



Concept Environmental and Social Review Summary Concept Stage (ESRS Concept Stage)

Date Prepared/Updated: 02/12/2020 | Report No: ESRSC01112



Advancing Sustainability in Performance, Infrastructure, and Reliability of the Energy Sector in the West Bank and Gaza (P170928)

BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
West Bank and Gaza	MIDDLE EAST AND NORTH AFRICA	P170928	
Project Name	Advancing Sustainability in Performance, Infrastructure, and Reliability of the Energy Sector in the West Bank and Gaza		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Energy & Extractives	Investment Project Financing	2/17/2020	3/30/2020
Borrower(s)	Implementing Agency(ies)		
Ministry of Finance	Palestinian Energy and Natural Resources Authority (PENRA)		

Proposed Development Objective(s)

Improved operational, commercial and financial performance of electricity sector institutions and increased diversification of energy sources

Financing (in USD Million)	Amount
Total Project Cost	63.00

B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

Palestinian Electricity Authority's (PENRA) strategic long-term vision is to achieve greater autonomy through advanced transmission and distribution infrastructure, domestic generation through independent power producers, and financial and operational sustainability of its institutions. This vision is being implemented through a sustained reform process that is led by PENRA and supported by the donor community, to transform the energy sector into a

structured, regulated, and efficient service. This MPA, seeks to transform PENRA's vision into a phased program that is crucial to mobilizing the necessary technical and financial resources and engaging public and private sector stakeholders towards a common goal. The first Phase focuses on key interventions to support strengthening of the transmission network and distribution system to enable increased imports from neighboring countries, increased share of renewable energy and; improved commercial and financial management in the sector. The proposed project is strategically aligned with the current World Bank Group Country Assistance Strategy (CAS) for West Bank and Gaza (November 2017), which highlights the promotion of an environment for dynamic, inclusive private sector growth for job creation, and strengthening of institutions' accountability and capability.

D. Environmental and Social Overview

D.1. Project location(s) and salient characteristics relevant to the ES assessment [geographic, environmental, social] The project interventions cover the entire area of West Bank and Gaza, crossing all three areas --A, B and C. Area A is mostly urban and densely populated, area B is both urban and rural where economy is highly dependent on agriculture. Area C is mainly rural and some parts not populated or have scattered population that are highly vulnerable. Some project locations have been identified already such as the 161 kv interconnection between Gaza and The Israeli Electricity Company (IEC), the Jericho interconnection between West Bank and Jordan, and some interconnection points between IEC and the distribution grid in the West Bank. However, many other specific locations for project interventions are yet to be determined in the course of project preparation and implementation such as locations for reconfiguration of the connection points in West Bank with IEC, locations for upgrading the distribution networks, installation of control points and meters on the supply points from IEC, and installation of other equipment and meters. Most project interventions will be conducted on the existing networks and their ROW for distribution networks, transmission lines, and substations. Extensions of networks will possibly be in urban areas of dense population particularly in Gaza and rural areas in the West Bank. More specific information regarding the sits are under ESS5.

D. 2. Borrower's Institutional Capacity

PENRA has long been involved with the Bank in operations in West Bank and Gaza since the establishment of the Palestinian Authority in 1994. They implemented successfully operations in both Gaza and West Bank of similar nature such as extensions and upgrading of networks, high voltage substations, installation of equipment and meters through the DISCOs in West Bank and Gaza. PENRA is staffed with competent engineers to supervise such works and they have engaged environmental consultants for the implementation of these projects. Despite the technical competency and good track records mentioned above since none of the energy projects funded by the Bank triggered OP 4.12. And despite successful implementation of previous energy projects up to this point PENRA lacks a consistent system of tracking and handling environmental and social risks. The project plans to address this gap through TA and/or institutional component, including engaging a full time environmental and social specialist as part of its capacity building. To identify the needs and as a start a full day workshop on ESF was conducted by the Bank staff at PENRA.

