## KfW Carbon Fund

Mobilizing capital for CDM projects and programs from the perspective of a development bank: the experience of KfW Carbon Fund

Bogotá, November 18, 2010





### 1. The KfW Carbon Fund

- 2. Carbon Finance Structures
- 3. Cooperation with financing institutions

## KfW Carbon Fund Our Mandate



### > German Government Mandate (BMU) and European Dimension

- Promote the use of carbon credits for compliance (focus on EU-Emission Trading Scheme, ETS)
- Promote the use of carbon credits for project and programme development
- Lead carbon market development with innovative approaches

### Basic KfW approach: mitigate market imperfection

- Enable / simplify access to the carbon market for buyers and sellers
- Assume carbon market risk as appropriate
- Mitigate regulatory risks (e.g. post-Kyoto, EU-ETS III)
- Give special support to projects/programmes with high development impact (small projects, programmes of activities (PoA)

# **KfW Carbon Fund KfW Carbon Programmes**



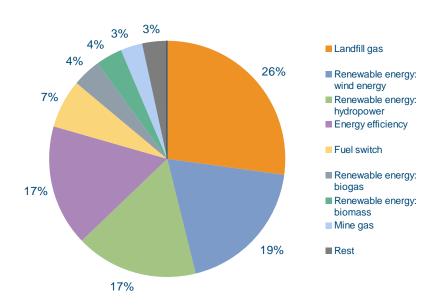
- KfW Carbon Fund (1st Tranche)
  - Volume: EUR 84 million, closed 31 December 2007
- EIB-KfW Carbon Programme I
  - Volume: EUR 88 million, closed 30 June 2009
- > Post-2012 Carbon Credit Fund (together with EIB, CDC, ICO and NIB)
  - Volume: EUR 125 million, external fund manager
- EIB-KfW Carbon Programme II
  - Volume EUR 100 million
- Government of Belgium Carbon Programme
  - Volume: EUR 20 million
- Syndication activities (sales back-to-back)
- KfW owned CDM portfolio and participations on carbon funds (e.g. CDCF)

### KfW Carbon Fund KfW's portfolio of carbon credits

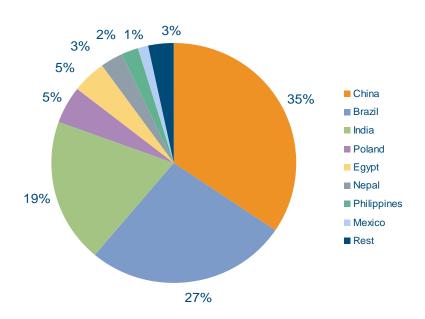


- KfW's portfolio of carbon credits as at 30 June 2010
  - Number of contracted projects: 78
  - Number of contracted carbon credits: some 34,5 million

### Portfolio by sector



### Portfolio by country



## KfW Carbon Fund KfW's portfolio of carbon credits in LAC



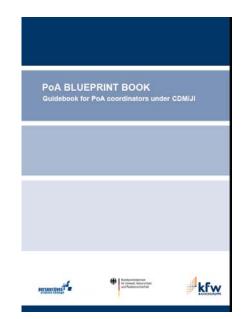
Project Name	Country	Status	CERs		
Bandairantes and Sao Joao Landfill Gas Projects	Brazil	Registered	3.200.000		
Gramacho Landfill Gas Project	Brazil	Registered	1.200.000		
Electric Power Co-Generation by LDG Recovery – CST	Brazil	Registered	350.000		
Switching coal to palm oil mill biomass waste residues at INOLASA	Costa Rica	Registered	150.000		
Santo Domingo Wind Energy Project	Mexico	Registered	2.400.000		
Bii Stinu Wind Energy Project	Mexico	Registered	2.100.000		
Guaracachi Combined Cycle Project	Bolivia	Registered	150.000		
Comodoro Combined Cycle Project	Argentina	Registered	100.000		
TOTAL Registered Projects					
Puebla Landfill Gas Project*	Mexico	Validation	1.200.000		
Clinker Reduction and EE Projects at CENOSA Cement Plant	Honduras	Validation	500.000		
MAGESA Waste Water Treatment Project*	Guatemala	PDD dev.	750.000		
TOTAL LAC			12.100.000		

