



Programmatic CDM: Moving Towards More Implementation

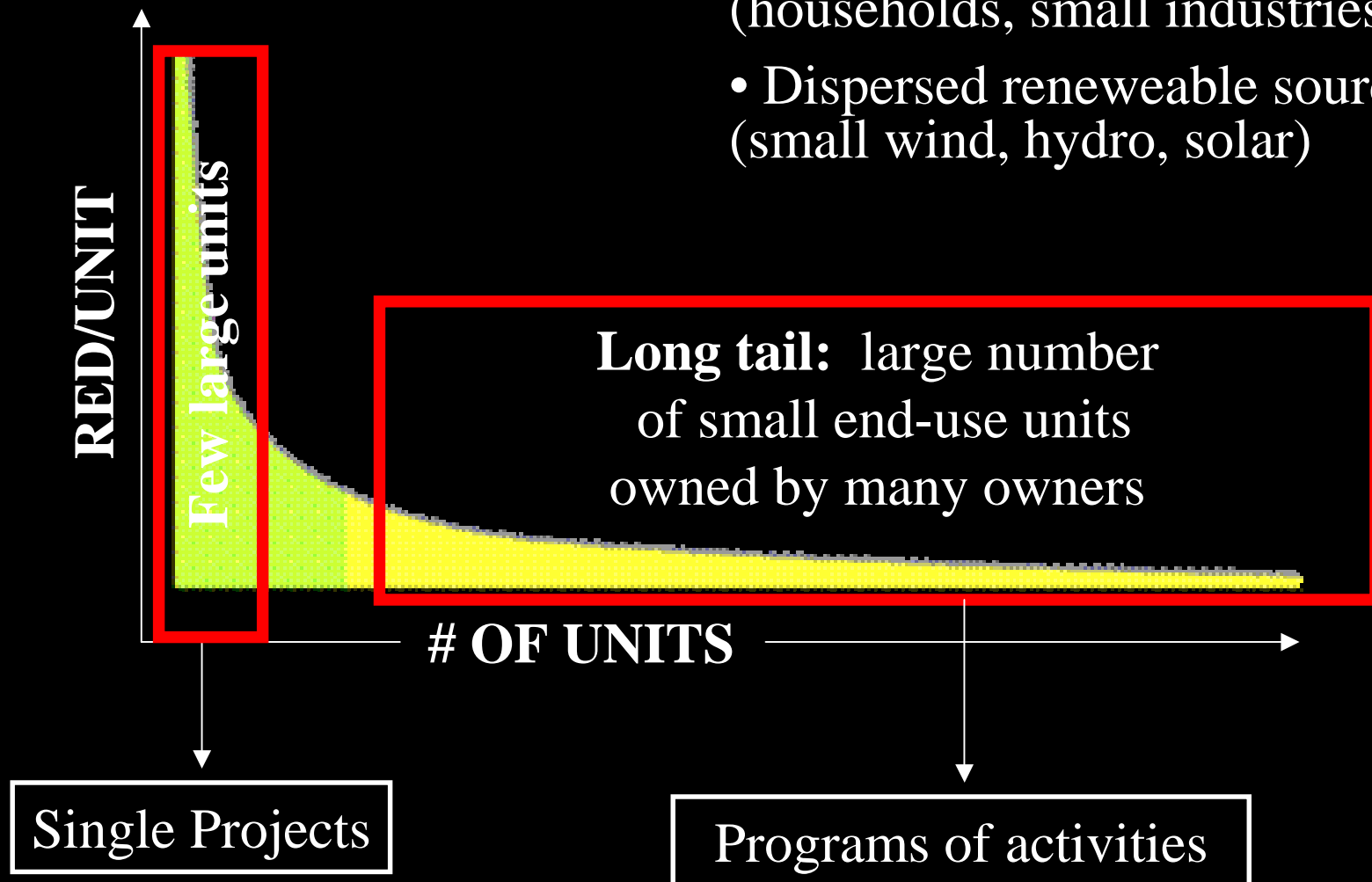
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Application of Programme Approach

Source: ESMAP and CFU (2007)

- End-use energy efficiency (households, small industries)
- Dispersed renewable sources (small wind, hydro, solar)





Types of CDM Projects

| Single Project | Bundle of Projects | Program |
|---------------------------------|--|---|
| Single location | Multiple locations | Multiple locations, across countries |
| Single project participant (PP) | Multiple project participants (PP) | Multiple project participants (PP) |
| 1 project at a time | A number of activities submitted as 1 project activity at a time | A number of activities submitted as coherent groups (CPA) over the life-time of the POA |
| One crediting period | Uniform crediting period for all activities | Each CPA has own crediting period |
| PP known ex-ante | All PP known ex-ante | At least one PP known ex-ante, rest join later |