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

Environmental Risk Rating

Public Disclosure

Substantial

Substantial

The capacity of PENRA to manage environmental risks is limited in terms of human and technical resources and will be enhanced during project implementation by building in-house capacity for social and environmental management, and relying in parallel on external short term consultants.. The project activities are distributed over a wide range of geographical areas in the West Bank and Gaza and the environmental and social risks are multidimensional. Some of the project locations are particularly risky as they are located in hot spots of "Area C" in the West Bank and close to the security fence in Gaza, thus an additional security risk to staff, workers, and personnel. The anticipated risks are mainly during construction phase such as safety risks and construction hazards of disruption, noise, dust, in addition to the safety risks associated with installation works of High, medium, and low voltage equipment. Some specific risks are anticipated during the operation of high voltage transmission lines and substations, in particular to hazards of electromagnetic fields (EMF) and impacts to birds and wildlife. Delays in implementation could pose additional contextual risks to the operation, particularly in Gaza due to the hard constraints on entry of materials and equipment.

Social Risk Rating

Substantial

The project includes medium- to large-scale construction, involving possible land acquisition, labor influx and labor management risks as well as risks related to restriction of land use, community health and safety, and exclusion of the vulnerable groups. Land needed for the 161 kv interconnection between Gaza and IEC, the Jericho interconnection between West Bank and Jordan, and some interconnection points between IEC and the distribution grid in the West Bank are either in the ROW of the existing lines or limited to small parcels of land for new substations. No physical resettlement is anticipated. With respect to labor, it is not anticipated that large labor camps will be constructed for the project and the project will be divided to small packages implemented by local contractors and joint ventures. Despite these, the client low capacity with respect to addressing the above risks, as described under institutional capacity, contribute to this risk rating. In addition the project faces some contextual risks that are substantial, given the political tension, especially in Gaza, where a bulk of infrastructure will be constructed. In terms of client capacity, as noted above, even though PENRA has successfully implemented a number of WB projects none had triggered the OP 4.12 therefore little experience regarding land acquisition and implementation of the RAP. This is exacerbated by the fact that there are gaps between National laws regarding land take for development projects and Bank requirements under ESF. Given the different components' activities that entail preparation and implementation of RAPs and the contextual risks and limited capacity of the client in terms of tracking social risks the risk rating at this stage is substantial. In addition, even though there will not be labor camps nonetheless the scale of the project could require labor some influx for the the construction of the 161 kv interconnection between Gaza and IEC and the Jericho interconnection between West Bank and Jordan.

B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:



Component 1 of the project include (i) Rehabilitation of PETL-IEC connection points, the Palestinian and Israeli electricity systems are highly inter-connected. The Israeli Electricity Company (IEC) supplies West Bank consumers through 200+ connection points. Under the terms of the Power Purchase Agreement (PPA) between IEC and the Palestinian Electricity Transmission Company (PETL), PETL will take over the management of these connection points as per a pre-agreed schedule. (ii) Construction of North Gaza-Israel 161KV interconnection, (iii) Upgrade of West Bank-Jordan existing interconnection,

The activities under component 2 include (i) Revenue Protection Program, a first phase revenue protection program has been launched in West Bank & Gaza under the ongoing project (ESPIP), which covers the 23 percent of the total consumption across the six DISCOs by targeting the top 16,000 customers. As the Palestinian economy does not have many large industrial or institutional consumers, a vast proportion of the consumption is by small-scale industrial and commercial (MSMEs) sector and the residential sector. The second phase is expected to target the next 20-30 percent of consumption. This phase will also start looking at solutions to address non-payment from poorest communities and displaced populations.

The activities under 3 component will include (i) grid reinforcement and upgrade to enable evacuation of utility-scale and small-scale renewable energy (RE), (ii) Small-scale rooftop PV for Health, MSMEs and Residential Sector, (iii) Expansion of Revolving fund for Rooftop PV systems for small businesses (MSMEs) in West Bank & Gaza, (iv) pilot improved battery recycling in Gaza, currently, Gaza strip is estimated to have half a million batteries, of various types (primarily, lead-acid and gel), in circulation. Given the excellent solar potential, solar PV market is active in Gaza and continues to grow. As the Israeli border controls forbid the transport of batteries from Gaza to any external location (within Israel and abroad), management of this battery waste is an urgent environment and public health concern. Gaza strip has approximately 15 small factories (workshops) that recycle batteries. However, they also face import restrictions and typically utilize very basic processes, with no environmental quality or safety considerations. This activity will assist in the identification of best practices to support small-scale battery recycling, identify the equipment required that would also be allowed under the import restriction regime and support 2-3 small factories (workshops) to upgrade and retool their operations. In addition, the activity will enable knowledge exchange with the remaining workshops and identify options for supporting the remaining factories.

