

KfW Carbon Fund

Financial support for projects under the Kyoto Protocol

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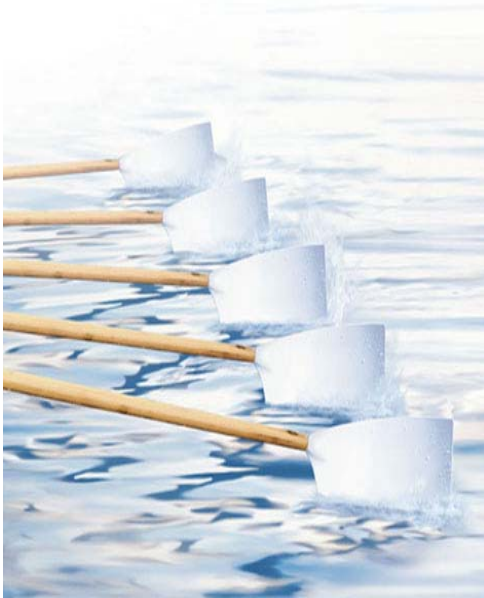
KfW Carbon Fund

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www.kfw.de/carbonfund

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

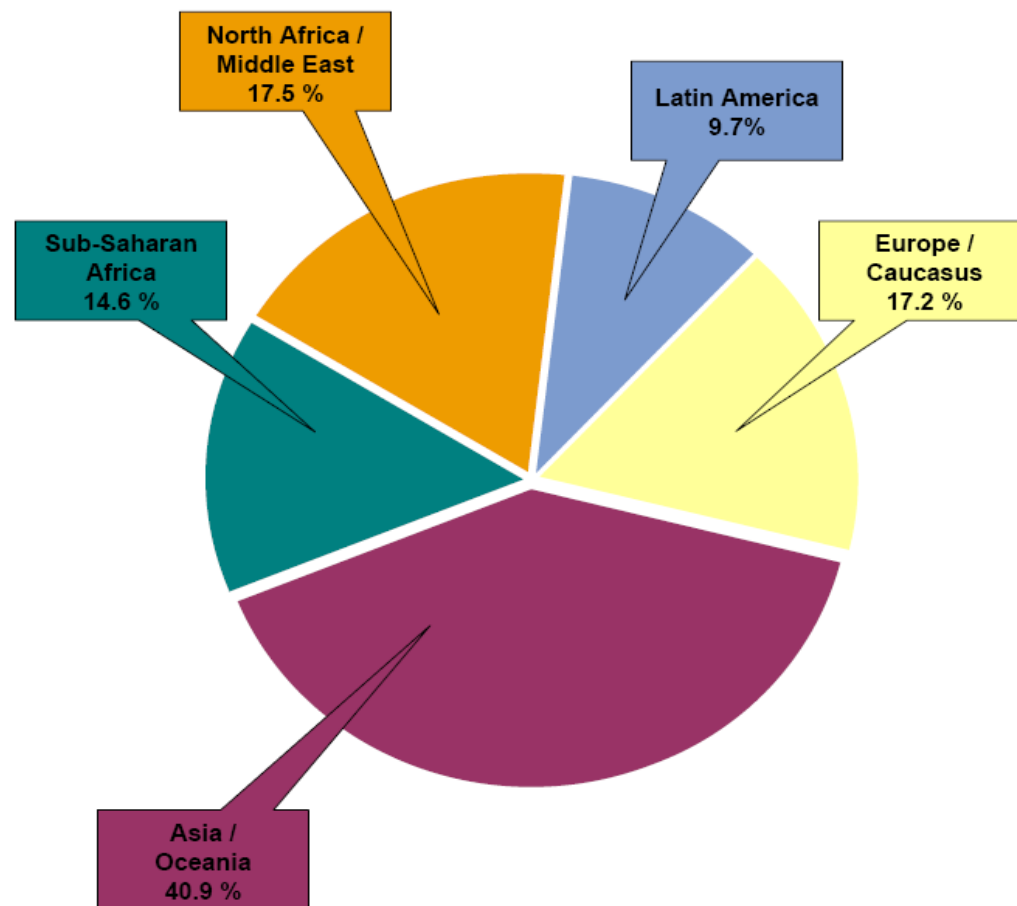


KfW Entwicklungsbank (KfW development bank).



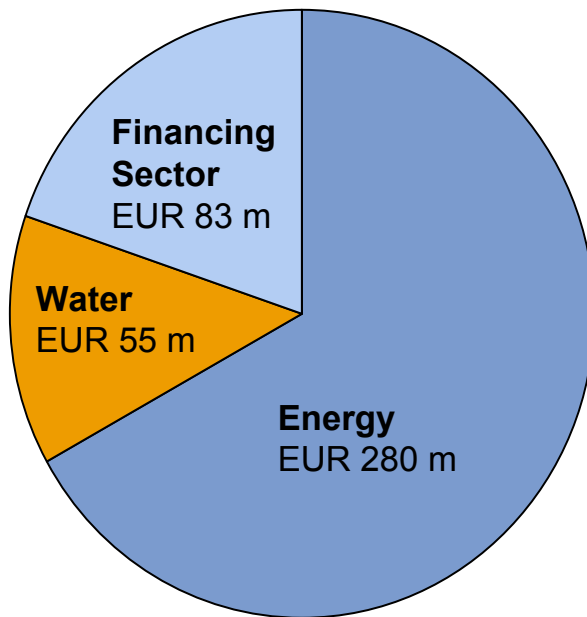
- **On behalf of the German federal government, KfW Entwicklungsbank finances investment and advisory services in developing countries (= Financial Cooperation).**
- **Goals**
 - To sustainably improve the economic and social situation of the people in developing countries
 - To reduce poverty
 - To 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