# KfW Carbon Fund PoA Support Center



#### >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"

# KfW Carbon Fund KfW's PoA Support Center in LAC Feasibility study / PoA-DD under developement



PoA Approach	Country	Managing Entity	Type of Organization	CER Potential	PDD Consultant
PoA SHP Central America	Central America (5 countries)	Grupo Financiero de Occidente	commercial bank	500.000	South Pole
PoA wastewater treatment at tequila industry (dairy, sugar and mescal under review)	Mexico	FIRA	state-owned development bank	1.400.000	Ecosecurities
PoA manure treatment and biogas utilization	Mexico	Financiera Rural	state-owned development bank	1.500.000	MGM
PoA SHP Mexico	Mexico	Banco Santander / Abengoa	commercial bank / tech. provider	1.000.000	Zeroemissions
PoA Energy Efficiency	Mexico	SENER	ministry	under review	South Pole



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Advance payment

**Carbon Monetization** 

**Carbon Collateralization** 

Structuring carbon equity

# KfW Carbon Fund Upfront Payments

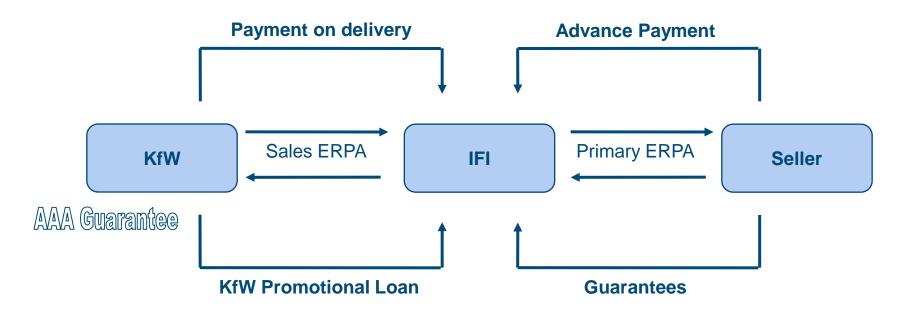


### Financing Facility for Preparatory Measures

- Costs in connection with the preparation of CDM projects (e.g. PDD, validation reports registration fees) can be financed.
- Support can not exceed €100.000 for individual projects and €300.000 for POAs
- Support is provided on a repayment basis plus 10% lump sum fee
- Grants for PoAs (PIN and PDD development)
- Advance Payment for future receivables under ERPA
- Upfront payments for a "secure" stream of CERs based on objective empirical data and expert opinion
- No fixed repayment schedule but a discount rate on the purchase price that factors in security buffers for potential delays