The main risks of the first phase of the MPA are associated with the project activities which involves civil works and electro-mechanical installations for the high voltage transmission, reconfiguration points, and construction of the 161 KV substation and the interconnection with IEC, the interconnection with Jordan, installation of PV solar. In addition to the risks during construction (dust, noise, utility interruption, safety hazards to workers and communities), the risks during operation include increased generation of solid and liquid waste, particularly, battery waste from the PV solar modules, handling and disposal of PCB for the refurbishment of transformers, and electromagnetic field (EMF) along high voltage transmission lines and substations. Most activities will follow existing right of way (ROW), however, some project activities might require temporary and/or permanent land acquiring. Some external factors, such as movement restrictions might increase the construction and operation risks in the context of West Bank and Gaza, as restrictions on access and movement is a major concern for implementation of activities that are related to Area C in the West Bank and close to the security fence in Gaza.

The client is preparing an environmental and social assessment which will review the construction and operation risks associated with different activities of the project, particularly the civil works and electro-mechanical works associated



with construction of substations, transmission lines, installation of control equipment and meters, upgrade of networks, and other anticipated activities, the Environmental social assessment will review the social risks of these activities and the impacts associated with the performance and customer aspects of the distribution DISCOs. The Environmental and Social assessments for all site-specific activities will examine and determine any "Associated Facilities" linked with the project activities in accordance with the ESF definitions. Any Associated Facilities will be subject to the Bank ESF framework ESSs.

Given the fact the project is spanning the entire West Bank and Gaza and some specific locations for project interventions yet to be identified during appraisal and project implementation, the instrument of choice for ES assessment is Environmental and Social Management Framework. In addition, Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan will be conducted for the site-specific interventions that have been identified, i.e., the 161 KV substation in Gaza and the interconnection with IEC, and the high voltage interconnection with Jordan. The ESMF will assess the general impacts of the project intervention that are relevant to the project as detailed below. Once the locations for other interventions are fully identified, site-specific ESMPs will be prepared. A Resettlement Policy Framework (RPF) will be prepared, given that the project covers the entire West Bank and Gaza and not all the sites are specified at the time of appraisal. In addition, site specific Resettlements Action Plans (RAPs) will be prepared for the packages identified by appraisal that involves land and livelihoods. Vulnerable groups will be identified if any within the geographical domain of the project. As the locations of different packages are determined, site specific RAPs will be prepared based on the RPF. Finally, a LMP and a Stakeholder Engagement Framework (SEF) and SEP will be also prepared for the appraisal. The ESMF, the RPF, SEF, SEP, and LMP will be all disclosed by appraisal.

Areas where "Use of Borrower Framework" is being considered:

Use of the Borrower Framework is not considered. The program will rely on the Bank framework for environmental and social aspects implemented via the project implementation unit in cooperation with the distribution companies. The MPA will be a chance to enhance the cooperation between PENRA and the environmental quality authority, both lack adequate capacities for environmental monitoring and enforcement. Despite the presence of an Environmental Law and Environmental Impact Assessment Policy for the Palestinian Environment Quality Authority, yet it lacks specific industrial standards and mechanisms for monitoring and enforcement of environmental regulations.