Examples

Project Activities (CPA) under a Program (POA)

Single Technology : Single Location

Industrial Chiller in a factory

Single Technology : Several Locations

Efficient Light-bulbs (CFLs) in several homes

Several Technologies : Single Location

Energy Efficiency measures in water pumping station

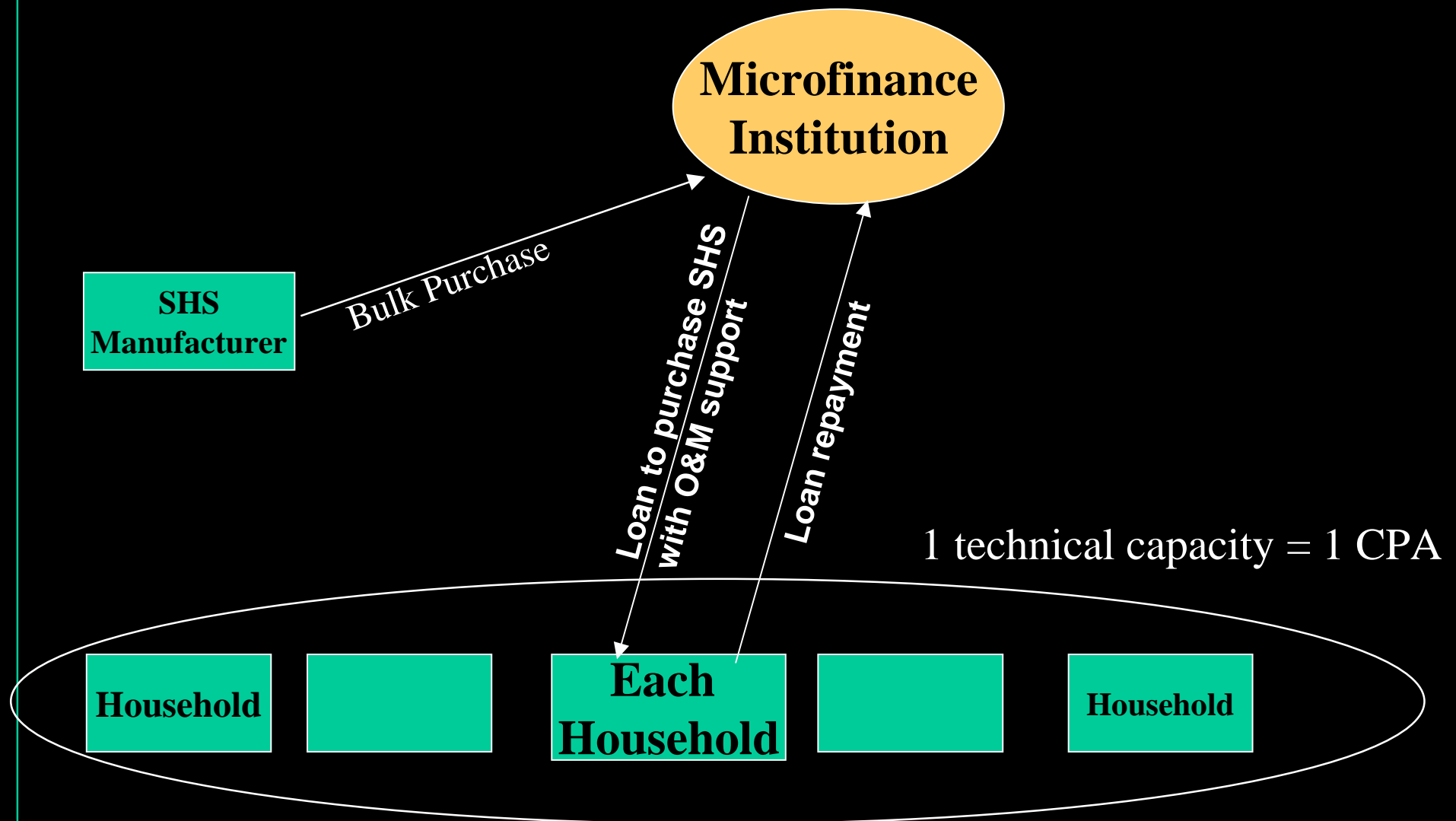
Several Technologies : Several Locations

