

COPA Session Study: COPA member countries readiness for Article 6 5<sup>th</sup> Sep. 2024, moderator: Malin Emmerich, experts: Ayse Frey & Jorge Lujan



### MEETING ETIQUETTE

- A recording of the session will be uploaded on COPAs website. Participation mean you agree.
- Mute yourself.
- Raise a digital hand to get the word or write your questions in the chat.
- Unmute and turn on your camera when you speak.
- Have fun!



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### AGENDA

1. COPA Welcome & Agenda	Malin Emmerich (GIZ Proklima)
2. COPA study on: Eligibility of ODS/HFC destruction or r Article 6 of the Paris Agreement	eclamation projects under
<ul> <li>Picture &amp; Background</li> <li>Technical challenges</li> <li>COPA countries readiness for Article 6</li> <li>Exploring: eligibility by project type</li> </ul>	Ayse Frey & Jorge Lujan energy changes
3. Discussion and exchange	All
4. End of Session	

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### **COPA - CLIMATE AND OZONE PROTECTION ALLIANCE**

- **COPA works jointly with partner countries and members** 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.
- Currently **73 members** in total, of which **24 countries** (September 2024)
- Membership is free of cost; members are invited to actively contribute through working groups.
- Website: <u>https://www.copalliance.org</u>
- COPA Secretariat Mail: contact@copalliance.org
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   In coperation with:
   In coperation with:
   Implemented by:
   Implemented by:



### CLIMATE AND OZONE PROTECTION ALLIANCE (COPA) Thematic Working Groups (TWG)



#### Policy Framework

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

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



#### **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



### **SURVEY & GETTING TO KNOW EACH OTHER**

- In the chat there will be different options posted
- Make a heart or thumb-up for the option or options that are true for you
- Let's start with who you represent!
- What do you know about today's topic?





### **COPA MATERIALS ONLINE:** <u>WWW.COPALLIANCE.ORG</u>

- Todays' session is recorded and will be uploaded on the COPASwebsite.
- There are already cool and informative materials available on the COPA website. No need to be bored! For example:
- <u>Webinar Sessions</u> (video recording) from Working Groups meetings
- Guidelines e.g. on ODS/HFC banks Inventory
- Virtual Study Tour on Reclamation & Destruction Technology (live-session-series)
- COPA studies and Reports





### 5<sup>th</sup> September 2024

Results of COPA study: Eligibility of ODS/HFC destruction or reclamation projects under Article 6 of the Paris Agreement

Ayse Frey & Jorge Lujan

Ayse.Frey@energy-changes.com Jorge.Lujan@energy-changes.com



### First Our agenda for today:

- Painting a picture
- Background
- Integrity
- Technical challenges
- Evaluation: COPA countries readiness for Article 6
- Exploring: Eligibility by project type

#### **Case study**

### Painting a picture: What happens to ODS/HFC gases today?

- 1. A refrigerant technician arrives on-site to a large hospital or shopping center in India, to provide maintenance services for the huge industrial refrigeration system.
- 2. India has regulations prohibiting the venting of refrigerant gases to the atmosphere.
- 3. Absent enforcement or incentives, the gas is simply vented from the equipment. The technician reports the refrigeration system as empty when they arrived.

### This happens every day, across the world.

What if carbon finance, through Art.6 / VCM, supports a reclaimed refrigerant market where the gases are recycled and are price competitive? What if the technician receives a fee (through carbon finance) to take the gases to a destruction facility?

Background

### Energy Changes supported COPA in analyzing and understanding the potential of leveraging carbon finance to tackle ODS & HFC emissions

The work aimed to answer several key questions:

Which are key policy or eligibility issues which may impact the development of projects funded through carbon finance?

Of COPA's current country members, which ones are best positioned to host activities under Article 6 of the Paris Agreement?

Which project types make the most sense to be financed through carbon markets?

### Background

What are carbon market mechanisms? Two different approaches to credit-based carbon markets.

### **Voluntary Carbon Markets**

VCMs rely on independent carbon standards, such as VERRA, Gold Standard, as well as independent auditors and verifiers to certify projects. Generates 'carbon credits'.

VS.

Current issues are related to the perception of credits and ongoing quality initiatives and guidelines for their use, and potential upcoming regulations.

For financing projects, key questions are methodology eligibility and finding buyers for resulting credits.

### **Article 6 of the Paris Agreement**

UN-backed mechanisms to establish carbon markets that are operated between countries, in order to meet NDC targets. Generates 'ITMOs'.

Requires, <u>corresponding adjustments</u> therefore requiring the acceptance of country governments.

Rules set and agreed to by all signatories of the Paris Agreement must be met. These countries then establish national frameworks and guidelines for participation.

