

**INTEGRATED SAFEGUARDS DATA SHEET
APPRAISAL STAGE**

Report No.:ISDSA21285

Date ISDS Prepared/Updated: 29-Mar-2017

Date ISDS Approved/Disclosed: 30-Mar-2017

I. BASIC INFORMATION

1. Basic Project Data

Country:	West Bank and Gaza	Project ID:	P148600
Project Name:	West Bank and Gaza Electricity Sector Performance Improvement Project (P148600)		
Task Team Leader(s):	Roger Coma Cunill		
Estimated Appraisal Date:	20-Mar-2017	Estimated Board Date:	20-Jul-2017
Managing Unit:	GEE05	Lending Instrument:	Investment Project Financing
Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00(Rapid Response to Crises and Emergencies)?			No
Financing (In USD Million)			
Total Project Cost:	8.00	Total Bank Financing:	0.00
Financing Gap:	0.00		
Financing Source			Amount
State and Peace Building Fund			2.00
Special Financing			6.00
Total			8.00
Environmental Category:	B - Partial Assessment		
Is this a Repeater project?	No		

2. Project Development Objective(s)

The Project Development Objective is to enhance the energy sector's institutional capacity, improve efficiency of the distribution system in targeted areas, and pilot a new business model for solar energy service delivery in Gaza.

3. Project Description

The proposed project proposes to improve the efficiency of the Palestinian electricity sector, reduce system losses and pilot solar energy in support of energy security goals. These objectives will be achieved through several interventions along the Palestinian energy supply chain, from generation, distribution, transmission to regulation.

Component 1 - Strengthening the capacity of Palestinian electricity sector institutions: PETL and PERC (US\$

2.5 million):

This component focuses on the sustainability and performance of the Palestinian Electricity Transmission Company Ltd (PETL) and the Palestinian Electricity Regulatory Council (PERC). It would reinforce PETL and PERC operational performance through the following interventions:

(i) Sub-Component 1.1: Strengthen the Capacity of Palestinian Electricity Transmission Company Ltd - PETL (US\$ 1.8 million):

This entails investments to support the technical, operational and legal functions of PETL. It would strengthen PETL capacity as the single buyer of electricity from suppliers (i.e. IEC, future IPPs, Egypt, Jordan) and as seller of electricity to Palestinian Distribution companies. Key investments include:

- Testing and commissioning equipment, and metering test bench for PETL;
- Supply of vehicles and fault locator for the PMU & PETL;
- Consultant to support PPA negotiations.

(ii) Sub-Component 1.2: Palestinian Electricity Regulatory Council - PERC (US\$ 0.7 million):

This sub-component supports monitoring, evaluation, and financial audit functions of PERC. It provides funding to monitor the quality of service of DISCOs, tracking key performance indicators, auditing financial statements, and reviewing the use of Enterprise Resource Planning (ERP) systems. This sub-component will also support PERC in establishing the bulk-supply tariff at the distribution level and retail once the Power Purchase Agreement between IEC and PETL has been negotiated.

Component 2 - Improving the operational performance of Palestinian Electricity Distribution Companies (DISCOs) (US\$ 2.8 million):

This component focuses on the sustained improvement of operational performance of the five DISCOs in the West Bank. It includes a “Revenue Protection Program” (RPP) with improved metering and billing systems. The RPP reduces commercial losses by the installation of smart meters targeting high end costumers and through investments to improve Management Information Systems (MIS). A US\$ 1 million complementary Energy Sector Programmatic Technical Assistance (P162545) will finance a diagnostic of the existing meters in the utilities’ customers and put forward adequate technical specifications and an implementation action plan.

(i) Sub-component 2.1: Revenue Protection Program (US\$ 1.4 million):

The RPP will provide smart meters to improve billing and collection from industrial and commercial customers that represent the majority of the electricity sales. The RPP will also include Advanced Metering Infrastructure (AMI) comprising communication devices, software (MDMS) and a Metering Control Center (MCC). The functionalities of the AMI and Control Center include: revenue protection (detection of theft, frauds), automatic meter reading, remote disconnection/reconnection, and load control and outage detection.

The RPP implementation will consist of the following:

HEPCO and JDECO: For HEPCO, the commercial and industrial sectors represent the “high value” segment since they make up only 28.2percent of customers but represent 59 percent of its total electricity sales. By installing an additional 5,449 smart-meters , 100 percent of energy consumed by this segment will be metered and billed. In JDECO, all customers in the industrial segment will benefit from the program. These customers are 0.6% of the company’s total number of customers but represent over 17% of its revenues. The program will also include several dozen “whole-sale” meters at the entrance of refugee camps to improve the transparency and data available on the impact of refugee camps on the commercial losses of distribution companies in the

West Bank.