Efficient equipment (refrigerators, ACs, etc) in several homes



Solar Home Systems

Under validation

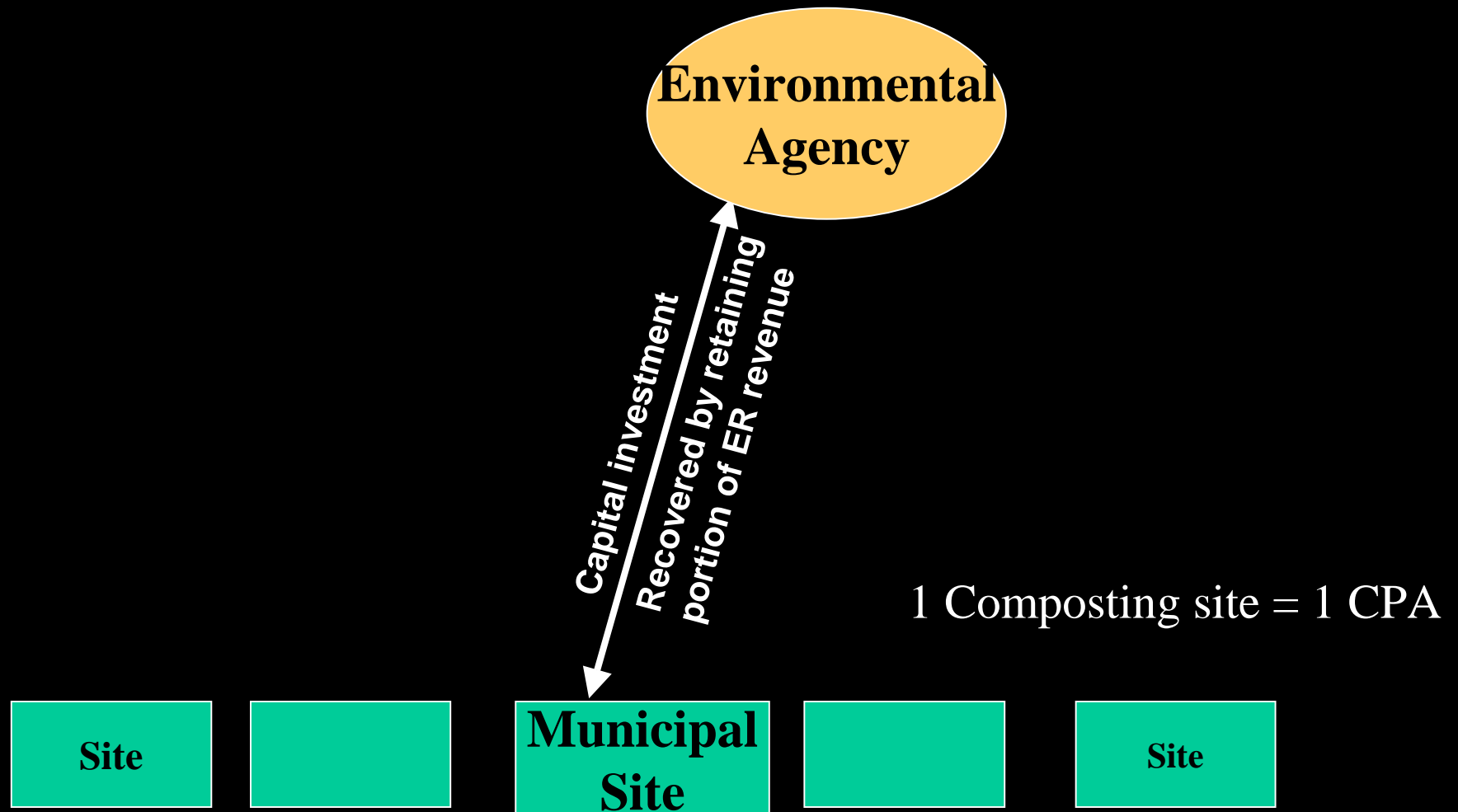


Methodology: AMS I.A. Renewable Energy generation for user



