

# Programmatic CDM and EE

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Implementing Program of Activities under CDM from the point of view of the Managing Entities: **Microfinance Institutions as an opportunity for developing Energy Efficiency PoAs in Latin America?**

Latin American Carbon Forum - Chile - 28-30 October 2008

# Brand structure



Promotion of housing,  
environment and  
climate protection, education,  
infrastructure, social issues



Promotion of SMEs,  
business founders,  
start-ups



International project and  
export finance



Promotion of developing  
and transition countries



# Contents

- The private sector as managing entity: case study;
- The public sector as managing entity: case study;
- Evaluating the role of microfinance in CDM;
- MFIs as managing entity: case study;
- Microfinance in Latin America;
- Conclusions;

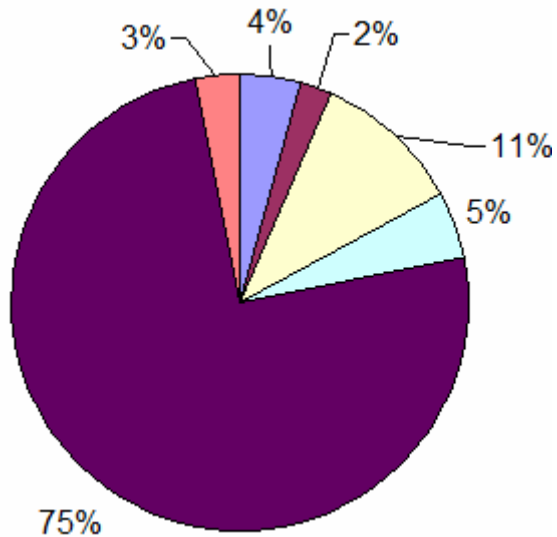
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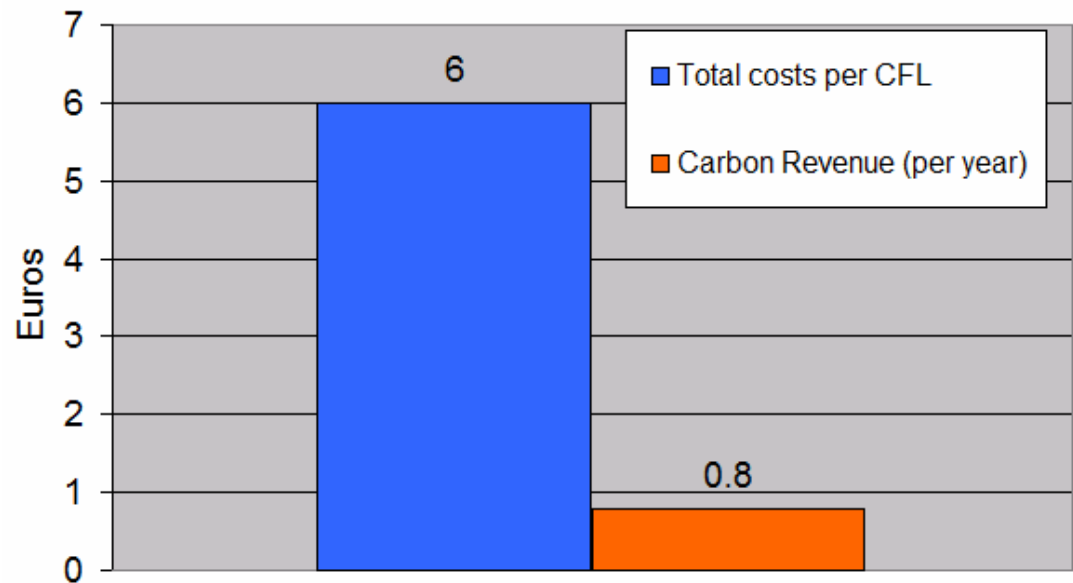
## Interest of pCDM - private sector

- Access to the CDM market as pCDM implementing or supporting entity:
  - Financial institutions;
  - Utilities;
  - Producers of climate friendly technology;
- Support and expansion of core business activities:
  - Improvement of loan conditions;
  - Funding of demand side management programs;
  - Offering price discounts for climate friendly products;
  - Realizing and funding of sustainable development initiatives.

