



COPA - Financing options for LRM

26th Sep. 2025, CCAC Workshop, Dakar; Mairin Herm, GIZ

CONTENT OVERVIEW

1. Introduction to COPA
2. Financing options for LRM
 - Different financing mechanisms
 - Regulatory support can strengthen private business cases
 - Public Private Partnerships - Togo
 - Cooling as a Service with LRM – South Africa
 - Recycling, Reclamation and Recovery (RRR) – Grenada & China

WHO IS COPA – THE CLIMATE AND OZONE PROTECTION ALLIANCE

- **Initiated 2021 by the German Federal Ministry of Economic Affairs and Climate Action** to pave the way for an enhanced environmental stewardship of ODS and HFCs
- **Today a member-driven coalition** of organizations and countries working together, supported by a Secretariat
- Driving and accelerating the **holistic solutions needed to reduce ODS and HFC banks** globally

Vision:

A global shift to sustainable refrigerant management & thereby closing the loop to a circular economy in the cooling sector

Implemented by:



In cooperation with:



Supported by:



on the basis of a decision
by the German Bundestag

COPA STEERING COMMITTEE & CONTACT

COPA Steering Committee (2025 – 2027)

PUBLIC SECTOR	PRIVATE SECTOR			COUNTRIES
				
Rachel Pekker BMW, Germany	Adrian Bukmanis Veridien RM, Australia	Samuel Jacobs Energy Partners Refrigeration, South Africa	Leslie Smith Grenada	Igobe Gobsie Mbulawa Botswana

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COPA TODAY

- **Partner countries and members** across private and public sectors, civil society, academia, countries and financing institutions work together
- Driving forward holistic solutions for **sustainable refrigerant management** of ODS and HFC
- **80 members** in total, of which **26 countries** (Sep 2025)
- **Membership is free of cost;** members actively contribute through working groups and voluntary efforts.
- **COPA Provide:** Exchange, networking, publications, technical guidelines, online courses, research, pilots, project development support, financing solutions, ...



**Policy
Framework**



**Technology
Solutions**



**Financing
Mechanism**



**Implementation
Models**

EXAMPLES OF FINANCING OPTIONS FOR LIFECYCLE REFRIGERANT MANAGEMENT (LRM)

MORE FINANCE IS NEEDED TO TACKLE THE CLIMATE & OZONE CRISES

What financing flows are available for LRM in Article 5 countries?

- ✓ **Public finance;** grants, concessional debt and equity, impact investments
- ✓ **Private finance:** debt, equity & (impact) investment
- ✓ **Public-Private-finance mix:** different forms of blended finance

Big Question: How to increase the financing and thus the positive impact of LRM for climate and ozone protection?

LRM FINANCING CHALLENGES - ARTICLE 5 COUNTRIES

Financing flows are available in Article 5 countries. However, Article 5 countries frequently face specific barriers to financing LRM.

The financing challenges are dependent to the local context, but often include:

- ✓ **New (unknown) technology with short or no track-history**
- ✓ **Lack of collateral and successful credit history**
- ✓ **Not enough data to support impact and business model**
(e.g. baseline, national GHG inventory, commercial finance model)
- ✓ **Often financier prefer large investments with demonstrated impact, as this make the “most bang for the buck”** (basically the highest impact and return for each dollar invested). However, most LRM projects in Article 5 countries are either smaller and /or with no verified methodology or impact.

High perceived risk
→ the costs of capital (finance) will often be higher in Article 5 countries compared to Article 2 countries



LRM FINANCING CHALLENGES - ARTICLE 5 COUNTRIES

In addition to challenges increasing the financing risk and costs of capital, Article 5 countries may also face challenges for accessing financing in the process of applying for finance itself.

- ✓ Complex, costly and resource-intensive administrative processes for accessing finance
- ✓ Lack of adequate technology and knowledge related to maintenance (technical service)
- ✓ LRM project must be aligned to local regulation, e.g. for Hazardous waste, transboundary movements, quotas of import / export aligned to MP phase-out, etc.
- ✓ Little knowledge for preparing required input will increase costs of capital even more

[Get ready for finance - Financing for project development | News von COPA](#)

GET READY FOR FINANCING – FOR LRM ACTIVITIES

PROBLEM

Why is it so difficult to match existing resources with project needs?

