Programme of Activities

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KfW Carbon Fund

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KfW Bankengruppe in brief

- Promotional bank of the Federal Republic of Germany
- Founded in 1948
- Shareholders: Federal Republic of Germany (80%), German federal states (20%)
- Headquarters: Frankfurt am Main; branch offices: Berlin and Bonn
- Foreign representations: Brussels and around 60 offices and representations worldwide
- Balance-sheet total at the end of 2009: EUR 400 billion
- Rating: AAA/Aaa/AAA
Local presence in more than 60 countries around the globe

Offices in Sub-Saharan Africa:
- Benin
- Burkina Faso
- Cameroon
- Congo, D.R.
- Ethiopia
- Ghana
- Kenya
- Madagascar
- Mali
- Mozambique
- Namibia
- Niger
- Rwanda
- Zambia/Malawi
- Sénégal
- South Africa
- Tanzania
- Uganda
Brand Structure

Domestic development business

Promotion of SMEs, business founders, start-ups
Promotion of housing, environment and climate protection, education, infrastructure, social issues
Financing of municipal infrastructure projects and promotion in Europe

Export and project finance

Promotion of developing and transition countries

KfW Carbon Fund
KfW Carbon Purchase Programmes

- KfW Carbon Fund (1st Tranche)
  - Volume: EUR 84 million, closed 31 December 2007

- EIB-KfW Carbon Programme I
  - Volume: EUR 88 million, closed 30 June 2009

- Belgian Carbon Purchase Programme
  - Volume: EUR 20 million

- Post-2012 Carbon Credit Fund (together with EIB, CDC, ICO and NIB)
  - Volume: EUR 125 million, external fund manager

- EIB-KfW Carbon Programme II
  - Volume EUR 100 million
  - Purchase up to 2020
  - Focus on PoA and LDCs
KfW’s portfolio of carbon credits as at 30 June 2010
- Number of contracted projects: 76
- Number of contracted carbon credits: some 30 million

Portfolio by sector:
- 26% Landfill gas
- 17% Renewable energy: wind energy
- 17% Renewable energy: hydropower
- 7% Energy efficiency
- 5% Fuel switch
- 4% Renewable energy: biogas
- 3% Renewable energy: biomass
- 3% Mine gas
- 2% Mine gas
- 1% Rest

Portfolio by country:
- 35% China
- 27% Brazil
- 19% India
- 17% Poland
- 5% Egypt
- 5% Nepal
- 2% Philippines
- 1% Mexico
- 3% Rest
Just to remember:
What is a PoA?

CPA: Set of interrelated measures to reduce GHG emissions within a designated area => particularly suitable for dispersed micro activities.

CPAs can be added at any time during duration of PoA (up to 28 years)

All CDM methodologies can be applied. The SSC threshold relevant on CPA level.

A PoA Coordinator is responsible for the PoA and communicates with the EB.

CPAs must be homogenous

All CPAs end when PoA is terminated.
PoA Support Center

Since October 2008 on behalf of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)

Advice on:
• Identification of pCDM opportunities;
• Check with CDM requirements;
• First economic assessment.

Development of the PINs + PDDs
• Technical support
• Financial support

Advice during decision-making progress

Dissemination of Information, Workshops and Publications “Blueprint book”
## PoA Pipeline Sept 2010 (25 PINs / 10 PDDs)

<table>
<thead>
<tr>
<th>Sektor</th>
<th>Region</th>
<th>Operator (CE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Efficiency in Buildings</td>
<td>Poland, Estonia and Israel</td>
<td>Banks + Public Supply Company</td>
</tr>
<tr>
<td>Energy Efficiency in SMEs</td>
<td>Poland, India</td>
<td>Banks</td>
</tr>
<tr>
<td>Household Stoves Biogas</td>
<td>Nigeria, Mexico China, India</td>
<td>NGO, Banks Public Institutions (e.g. Energy Agencies)</td>
</tr>
<tr>
<td>Renewable Energy (Solar Water Heater / Mini Hydro)</td>
<td>South Africa, Central America Philippines, Nepal Vietnam, East Africa</td>
<td>Banks and Private companies</td>
</tr>
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Seed funding is a barrier for PoA implementation:

- **PoA Implementation cost (all PoAs):**
  - PoA-DD, Validation, Registration;
  - Database/software for monitoring;
  - Setup of internal procedures/routines and staff recruitment/training;
  - Marketing/customer relationship including contract/monitoring templates.

- **Pre-financing of provided incentive (most PoAs):**
  - Financial transformation of carbon income stream into upfront incentives: grants, price discounts, interest rate subsidies etc.;
  - Upfront payments are refunded only out of carbon income (no other income source for coordinating entity).

- **Pure carbon finance:**
  - Lending against expected carbon stream (ERPA is collateral).
Seed funding is a barrier for PoA implementation:

- **Obstacles**
  - **Coordinating Entity:** the coordinating entity is often not credit worthy.
  - **Country Risk:** very few developing countries with investment grade rating; LDCs only with speculative rating.
  - **End User:** No recourse to end users possible: end users won’t sign an agreement with liability regulations;
  - **Data:** No historical default data at all: only three PoAs registered, no PoA-CERs issued
  - **Post 2012:** Uncertainty about Post-Kyoto agreement and utilization in EU ETS.
South African SWH Programme

- Analysis of the SWH potential in South Africa
  - SA has amongst the highest solar radiation levels in the world
  - About 4 million houses in SA have formal piped water supply
  - Coal-fired power stations constitute 93% of the national generation capacity

  ➔ High potential for carbon reduction

- Barriers:
  - Low electricity prices and
  - High capital cost of installation

  ➔ A subsidy for the end user is critical to overcome barriers.
  ➔ Revenues of carbon credits shall be used as a subsidy

- Challenges:
  - Programme will face a negative cash flow in the first years as subsidies have to be paid upon installation of a SWH and carbon credits will only by available during the operation period of a SWH.
  - A monitoring system satisfying UNFCCC formalities has to be established.
  - A partnership with a bankable trustee must be established to handle payments for CERs (upfront payments and payments on delivery).
High upfront and preparation costs were assessed as the main barrier for the success of SWH PoA.


Grants have been and will be made available for:

- Preparation of the Programme Documents (PDD)
- Validation of the Programme and the first inclusions of CPAs
- Audit- and Consultancy Services

Further funds will be made available as Advance Payment and will be repaid with carbon credits (CERs).
Thank you for your attention

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