

# GEF-KAM Industrial Energy Efficiency Project

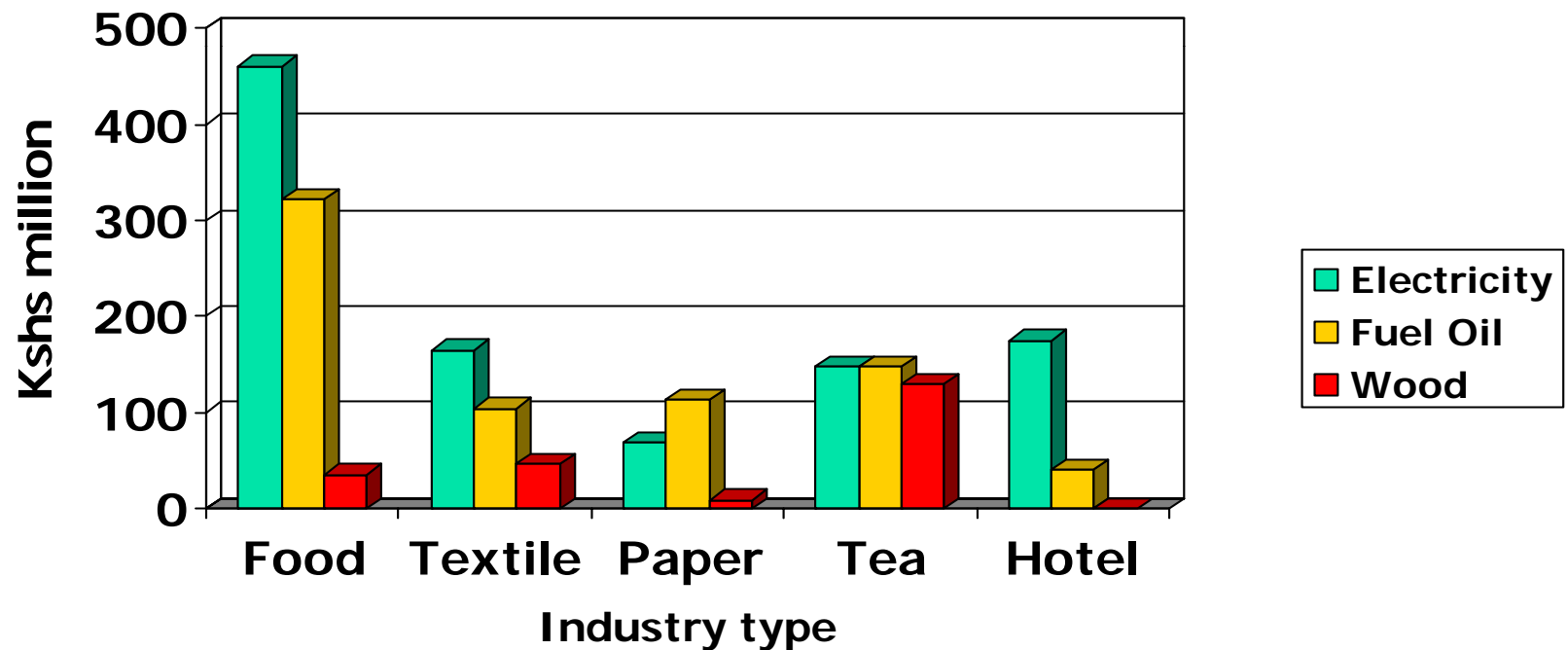
- Removal of Barriers to Energy Conservation and Energy Efficiency in Small and Medium Scale Enterprises (SME)
  - *A Project of the Government of Kenya with Support from UNDP-GEF*
  - *Executed by UNOPS at the Kenya Association of Manufacturers (KAM)*

# Background

- **Kenya's development scenario**
  - GDP growth rate declining since 1995
  - Real industrial output decrease by 1.5% in recent years
  - Industrial energy waste of 10% to 30% is common
- **Impacts of inefficient energy utilization**
  - High production costs and non-competitive products
  - Slow economic and industrial development (closures)
  - Increased unemployment and poverty
  - Negative environmental impacts

# Background – Energy saving potential

Estimated annual savings for different types of industry



## Background – Investment in Energy Efficiency

Sector	Annual Savings	Investment
Food & Bev.	USD 10m	USD 30m
All Sectors	USD 80m	USD 300m

\* Kenya aims to become a newly industrialized nation by the year 2020. There is scope for investments of approx. USD 15m/yr in EE improvements.