["For each country, and each level of intervention, the type of finance – whether it be debt, equity, grant, credit generation or something else – will differ and the COPA [finance approach] will need to determine the appropriate intervention together with its partners and stakeholders."]*

* Source: "COPA Financing and Fundraising Mechanism: A Review and Concept"; April 2023, pg91,

Quoted in the COPA online session: **Get Ready for Finance**, in the presentation: Financing for project development, provided by T. Hunzai on Aug. 14th 2024

PUBLIC FINANCING FOR LRM IN MP ART. 5 COUNTRIES

Public financing sources:

Public

- MLF, ODA, Bilateral cooperations, Global/Regional/National Developing Banks, Green Climate Fund, CCAC projects calls
- **Grant financing for specific activities**, for example, such as conducting national inventories of ODS and HFCs, thematic study and data-collection, infrastructure or standard development, capacity enhancement, training of technical capacities, equipment for custom services, awareness rising, development and implementation of new regulations
- **Concessional finance instruments**, such as below-market interest-rate Debt and Equity financing, with longer grace or payback periods, for testing or initiating new business models into the market, such as market introduction of green ACs
- **Donation** for relevant causes, e.g. tools

PUBLIC FINANCING FOR LRM IN MP ART. 5 COUNTRIES

Public financing sources - COPA Examples (Grant / Donation):

- Practical technical trainings held in Sierra Leone, Namibia, and Lesotho for ca 90 participants, who learnt best practices for end-of-life refrigerant management
- Acquisition of refrigerant recovery equipment and tools for the **HVAC Namibia - Association of Heat, Ventilation, and Cooling (Namibia)** to help promote and accelerate the refrigerant recovery activities in the country



PRIVATE FINANCING FOR LRM IN MP ART. 5 COUNTRIES

Private financing sources:

Private

- Private banks & investment companies, venture capital, individuals, companies
- Financing through credits, equity and securities / insurance for companies expanding their LRM business models to new customers, regions, sectors
- Example of private finance LRM activities: company credit with market-based interest-rate for expansion of business, e.g. a refrigerants distributors that want to establish a bring-back-system for re-usable gas-containers and cylinders for their business and need new equipment for that.

PRIVATE FINANCING FOR LRM IN MP ART. 5 COUNTRIES

Private financing sources - COPA Examples:

- Sustainable LRM business model development: Cooling as a Service for SMEs (Agriculture) including LRM developed in South Africa with COPA member Energy Partners
- Recycling, Reclamation and Recovery Centre for LRM; business model development support in Grenada
- Research studies in China on the costs of LRM and Refrigerant recovery and recycling, to identify the barriers to market development in the current business models

PUBLIC-PRIVATE FINANCING FOR LRM IN MP ART. 5 COUNTRIES

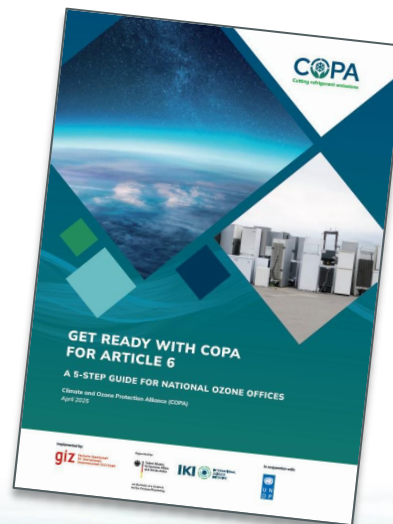
Public and Private financing mixes suitable for LRM:

- **Public-private-partnership or "PPP"**; set-up as independent unit providing public services, e.g. for water, energy or waste management provision. Financing from both public and private actors, in partnership in the "PPP unit". Operational costs covered through customer fees or taxation to citizens for certain public services.
- **Blended finance**, e.g. for new infrastructure. A public partner could finance the construction of a new WEEE Recycling Centre. After the Centre is operational, the public partner then sell the facility + debt to another investor, when it has lower financial risk. Or the **Public actors provide financial securities and insurances, e.g. first losses guarantees**, for private businesses such as companies expanding their LRM business models to new customers, regions, sectors
- **Carbon market financings** through emission reductions, e.g. through developing International Tradeable Mitigation Outcomes (ITMOs) under the Paris Agreement Article 6 cooperations

PUBLIC-PRIVATE FINANCING FOR LRM IN MP ART. 5 COUNTRIES

Public and Private financing mixes suitable for LRM - COPA Examples:

- Training and Guidelines for developing PPP (Public-Private-Partnership) for the RAC sector in Togo
- Paris Agreement Article 6 Guidelines for NOUs
- free online course for cooling carbon markets



POLICY & REGULATORY SUPPORT FOR LRM

- **Quota on HFC import and production:** quotas increase the price of virgin materials, motivate to recycling
- **Develop and enforce Technical Standards;** e.g. Energy Efficiency Label for AC and refrigerators, technical certification required for installation and maintenance of cooling systems and AC
- **Put a price on carbon** or limit the amount of emission permits (e.g. Emission Trading System)
- **„Extended Producer Responsibility“** (EPR) regulation incentivize producers to organize an efficient LRM
- **Prohibitions:** e.g. forbidding single-use gas cylinders, venting of systems, reparations with virgin materials, etc.