# Compact Fluorescent Lamps



CFL in India

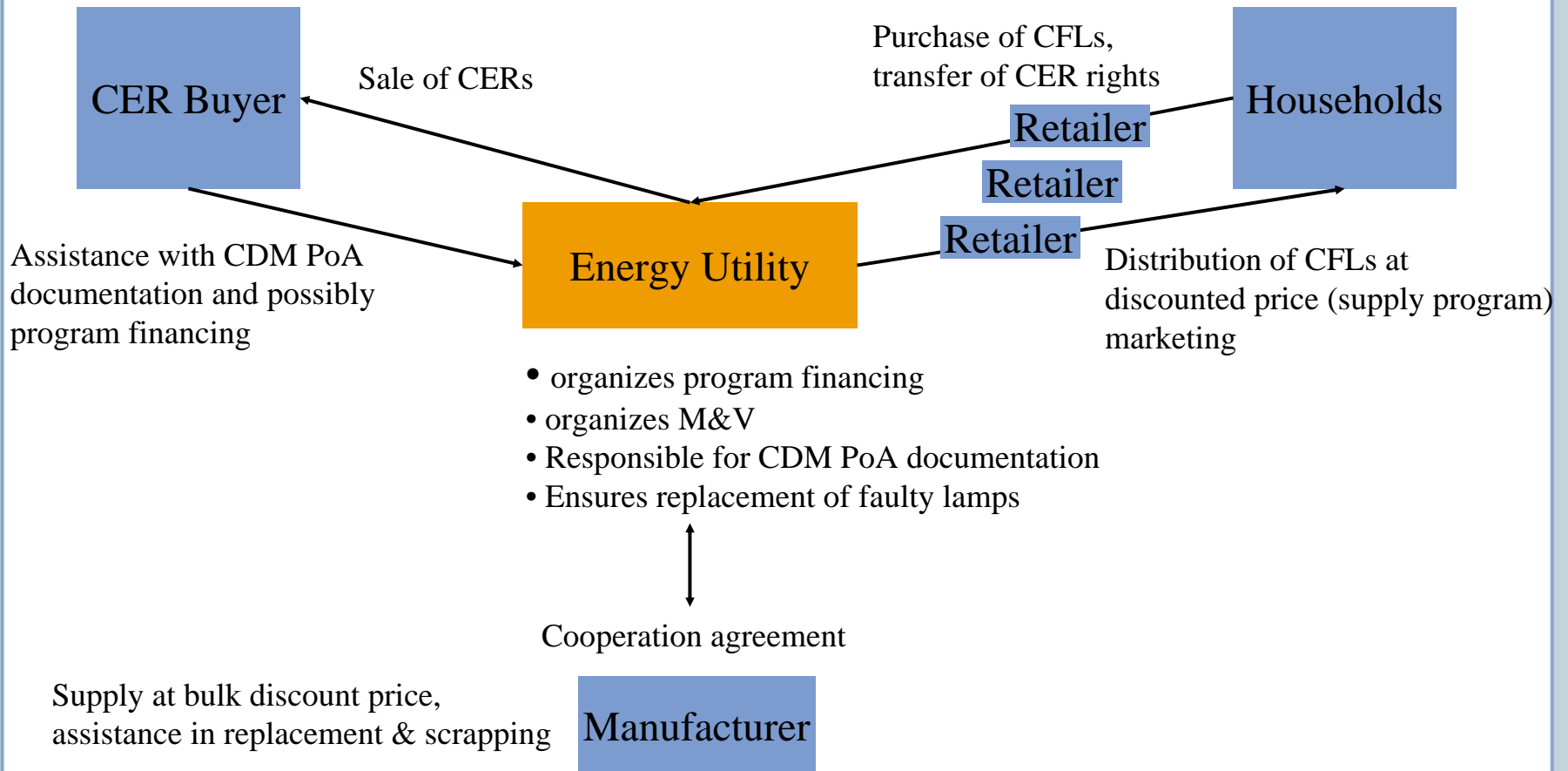


Average lifetime: 10 years

CER price: EUR 10

Total costs for 530,000 CFLs: EUR 3,185,000

# Compact Fluorescent Lamps



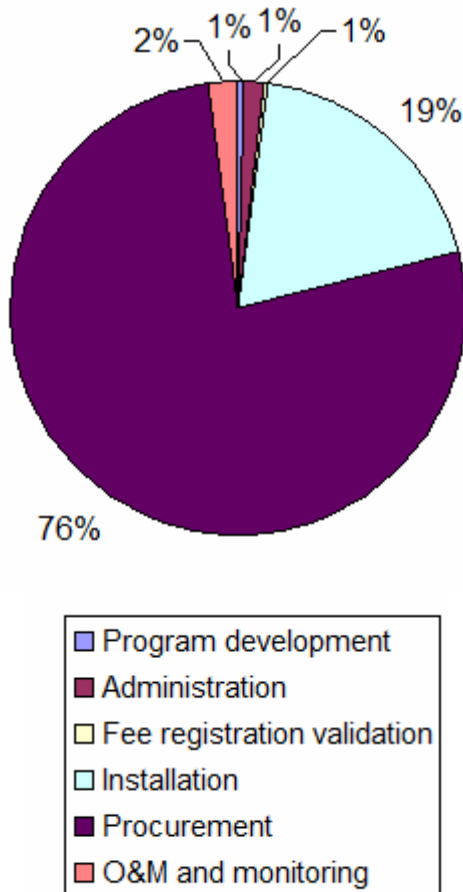
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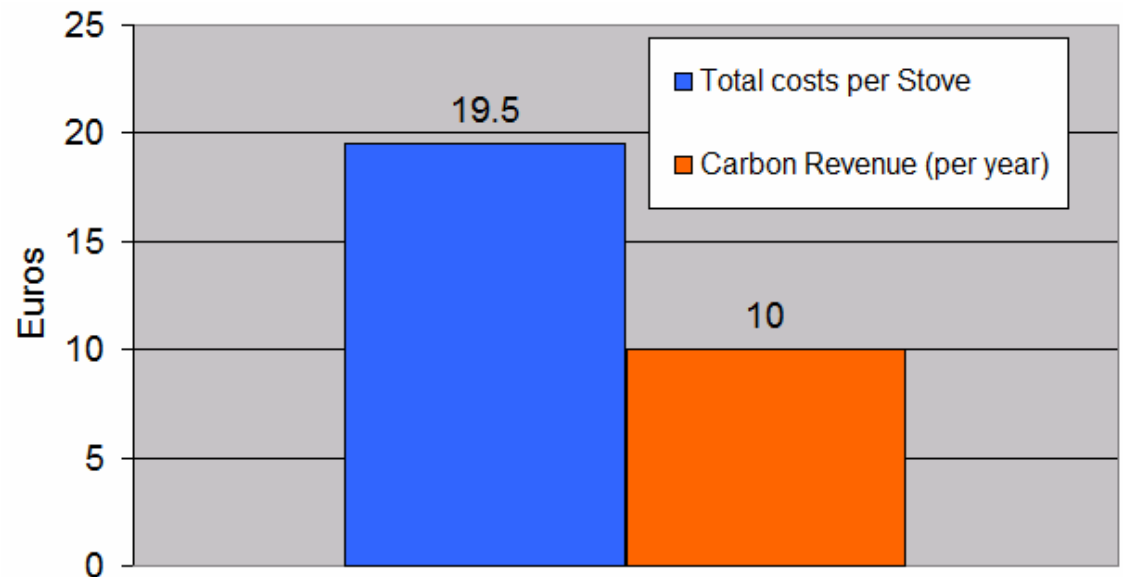
## Interest of pCDM – public sector

- Funding of national/regional/local energy or climate policy initiatives via CDM revenues.
- Providing the missing link in dealing with market imperfections:
  - Distorted energy prices;
  - Split incentives;
  - Initial cost orientation versus lifecycle cost orientation.
- Post 2012 Perspective : Generation of public funds through policy implementation programmes.
  - Example: energy efficiency standards and labelling.
  - Huge revenue potential for Governments.
  - However CDM regulation not yet ready for policy programmes.