# The Project Goal

- To remove barriers to energy efficiency and conservation (information, technical, **financial**, institutional)
- Enhance energy efficiency in SMEs, and enable **investments** in energy efficiency
- Reduce CO<sub>2</sub> emissions
- Industry to produce high quality products at lower cost
- Increase the institutional capability to implement energy efficiency projects

# Project Activities

- Awareness raising among business owners and operators (Workshops, Networking)
- Overcoming financial barriers
  - Financial Engineering Courses (RFP issued)
  - **Guide for Investors (under preparation)**
- Financing and implementing demonstration projects to test and prove the new approaches (e.g. CDM)
  - Canada CDM Small Projects Facility
  - Baltic CHAIN (Clearing House and Information Network)

# Guide for Investors in Industrial Energy Efficiency Projects

## Part I – Project Development Module

1. **Energy Efficiency Technologies and Market Feasibility**  
What is an energy efficiency investment?
2. **Project Development Process**  
What are the steps to follow to develop an energy efficiency investment project?
3. **Project Financing Modalities**  
How to develop financing for an energy efficiency investment project?
4. **Project Implementation and Monitoring**  
How to ensure that the investment meets financial and energy performance expectations?

## Part II – Support Module

5. **Policy, Legal and Regulatory Considerations**  
What is the supporting regulatory framework?
6. **Sources of Information and Assistance**  
What information is available?
7. **Case Studies**  
Are there real projects to build confidence?



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# Canadian CDM Small Projects Facility

## Objectives

- Promote small GHG reduction projects that qualify under the CDM simplified approval process.
- Increase CDM opportunities in countries and regions with existing investment barriers.
- Support communities, NGOs, SMEs, and other potential project hosts in preparing project documents for small CDM projects.
- Link Canadian CDM investors with viable projects.

# Canadian CDM Small Projects Facility

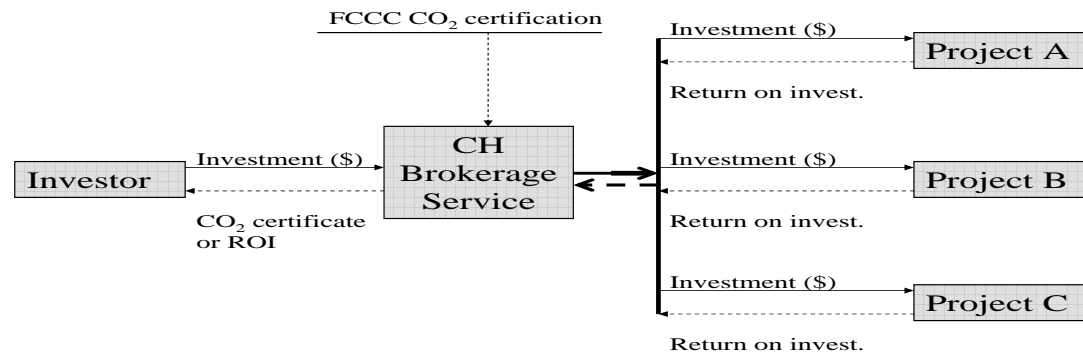
## Services

- Use CDM to assist host organization meet their objectives,
- Apply the simplified baseline and monitoring and verification procedures that will apply under the special simplified process for small CDM projects,
- Develop the most appropriate business models to implement and finance projects,
- Carry out basic financial and CER analysis for the project,
- Identify the role for a carbon investor and prepare a CER purchase agreement.