Policies and regulations can support and strengthen financing flows going towards LRM activities:

- ✓ By enforcing standards (EE, reusable cylinders) and EPR regulation
- ✓ Imposing quotas for import of HCFC and HFCs

COPA FINANCE RESOURCES ONLINE

Publications:

- [Get ready with COPA for Article 6, a 5-step guide for national ozone offices](#)
- Online course: ["Cooling Carbon Markets" \(English, French and Spanish\)](#)
- ["COPA Financing and Fundraising Mechanism: A Review and Concept"](#)
- ["Using carbon markets to reduce emissions from end-of-life refrigerants and foam blowing agents" \(Study + excel template\)](#)

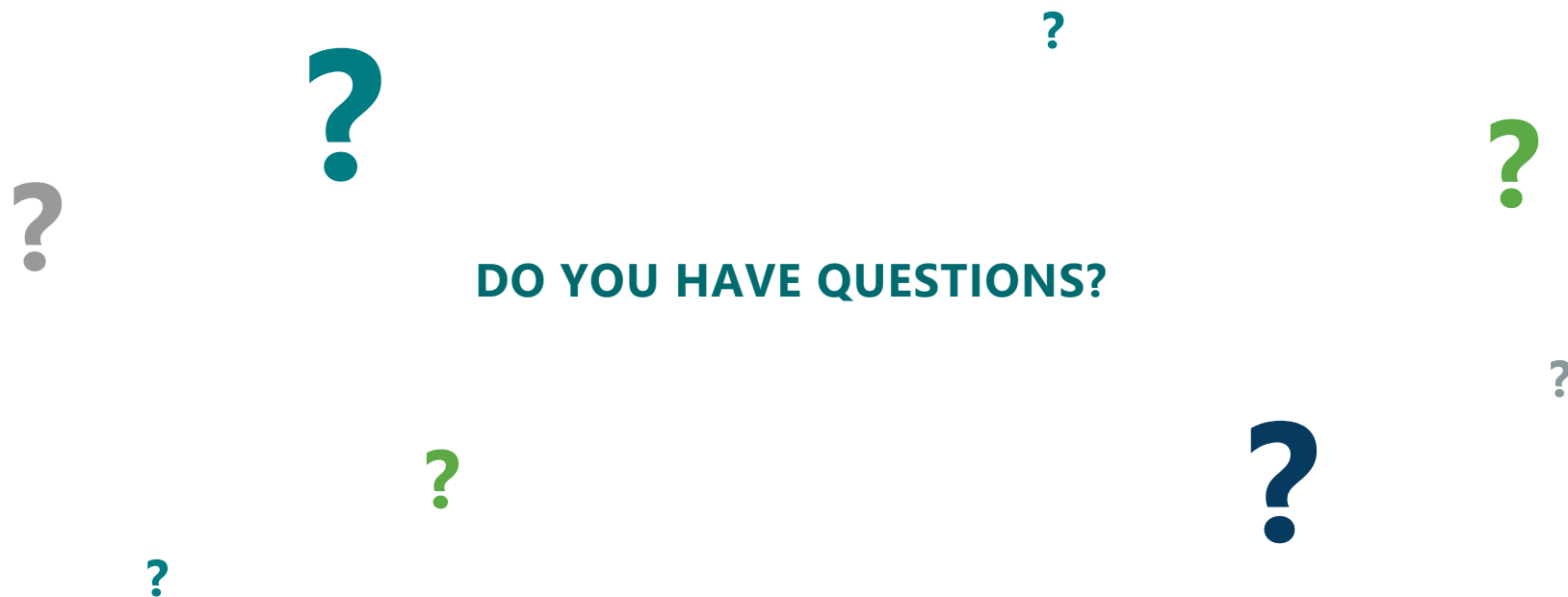
Session slides (ppt slides as pdf-files):

- [Cooling as a Service business case in South Africa](#), ppt-slides from Samuel Jacobs, Energy Partners
- [Introduction and Fundamentals](#) to Beyond Value Chain Mitigation (BVCM) by Adrian Bukmanis
- [Beyond Value Chain Mitigation](#) by Juliette de Granpré, New Climate Institute

Online sessions – video recordings:

- [Get ready for finance - Financing for project development](#)
- [ODS & HFC Projects Eligibility under Article 6](#)
- [Session: Carbon Credits introduction](#)
- [PPP for WEEE in Togo - CCAC 2025 Workshop on Lifecycle Refrigerant Management \(LRM\)](#) in Bangkok 6 July 2025







Thank you!