

## Integrated Safeguards Data Sheet (Initial)

Report No: AC302

### Section I - Basic Information

Date ISDS Prepared/Updated: 09/25/2003

#### A. Basic Project Data (from PDS)

##### I.A.1. Project Statistics

Country: MOROCCO	Project ID: P041396
Project: MA-SOLAR BASED POWER	Task Team Leader: Rene G. Mendonca
Authorized to Appraise Date: September 3, 2004	IBRD Amount (\$m):
Bank Approval: June 15, 2005	IDA Amount (\$m): Global Supplemental Amount (\$m): 50.00
Managing Unit: MNSIF	Sector: Renewable energy (70%); Power (20%); Central government administration (10%) Theme: Pollution management and environmental health (P); Rural services and infrastructure (P); Access to urban services for the poor (S)
Lending Instrument: Specific Investment Loan (SIL)	
Status: Lending	

##### I.A.2. Project Objectives (From PDS):

The project development objectives are to increase the use of renewable energy sources in Morocco and to help reduce the long-term costs of low greenhouse gas emitting energy technologies in accordance with OP7 of the GEF. As a country that is well endowed with both solar and wind resources, this project will allow Morocco to develop this comparative advantage and become a leader in the application of solar thermal technologies. The project aims furthermore at enabling Morocco to embark on a path of sustainable development in accordance with its commitments under the 2002 Johannesburg World Summit for Sustainable Development and the 1997 Kyoto Protocol to the Climate Change Convention. In addition, the project addresses Morocco's power shortage in the electricity sector. The goal for the gas-fired part of the plant is to exhibit increased levels of power plant efficiency and availability when compared with existing plant.

##### I.A.3. Project Description (From PDS):

The project includes the integration of a solar trough collector field producing a minimum energy output with a natural gas-based power generating unit. The proposed project will be implemented in two phases. The first phase entails the engagement of specialized consultants to prepare a feasibility study, bidding documents, draft contracts, and to advise ONE during the evaluation of proposals. The following phase involves the construction and operation of a solar/fossil fuel hybrid power station of about 200 MW with an expected annual net production of 1,590 GWh per year. The solar output is estimated at 3.5% of the annual production representing 55.2 GWh per year. It is expected that the solar thermal power plant may be put in service in the beginning of 2008.

Following an unsatisfactory response to competitive bidding of an IPP, Morocco's public power utility has decided to finance the solar thermal plant itself through an EPC (Engineering, Production, Construction) cum O&M (Operation and Maintenance) contract. ONE will thus be the owner of the plant. The O&M contract will last 5 years, and is put in place in order to ensure appropriate incentives for the operation of the plant, including to the full capacity of the solar field. The power plant capacity is indicative and is based on the preliminary results of the pre-feasibility study.

Timeline up until construction:

1. Pre-qualification (month 1-8)
2. Preparation of bid documents (month 1-8)
3. Preparation and submissions of offers (months 9-17)
4. Technical and commercial evaluation of offers (month 18-26)
5. Contract negotiations (month 27-31)

I.A.4. Project Location: (Geographic location, information about the key environmental and social characteristics of the area and population likely to be affected, and proximity to any protected areas, or sites or critical natural habitats, or any other culturally or socially sensitive areas.)

The project will be located in the province of Jerada in the north-east of Morocco. The site itself is 1.5 km<sup>2</sup> large. The terrain is flat and the climate is desert-like with a very low rate of humidity. Sufficient water is provided through the groundwater that currently also provides water for the power plant currently installed in Jerada. The major part of vegetation consists of grasses and different cactus types. The population density in the area is low. A small village is located north of the site envisaged. The main source of income for the people in the region is low intensity sheep farming. The planned power plant will thus not interfere with the existing mode of agriculture.

**B. Check Environmental Classification: B (Partial Assessment)**

*Comments:* The environmental impact of the plant both at the local and regional/global level will be minimal as the plant will utilize solar and natural gas. The use of solar power does not produce any pollutants. The combustion of natural gas leads to the lowest level of CO<sub>2</sub> emissions of any fossil fuel. In addition, the combustion of natural gas does not entail SO<sub>2</sub> emissions, and has significantly lower emissions of NO<sub>x</sub> than other fossil fuels. The heat transfer oil used in the system might leak and contaminate soil. However, appropriate treatment of contaminated soil has been included in the design of the project. No other adverse environmental impacts, including on groundwater, are foreseen. Equally, no resettlement is foreseen and no adverse social impacts are expected.

**C. Safeguard Policies Triggered (from PDS)**

(click on  for a detailed description *or* click on the policy number for a brief description)

Policy	Triggered
<b>Environmental Assessment (OP 4.01, BP 4.01, GP 4.01)</b>	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> TBD
<b>Natural Habitats (OP 4.04, BP 4.04, GP 4.04)</b>	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> TBD
<b>Forestry (OP 4.36, GP 4.36)</b>	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> TBD
<b>Pest Management (OP 4.09)</b>	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> TBD
<b>Cultural Property (OPN 11.03)</b>	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> TBD
<b>Indigenous Peoples (OD 4.20)</b>	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> TBD
<b>Involuntary Resettlement (OP/BP 4.12)</b>	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> TBD
<b>Safety of Dams (OP 4.37, BP 4.37)</b>	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> TBD
<b>Projects in International Waters (OP 7.50, BP 7.50, GP 7.50)</b>	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> TBD
<b>Projects in Disputed Areas (OP 7.60, BP 7.60, GP 7.60)*</b>	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> TBD

## **Section II - Key Safeguard Issues and Their Management**

**D. Summary of Key Safeguard Issues.** *Please fill in all relevant questions. If information is not available, describe steps to be taken to obtain necessary data.*

II.D.1a. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts.

