

Barriers to scale in Article 5 countries: *Why recovery remains limited*



CCAC Cooling Hub



Aims to

- Maximize the environmental and climate benefits of Kigali Amendment
- Elevate awareness on the critical role of LRM
- Support developing countries to implement ambitious LRM approaches
- Mobilise and facilitate access to financial, technical, and policy resources



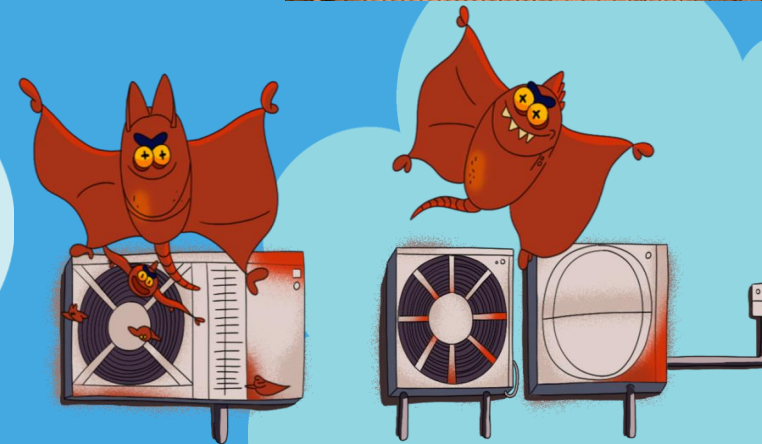
Country Co-Leads



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Japan



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Expectation

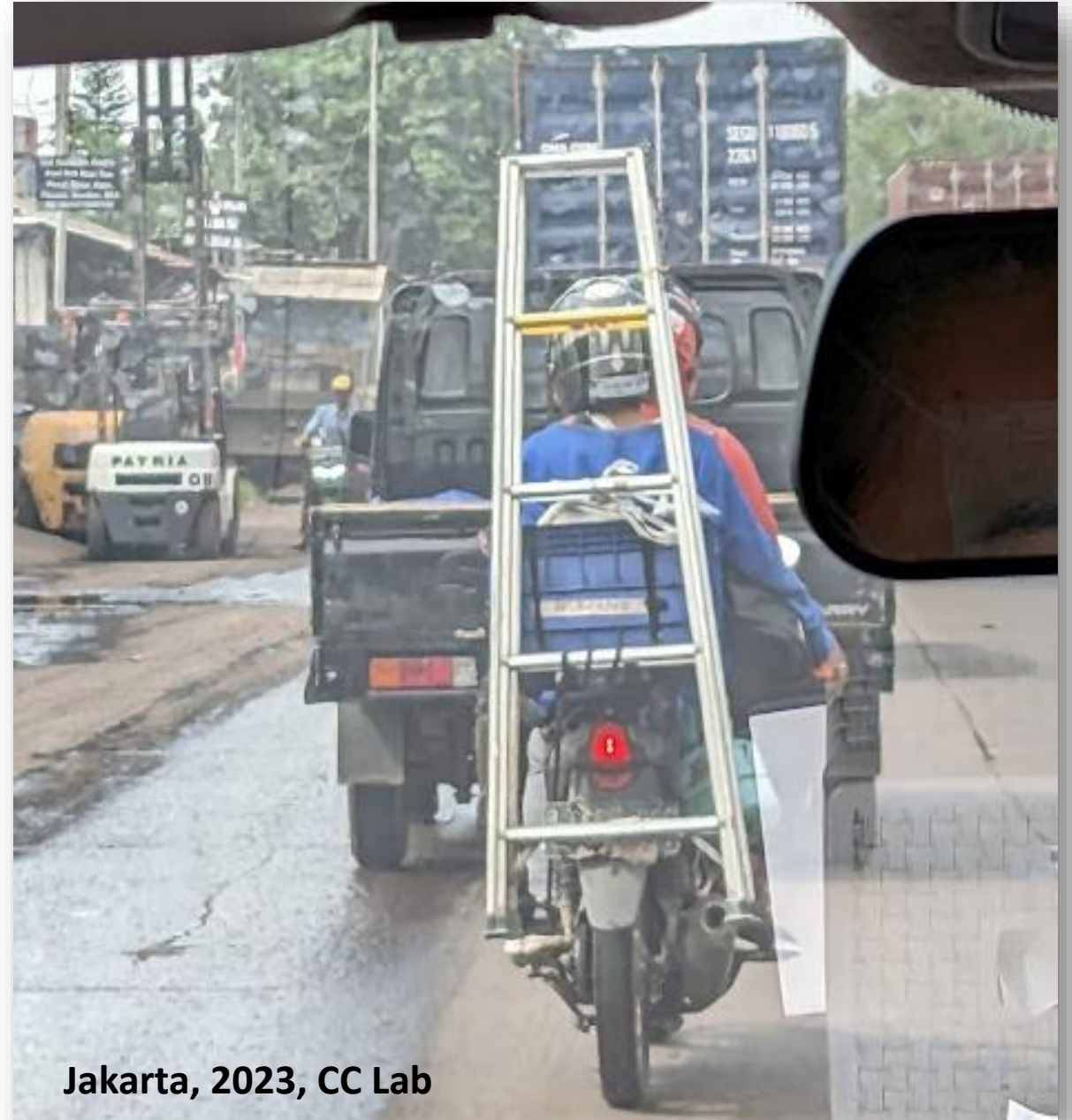


PHOTO CREDITS

- [Refrigerator And Air Conditioner \(RAC\) Repair Training Course - SGL Technologies](#)
- [HVAC Van Interiors - Commercial Van Interiors](#)



Reality in developing countries



Jakarta, 2023, CC Lab

Background of Multilateral Fund support for LRM

The Multilateral Fund has long funded activities in Article 5 countries that support elements of LRM

Promotion of good servicing practices

- Training and certification of RAC technicians
- Support to training institutes and RAC technician associations
- Training on safe handling of low-GWP alternatives, as appropriate

Infrastructure for refrigerant containment

- Refrigerant recovery, recycling and reclaiming (RRR) infrastructure
- Provision of tools and equipment to RAC technicians
- Refrigerant leakage prevention projects

Strengthening of policy and regulatory frameworks

- Development of policies, regulatory measures, and standards for refrigerant management
- Licensing of workshops, introduction of labelling and record keeping requirements
- Training of officers related to enforcement of regulations

These activities mostly relate to **collection, transport and storage** of the refrigerant **while still being used**

Background of Multilateral Fund support for LRM

The Multilateral Fund **has long funded** activities in Article 5 countries that support **many but not all elements of LRM**

Limited or not funded so far by the MLF:

- Limited funding provided for disposal of controlled substances
- Disposal of EOL equipment that contained controlled substances (i.e., need for link to country's waste management policies and regulations)
- Design of equipment to maximize refrigerant containment/minimize leaks
- Tools for predictive maintenance

Funding for development of inventory of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances contained in document (Decision 91/66)

- **To date, projects approved for 127 A5 countries**
- **Expected to be completed between June 2025 and December 2027**

Barriers to Scale

- **Weak incentives:** Costs of recovery, storage and transport is shouldered by the technician/workshop; recovery is time consuming – can be used by technician to service another client
- **Lack of recovery machines and refrigerant identifiers:** Recipients of grants have one and usually stay in the shop, not carried to different clients; MLF-provided tools and equipment do not work, no incentive for shops to shoulder/buy their own
- **Weak enforcement of venting bans, recovery requirements**
- **Fragmented system:** Complexity of establishing the necessary infrastructure, such as reverse supply chains, for managing refrigerants effectively
- **Policy gaps:** lack of a clear regulatory distinction between reused and waste refrigerants as defined under the Montreal Protocol and the Basel Convention further complicates the potential for recovery and reuse; Permits for surrendering/handling used refrigerants domestically as well as with transboundary movement



Opportunities

- Decision 91/66: 127 developing countries have an opportunity with the inventories and action plans – need to have a close examination of **recovery**
- Decision XXXV/11(4) of the Meeting of the Parties: Requested the ExCom to consider providing a window of funding for countries who have completed their national inventories and plans.
- Other options for financing LRM



Material recycling and EPR – Think circular, not linear!

