



Resource mobilization for Climate Benefits

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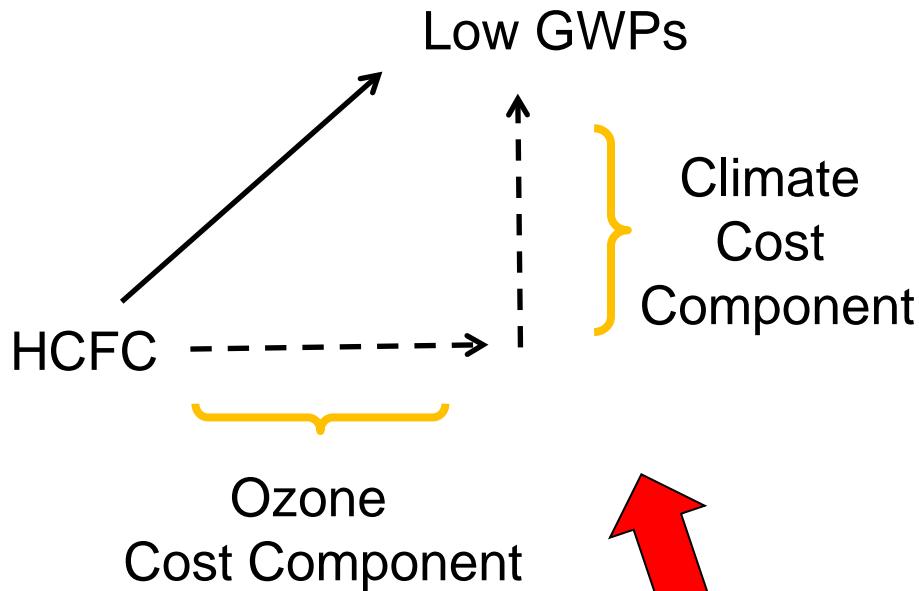
**LAC Network Meeting in Kingston
October 2013**

Resource mobilization for climate co-benefits

- ExCom decision 63/20 approved US\$ 200,000 for UNDP
- Target: To examine technical interventions in order to **maximize the climate impact of HCFC phase-out**, such as energy efficiency enhancements outside of MLF
- UNDP has sought to mobilize resources from bilateral and multilateral sources, and **private** sectors