ESS10 Stakeholder Engagement and Information Disclosure

Project activities involve a wide range of communities where the construction activities will take place and require consultations with the communities on different environmental and social risks and best ways to manage them, including the construction activities in the communities, installation of pre-paid meters, construction of substations and their operation. A wide range of stakeholders will be involved, including service ministries, municipalities and local authorities, electrical distribution companies, IEC, and users. Other stakeholders include affected communites, those whose land could be affected, local NGOs working on energy sector, among others. The project may also involve disruption of utilities and disturbance during construction. Given the wide geographical areas of project interventions some vulnerable communites living in the remote areas also could be might be impacted by project activities. This wide range of stakeholders requires detailed stakeholder engagement plan (SEP) with specific methodology to reach them all. That could include ways to reach the remote areas to ensure the inclusion of the communites living there, having different sessions for men and women in areas where they do not mix in public,

having the meeting during the hours that many could participate, facilitate the precipitation of those with physical disabilities, among others. Some specific project locations have been identified already such as the 161 kv interconnection between Gaza and IEC, the Jericho interconnection between West Bank anmd Jordan, and some interconnection points between IEC and the distribution grid in the West Bank. However, many other locations for project interventions yet to be determined in the course of project preparation and implementation such as locations for reconfiguration of the connection points in West Bank with IEC, locations for upgrading the distribution networks, installation of control points and meters on the supply points from IEC, and installation of other equipment and meters. For the sites that are identified a SEP will be prepared by appraisal and disclosed. For subprojects that their locations are unknown, Stakeholder Engagement Framework (SEF) will be prepared before appraisal, which will be the bases for the future packages SEPs once the packages are identified.

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

The project activities will involve contracted workers under many contractors and subcontractors who will implement the civil works and technical assistance, direct workers from PENRA and the electricity distribution companies, and supply chain workers. It is not anticipated that large labor camps will be constructed for the project and the project will be divided to small packages implemented by local contractors and joint ventures, a small number of foreign experts and high skilled labor might be involved. Since the construction and operation of transmission and distribution infrastructure includes a high level of exposure to electrical hazards and requires executing substantial works during construction and operation, labor risks, including OHS has been identified as one of the principal risk areas. Labor Management Procedures (LMP) will be prepared and disclosed by appraisal. Site-specific LMPs will be prepared and disclosed before commencement of work on any of the sites. The contracts will include particular provisions on occupational health and safety measures, child labor, and work conditions, following the general World Bank Guidelines on Environmental Health and Safety (EHS Guidelines) and the more specific Occupational Health and Safety guidelines, especially on Physical Hazards.

ESS3 Resource Efficiency and Pollution Prevention and Management

The project activities under component 1 involve construction, civil works, and electro-mechanical installation of equipment. Therefore, Management of solid waste associated with construction activities is critical, particularly, management of battery waste associated with solar PV installations for households, clinics, hospitals, and SMEs. In addition, careful management of PCB in transformers replaced and rehabilitated in accordance to industrial standards is important. A sub-component of the project is designed to improve the client capacity to handle, transport, store, recycle, and dispose hazardous waste such as batteries and RCPs from transformers. A preliminary waste disposal management plan will be included in the ESMF, and further developed in each site specific ESMP. The general and specific World Bank Guidelines on Environmental Health and Safety (EHS Guidelines) will be ensured for all project activities including the industrial standards for distribution and transmission.



ESS4 Community Health and Safety

The safety of communities where electromechanical works and installations will be performed will be examined, particularly, safety of communities where substations and high voltage transmission lines will be constructed, with a potential of community exposure to electromagnetic fields (EMF). Safety of communities where civil works, trenches for underground cables, electrical towers will be constructed will be also investigated and ESMPs to manage those risks will be ensures during construction. Wherever the construction of the substations and transmission lines will require route detours, safety measures for nearby communities, and road users, from traffic and construction activities will be put in place in accordance with acceptable norms and as per the World Bank's EHS guidelines and enforced.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

Subcomponent 1.3 consists of construction of new Gaza-Israel 161KV interconnection that involves rebuilding of substation either at the same site or shifting the site 500m north to be closer to another critical infrastructure site. The project also will involve rehabilitation and upgrading of Jericho interconnector between West Bank and Jordan. For the interconnectors, the location of the sections that new lines would be needed as well as the locations of new substations are not known at this point therefore the amount and nature of land that would be needed. This information will be only known once the feasibility studies are finalized. The environmental and social assessment that will be done under the ESS1 will determine the scope and needed instruments.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