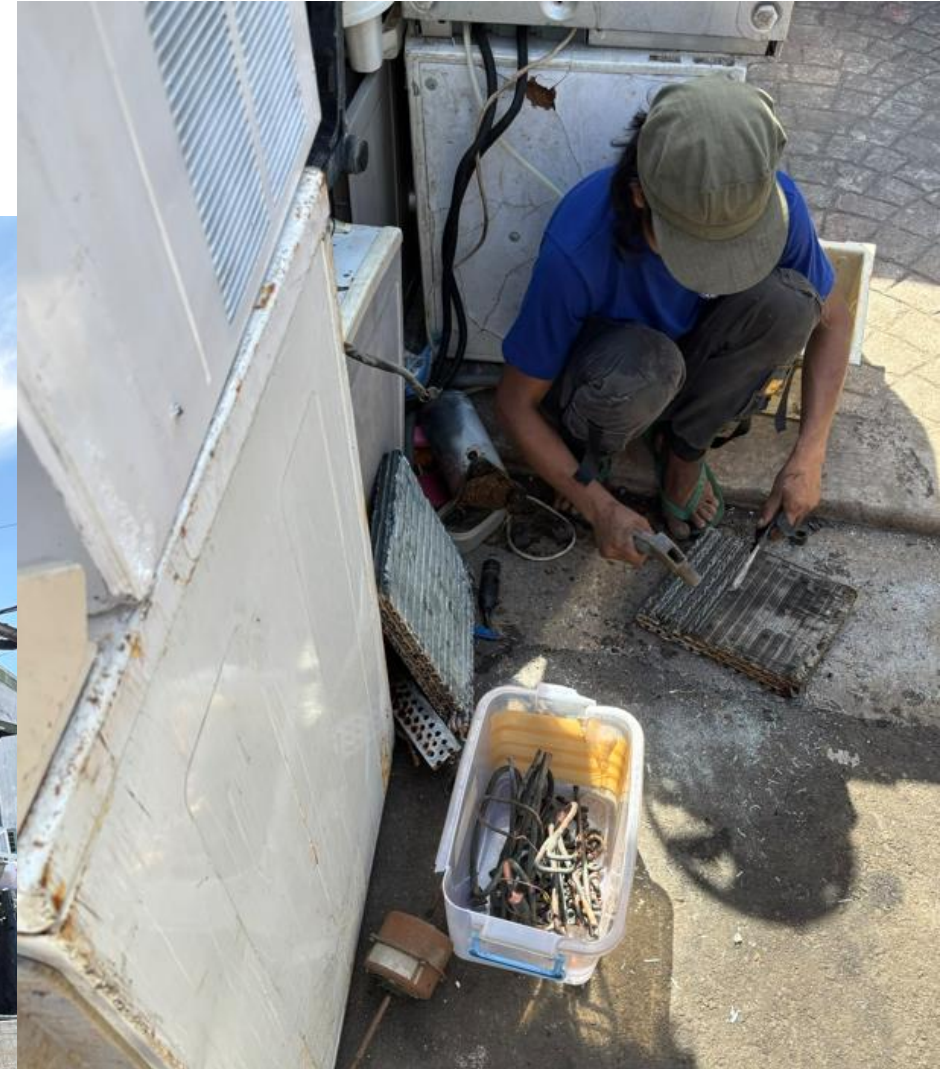


Photo Credit: OECC Japan, May 2025,
Manila, Philippines

Webinar on Financing Lifecycle Refrigerant Management

Carbon Markets

June 18, 2026

3:00 PM - 4:00 PM CEST

Speakers:

- **Ms. Anastasia O'Rourke**, Senior Managing Director, Carbon Containment Lab
- **Ms. Ali White**, Program Manager, Cascade Climate
- **Mr. Makoto Kato**, Member of Board of Directors, Overseas Environmental Cooperation Center (OECC) Japan



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Thank you!

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