

DIREC 2010

Financing of Large Scale Solar Power Projects

Lessons learnt in the financing of large scale solar power projects

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A bank with a wide array of functions



Domestic promotion

We promote Germany

Business Area Mittelstandsbank

Promotion SMEs,
business founders,
start-ups

Business Area Privatkundenbank

Promotion
construction
of new housing
and modernisation
as well as education

Business Area Kommunalbank

Financing municipal
infrastructure
projects and
global loans
Germany/Europe
agency business for
Federal Government

International business

We ensure internationalisation

Business Area Export and Project Finance

International
project and
export finance

We promote development

Business Area Promotion of Developing and Transition Countries

Promotion of
developing and
transition countries

Promotion of environmental and climate protection



CSP-Projects / Programs with KfW-Involvement

BANK	COUNTRY	PROJECT ^{*)}	CAPACITY	PROJEKT STATUS
KfW IPEX	Spain	ManchaSol I	50 MW	Close to commercial operation
		Solnova 1,3,4	3 x 50 MW	In operation since 2010
		Alvarado	50 MW	In operation since 2009
KfW IPEX	USA	Nevada Solar 1	64 MW	In operation since July 2007
KfW Entwicklungsbank	India	Anta	15 MW	Feasibility Study concluded, Evaluation ongoing
BMZ/GEF (UNEP), KfW	Worldwide i.e. MENA	Program		EMPower Initiative for Promotion of large scale Solar Power Projects in Developing Countries
WB, Entwicklungsbank	Egypt	KomOmbo	100 MW	Feasibility Study Tender Stage
KfW Entwicklungsbank	Marocco	Quarzazate	500 MW	Prequalification Stage
KfW Entwicklungsbank	South Africa	Program		Renewable Energy in the Southern African Power Pool
KfW Entwicklungsbank	Turkey	Birecik	25 MW	Selection of Consultant for Feasibility Study

*) Co-Financings

KfW Entwicklungsbank

Solar Thermal Plant Anta - India

Objective

- Construction of 1. CSP Plant in India with an installed capacity of 15 MW
- Introduction of innovative technology in India
- Transfer of Clean-Technology Know-How

Approach

- Strong Partner: NTPC
- 15 MW Pilot Plant at existing Gas Plant Anta
- Involvement of International Expertise

Impact

- Production of clean energy for 50,000 people
- Reduction of 25,000 t CO₂ per year
- Improvement of marketability of CSP-technology



KfW IPEX-Bank

Solar Thermal Plant ManchaSol-1 - Spain



The Challenge:

- Financing a CSP-Plant with salt storage w/o any long term operational data on large storage systems
- Credit Crunch

The Solution:

- Comprehensive Sponsor's, EPC, O&M-contractor and suppliers guarantee package
- Large banking club
- EIB-Refinancing

ManchaSol-1

Total investment volume : EUR 372 million

KfW IPEX-Bank ticker: EUR 45 million

Value Added by KfW IPEX-Bank:

- Engineering know-how on CPS-technology
- Provision of financing in difficult times

Thank you for your attention



KfW IPEX-Bank

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