KfW Carbon Fund
Financial support for projects under the Kyoto Protocol

Serbian German Workshop – Belgrade 18th Sept. 2007

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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 50 offices and representations worldwide.
- Balance-sheet total at the end of 2006: EUR 360 billion.
- Average number of employees in 2006: 3,600.
- Rating: AAA/Aaa/AAA.
Brand Structure.

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

Promotion of SMEs, business founders, start-ups

Export and project finance

Promotion of developing and transition countries
KfW Entwicklungsbank (KfW development bank).

- On behalf of the German federal government, KfW Entwicklungsbank finances investment and advisory services in developing countries (= Financial Cooperation).

- Goals
  - To sustainably improve the economic and social situation of the people in developing countries
  - To reduce poverty
  - To protect natural resources
  - To secure peace worldwide

- Areas of promotion
  - Social and economic infrastructure
  - Financial systems
  - Resource protection

- Volume of Financial Cooperation Commitments 2006: EUR 2,398 m
Breakdown of FC commitments by region 2006

- **North Africa / Middle East**: 17.5%
- **Latin America**: 9.7%
- **Sub-Saharan Africa**: 14.8%
- **Europe / Caucasus**: 17.2%
- **Asia / Oceania**: 40.9%
FC in Serbia – Commitments and Goals

FC Commitments 2001 – 2006
EUR 418 million

- Energy
  EUR 280 m
- Water
  EUR 55 m
- Financing Sector
  EUR 83 m

Goals
- Emergency measures after the war to secure supply of power, heat and drinking water
- Secure access to financing through micro-financing programmes
- Now: Efficient use of resources (energy and water)
- Compliance with European environmental standards in energy generation and mining:
  - Reduce harmful emissions
  - Promote energy efficiency and renewable energy
  - Rehabilitation of hydropower
  - Reduce harmful environmental effects of open pit mining
- Improve management capacity and financial sustainability of public and municipal enterprises
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Objectives of KfW’s Carbon Programmes

● **Background**
  - Kyoto-Protocol (Clean Development Mechanism)
  - European Emissions Trading System (ETS), Linking Directive
  - National Allocation Plans

● **Project development function**
  Promotion of projects and measures contributing to
  - reduction of global Greenhouse Gas Emissions
  - sustainable development in the host country

● **Provide a service instrument for German and European enterprises wanting to use project-based certificates for compliance purposes**
  - alternative to own measures and emissions trading
  - no internal capacities required
  - risk mitigation by diversification
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Concept of the Programme

- **Purchase programme (“Buyers’ Pool”) for project-based certificates**
  - Purchase of compliance tools for the ETS (CERs, ERUs, project-based EU-Allowances)
  - Commercial orientation

- **KfW purchases as a trustee for participants**
  - Target group: German and European enterprises, who want to use JI and CDM for compliance purposes and do not have own access to projects abroad

- **Off-take contracts with suppliers of certificates (“ERPA”)**
  - Almost all kinds of technology – preferred: Renewable Energy and Energy Efficiency
  - No restriction on countries, but prerequisite: Ratification of the Kyoto-Protocol
Eligible Project Types

- Generally there are not specific limitations, but projects have to be in line with Kyoto and ETS:
  - no nuclear power projects
  - large hydro power projects only if they fulfil the requirements of WCD
  - until further notice no sink-projects (LULUCF)

Eligibility Criteria (inter alia)

- Project risks
- Kyoto Risks
- Price per tonne CO$_2$e
- Transaction costs
- Minimum delivery 30,000 t CO$_2$e per year
- Status of implementation
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Purchase Contracts with Sellers

- **Long-term purchase agreement (forward contracts)**
  - Market-based pricing (fixed or variable pricing)
  - Contract period up to 2012

- **Flexible contract terms**
  - Option on additional amounts
  - Possibility to extend contract period past 2012
  - Early delivery option possible
  - Purchase with consortium or syndication
  - Bundling of smaller projects

- **Payment on delivery**
  - But advance payment in individual cases possible; customary terms and conditions

- **No assumption of “Kyoto risks”**
  - Registration, transfer risks etc. remain with the seller
Flexible Mechanisms JI & CDM
Potential for Projects

- **Additional Cashflow for Projects from sales of certificates**
  - Improvement of project profitability (IRR)
  - Improvement of debt service cover ratio (DSCR)