### Integrity

### Focusing on **integrity** in ODS/HFC projects

### Strengths:



- Additionality is strong for ODS/HFC projects, particularly destruction
- Article 6 rules have been agreed by 195 Parties to the Paris Agreement:

broad international and intercontinental consensus

- Carbon finance can directly enable climate solutions that would not happen otherwise



### **Challenges:**

- Developing accurate baselines: National context matters
- Ensuring smart policy by country governments, i.e. strategically achieving national targets/objectives

Key message

# Strategic use of carbon finance can cost-effectively enable smart and efficient national policies and objectives

Results

# Technical Challenges

# Hydrofluorocarbon (HFC) gases

# Addressing HFC gases

- HFC mitigation can be credited under Article 6 of the Paris Agreement in a straightforward way.
- GWP potential therefore credited as tCO2e.
- They can also be credited under voluntary carbon markets.

### Key points:

- HFCs must be included in NDC coverage and in National Inventories.
  - This strengthens ambition.
- Depending on project types, deriving baselines must be a significant undertaking.

# Ozone Depleting Substances (ODS)

## Addressing ODS gases

- 1. ODS gases are not included under the Paris Agreement. It does not have a scope for reporting under Article 13.
- However, it is still technically possible to credit through Article 6.
- 3. ODS can be clearly credited through VCM.

# Ozone Depleting Substances (ODS)

# Addressing ODS gases

Key points:

- If trading ODS ITMOs, both countries would need ODS targets in their NDC.
- These may be possible to be accounted as "non greenhouse-gas metrics".
- The transactions are theoretically possible, however the conditions to do this are complex, and some accounting uncertainties remain.
- Other entities may want to purchase ODS ITMOs for unique reasons.

### **Article 6 - Obtaining Corresponding Adjustments**

Obtaining corresponding adjustments is the key requirement to develop Article 6 projects.

- For a project developer, finding out about the country's national framework is essential
- Countries need to carefully consider which activities they will issue corresponding adjustments to
- Corresponding adjustments, given that they are approved by a country, increase and generate a price premium for ITMOs
- No one size fits all exists for obtaining corresponding adjustments at present

Results

## Addressing HFC & ODS gases - Summary

### **Key points HFC:**

- Clearly accounted under Article 6 and Article 13 rules as tCO2e ITMOs.
- A lot of countries already have HFC
  targets if they want to transact HFC
  ITMOs, they should include HFCs in their
  NDC and National Inventory.
- Countries without an HFC target may still be able to purchase HFC (in tCO2e) ITMOs.

### **Key points ODS:**

- Accounting not so clear possible to transact under Article 6, but requires different accounting 'unit'.
- For claims against an NDC, both countries need a target in ODS.
- Relatively less straightforward than transacting HFC ITMOs.

Both project types require thinking about baselines and additionality, and links to national plans to achieve KA & MP. Evaluation of COPA member countries for Article 6

**Results** 

### Results

### Evaluation of COPA member countries readiness for Art. 6 (HFC focus)

Country Name	Is HFC included in the country's NDC?	Is HFC included in the country's National Inventory (contained within the Biennial Update Report)?	Is the country an Article 5 country?	Are carbon market mechanisms under the PA mentioned in the NDC?	Does the country have a comprehensive Article 6 framework?	Does the country have bilateral agreements or MoUs in place?	Potential of obtaining corresponding adjustments for HFC activities based on assessment.
Botswana	No	Yes	Yes	Yes	No	No	Medium
China	Yes	Yes	Yes	No	No	No	Medium-Low
Dominican							Medium-Low
Republic	No	No	Yes	Yes	No	Yes - Singapore	Madium
Ecuador	Yes	Yes	Yes	No	No	No	Medium
Egypt	No	Yes	Yes	Yes	No	No	Medium-Low
Eswatini	Yes	No (no submission)	Yes	Yes	No	No	Medium-Low
Ghana	Yes	Yes	Yes	Yes	Yes	Yes - Singapore, Sweden, Switzerland, South Korea	Higher
Grenada	Yes	Yes	Yes	Yes	No	No	Medium-Low
Malawi	No	Yes	Yes	Yes	Yes	Yes - Switzerland	Medium-High
Mexico	Yes	Yes	Yes	Yes	No	Yes - Japan	Medium-Low
Namibia	Yes	Yes	Yes	Yes	No	No	Medium
Nigeria	Yes	No	Yes	Yes	Yes	No	Higher
Papua New Guinea	No	Yes	Yes	Yes	No	Yes – Japan, Singapore, Australia	Medium-High
Philippines	Yes	No (no submission)	Yes	Yes	No	Yes - Japan MoU	Medium
Senegal	Yes	No (no submission)	Yes	Yes	Yes	Yes - Singapore, Norway, Japan, Switzerland	Higher
Sierra Leone	No	Yes	Yes	Yes	No	No	Medium-Low
South Africa	Yes	Yes	Yes	Yes	No	No	Medium-Low
South Sudan	No	No (no submission)	Yes	No	No	No	Medium-Low
The Gambia	Yes	No (no submission)	Yes	Yes	No	No	Medium-Low
Тодо	Yes	Yes	Yes	Yes	No	No	Medium-Low
Tunisia	Yes	Yes	Yes	Yes	Yes	Yes - Switzerland, Japan, Monaco	Medium-High
Zimbabwe	Yes	No	Yes	Yes	No	No	Medium-Low