# Household Stoves



Studies from Hulscher and Bailis

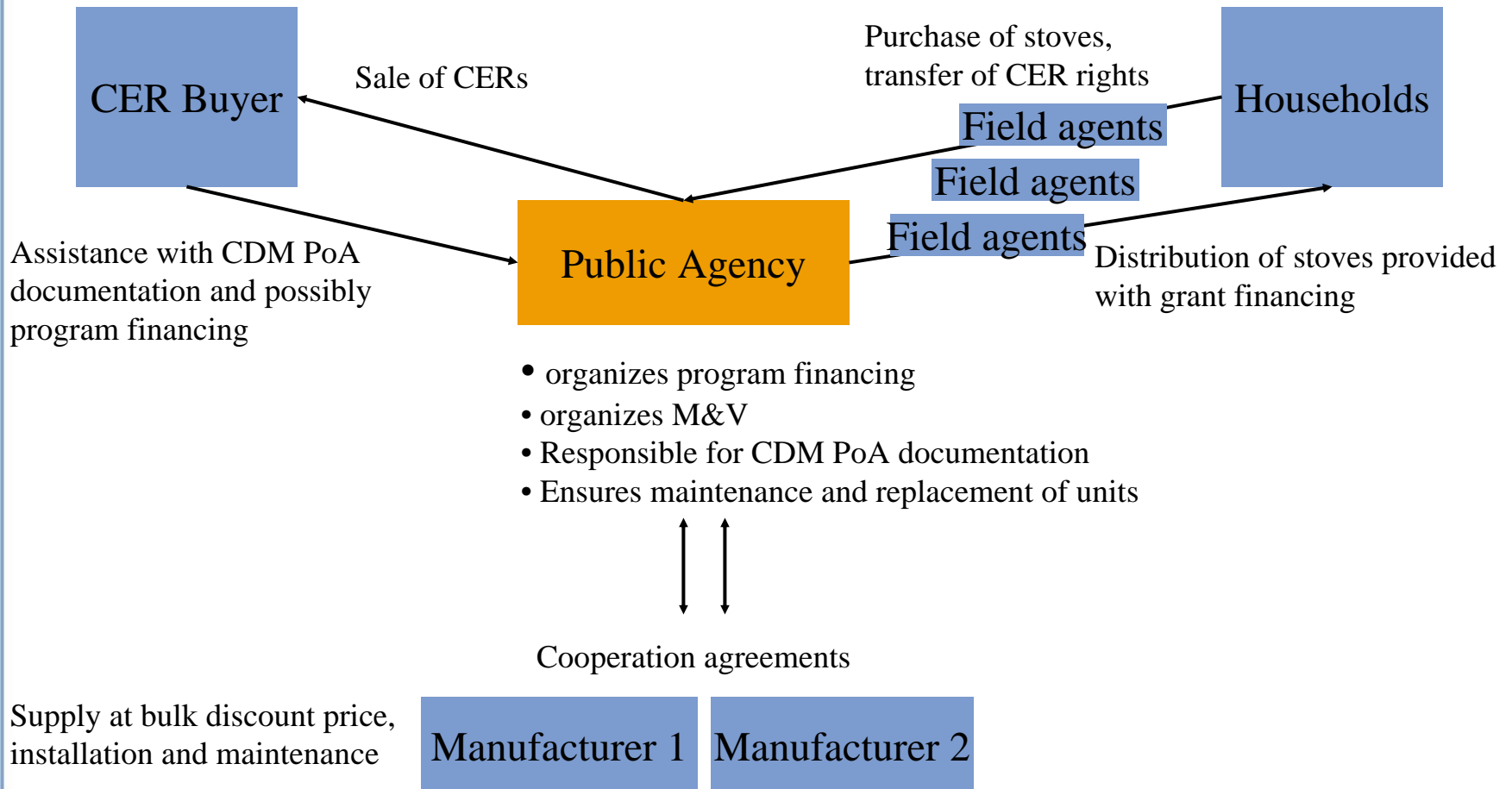


Average lifetime: 2 years

CER price: EUR 10

Total costs for 1,000,000 stoves: EUR 19,500,000

# Household Stoves



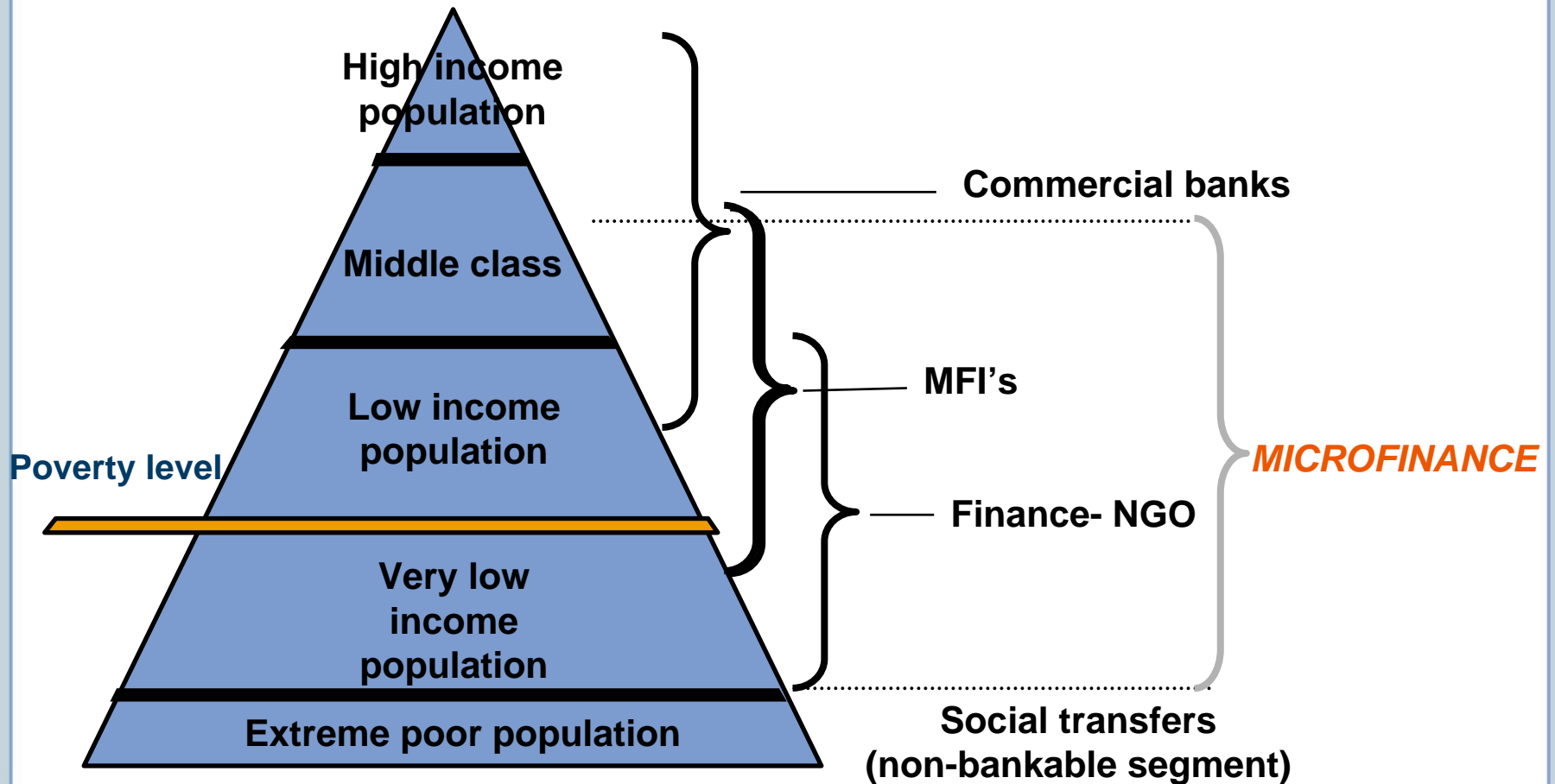
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## What is microfinance?

- Financial services for poor and low-income clients to finance their income-producing activities, build assets, improving their living conditions, etc.
- Microfinance institutions (MFIs) use new methods developed mostly over the last 30 years to deliver very small loans to low (mostly unsalaried) borrowers, taking little or no collateral (group lending and liability, pre-loan savings requirements, gradually increasing loan sizes, etc);
- Target group: low income population and micro enterprises that do not have access to other financial services.

# Microfinance in the financial system



# MFIs as managing entities: enhancing the value of PoAs



- Access to financial resources and necessary initial investments;
- Established networks within the financial sector and with donors;
- Proximity to target group and proved experience in structuring and financing programs;
- Reducing financial risk, facilitating the provision of seed capital by carbon buyers also in in high risk countries/sectors;
- MFIs' programs are of public interest but they can handle independent;
- MFIs are a reliable counterparty for carbon buyers;
- MFIs orientation on sustainable development fits with original CDM goals;

# MFIs as managing entities: reducing energy hungry and poverty



- Low income population and micro enterprises have generally limited access to sustainable energy systems. 2,4 billion people living in developing countries do not have access to modern sources of energy (United Nations – International Energy Outlook 2004);
- The lack of affordable energy reduces the productivity of both households and micro enterprises, by limiting their activities to daylight hours and constraining the use of time-efficient technology.
- The rising energy prices will further increase the negative consequences of the future energy hungry on the poorest population in emerging economies;
- Improving energy efficiency can contribute to reduce significantly the economic pressure on low income households;
- From the point of view of GHG emissions abatement there is a huge reduction potential in household, transport and agriculture sectors;
- Low income population is more vulnerable to the consequences of climate change.

