PROKLIMA
NATURALLY COOL

GIZ Proklima

Green Cooling in a warming world
变暖世界中的绿色冷却

GIZ Proklima | April 2024 | Malin Emmerich

GIZ Proklima

Making cooling a hot topic since 1995
自 1995 年起让制冷成为热门话题

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- Established 1995 to implement technical projects for **ozone protection** under the Montreal Protocol.

- 2016, the **Kigali Amendment** broadened the focus to also include **climate protection**.

- Promoting and introducing **natural refrigerants and energy-efficient** appliances in the RAC sector.

- Working on behalf of German Ministries BMZ, BMWK, BMUV and other donors, e.g., EU, AFD, etc.

- 成立于 1995 年，旨在根据《蒙特利尔议定书》实施臭氧保护技术项目。
- 2016 年，《基加利修正案》将重点扩大到气候保护。
- 在制冷和空调部门推广和引进天然制冷剂和节能设备。
- 代表德国部委（BMZ、BMWK、BMUV）和其他捐助者（如欧盟、AFD 等）开展工作。

GIZ Proklima work areas
GIZ Proklima 工作区

Since 1995, Proklima implemented more than:
- ✓ **300 projects**
- ✓ **in +40 partner countries**

自 1995 年以来，Proklima 实施了多个项目：
- ✓ **300 个项目**
- ✓ **在 40 个伙伴国家**

**Technology transfer
技术转让**

**Policy advice
政策建议**

**Capacity building
能力建设**

Avoiding emissions by "leapfrogging" to Green Cooling

通过 "跳跃式 "绿色冷却避免排放

Instant switch to highly **energy-efficient** technologies with **natural refrigerants** without relying on climate-damaging interim technologies.

立即转向使用天然制冷剂的高能效技术，而不依赖破坏气候的临时技术 。

ODS and HFC banks – an unseen threat
ODS 和 HFC 银行是一个看不见的威胁

- Studies by GIZ Proklima estimate that the annual emissions of ODS banks are equivalent to those of **441 coal-fired power plants**.

- More information on ODS and HFC banks management is on the COPA website: www.copalliance.org

- GIZ Proklima 的研究估计，消耗臭氧层物质库存的年排放量相当于 441 个燃煤发电厂的排放量。

- 有关消耗臭氧层物质和氢氟碳化物库存管理的更多信息，请访问 COPA 网站：www.copalliance.org

COPA – CLIMATE AND OZONE PROTECTION ALLIANCE
pointing a light on a blind spot - 点亮盲点

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

蒙特利尔议定书》或任何其他国际环境公约都没有对现有消耗
臭氧层物质和氢氟碳 化合物库存的管理和销毁做出规定。

ODS and HFC Banks management
消耗臭氧层物质和氢氟碳化物库存管理

COPA SET-UP / COPA 设置

- COPA was initiated by the German Federal Ministry for Economic Affairs and Climate Action (BMWK) and funded as part of the **International Climate Initiative (IKI)**.

- COPA is jointly implemented by **GIZ, UNIDO and UNDP**, GIZ provide the COPA Secretariat.

- Within GIZ, COPA is integrated into the **Proklima** program, which has been promoting the worldwide expansion of environmentally friendly and energy-efficient cooling technologies since 1995 in the context of the Montreal Protocol (MP) and its Kigali Amendment.