(ii) Sub-component 2.2: Management Information Systems (US\$ 1.4 million from World Bank):

This component focuses on providing state-of-the-art tools to Palestinian's DISCOS that will enable improving key companies' commercial and operational performances. The investment entails incorporating Management Information Systems (MIS) at JDECO, NEDCO and HEPCO that have the following features:

- a) Commercial Management System (CMS) to support the regular commercial cycle (meter reading, billing, collection, disconnection/reconnection);
- b) Incident Management System (IMS) for effective attention of customer's complaints due to outages and other issues in electricity supply and fast service restoration;

A US\$ 1 million Energy Sector Programmatic Technical Assistance (P162545) will finance a study to assess a detailed assessment on existing software gaps in the selected DISCOs and draft bidding documents to optimize costs.

Component 3 - Improving energy security in Gaza with solar energy (US\$ 2 million):

This component supports the design and implementation of a pilot business model for rooftop solar energy in Gaza. The pilot aims to reduce the barrier to entry for all income levels, including the poor, thereby creating a model that can be easily replicated and rapidly scaled up. Due to limited funding, this pilot will not significantly change Gaza's energy crisis on its own. However, in the long terms, the benefits of scaling up rooftop solar will include: i) increased energy security in case of conflict, ii) longer hours of available power supply, and iii) cleaner and cheaper alternative to stand-by generators.

The pilot will aim to install 0.5, 1, 2, and 3 KWp rooftop solar systems on residential rooftops for a total of 1MW installed capacity. Qualified consumers who receive the rooftop solar systems will pay back the cost in monthly installments until the system is paid off. The monthly payments will then return to a revolving fund that will be used to install more solar systems. If the existing seed fund for the model is leveraged through additional funds from donors, private/commercial sectors and consumers themselves, then more capacity can be installed and a greater number of consumers reached by the program.

The targeting of participants will adopt a two-pronged approach to ensure beneficiaries from the entire income spectrum can participate. The pay-back scheme will be designed so that the top 80% of the population can afford the monthly payments without the need for subsidies. The bottom 20%, which can be targeted through the World Bank's existing Cash Transfer Program (CTP), will receive relevant subsidies to ensure they are also able to participate in the program. This two-pronged approach, with 80% non-subsidized, and 20% partially subsidized solar systems, strikes a good balance between ensuring that the poor are included in the program and the revolving fund continues to revolve, thereby creating a sustainable business model that can be adopted by the private sector.

To reward payment loyalty, only consumers with good payment records will be eligible to participate in the program. The program will initially be led by the public sector (PENRA and GEDCO) to improve its visibility and control of the energy sector, but will be transferred to the private sector in subsequent phases once the pilot has been proven successful. The solar system installations will be outsourced to private contractors and the management of the revolving fund will be under the responsibility of the Ministry of Finance or through a private local bank. To ensure product sustainability, contractors will be required to provide a 2-3 year warranty on parts and installation and have a permanent presence in Gaza so that consumers can easily reach them in case of any problems.

Component 4: Technical Assistance, Capacity Building and Project Management (US\$ 0.7 million): This component will be used to strengthen the capacity of PENRA and support staffing the Project Management Unit (PMU) for two years. The PMU is located at PENRA's offices in Ramallah. The PMU staff will be integrated in PENRA's payroll after two years to ensure the Project's sustainability.

4. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

Project activities will target electricity distribution companies spanning the entire geographical area of West Bank and Gaza.

5. Environmental and Social Safeguards Specialists on the Team

Helen Z. Shahriari(GSU05)

Zeyad Abu-Hassanein(GEN05)