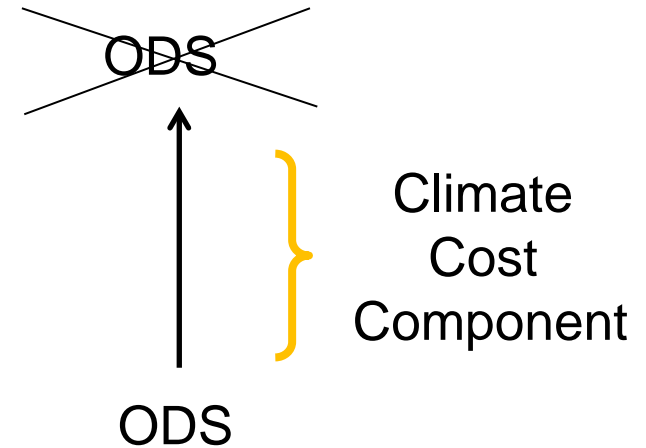
The Climate Cost Component

HCFC Phase Out



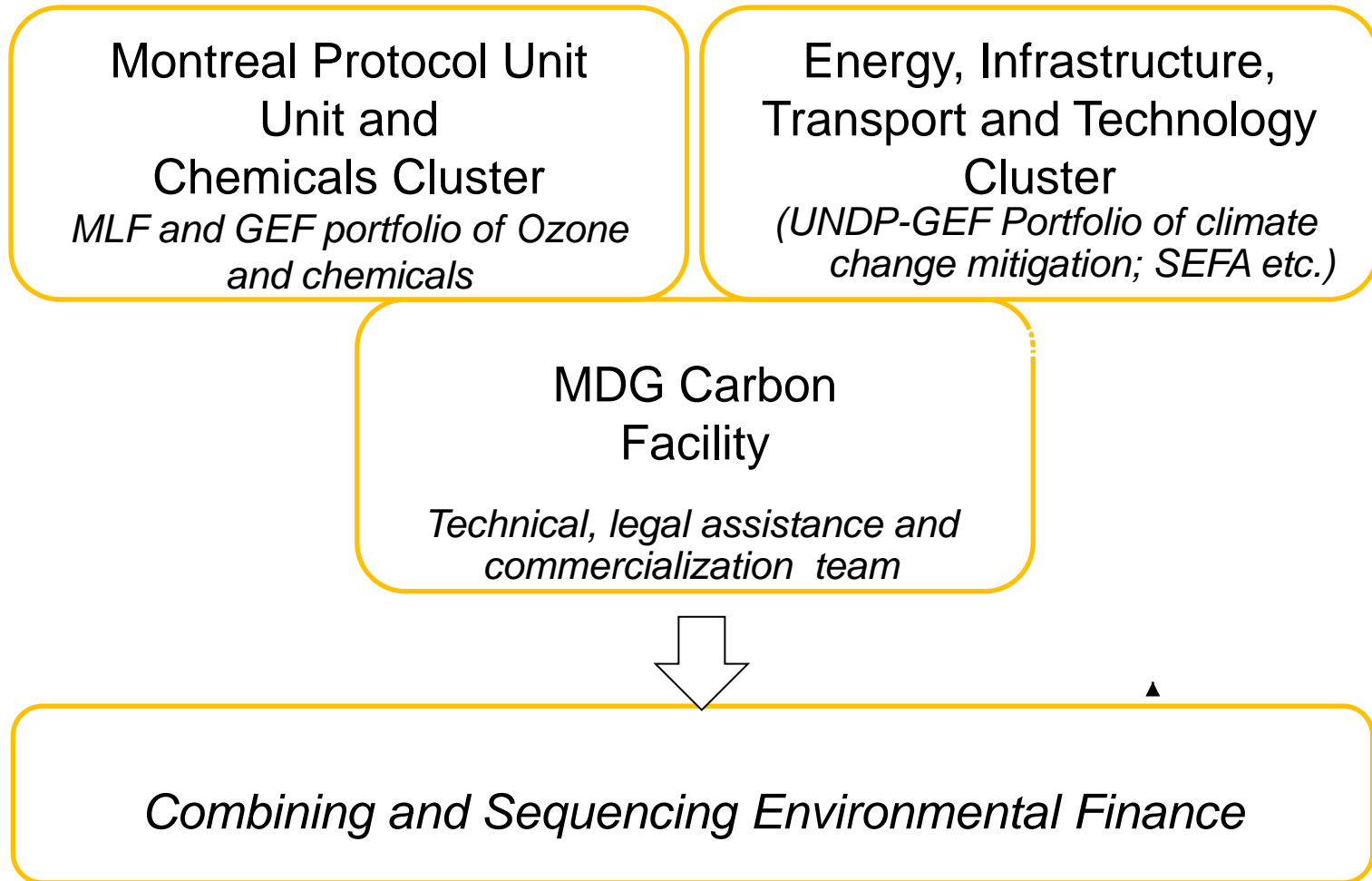
Energy efficiency

ODS Banks



MSWaste/E-Waste

UNDP Institutional Structure



Potential Funding Sources

Focus: Maximization of Climate Benefits of HCFC Phase Out

MLF
(ODS
Phaseout)

- Current funding primarily for HCFC cost component in current triennial replenishment

GEF
(Energy
Efficiency)

- Current limited funding for climate cost component if there are energy efficiency gains

Carbon
Finance
(GHGs)

- Possible funding source (for *entire* climate cost component, for both HCFC Phase Out and ODS banks).