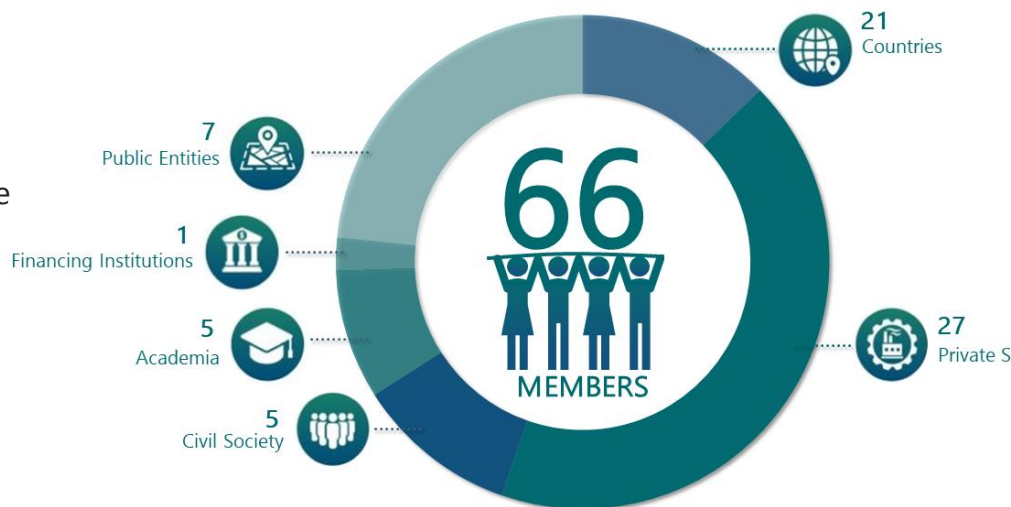Implemented by:
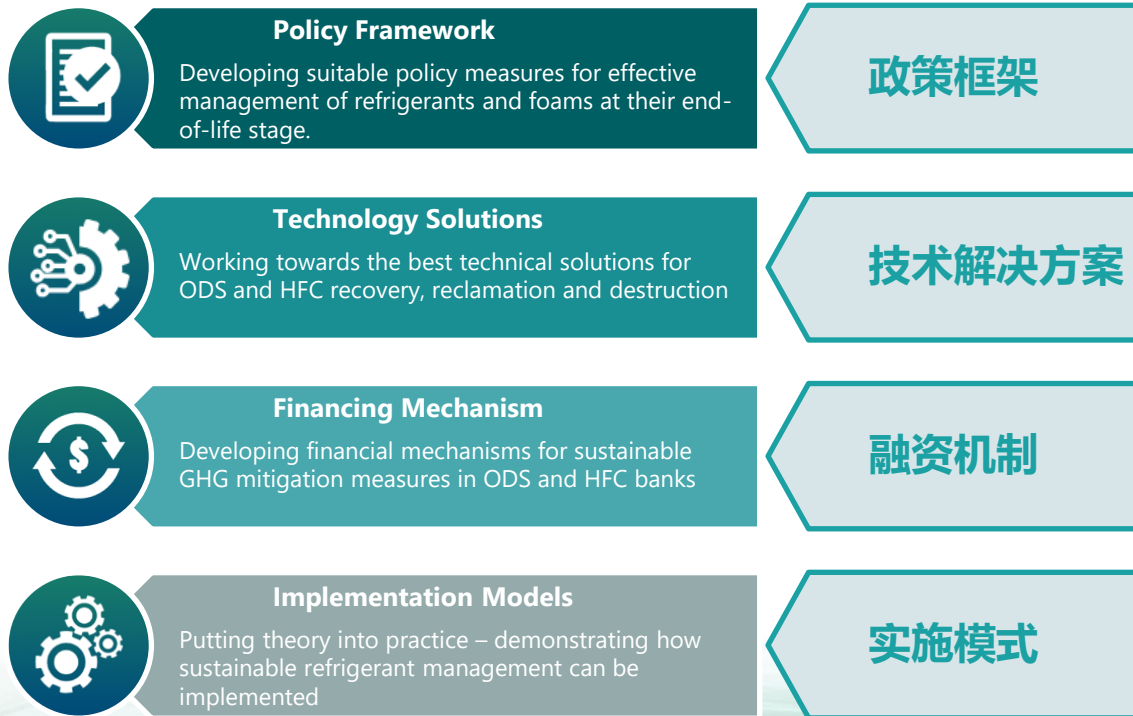
In cooperation with:

Supported by:

A GLOBAL ALLIANCE - *promoting memberdriven activities*
促进成员活动的全球联盟

- A global alliance

- COPA works jointly with partner **countries and members** across private and public sectors

- 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 **66 members** in total, of which **21 countries** (Feb 2023)

- **Membership is free of cost**

- Members are expected to **actively contribute** to COPA activities, e.g. in **Working Groups**.