Municipal Waste Composting

Under validation

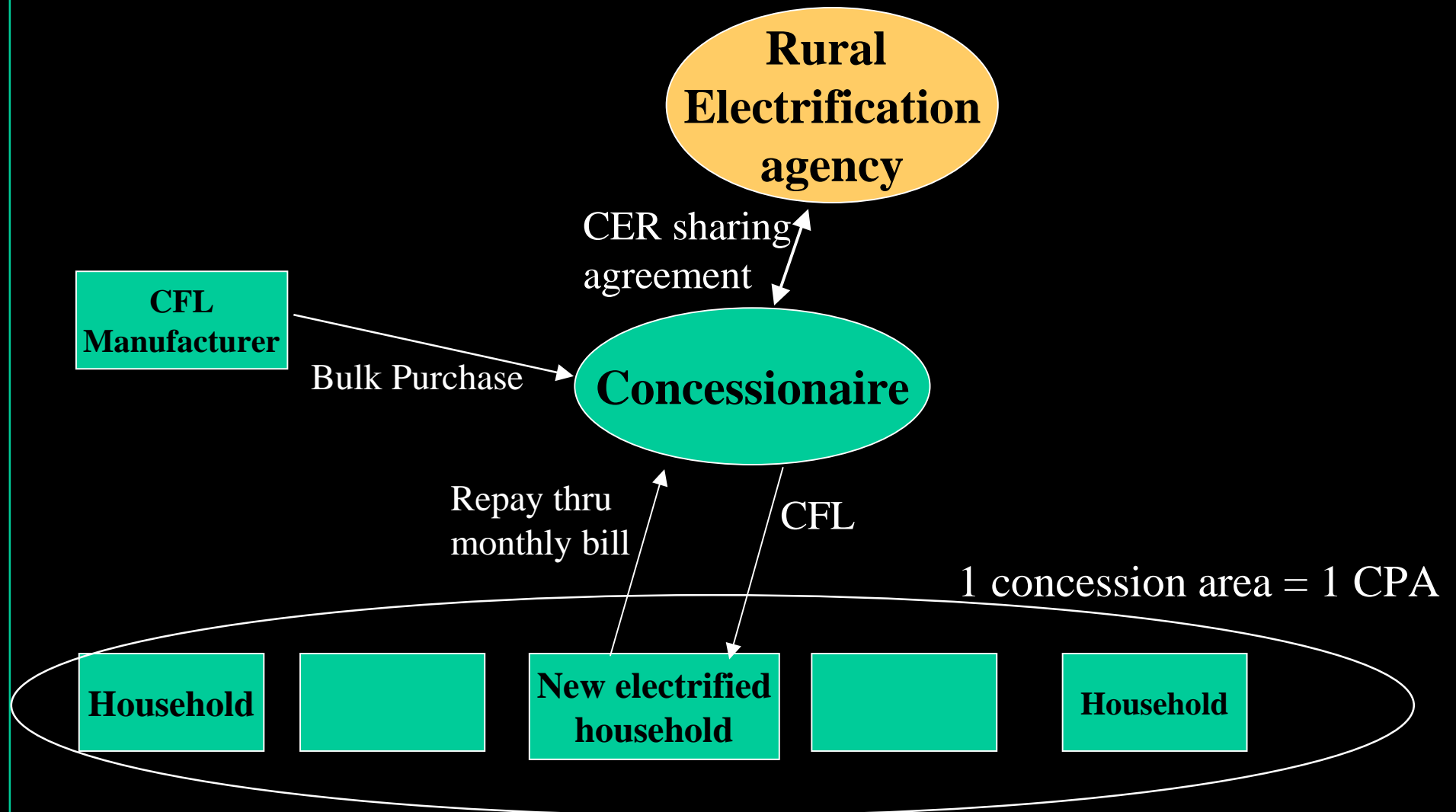


Methodology: AMS III.F Avoidance of Methane emissions through controlled biological treatment of biomass"