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## pCDM: Microfinance institution

- MFI offer credit on favorable conditions for the implementation of PoA
- Households / micro enterprises make use of the micro credit to implement energy efficiency measures under PoA's framework;
- Households / micro enterprises transfer CER ownership to MFI by incorporation to the program;
- MFI sells the CERs to carbon buyer and refund the micro credits with the CER revenues;

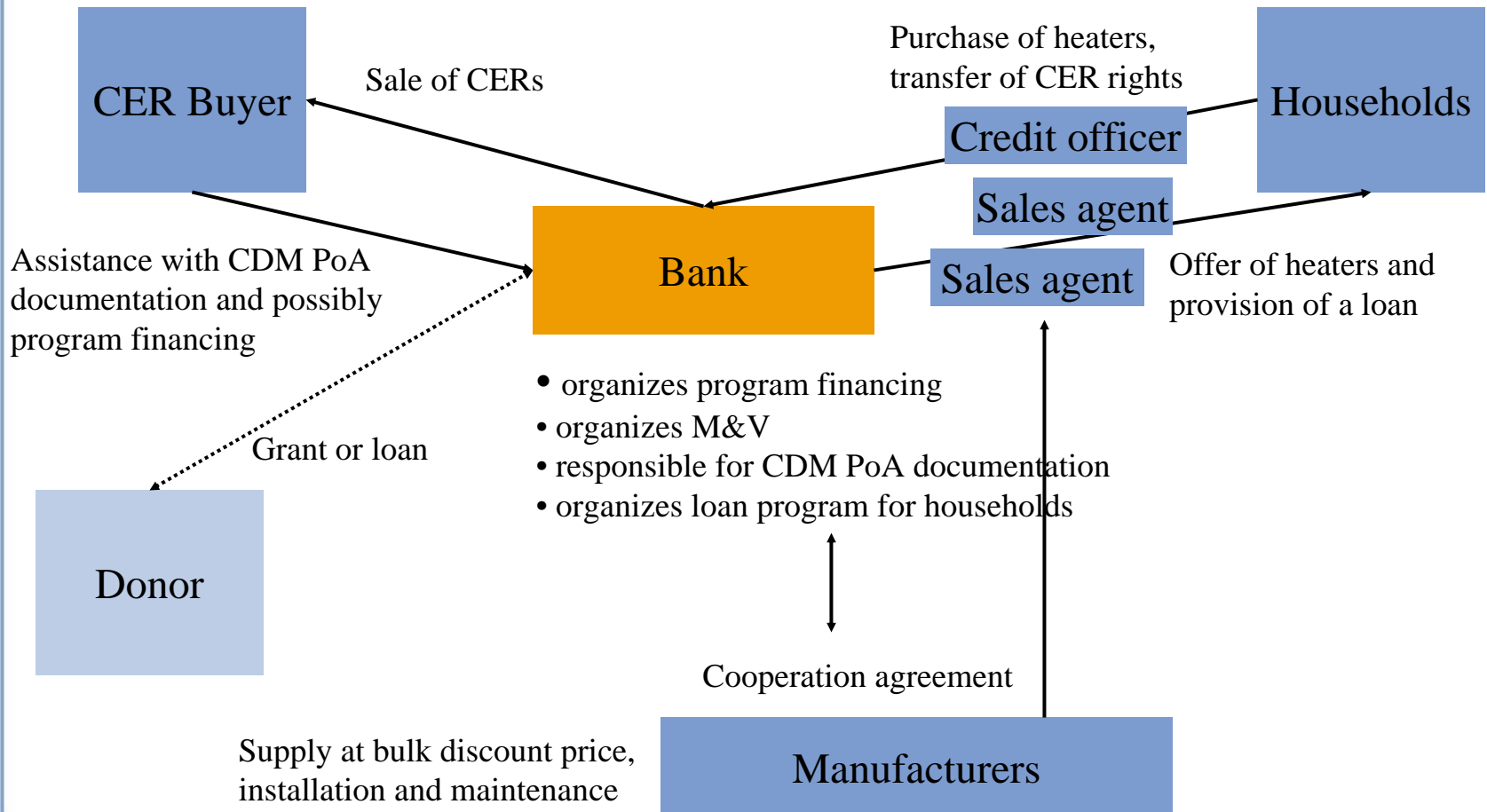
**For the first years is pre-financing / seed capital necessary (MFI, carbon buyer, etc)!!**