21 Countries

7 Public Entities

1 Financing Institutions

5 Academia

5 Civil Society

27 Private S

66 MEMBERS

COPA THEMATIC WORKING GROUPS (TWG)
COPA 工作组

Policy Framework
Developing suitable policy measures for effective management of refrigerants and foams at their end-of-life stage.

政策框架

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

技术解决方案

Financing Mechanism
Developing financial mechanisms for sustainable GHG mitigation measures in ODS and HFC banks

融资机制

Implementation Models
Putting theory into practice – demonstrating how sustainable refrigerant management can be implemented

实施模式

COPA ACTIVITIES IN CHINA

✓ **China Household Electrical Appliances Association (CHEAA)**
Research Report on Refrigerant Emission during Recycle and Disassemble in Chinese Room Air-conditioner Sector (Dec. 2022)

✓ **Solid Waste and Chemicals Management Center, MEE (SCC)**
Investigation report on the status quo of refrigerant recovery in China automobile dismantling industry (Apr. 2023)

✓ **The Foreign Economic Cooperation Office, MEE (FECO)**
Research Study on ODS and HFCs Inventory Management of Room Air Conditioners in Shenzhen, China (Dec. 2023)

✓ **2024 -> Pilot project with China Automotive Technology and Research Center Co., Ltd (CATARC)**
Develop process for workshops for refrigerants recovery from AC, during maintenance of cars

✓ **2024 -> Solid Waste and Chemicals Management Center, MEE (SCC)**
Survey of refrigerant recovery during automobile dismantling process in selected regions

✓ **10th April 2024 -> COPA Meet & Greet, hosted by CHEAA**

✓ **11th April 2024 -> COPA Virtual Study Tour with Aohong and CATARC**

COPA 在中国的活动

✓ **2022 中国家用电器协会 (CHEAA)**
中国房间空调器行业回收和拆卸过程中的制冷剂排放研究报告 (Dec. 2022)

✓ **2023 固体废物和化学品管理中心 (SCC)**
中国汽车拆解行业制冷剂回收现状调查报告

✓ **2023 对外经济合作办公室 (FECO)**
深圳市房间空调器 ODS 和 HFCs 库存管理调查研究

2024 年的活动：

✓ 与中国汽车技术研究中心有限公司（CATARC）合作的试点项目

✓ 选定地区汽车拆解过程中制冷剂回收情况调查 (SCC)
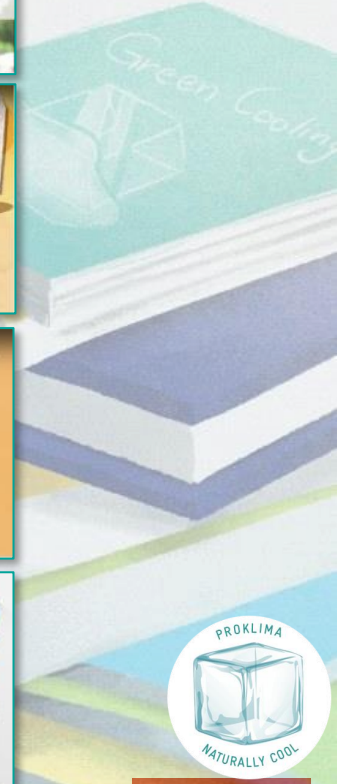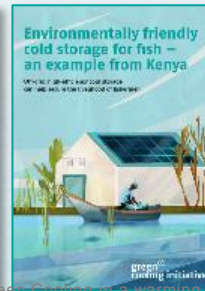
✓ COPA 会议 (CHEAA)

✓ COPA 虚拟学习之旅 (Aohong, CATARC)

COPA MATERIALS ONLINE:
在线 COPA 资料

- **Guidelines** – e.g. on ODS/HFC banks Inventory

- Webinar Sessions (videos) from Working Groups

- Virtual Study Tour on Reclamation & Destruction Technology (live-session-series)

- COPA studies and Reports

- Events & News

- Call for Ideas for Projects Activities

Proklima publications (selection)

All Proklima materials: www.green-cooling-initiative.org

Become an ally!
成为盟友！

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!

今天就加入网络，成为绿色冷却社区的一员！

www.green-cooling-initiative.org/network

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