CFL Rural electrification

Under validation



Methodology: AMS II.C. Demand side Energy Efficiency activities

POA under validation



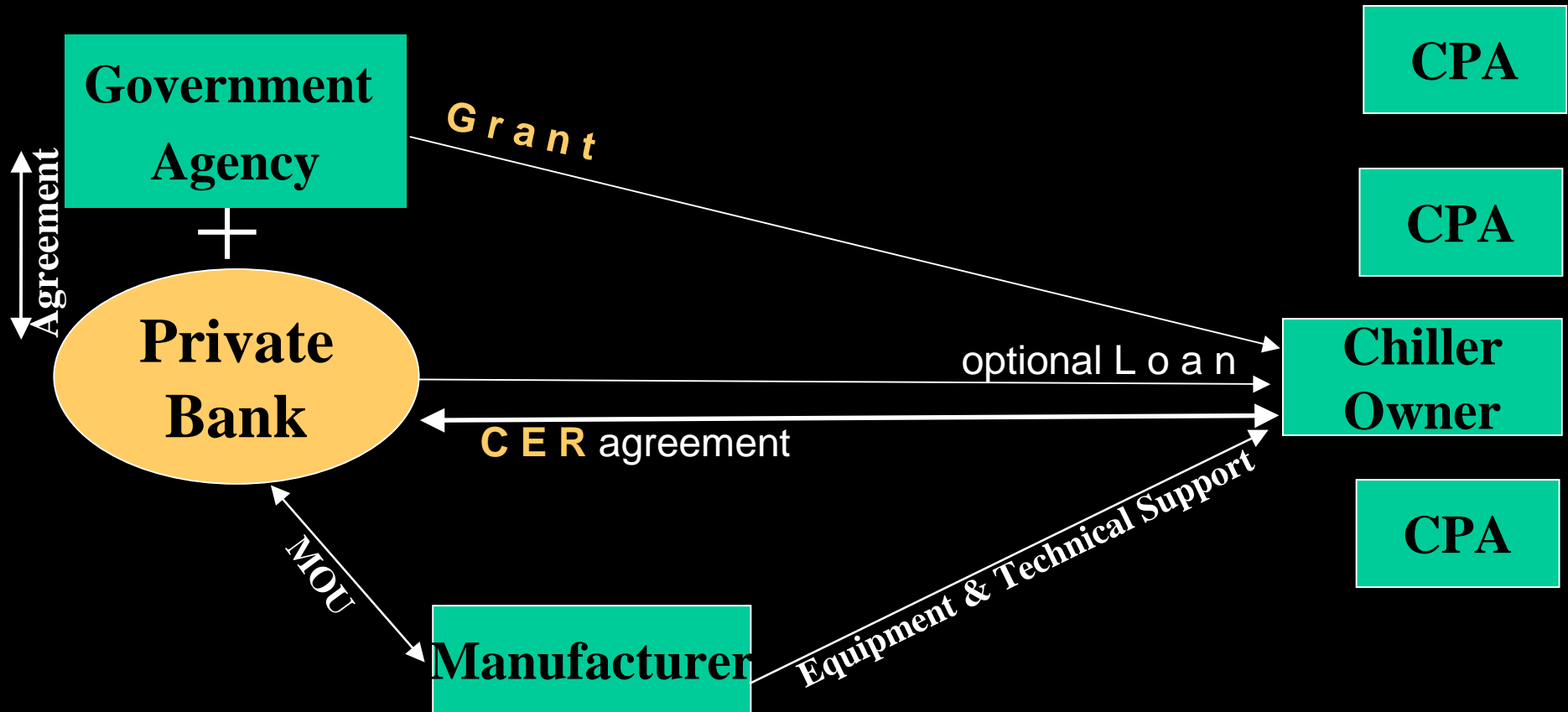
| Country | Technology | Methodology | POA Coordinator |
|---------------------|--|--------------------------------------|--------------------------------------|
| <i>Bangladesh</i> | <i>Solar Home Systems</i> | <i>Renewable Energy (AMS I.A.)</i> | <i>Non Governmental Organization</i> |
| Brazil | Methane Capture from animal waste & Combustion | Waste Management (AMS III.D.) | Meat Product Company |
| South Africa | Solar Water Heating systems | Renewable Energy (AMS I.C.) | Equipment Supplier |
| Mexico | Compact Fluorescent Lamps | Energy Efficiency (AMS II.C.) | CDM project developer |
| <i>Uganda</i> | <i>Municipal waste composting</i> | <i>Waste Management (AMS III.F)</i> | <i>Environmental Agency</i> |
| <i>Senegal</i> | <i>Compact Fluorescent Lamps</i> | <i>Energy Efficiency (AMS II.C.)</i> | <i>Rural Electrification Agency</i> |



Efficient Chillers

Proposed

1 Chiller unit = 1 CPA



Methodology: AM0060 Replacement by Energy Efficient Chillers



CDM Program Design.

- **What** coordinating/managing entity will be most effective for the required tasks
- What is the **relationship** between program and project entities?
- What is the **funding source** for program implementation? Can it be fully and effectively implemented without CDM revenue?
- What are the major **risks** in program implementation?
- How will we **measure and verify** project-related energy saving?



Experience

- Role of coordinating entity is critical in ensuring effective implementation of the program
- Capacity building is key to successful implementation of programs
- Program design should include a detailed control mechanism and incorporate additionality and monitoring & verification requirements



What is needed

- **REGULATION**

- Guidance and intervention is urgently required from CDM EB on:
 - Liability issue of the DOE
 - Application of a single version of methodology to a entire program and all the CPA during one crediting period
 - Use of multiple, logically linked methodologies in a program
 - Application of debundling rule to PoAs

- **CAPACITY**

- Building capacity of various stakeholders (government agencies, NGOs, FIs, private sector, and validators) will be key to success.
- Increased participation by international agencies, to share experience with implementation of their past (non-CDM) programs



Thank you

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