FC in Serbia – Commitments and Goals

FC Commitments 2001 – 2006 EUR 418 million



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

- **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

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 CO₂e
 - Transaction costs
 - Minimum delivery 30,000 t CO₂e per year
 - Status of implementation

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



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

Source: etsg

Certificates and Project Finance

Support for CDM /JI Project (I)



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**

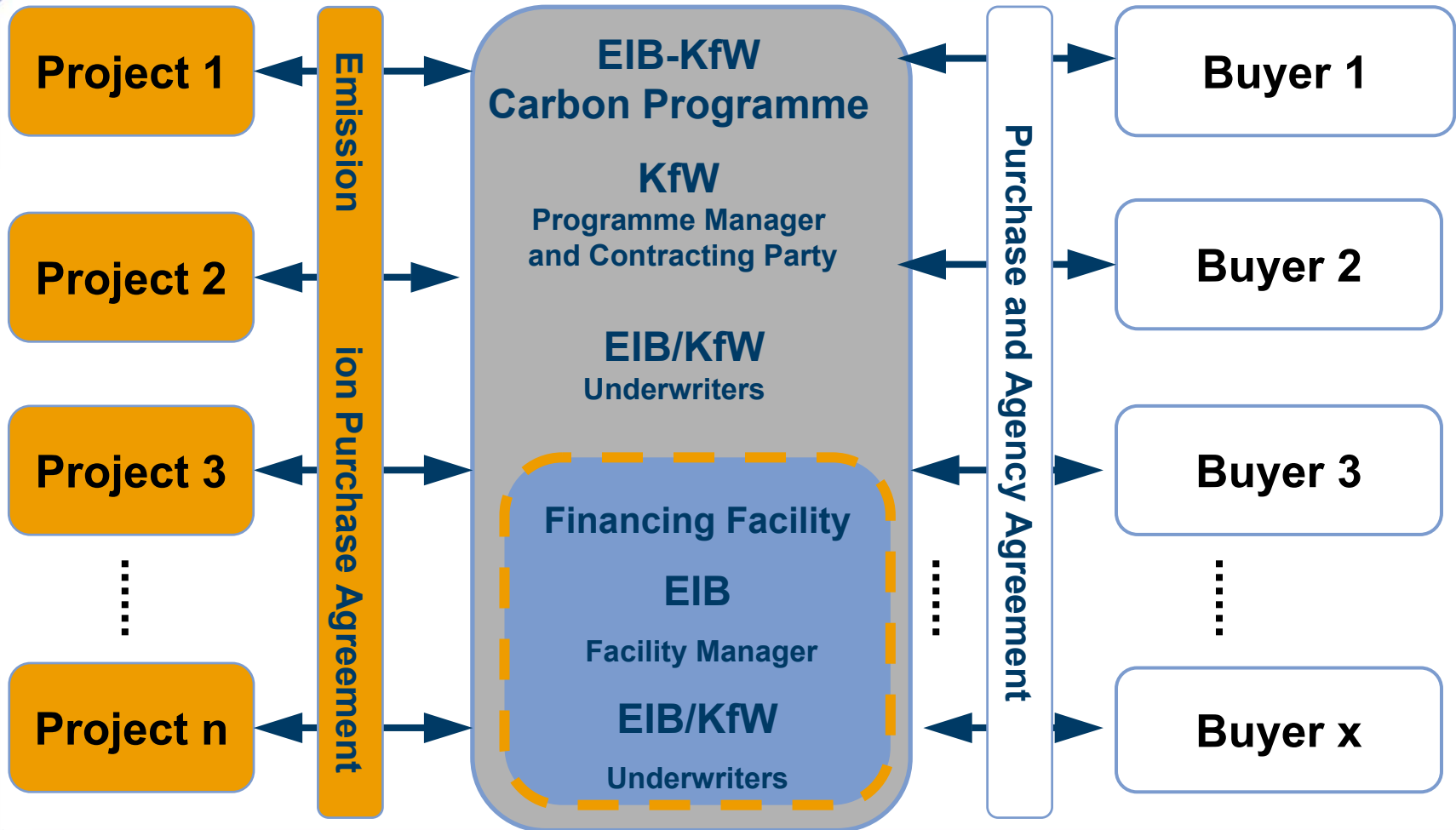
- Entwicklungsbank (development bank): grants and loans for governmental institutions
- DEG: partner for financial solutions and equity investments for the private sector in developing and reforming countries
- IPEX: export and project financing – commercial terms and conditions

- **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 CO₂e 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

Programme Structure



- 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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