Others

- Funding as per Bilateral and Private Sector partners interests/possibilities

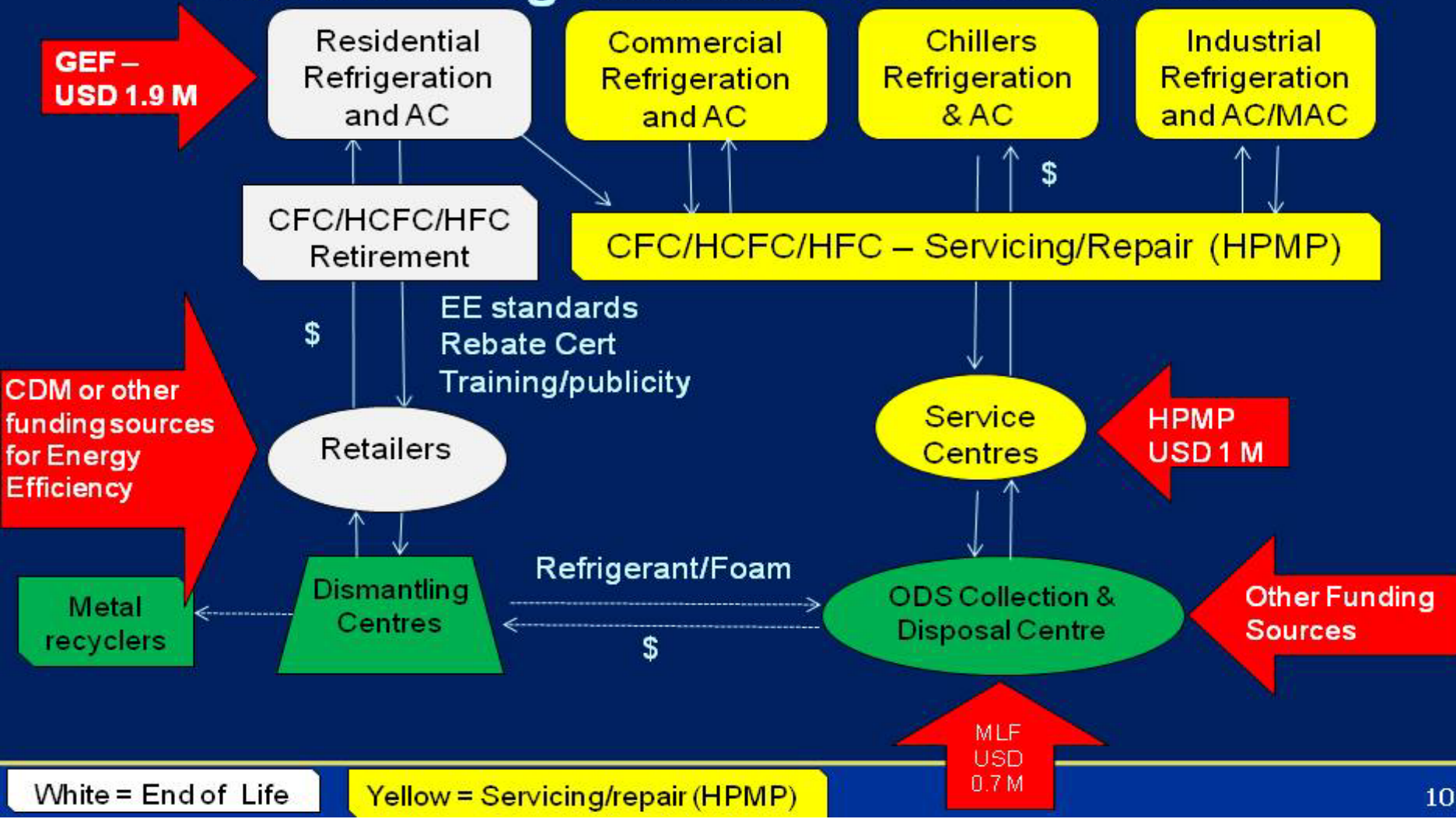
Opportunities to Maximize Climate Benefits

