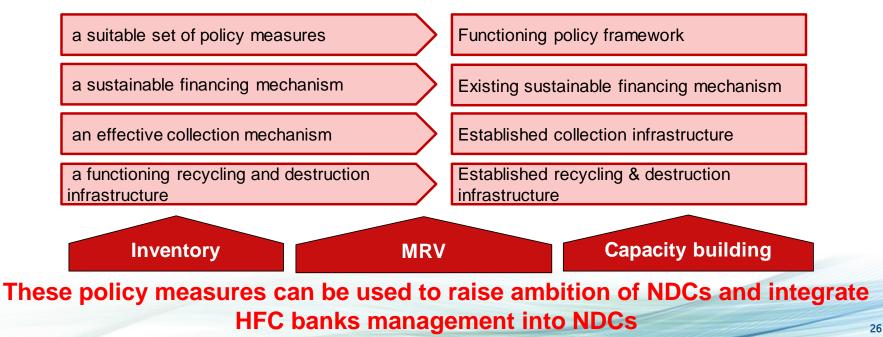


#### **CORE PROCESSES OF ODS & HFC BANK MANAGEMENT**

\*Low emission development strategy (LEDS)

LEDS / climate, energy plans

For a successful ODS & HFC bank management, these core processes are to establish:





### **POLICY INSTRUMENTS TO ADRESS REFRIGERANT MANAGEMENT**

- Mandatory on-site recycling of refrigerants
- Regulation to ensure that refrigerant handling, installations, servicing, and leakage checks are carried out by certified technicians
- Operators' registry for larger systems, incl. regulation against end-of-life release
- Establishment of refrigerant & cooling appliances collection system incl. proper treatment for pilot regions (urban/ metropole areas)
- Collection points for refrigerants & cooling appliances and routines for proper treatment, including reverse logistics (take-back schemes for importing countries)
- Establishment of refrigerant reclaim facilities in combination with mandatory regulation to ensure proper handling
- Sufficient collection and recycling capacity, financed by EPR scheme



#### More Information here



**4.** Solutions for ODS and HFC banks management Maria Gutierrez, Tradewater

# **T**radewater

### **Solutions for ODS banks management**



# TradewaterA climate solution that<br/>you can be a part of

- Tradewater is a mission-based environmental project development company
- Fighting climate change by finding, collecting and destroying the most powerful greenhouse gases in the world before they are released into the atmosphere.
- We leverage the market for **carbon offset credits** to make this work possible.



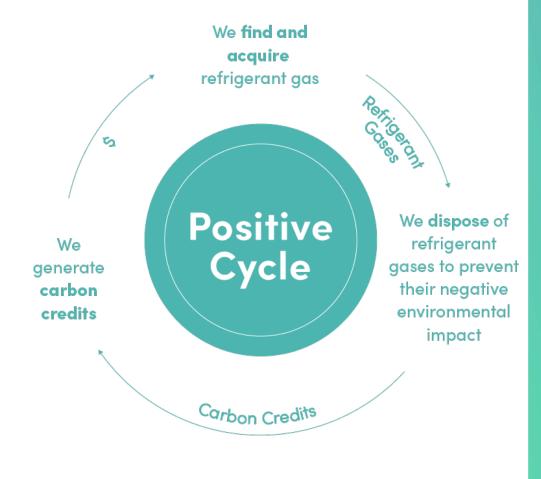
# **Findings we strive to solve**





# Findings we strive to solve

# **Enabling Disposal**







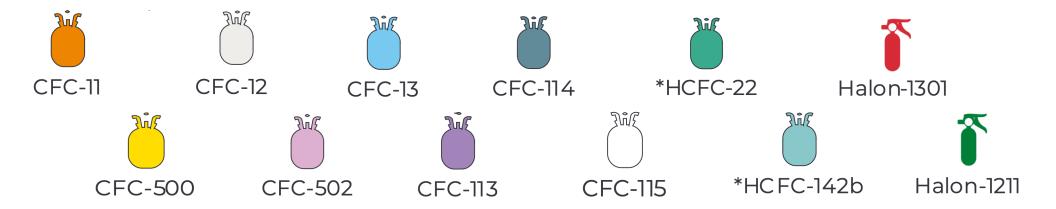
Once a sufficient amount has been accumulated through an authorized waste manager, the gases are destroyed or reclaimed locally or internationally, preventing a potential negative environmental impact.



Carbon credits are generated through recognized and verifiable international protocols, and their sale finances the search and management of more refrigerant.

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# **Eligible Ozone Depleting Substances**



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\*Certain limitations apply. Ask for details and about any other refrigerant you may have.



Tradewater's projects have destroyed more than 669,000 kilograms of CFCs representing over 5.7 million tons of CO<sub>2</sub>e.

We have built networks for community engagement and project development on four continents.

# **International Trajectory**



GHANA



DOMINICAN REPUBLIC



HONDURAS



THAILAND



SAUDI ARABIA



CHILE





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# **Tradewater's Added Value**



**Strengthening the refrigerant value chain.** We work directly with local stakeholders who are involved in the life cycle of refrigerant gases.



**Subsidizing important environmental work.** After we destroy refrigerant gases, we sell resulting carbon offset credits. This subsidizes the search for even more refrigerant gases and allows us to offer the service at no or low cost, depending on each case.

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**Ensuring high-quality, compliant work.** Our carbon offset generation process is verified by 3rd parties, making certain that they comply with legislation and meet the highest standards applicable to the management and final disposal of refrigerant gases, including the Montreal Protocol.

# **Tradewater's Added Value**

**Creating environmental impact.** Our efforts prevent refrigerant gases from leaking into the atmosphere, which helps reduce ozone depletion and fight climate change.



**Comprehensive Support.** We handle all the logistics needed to transport material for destruction, including export and Basel permitting, if needed.



Urgency. We work urgently and rapidly to protect the planet.

# **Tradewater**

### **Contact Information:**

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6. Conclusion and Closing remarks Ole Nielsen

# Contact & events

### CONTACT US

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## UPCOMING EVENTS

12 November side event at COP27





# THANK YOU FOR YOUR PARTICIPATION