- **Better access to financing products via mortgaging of certificates**
  - Advanced payment on the ERPA
  - Mezzanine finance against release of covenant
  - More beneficial financing conditions in terms of debt (shorter maturity, lower margins)
## Certificates and Project Finance

### Improvement of profitability

<table>
<thead>
<tr>
<th>Land</th>
<th>Projekt-Typ</th>
<th>IRR ohne Zertifikate</th>
<th>IRR mit Zertifikaten</th>
</tr>
</thead>
<tbody>
<tr>
<td>Romania</td>
<td>District Heating</td>
<td>10,5 %</td>
<td>11,4 % (+0,9)</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>Windpower</td>
<td>9,7 %</td>
<td>10,6 % (+0,9)</td>
</tr>
<tr>
<td>Jamaica</td>
<td>Windpower</td>
<td>17,0 %</td>
<td>18,0 % (+1,0)</td>
</tr>
<tr>
<td>Marocco</td>
<td>Windpower</td>
<td>12,7 %</td>
<td>14,0 % (+1,3)</td>
</tr>
<tr>
<td>Chile</td>
<td>Hydro</td>
<td>9,2 %</td>
<td>10,4 % (+1,2)</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>Hydro</td>
<td>7,1 %</td>
<td>9,7 % (+2,6)</td>
</tr>
<tr>
<td>Guayana</td>
<td>Biomass</td>
<td>7,2 %</td>
<td>7,7 % (+0,5)</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>Biomass</td>
<td>14,6 %</td>
<td>18,2 % (+3,6)</td>
</tr>
<tr>
<td>Brasilia</td>
<td>Biomass</td>
<td>8,3 %</td>
<td>13,5 % (+5,2)</td>
</tr>
<tr>
<td>Latvia</td>
<td>Landfill Gas</td>
<td>11,4 %</td>
<td>18,8 % (+7,4)</td>
</tr>
<tr>
<td>India</td>
<td>Landfill Gas</td>
<td>13,8 %</td>
<td>18,4 % (+5,4)</td>
</tr>
</tbody>
</table>

Source: etsg
KfW offers:

- **Financing of preparatory measures:**
  - Design of PDDs, Validation Reports and other documents such as Environmental Impact Assessment Reports etc.
  - Financial support shall not exceed 50% of the contract value for the preparation of the respective documents
  - Maximum amount of KfW financing: EUR 50,000.--
  - Repayment by deduction from the payment for the first delivery of CERs
  - Conclusion of a contract with the Seller of the Certificates
Certificates and Project Finance Support for CDM /JI Project (II)

- **Advance Payment:**
  - based on the future delivery of certificates
  - Amount usually 50% of the ERPA value
    - depends on credit rating (=corporate risk) and project risks
    - in individual cases even more than 50%
  - Commercial risk margins

- **Financial offers by credit departments and affiliates of KfW**
  - Entwicklungsbank (development bank): grants and loans for governmental institutions
  - DEG: partner for financial solutions and equity investments for the private sector in developing and reforming countries
  - IPEX: export and project financing – commercial terms and conditions
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Present Status of the Carbon Programmes

- **Programme Volume (First Tranche):** EUR 83.9 m
  - 24 participating Enterprises from Germany, Austria, France and Luxemburg
  - Supported by German Federal Government and KfW

- **7.3 million tons CO$_2$e contracted** (per 30.06.07)
  - **Sectors:** focus on renewable energy (wind, hydro, biomass), methane avoidance (landfill gas, CMM, biogas)
  - **Countries:** focus on India, China, Brazil, Egypt

- **EIB-KfW Carbon Programme (Second Tranche)** EUR 100 m
  - **Value Added Features**
    - **Buyers’ side:** Tailor-made product, and delivery guarantee for SMEs
    - **Sellers’ side:** Financing facility for advance payments for projects
EIB–KfW Carbon Programme

Programme Structure

- Project 1
- Project 2
- Project 3
- Project n

EIB-KfW Carbon Programme
KfW Programme Manager and Contracting Party
EIB/KfW Underwriters

Financing Facility
EIB Facility Manager
EIB/KfW Underwriters

Purchase and Agency Agreement

Buyer 1
Buyer 2
Buyer 3
Buyer x
Huge potential for eligible projects in Serbia

Main sectors:
- Energy Efficiency and Renewable Energy,
- e.g. Hydropower Rehabilitation
- District Heating Programme.

KfW wants to help Serbia to implement such projects
Thank you for your attention!

For further information: www.kfw.de/carbonfund

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