COPA
Cutting refrigerant emissions

Climate and Ozone Protection Alliance

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Ellen Michel

COLLECTION, RECYCLING & DESTRUCTION OF COOLING APPLIANCES IN GHANA

Cost-Benefit Analysis of RAC Reverse Logistics

MISSION AND GOALS

Mission

- Evaluate reverse logistics systems for EOL cooling appliances and propose a cost-effective model that minimizes emissions of refrigerants throughout the recycling - disposal value chain.

Goals

- Evaluate and challenge current models and proposals.
- Identify operational, legal and capacity gaps.
- Develop the foundation for an effective and efficient mechanism to reduce emissions from EOL cooling appliances.

PROPOSAL 1: TAKE-BACK SYSTEM VIA REPAIR SHOPS

Objective: Develop a sustainable take-back system through a network of repair shops.

Background:

- High Value: Ghanaians highly value cooling appliances, prioritizing repair over disposal.
- Common Issue: High repair costs often lead to appliances being abandoned at repair shops.

PROPOSAL 1: TAKE-BACK SYSTEM VIA REPAIR SHOPS

Proposal:

1. Regulatory Framework:
    - Implement regulations to guide the disposal of EOL cooling appliances.
    - Ensure compliance with environmental standards.
2. Logistics Development:
    - Monitor & coordinate and document collection and treatment.
    - Establish a network linking repair shops to licensed recycling facilities.
    - Facilitate the transport and proper disposal of EOL appliances.
3. Repair Shop Role:
    - Empower repair shops to act as collection points for EOL appliances.
    - Provide training on documenting and handling EOL cooling appliances.

PROPOSAL 2: INCENTIVE PROGRAM

Objective:

Expand the existing e-waste incentive program to include EOL cooling appliances.

Background:

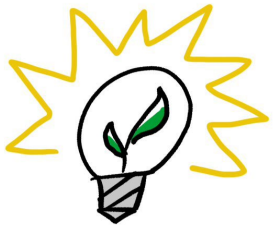
- Successful Model: Incentive programs for other e-waste fractions have proven effective.
- Informal Sector Role: Informal waste pickers are key players in the waste management ecosystem.

PROPOSAL 2: INCENTIVE PROGRAM

Proposal:

1. Incentive Expansion:
    - Extend the current e-waste incentive program to cover EOL cooling appliances.
    - Offer payments to informal waste pickers for turning in EOL cooling appliances.
2. Designated Collection Points:
    - Establish specific locations for waste pickers to drop off EOL cooling appliances.
    - Ensure these points are accessible and well-publicized.
3. Auction Process:
    - Collected EOL appliances are auctioned to licensed recyclers.
    - Proceeds from auctions can support the incentive program and further recycling initiatives.

PROPOSAL 3: MANDATORY ONE-OLD-FOR-NEW-ONE



Objective:

Implement a mandatory collection system for commercial refrigeration and air conditioning (RAC) units.

Background:

- Commercial Impact: High turnover of commercial RAC units leads to significant EOL waste.
- Responsibility Gap: New suppliers often do not account for the disposal of replaced equipment.

PROPOSAL 3: MANDATORY ONE-OLD-FOR-NEW-ONE

Proposal:

1. Mandatory Collection:
    - Enforce a regulation where suppliers of new commercial RAC units must collect the replaced equipment.
    - Establish a clear protocol for this collection process.
2. Supplier Responsibility:
    - Suppliers must turn in collected EOL RAC units to licensed recyclers.
    - Failure to comply will result in stiff penalties to ensure adherence.
3. Regulatory Changes:
    - Develop and implement the necessary regulatory framework.
    - Ensure thorough information dissemination to all stakeholders.

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Contact us:

Ellen Michel
Head of COPA Secretariat
E-Mail: ellen.michel@giz.de

COPA Secretariat
contact@copalliance.org

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