The high voltage transmission lines, substations, and distribution grids, reconfiguration might impacts trees and interrupt natural habitats for birds and other wildlife. The site-specific ESIAs will assess the impacts on habitats of importance, if any identified. Additional information will be obtained and assessed on impacts to natural habitats once the client had completed the preparation of instruments.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

Special and vulnerable groups might be impacted by construction of substations and transmission lines in rural and remote areas but at this point there is no known IP in the area. This will be further investigated and assessed as part of the ESS1.

ESS8 Cultural Heritage

Project activities involve mostly superstructures (above-ground) with minor earthworks. No tangible or intangible cultural heritage is expected to be impacted by project activities. However, given the historic nature of the country there is always a chance to find tangible CH. As a result, at the least, chance fund approach will be applied, and chance find procedures will be incorporated in the ESMF and in all works' contracts.



Advancing Sustainability in Performance, Infrastructure, and Reliability of the Energy Sector in the West Bank and Gaza (P170928)

ESS9 Financial Intermediaries

There is no financial intermediaries involved in this project. The entire project and decision-making process is managed by PENRA.

B.3 Other Relevant Project Risks

Security risks associated with construction in high-risk areas such as "Area C" in West Bank close to Israeli settlements, and around the security fence in Gaza. Delays of material entry can increase risks during construction by extending the work durations, whereconstruction sites and trenches are open, stocking of contsurction material, route detours and other community safety aspects may be increased if not addressed properly during the "pause" periods. The volatile political and security situation in the region is an external factor to be considered.

C. Legal Operational Policies that Apply	
OP 7.50 Projects on International Waterways	No

OP 7.60 Projects in Disputed Areas

III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered?

Financing Partners

There is no common approach anticipated for first phase and no parallel financing is envisaged at appraisal .

B. Proposed Measures, Actions and Timing (Borrower's commitments)

Actions to be completed prior to Bank Board Approval:

1- Preparation of Environmental and Social Management Framework (ESMF)

2- Preparation of Environmental and Social Assessment for the 161 KV Substation in Gaza and interconnection with IEC.

3- Preparation of Environmental and Social Assessment for the Jordan Interconnection.

4- Preparation of a Resettlement Action Plan for components and activities with technical design available at project appraisal, as well as a Resettlement Policy Framework (RPF) for those activities with no detailed design by project appraisal.

- 5- Preparation of the Labor Management Procedure.
- 6- Preparation of the Stakeholder Engagement Plan (SEP).

The above instruments will be prepared by project appraisal.

No

No



Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):

Preparation of site-specific ESMPs for different interventions, to be cleared and disclosed before commencement of civil works.

Preparation of site-specific RAP once locations of interventions are identified and before commencement of construction.

Preparation and disclosure of site-specific LMPs and SEPs before commencement of construction. Recruitment of Environmental and Social Officer at PENRA to manage the ES risks by Project's effectiveness.

C. Timing

Tentative target date for preparing the Appraisal Stage ESRS

IV. CONTACT POINTS

Dennessien	Ministry, of Finance		
Borrower/Client/	Recipient		
Telephone No:	972-2-236653	Email:	mranade@worldbank.org
Contact:	Monali Ranade	Title:	Senior Energy Specialist
World Bank			

Borrower: Ministry of Finance

Implementing Agency(ies)

Implementing Agency: Palestinian Energy and Natural Resources Authority (PENRA)

V. FOR MORE INFORMATION CONTACT

The World Bank 1818 H Street, NW Washington, D.C. 20433 Telephone: (202) 473-1000 Web: http://www.worldbank.org/projects

VI. APPROVAL

Task Team Leader(s):	Monali Ranade
Practice Manager (ENR/Social)	Lia Carol Sieghart Recommended on 12-Feb-2020 at 09:46:2 EST
Safeguards Advisor ESSA	Nina Chee (SAESSA) Cleared on 12-Feb-2020 at 13:56:29 EST

15-Feb-2020