PROJECT INFORMATION DOCUMENT (PID)
CONCEPT STAGE

Report No.: PIDC20152

Project Name	West Bank and Gaza Electricity Sector Performance Improvement Project (P148600)
Region	MIDDLE EAST AND NORTH AFRICA
Country	West Bank and Gaza
Project ID	P148600
Borrower(s)	Palestinian Liberation Organization (for the Benefit of the Palestinian Authority)
Implementing Agency	Palestinian Energy and Natural Resources Authority (PEA)
Environmental Category	B-Partial Assessment
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I. Introduction and Context

Country Context

1. Despite a slow recovery from the 2014 recession, the Palestinian economic outlook is grim. The growth rate of the Palestinian economy is projected to be around 3.5 percent in the medium term. Given the high population growth in the Palestinian territories, this implies a near stagnation in per capita incomes. The economy has also not been able to create enough jobs, resulting in stubborn unemployment rates reaching 27 percent in 2016 (18 percent in the West Bank and 42 percent in Gaza), despite recent steps by Israel to increase the number of work permits for West Bank Palestinians. The productive capacity of the Palestinian economy has been eroded over the years with a significant decline in the size of manufacturing and agriculture in the economy.

2. The current critical situation requires renewed efforts by the donors, the Palestinian Authority (PA) and the Government of Israel (GoI). Until there is a permanent peace agreement, the Palestinian economy will continue to perform below its potential and this will impact the economic and fiscal performance. However, even without a final peace deal there is more that can be done to enhance the performance of the Palestinian economy and improve the fiscal situation. Increased donor support and continued reforms led by the PA are needed to ensure improved competitiveness and fiscal sustainability of the Palestinian economy over time.

3. GoI actions to help Palestinian private sector activity and raise employment levels could significantly mitigate the stress of economic stagnation. Restrictions have been the main constraint to Palestinian economic competitiveness and have pushed private investment levels to amongst the lowest in the world. Restrictions on Area C are amongst the most detrimental to economic growth and World Bank analysis has reported that access to Area C could increase Palestinian GDP by 35 percent and would be expected to lead to a 35 percent increase in employment. The World Bank estimates that GDP

losses in Gaza, since the blockade of 2007, are above 50 percent -- in addition to large welfare losses.

4. The reconstruction of the Gaza Strip following the 2014 conflict with Israel is progressing but needs to accelerate. Out of the US$3.5 billion pledged by donors at the Cairo conference of October 2014, 46 percent has so far been disbursed. The entry of materials in the Gaza Strip needs to be accelerated, particularly as efforts shift towards long term recovery projects. The Gaza Reconstruction Mechanism (GRM) has been fairly effective at facilitating material for minor home repairs and at increasing the transparency of the review and approval process. However, more complex infrastructure projects are facing long delays depending on the type of material and equipment needed.

Sectoral and Institutional Context

5. In the last two decades, a sustained reform process supported by the donor community has improved and consolidated the Palestinian energy sector from a fragmented municipally-based system to a more efficient single-buyer model. The Palestinian Energy and Natural Resources Authority (PENRA), was established in 1995 and its mandate consolidated with the approval of the 1997 Letter of Sector Policy which highlighted the key institutional reforms needed by the sector. The reform consolidated the electricity distribution services of numerous fragmented municipalities and village councils (MVC) into larger distribution companies (DISCOs) to benefit from economies of scale. Currently there are 6 DISCOs (5 in West Bank and 1 in Gaza). However, 150 MVCs have yet to transfer their electricity services to the DISCOs because they use the revenues from electricity bills to subsidize other municipal services. In 2009 the Palestinian Electricity Regulatory Council (PERC) was established with a mandate of regulating and monitoring the energy sector. In 2013, the Palestinian Electricity Transmission Company Ltd (PETL) was established with a mandate to be the single buyer and Transmission System Operator (TSO) for the Palestinian energy sector.

6. The Net lending caused by the electricity sector drains around 13percent of Government's revenues. For years, the Palestinian Authority (PA) has borne the fiscal impact of the non-payment of Distribution Companies, Municipalities and Village Councils to the Israeli Electric Corporation (IEC). In 2014, the World Bank conducted a detailed study to better understand the causes of Net lending and concluded that a lack of transparency, weak governance, poor sector performance and political factors are among its key drivers.