The site is in a deserted area where no human settlements and economic activities exist. Subsequently social safeguard (OP 4.11(cultural property), OD 4.20 (indigenous people), OP/BP 4.12 (involuntary resettlement)) does not apply.

II.D.1b. Describe any potential cumulative impacts due to application of more than one safeguard policy or due to multiple project component.

N/A.

II.D.1c Describe any potential long term impacts due to anticipated future activities in the project area.

The construction of the solar thermal power plant may lead to increased economic activity around the site, including through tourism. ONE expects that there may be interest by tourists to visit the solar thermal power plant. This would in turn lead to the creation of employment for the population located in proximity to the plant.

II.D.2. In light of 1, describe the proposed treatment of alternatives (if required)

N/A.

II.D.3. Describe arrangement for the borrower to address safeguard issues

Recommendations of the Environmental Analysis will be fully implemented. In particular detailed environmental management and monitoring programs will be established and followed by ONE. Furthermore, ONE will implement the mitigating measures to reduce any adverse impact to the atmosphere. Also, the issue of leakage of heat transfer oil has been addressed in the EIA, through a set of technical measures (specification of ball joints and biological remediation of contaminated soil). The above will be enforced through appropriate contractual clauses which will be included in the corresponding project contracts with the plant operator.

II.D.4. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

Although the site itself is not populated, there is a village to the North of the site. Residents of the village have been consulted and confirmed that the site is of no economic use to them, its allocation to the project will not negatively affect their livelihood. Inter-agencies consultation has also been conducted. These consultations will be documented before appraisal.

**E. Safeguards Classification** *(select in SAP)*. Category is determined by the highest impact in any policy. Or on basis of cumulative impacts from multiple safeguards. Whenever an individual safeguard policy is triggered the provisions of that policy apply.

- [ ] S1. – Significant, cumulative and/or irreversible impacts; or significant technical and institutional risks in management of one or more safeguard areas
- [X] S2. – One or more safeguard policies are triggered, but effects are limited in their impact and are technically and institutionally manageable
- [ ] S3. – No safeguard issues
- [ ] SF. – Financial intermediary projects, social development funds, community driven development or similar projects which require a safeguard framework or programmatic approach to address safeguard issues.

#### ***F. Disclosure Requirements***

<i>Environmental Assessment/Analysis/Management Plan:</i>	<u>Expected</u>	<u>Actual</u>
Date of receipt by the Bank	8/23/2003	
Date of “in-country” disclosure	4/15/2004	
Date of submission to InfoShop	4/30/2004	
Date of distributing the Exec. Summary of the EA to the Executive Directors ( <i>For category A projects</i> )		
<i>Resettlement Action Plan/Framework:</i>	<u>Expected</u>	<u>Actual</u>
Date of receipt by the Bank	Not Applicable	Not Applicable
Date of “in-country” disclosure	Not Applicable	Not Applicable
Date of submission to InfoShop	Not Applicable	Not Applicable
<i>Indigenous Peoples Development Plan/Framework:</i>	<u>Expected</u>	<u>Actual</u>
Date of receipt by the Bank	Not Applicable	Not Applicable
Date of “in-country” disclosure	Not Applicable	Not Applicable
Date of submission to InfoShop	Not Applicable	Not Applicable
<i>Pest Management Plan:</i>	<u>Expected</u>	<u>Actual</u>
Date of receipt by the Bank	Not Applicable	Not Applicable
Date of “in-country” disclosure	Not Applicable	Not Applicable
Date of submission to InfoShop	Not Applicable	Not Applicable
<i>Dam Safety Management Plan:</i>	<u>Expected</u>	<u>Actual</u>
Date of receipt by the Bank	Not Applicable	Not Applicable
Date of “in-country” disclosure	Not Applicable	Not Applicable
Date of submission to InfoShop	Not Applicable	Not Applicable

If in-country disclosure of any of the above documents is not expected, please explain why.

#### **Signed and submitted by**

	<b><u>Name</u></b>	<b><u>Date</u></b>
Task Team Leader:	Rene G. Mendonca	9/25/2003
Project Safeguards Specialists 1:	Hocine Chalal/Person/World Bank	9/25/2003
Project Safeguards Specialists 2:	Mohamed Arbi Ben-Achour/Person/World Bank	9/25/2003
Project Safeguards Specialists 3:		

#### **Approved by:**

	<b><u>Name</u></b>	<b><u>Date</u></b>
Regional Safeguards Coordinator:	Sherif Kamel F. Arif	9/25/2003
Sector Manager	Francoise Clottes	9/25/2003