6. Safeguard Policies That Might Apply

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	This project is classified as category "B" according to the World Bank Policy OP 4.01. Project financing will include interventions for installation of rooftop PV solar panels, smart meters, equipment for operation of sub-stations, and other meters installed on the networks. The environmental impacts of those interventions are limited, localized, and easily mitigated. Since the exact locations of sub-projects will be fully determined during project implementation, an Environmental and Social Management Framework (ESMF) has been prepared and consulted by the client, approved by the Bank, and disclosed both locally and on the Bank Infoshop before appraisal date on March 12, 2017.
Natural Habitats OP/BP 4.04	No	The installations and construction works are expected in urbanized areas and no natural habitat is expected to be impacted by project activities.
Forests OP/BP 4.36	No	The installations and construction works are expected in urbanized areas and no forests is expected to be impacted by project activities.
Pest Management OP 4.09	No	N/A
Physical Cultural Resources OP/BP 4.11	No	no physical cultural resources are expected to be affected by project activities
Indigenous Peoples OP/BP 4.10	No	N/A
Involuntary Resettlement OP/BP 4.12	No	The project does not trigger the World Bank Resettlement Policy (OP 4.12). The only civil works is limited to installation of the solar panels on the roof tops of the existing residential units in Gaza on a pilot bases. Under component 3, the business model for rooftop solar energy in Gaza.

		Will be piloted. The pilot aims to reduce the barrier to entry for all income levels, including the poor. Although the OP 4.12 is not triggered the Environmental and Social Management Framework (ESMF) has been prepared and the PIU environmental safeguards officers will screen all the sub-projects for social and environmental compliance.
Safety of Dams OP/BP 4.37	No	N/A
Projects on International Waterways OP/BP 7.50	No	N/A
Projects in Disputed Areas OP/BP 7.60	No	N/A

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

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

Project financing will include interventions for installation of rooftop PV solar modules in Gaza, smart meters, equipment for operation of sub-stations, and other meters installed on the networks. for the distribution companies in West Bank The environmental impacts of those interventions are limited, localized, and easily mitigated. The project triggers OP 4.01 on environmental assessment and the project is classified as category "B" requiring partial assessment. Since the exact locations of sub-projects will be fully determined during project implementation, an Environmental and Social Management Framework (ESMF) has been prepared and consulted by the client, approved by the Bank, and disclosed both locally and on the Bank Infoshop by March 11, 2017. The ESMF identified the potential negative impacts of the investments during construction and operation, e.g., noise, dust, interruption of services, health and safety risks, waste disposal, among others. It includes proposed measures to mitigate for the potential risks. It also include screening methodology for sub-projects against safeguards policies, a monitoring plan and implementation arrangements of the ESMF, as well any capacity building needs.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

Replacement of spare parts and batteries for the solar modules is expected once every three years. The ESMF stipulates that disposal of batteries and spare parts will be conducted in an environmentally sound manner to a licenced facility by the Palestinian Environmental Quality Authority.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

N/A

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

A qualified environmental officer at PENRA/PIU will be hired, he will be responsible for conducting sub-projects screening, identifying environmental and social risks, liaison with the Environment Quality Authority as needed, and monitoring compliance of beneficiary distribution companies and their sub-contractors with the provisions of the ESMF.

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

The Key stakeholder is the Palestinian Energy Authority (PENRA), direct beneficiaries from the project are the electricity distribution companies in West Bank and Gaza. In addition, the implementation of the ESMF will be ensured in close coordination with the Palestinian Environmental Quality Authority. Consultations with those key stakeholders on the ESMF was conducted by the PIU at PENRA late February 2017. Further consultations on follow-up ESIA/ESMF will be further conducted by the client and distribution companies with affected people during project implementation. The ESMF will be disclosed locally at PENRA website (both in Arabic and English) and at the Bank infoshop.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	19-Mar-2017
Date of submission to InfoShop	20-Mar-2017
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
"In country" Disclosure	
West Bank and Gaza	19-Mar-2017
<i>Comments:</i> ESMF disclosed in Penra premises in Ramallah.	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why::	
N/A	

C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment						
Does the project require a stand-alone EA (including EMP) report?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	NA	<input type="checkbox"/>
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	NA	<input type="checkbox"/>
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	NA	<input type="checkbox"/>
The World Bank Policy on Disclosure of Information						
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	NA	<input type="checkbox"/>
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	NA	<input type="checkbox"/>
All Safeguard Policies						
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	NA	<input type="checkbox"/>
Have costs related to safeguard policy measures been included in the project cost?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	NA	<input type="checkbox"/>
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	NA	<input type="checkbox"/>
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	NA	<input type="checkbox"/>

the project legal documents?

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III. Approval

Task Team Leader(s):	Name: Roger Coma Cunill	
<i>Approved By:</i>		
Safeguards Advisor:	Name: Nina Chee (SA)	Date: 30-Mar-2017
Practice Manager/Manager:	Name: Erik Magnus Fernstrom (PMGR)	Date: 30-Mar-2017

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