# Exploring eligibility by project type

**Results** 

Results

### **ODS & HFC** <u>destruction</u> project eligibility

Туре #	Project scenario	Country	Collected or available gas types	Methodologies available	Likelihood of eligibility	Main barriers beyond typical project logistical barriers
	ODS/HFC	Kigali Amendment Article 5 country with	HFC	CCL, Any existing or custom meth	Higher	
			ODS	Any existing or custom meth	Low	Activity may need to be aligned with positive list of country government and NDC
Article	project	Paris Agreement Article 6 framework	HFC/ODS mix	CCL or any existing or custom meth	Higher	<ul> <li>Country government or potential buyers may request a specific carbon standard or methodology</li> </ul>
6.2	ODS/HFC destruction project	Kigali Amendment Article 5 country without Paris Agreement Article 6 framework	HFC	CCL, Any existing or custom meth	Medium	<ul> <li>Lack of ability to obtain corresponding adjustments, unless another framework is present, e.g. JCM</li> <li>Longer timeframe to project viability</li> <li>High dependence on government decisions and lower possibility to obtain offtake agreement</li> </ul>
			ODS	Any existing or custom meth	Low	
			HFC/ODS mix	CCL or any existing or custom meth	Medium	
Type #	Project scenario	Country	Collected or available gas types	Methodologies available	Likelihood of eligibility Mair	barriers
			HFC	N/a	N/a • Ga	s collection cost barriers

			HFC	N/a	N/a	Gas collection cost barriers
VCM	ODS destruction project	Kigali Amendment Article 5 country	ODS	ARB, VERRA, CAR, ACR	Higher	<ul> <li>Buyer identification, low prices for credits</li> <li>Methodology eligibility and eligibility of destruction facility,</li> </ul>
			HFC/ODS mix	No methodology explicitly covering both gas types	N/a	<ul> <li>particularly host country and gas source eligibility</li> <li>ACR methodology currently limited to CFC, expected expansion to HCFCs within next year</li> <li>ODS destruction VERRA methodology may be revised to include HFC destruction</li> </ul>
	HFC destruction project	Kigali Amendment Article 5 country	HFC	CAR (only Mexico), ACR (only for HFCs from insulation foam blowing agents)	Medium- Low	<ul> <li>Buyer identification, low prices</li> </ul>
			ODS	N/a	N/a	<ul> <li>Methodology eligibility and eligibility of HFC sources</li> </ul>
			HFC/ODS mix	No methodology explicitly covering both gas types	N/a	

Results

### **ODS & HFC** <u>reclamation</u> project eligibility

Туре #	Project scenario	Country	Collected or available gas types	Methodologies available	Likelihood of eligibility	Main barriers beyond typical project logistical barriers
Article 6.2	HFC reclamation	Kigali Amendment Article 5 country with Paris Agreement Article 6 framework	HFC	ACR, Any existing or custom meth	Medium-High	<ul> <li>Potential barriers to the commercialization of reclaimed gases depending on government regulations</li> <li>Gas separation if HFC/ODS are mixed may face additional barriers</li> <li>Country government or potential buyers may request a specific carbor standard or methodology</li> </ul>
			ODS	Any existing or custom meth	Low	
			HFC/ODS mix	Any existing or custom meth	Medium-High	
	HFC reclamation	Kigali Amendment Article 5 country without Paris Agreement Article 6 framework	HFC	ACR, Any existing or custom meth	Medium-Low	<ul> <li>Potential barriers to commercialization given Kigali Amendment gas consumption targets</li> <li>Further barriers same as above</li> </ul>
			ODS	Any existing or custom meth	Low	
			HFC/ODS mix	Any existing or custom meth	Medium-Low	

Туре #	Project scenario	Country	Collected or available gas types	Methodologies available	Likelihood of eligibility	Main barriers
		Kigali Amendment Article 5 country (Except Mexico*)	HFC	ACR	Medium-Low	<ul> <li>Potential barriers to the commercialization of reclaimed gases depending on government regulations</li> </ul>
			ODS	N/a	N/a	Potential barriers to commercialization given Kigali
VCM	HFC reclamation		HFC/ODS mix	No methodology explicitly covering both gas types	N/a	<ul> <li>Methodology eligibility</li> <li>Source eligibility – gases must be certified sources</li> <li>Country eligibility – gases must be reclaimed in the US, Canada, or Mexico (current ACR methodology is being revised to include other regions)</li> <li>Gas separation if HFC/ODS mix likely not feasible</li> </ul>

\*Projects in Mexico may be more viable given applicability of ACR's reclamation methodology



# Thank you!

# **Questions?**

Energy Changes

E: office@energy-changes.com

T: +43 1 96 84 529

Main Office: Boersegasse 10/5, 1010 Vienna, Austria