1. **Integrated Approach-** Servicing Sector in Ghana
SOF: MLF/National Budget/ GEF/Carbon Finance

2. **Energy Efficiency**– Refrigeration and AC sector
Indonesia
SOF: GEF/ national budget/private sector and bilateral partners

3. **Demonstration Projects** : EE and lower GWP
Alternatives to HCFCs in PU foam and CR sector India,
Indonesia, Malaysia
SOF: bilateral and private sector partners ▲

Ghana - Integrated Plan for Energy Efficiency, Climate Mitigation and ODS Reduction



White = End of Life

Yellow = Servicing/repair (HPMP)

Carbon Finance Considerations

- Carbon finance offers a number of opportunities for the funding of the climate components of such projects


- Any access to the carbon market needs to be approached carefully to build market credibility and manage risk

- Voluntary Carbon Market limitations
 - Transaction costs
 - Low price of credits
 - Volume limitations

Energy Efficiency – Refrigeration and AC Sectors in Indonesia

- Indonesia receives **MLF assistance for HCFC phase-out** in A/C and refrigeration sectors by 2015 – technology conversion programmes (~ US\$ 9 mln)
- In parallel to HCFC phase-out, in cooperation with UNDP-GEF's Climate Change Mitigation Team (separate department), a project concept (PIF) was developed and approved by the GEF Council on energy efficiency enhancements in the Air Conditioning and Refrigeration Sectors in **Indonesia** (http://www.thegef.org/gef/project_detail?projID=4899).
- This proposal falls under GEF's **climate change focal area**, and within Indonesia's **STAR** allocation (a system for transparent resource allocation among BD, CC and LD)
- Projected project's value is **US\$ 5 mln**
- Proposal (PIF) is **approved by the GEF Council**
- There is a **strong Government support on EE programmes** (several laws and initiatives to stimulate the distribution of EE products)

Energy Efficiency – Refrigeration and AC Sectors in Indonesia

- Proposal will help the Government and industry in enhancing energy-efficiency in manufacture of A/C and refrigeration equipment
 - Includes GEF support in:
 - Increasing versatility of the system design to accept a wider range of low-GWP refrigerants;
 - Improvement of heat exchanger design and add-on heat exchanger component to improve energy utilization efficiency (increased frontal coil area, increased and improved fin density);
 - Improvement of condenser fan motors and its aerodynamics
 - Compressor motor efficiency improvements; application of variable speed systems; application of noise/vibration reduction systems
- 
- Developed regulations in local manufacturing and import of EE RACs
 - Supported by EE standards and labeling (Mandatory national standards)
 - Inspection and certification system for all produced and imported RACs
 - Consumer assistance programmes to help explain benefits of energy EE appliances

Demonstration Projects

Bilateral Cooperation and Private Sector funding

- To carry out **demonstrations for low GWP and energy efficient technologies**, at select enterprises in the Asia-Pacific Region

Country	Sector/sub-sector	Baseline	Technology
India	Polyurethane Foams (Rigid)	HCFC-141b/HC	HBA-2/FEA-1100/AFA-L1
	Commercial Refrigeration	HCFC-22/Energy-efficiency	R-290/R-600a
Indonesia	Commercial Air Conditioning	Energy efficiency	Compressors, fans, heat exchangers
Malaysia	Polyurethane Foams	HCFC-141b/HC	HBA-2/FEA-1100/AFA-L1
	Commercial Refrigeration	HCFC-22/Energy-efficiency	R-290/R-600a and compressors, fans and heat-exchangers

-Policies and regulations for sustaining technical interventions

-Benchmarks for costs and implementation timeframes

Thank you!
Muchas Gracias!

<http://www.undp.org/chemicals/montrealprotocol.htm>

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