**The revenues of the CER sales must cover transaction costs and (if any) subsidies!!**

## Solar Water Heating

- Initial costs (including installation) per unit: 800 EUR.
- Energy production p.a.: 2 MWh.
- Carbon revenue potential p.a.: 20 EUR (2 t CO<sub>2</sub>).
  
- Fast amortization out of energy savings but initial cost barrier.
- Soft loans to overcome investment barrier.
- Additional funds required to provide strong enough incentive.
  
- Typical PoA operator: Financial institution.
- Multiplier: manufacturers.
- Monitoring via sales or micro credit agents possible.

# Solar Water Heating



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# Microfinance in Latin America

Rank	Country	2008 Score
1	Peru	76.6
2	Bolivia	74.4
3	Ecuador	69.7
4	El Salvador	59.0
5	Colombia	58.6
6	Nicaragua	58.0
7	Guatemala	54.0
8	Paraguay	49.6
9	Dominican Rep	48.0
-10	Mexico	47.5
-10	Panama	47.5
12	Honduras	47.1
13	Chile	43.2
14	Brazil	41.6
15	Costa Rica	40.3
16	Haiti	30.2
17	Argentina	28.5
18	Uruguay	28.3
19	Venezuela	24.9
20	Jamaica	21.2

## Indicators

Regulatory  
framework;

Investment  
Climate

Institutional  
development

Source: 2008 Microscope on the Microfinance Business Environment in Latin America and the Caribbean, published by Economist Intelligence Unit Limited 2008

## Conclusions

- Managing entities play a crucial role for the successful implementation of PoA;
- Microfinance and MFIs acting as managing entities can be a suitable instrument for GHG emissions reduction in dispersed sectors;
- The involvement of MFIs in CDM can significantly contribute to enhance the effects of climate protection programs on poverty reduction and sustainable development;
- MFIs are reliable counterparties for Carbon Buyers;
- MFIs constitute an opportunity for the development of CDM programs in high risk countries in Latin America by:
  - Making the necessary seed capital available;
  - Reducing the counterparty risk;

# How does the KfW PoA Support Center help?



- Advice on:
  - Identification of pCDM opportunities;
  - Check with CDM requirements;
  - First economic assessment.
- Development of Project Idea Note.
  - Technical support and readiness to take the lead.
  - Financial support.
- Advice during decision-making progress.
- Support through the following steps: concept, implementation, CDM registration, marketing of CERs.

## How does it work?

- Step 1 Partnership Agreement (MoU) KfW – Entities interested in PoA implementation (PoA entities).
- Step 2 KfW takes initiative to develop concrete PoA proposal (PoA-PIN) through technical and financial support.
- Step 3 Mutual decision making on going ahead.
- Step 4 KfW supports development of PoA concept and CDM documentation.
- Step 5 PoA entity decides on PoA implementation.
- Step 6 KfW supports PoA implementation and marketing of carbon credits.

# Participating in KfW PoA Support Programme



- **Required is:**
  - Institutional capacity and interest to implement a PoA.
  - Experience in implementing incentive programmes.
  - Cooperation in PoA-PIN development (MoU).
- **Not required is:**
  - CDM and carbon market experience.
  - Pre-commitment to implement a PoA.
  - Any type of financial pre-commitment.

## Timing

- By end of 2008 Partnership agreement (MoU).
- January 2009 - March 2009 PoA-PIN development.
- Evaluation of PoA-PIN and decision making.

For PINs taken forward:

- April 2009 - Juli 2009 Development of PoA concept and CDM documentation.
- Decision making on PoA implementation.
- From mid-2009 on: Start PoA registration process and PoA implementation.

# Thank you for your attention!

For further information: [www.kfw.de/carbonfund](http://www.kfw.de/carbonfund)

A background image showing several wooden oars with white blades floating on a body of water with ripples.

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