7. The consolidation of the Palestinian Transmission Electricity Company (PETL) as a single-buyer and key sector player has been delayed due to the large accumulated debt of Palestinian electricity distributors to IEC, which amounted to US$ 534 million (2.03 billion NIS). Currently, IEC deals directly with Palestinian distributors (6 DISCOs and 150 MVCs) selling power and collecting payments on over 280 connection points. To reduce the number of bilateral transactions between IEC and Palestinian service providers, PETL was established in 2013 to act as the single buyer of electricity with the goal to purchase power from suppliers, i.e. IEC, future IPPs, Egypt, Jordan, and distribute it to Palestinian Distribution companies, which in turn would distribute it to end customers. Thus, there would be one channel for power transactions between Israel and Palestine, and Palestinian service providers would be accountable to a single entity within their own government. PETL is fully staffed and operational thanks to the Bank and other donor support, which are funding this interim period. IEC conditioned the resolution of the large Palestinian outstanding electricity debt to any further improvement of the Palestinian electricity sector, including energizing two HV substations which could pave the way for of PETL's financial sustainability.

8. On 13 September 2016, the PA and the Government of Israel (GoI) signed an agreement to resolve past electricity sector debt and agreed on general principles for a future Palestinian energy market. This agreement confirmed the role of PETL as the sole purchaser of electricity in the Palestinian

Territories. The commercial relationship between IEC and PETL would be governed through a Power Purchase Agreement (PPA) to be signed within six months of signing the agreement (March 31 2017). In addition, four high voltage substations financed by the European Investment Bank and constructed by IEC in the West Bank would be energized, bringing critical additional power supply and reducing losses.

9. Despite significant improvements in the electricity sector's performance, further efforts are required to achieve sustained improvements, consolidate sector reform and ensure the successful implementation of the Israeli-Palestinian electricity debt agreement. DISCO's electricity bill collection rates increased from 52percent (2007) to 84percent (2015) on average due to the companies' decisive actions supported by the Bank and other donors under the Electric Utility Management Project. Network losses (technical and non-technical) however remain a major source of concern, since 25percent (2015) of the power purchased is lost and cannot be billed to the end customer (up from 19percent in 2007). Overall electricity sector efficiency improved from 42percent (2007) to 63percent (2015), but leaving significant room for improvement. The success of the new electricity debt agreement depends on the fact that PETLs pays 100percent of the power purchased to IEC. In turn, DISCOs and end consumers need to follow-suit along the value chain.

10. The Palestinian Electricity Regulatory Council (PERC) has proven its capacity to monitor and regulate the energy sector, but its role needs to be strengthened. PERC proposed the existing unified tariff for all DISCOs in the West Bank and is responsible for its revisions. Moreover, PERC provides licenses to DISCOS and monitors their financial, technical and operational performance parameters, including losses and collection rates. The government has shown its commitment to strengthen the role of PERC, but further donors support is required.

11. The 1.8 million people living in the Gaza Strip suffer from severe electricity shortages due to the inability to implement sustainable power supply options. The available power supply in Gaza only meets half of the demand resulting in rolling blackouts where 8 hours of electricity supply are followed by 8 hours of power cuts. During winter and summer peak load conditions, the situation deteriorates and power is only available 3-4 hours per day. This recurrent situation frequently leads to mass protests and anger towards the government and distribution companies. To punctually address these emergencies, bilateral aid from countries such as Qatar or Turkey provide large sums of funding for additional emergency diesel fuel for the highly inefficient and expensive Gaza Power Plant (GPP). Alternative solutions to provide more sustainable supply options, such as increased imports from Egypt and Israel, and expansion and rehabilitation of the Gaza Power Plant (GPP) to run on natural gas instead of diesel, have been in negotiations for over a decade. However, none of them have progressed due to political stalemate. The development of distributed solar PV could improve the living conditions of a significant number of households, while a solution to the other power supply options progress.

Relationship to CAS

12. The proposed project has a strong ownership by the Palestinian Authority (PA) and the Palestinian Energy and Natural Resources Authority (PENRA), and is fully in line with the World Bank's Assistance Strategy FY15-16 for the West Bank and Gaza (Report 89503GZ). The project will contribute to achieving the Assistance Strategy outcome 1.1 Improved fiscal management with a focus on health and electricity sectors. The project is therefore supporting the government's top priority of increasing payment of electricity bills from end consumers to DISCOs and from DISCOs to the Israel Electric Corporation (IEC), the main supplier of electricity to the Palestine. Thus, the project will contribute to reduce the fiscal pressure on the Government's budget through the net lending mechanism. Moreover, the project will support the Government's priorities of developing renewable energies to improve generation capacity and strengthen key sector institutions such as PETL and PERC.