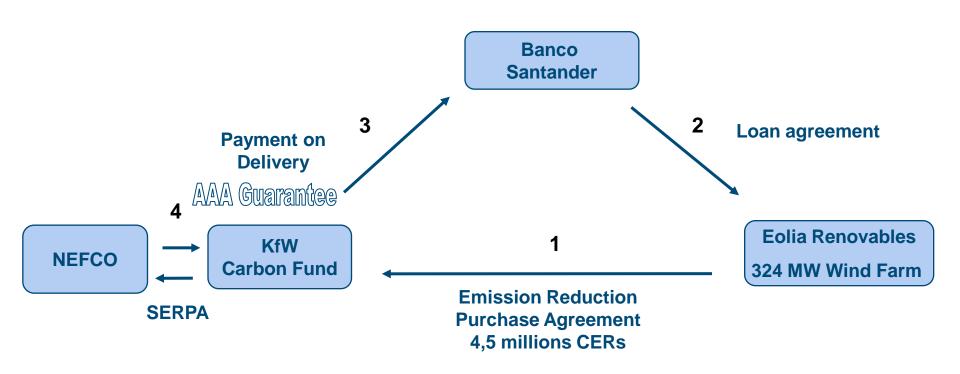
### **Carbon Monetization**





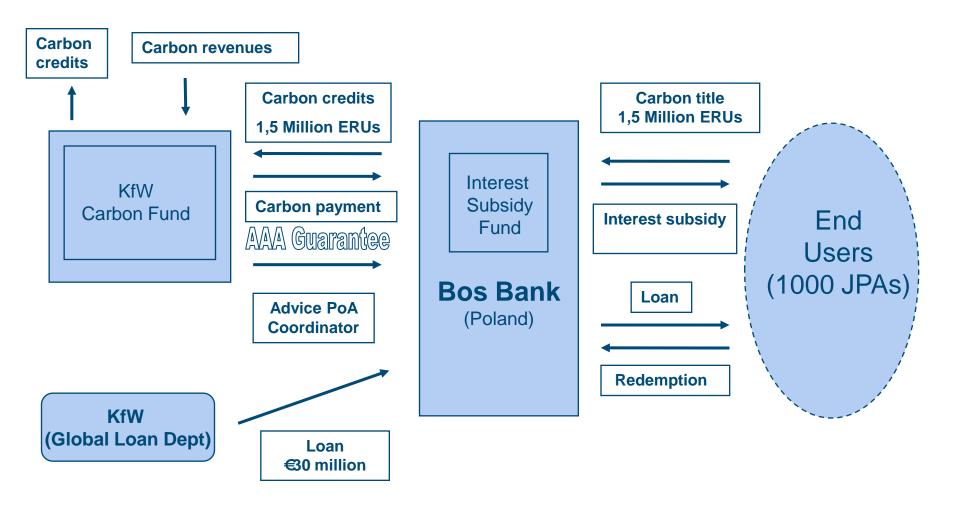
### **Cabon Collaterization**





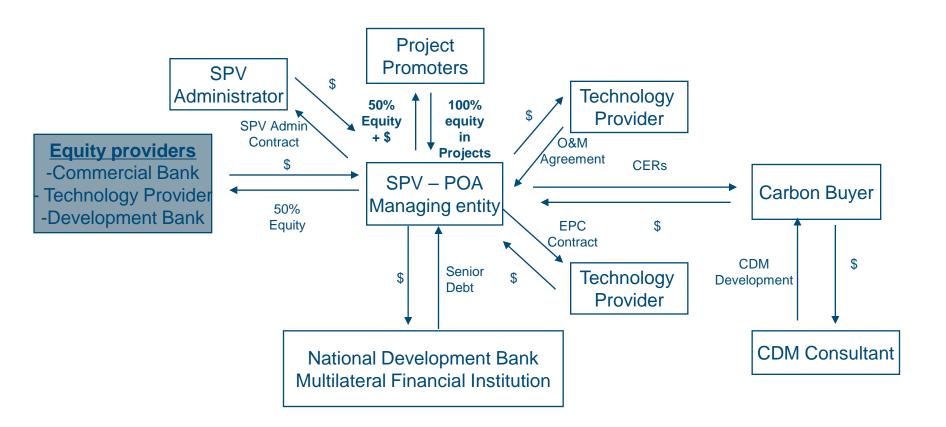
### **Carbon Collaterization - PoA**





### **Equity Carbon - PoA**







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### KfW Carbon Fund Cooperation with financial institutions



- Inter-Cooperation with KfW branches (FC, DEG, IPEX)
  - Focus: Integrated financial solutions for carbon projects, maximizing both project output and revenues.
  - Challenges: structuring carbon as a reliable asset.
- Cooperation with multilateral institutions (CAF, BCIE, IIC)
  - > Focus: joint efforts to match better Sellers requirements, actions to promote carbon markets (TA).
  - Challenges: cooperation vs. competition, inter-department coordination.
- Cooperation with national development banks (FIRA, FR, Bancomext, BNDES, COFIDE, BMI, etc)
  - > Focus: national capital for carbon projects and promotional activities.
  - Challenges: carbon deemed as political goal itself rather than a reliable asset.
- > Cooperation with commercial banks (Banco Santander, Deutsche Bank, Grupo Occidente, Caixa, etc)
  - Focus: development of commercially attractive and bankable financial solutions for carbon projects.
  - Challenges: present carbon markets as a real challenges despite political uncertainties.

### Conclusions



The role of a (development) financial institution at the carbon markets:

- Going beyond "payment on delivery".
- Structuring capital at risk.
- Carbon futures receivable as security for (complementary) debt financing.
- Facilitating the involvement of domestic financial sector.
- Active participation in the development and implementation on domestic market – solutions.



## ¡Muchas gracias por su atención!

Pablo Obrador Senior Project Manager KfW Carbon Fund

KfW Bankengruppe Palmengartenstrasse 5 – 9 D-60325 Frankfurt

Tel: +49-69-7431-4351 Fax: +49-69-7431-4775 carbonfund@kfw.de