

Programmatic Carbon: Experience with KfW's Carbon Fund

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Manila

Brand Structure.



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



**Promotional
Bank**

Promotion of SMEs,
business founders,
start-ups



SME Bank

Export and project finance



IPEX

Promotion of developing
and transition countries

KfW Carbon Fund



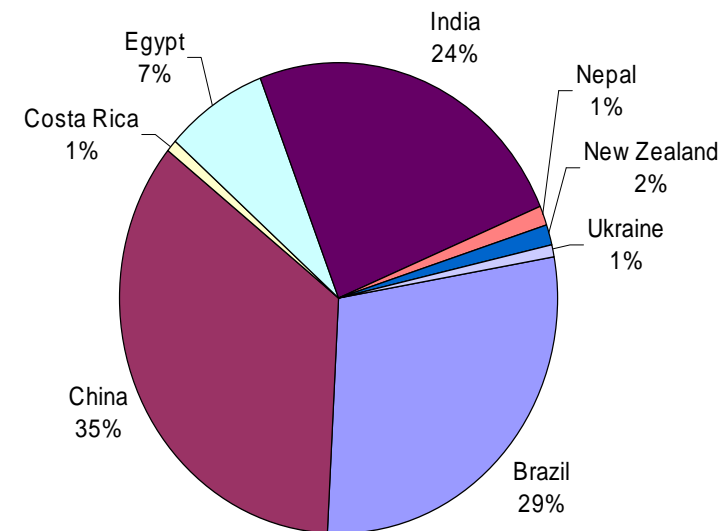
**International
Development
Financing**

KfW Carbon Fund

Overview on KfW Carbon Programmes



- **KfW Carbon Fund** (EUR 84 million) (closed); Participants from Germany, Austria, Luxembourg and France; equivalent CER volume completely contracted
- **EIB-KfW Carbon Programme** (EUR 100 million (open for Participants)); for smaller European Compliance Buyers
- **Separate Purchase Programme for Belgian Government** (EUR 20 million)
- **EIB Post 2012 Carbon Fund** (EUR 125 million); Co-operation with EIB, CDC, ICO and NIB



Project types; Renewable, EE, Fuel Switch, Waste.....

Programmatic carbon crediting

- PoA - Incentive or policy implementation program as CDM project:
 - Program operator receives CDM revenues;
 - Program participants receive incentive payment;
 - Incentives are provided against carbon ownership;
 - Market based private sector driven and bottom-up approach to sustainable sectoral transformation (difference to sectoral crediting);
 - Addressing small and micro activities;
 - Core target group: households, SMEs, municipalities.
- Market Entry barriers for PoAs:
 - Regulatory imperfections & capacity in CDM industry;
 - Institutional capacity in developing countries;
 - PoA Funding;
 - No PoA registered so far, only few in preparation.

PoA Support Center Germany



- Since October 2008 on behalf of German Government.
- Disseminate PoA-know-how in CDM/JI countries.
 - Workshops;
 - PoA Blueprint Book (launched at Carbon Expo 2009).
- Enable public and private entities to identify PoA potential.
- **Develop concrete and realizable PoA proposals.**
- Advise on PoA implementation and operation.
- Advise on PoA funding and marketing of carbon credits.

First PoA ideas (Phase I)

Sector	Region	Operator	Type
Energetic Building Rehabilitation (5)	Eastern Europe, MENA, South Asia	Banks	Soft loans
Household stoves and domestic biogas (5)	South Asia, Africa	NGOs, public agencies, MFIs	Grants, microfinance
Fuel switch, Energy efficiency in SMEs, service sector, transport (12)	MENA, Asia, Latin America	Banks, public agencies	Payment on delivery + credit lines, soft loans
Small and micro renewable energy (6)	Africa, Latin America, South Asia	Banks, public agencies	Soft loans, payment on delivery + credit lines
CFLs (2)	Africa, Latin America	Utilities	Price discounts

PoA Funding

- Situation for PoA operator:
 - Costs: development, implementation, operation;
 - Revenues: carbon credits are only source of income.
- Funding requirements:
 - **Development** (concept, business plan, capacity, CDM);
 - **Seed Funding** first generations of activities/incentives.
- Risk profile seed funding:
 - Performance risk of PoA operator;
 - Risk - : often stable consumption activities; low transfer risk (international carbon accounts); step wise implementation.
 - Risk +: complete reliance on CDM/JI monitoring; often no recourse to program participants (micro activities).
 - Banks have no experience with PoA funding.

PoA related risks - preparation and implementation



- Programme preparation:
 - Concept development, CDM documentation, contractual structure, assessment and decision-making;
 - Timing/cost: order of magnitude of 3-6 months / 200 T EUR.
 - Risk mitigation: step-by-step and development partnership.
- Programme implementation :
 - Setup of internal and external operational capacities;
 - CDM registration;
 - Timing/cost: orders of magnitude of 1 year / 300 T EUR
 - Risk mitigation: step-by-step implementation (including potential pilot phase) after CDM registration, development partnership.

PoA related risks - operation and funding.



- Incentive payments to programme participants against CER ownership;
- Monitoring and verification of emissions reductions (getting CERs);
- Selling of CERs and use of revenues to finance programme
- Risks/mitigation - operation:
 - Strong and reliable legal structure and data registry;
 - Reliable high-quality monitoring system;
 - Excellent carbon off-taker, long-term fixed price contract.
- Risks/mitigation - funding:
 - Often stable consumption related activities (lights, stoves);
 - Depending on CDM methodology: pure stochastic technical default;
 - Step-wise implementation: no once for all investment spending;
 - Potential to shift seed funding risk to carbon buyer or programme participants (depending on programme type).

PoA development in India

- Very strong interest in India in PoA Support Program Germany: 2 MoUs signed, 2 PINs developed, at least 10 more early project ideas.
- PIN 1 Regional Biogas Program
 - Substitution of fire wood by biogas out of manure;
 - 7.000 new digesters p.a. each achieving 2.5 t CO₂ ER p.a.;
 - ERs of up to 90 kt CO₂ p.a. after 5 years;
 - Strong economics: 10 year's carbon revenue pay for investment costs.
 - Grants + payment on delivery (coverage of maintenance costs).
- PIN 2 Industrial Energy Efficiency
 - Fuel saving through improvement of furnaces;
 - 200 units each achieving up to 500 t CO₂ ER p.a. (100 kt. p.a. in total);
 - 10 year's carbon revenue pay for 50% of investment costs.
 - Payment-on-delivery + standard credit line
 - Next generation of Industrial EE program: soft loan scheme in preparation.

What matters most?

- Start with your core business/interest and associated pCDM potential;
- Focus early on one first programme idea;
- Define early your role: pure operator or also investor and risk taker;
- Enter into a PoA partnership with an experienced and strong partner;
- Plan for a 2 year preparation, implementation, registration and start-up phase;
- Minimize risk through a step-wise process including several decision-making steps.



For further information: www.kfw.de/carbonfund

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