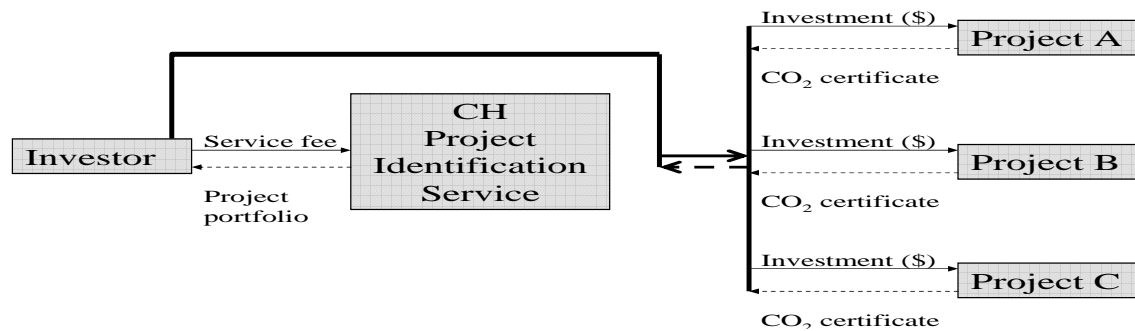
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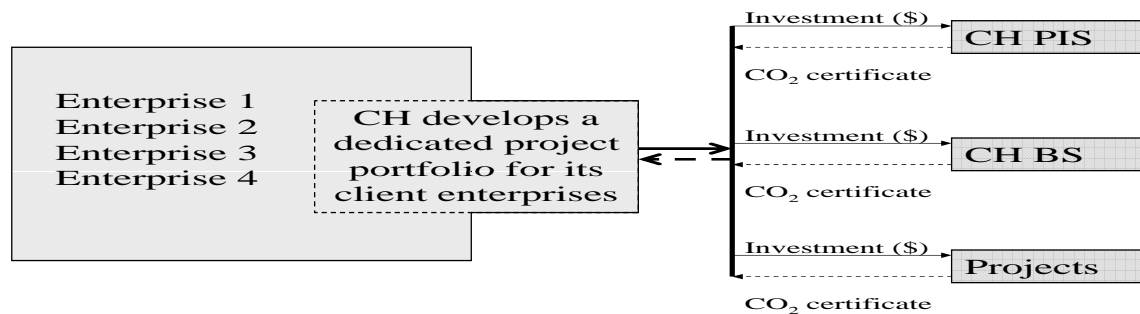
## CH Brokerage Model



## CH Project Identification Model



## CH Buyer Club Model



# Kenya – Institutional Framework for CDM

- National Climate Change Focal Point (NCCFP)
  - Define national CDM policy
  - Appoint members of an expert panel and a NCH
  - Approve CDM projects
- National Clearing House (NCH)
  - Set criteria for CDM projects
  - Process project proposals
  - Promote CDM projects
  - Monitor and evaluate projects
  - Liaise with stakeholders and coordinate CDM activities
  - Advise Government through the NCCFP
  - Develop national database for CDM projects

# Institutional Arrangement GEF-KAM Project

UNDP - GEF

UNOPS

Ministry of Trade  
and Industry

Kenya Association  
of Manufacturers

Project  
Management  
Unit

Industries, Financial Institutions and Stakeholders



# Results to date

- Expressions of interest from industry
  - Workshops, training courses
  - Industrial Energy Efficiency Network (IEEN)
- Guide for Investors
  - Expert Panel: technical, economic, financial, policy, legal, regulatory, academic specialists
- Institutional framework for CDM in Kenya
  - Business planning
  - Clearing house
- Public-Private-Partnership

# Conclusions

- The GEF project has succeeded in mobilizing active industry and government participation
- Financing modalities are being developed
- Sources of financing are being identified
- Framework is in place to attain investment targets
  - Industrial Energy Efficiency Network
  - Financial Engineering Courses
  - Guide for Investors
  - CERs
- Promote sustainable economic development
- Alleviate poverty through industrial development