13. The project supports the World Bank Group's strategic goals of ending extreme poverty and boosting shared prosperity since it will have significant co-benefits for people living in fragile and conflict-affected situations. The project is also in line with the World Bank's Energy Directions Paper which highlights the importance of supporting improvements in the financial, operational, and institutional environment of the sector. The Energy Directions Paper emphasizes the need of a sound institutional and financial environment as a prerequisite for effective investments in the electricity sector. The project will contribute to this goal in particular by (i) supporting the Palestinian Electricity Transmission Company Ltd (PETL) to consolidate it as the single buyer and off-taker of electricity in Palestine and (ii) supporting selected Distribution Companies to improve their operational performance.

II. Proposed Development Objective(s)

Proposed Development Objective(s) (From PCN)

The project development objective is to improve the monitoring of electricity payments, to reduce energy losses and to increase bill collection rates.

Key Results (From PCN)

- Web database established and is updated regularly to record energy usage and payments between IEC and PETL
- Decrease in electricity losses per year, in the project area (%)
- Increase bill collection per year, in the project area (%)
- Installation of additional monitoring meters (Number)
- Installation of prepaid and smart meters (Number)
- Feeder lines constructed or rehabilitated under the project (km)

III. Preliminary Description

Concept Description

The project concept benefits from strong buy-in and ownership from the PA counterparts.

The proposed operation builds on the Electricity Utility Management project (EUMP) which closed in September 2016. The EUMP was approved in 2008 for US$12m, with additional financing of US$2.5m approved in 2012 for a total amount of US$14.5m. The original objective was to reduce the fiscal burden of the electricity sector on the Palestinian Authority's budgetary resources through lower deductions from clearance revenues for arrears owed to the IEC. The project leveraged World Bank resources with parallel resources from a number of donors. After several years of implementation, the pace of activities financed by other donors was delayed, and, as a result, the original objective was judged to be too ambitious. The EUMP went through a Level I restructuring in September 2013, which included a revision of its PDO and changes to the results framework. PENRA continued the consolidation of power supply and improvement of electricity system efficiency.

In light of the deterioration of Palestinian utility performance, e.g. total losses, and an increase of non-payment for electricity imported from IEC, the World Bank completed an "Assessment and Action Plan to improve payment for electricity services in the Palestinian Territories" (also known as "Net lending" study) in 2014 to better understand the sources and causes of non-payment and proposed targeted actions. The study provides the additional analytical underpinnings for the proposed operation to focus on the following: (i) improving governance and efficiency of the energy sector, e.g. web database for transparency and accountability, prepaid and smart meters; (ii) consolidation of power supply (outgoing feeders for EIB-financed substations); and (iii) enhancing energy security (renewable energy and energy efficiency).

The project will also work on implementing the recommendations of the 2013 Renewable Energy Pilot, carried out under the Municipal Development Program, also led by the World Bank. The project will also promote renewable energy knowledge and application in the West Bank in selected pilot areas. The energy efficiency component in this project will be based on the recommendations of the World Bank-financed Energy Efficiency Action Plan completed in June 2016. This action plan is to identify the most feasible energy efficiency measures in the short to long term to saving energy and reduce CO2 emissions.

The proposed project components are planned as follows:

Component 1: Enhanced monitoring capacity and accountability for electricity payments (US$ 1.0 m). Based on the recommendations of the 2014 Net lending study, this component will focus on improving the transparency and accountability of the electricity payment cycle, which was a major obstacle for keeping electricity non-payers accountable. A web database will be established to track timely transfer of invoices and payments to IEC by relevant Palestinian stakeholders, i.e. Distribution Companies (DISCOs) and Municipalities. The web database will be managed by PETL in coordination with the IEC. This online database is critical for monitoring payments (and non-payments) from all Palestinian stakeholders, particularly as negotiations on a legally binding Power Purchase Agreement are ongoing between PETL and the IEC. This component will include a technical assistance sub-component to develop awareness campaigns to address the culture of non-payment for electricity services in targeted populations, e.g. refugee camps. The outcome of this component is to increase transparency and accountability of the electricity payment cycle in order to increase payments for electricity service.

Component 2: Reduction of Distribution Losses and Power Supply Consolidation (US$ 6.0 m). Network losses, technical and non-technical, are above 20% and higher than regional benchmarks. The second component will focus on reducing non-technical losses, i.e. thefts, and increasing bill collections by deploying smart meters and related Advanced Metering Infrastructure as well as monitoring meters to selected DISCOs. The introduction of smart metering along with data tracking software and mobile applications would also enable households and other customers to have greater control over their consumption. This component will include a second sub-component to finance materials, tools and civil works for the installation of the out-going feeders (purchased with the support of Norway Cooperation) of the new Jenin and Nablus 161/33 kV substations (financed by the European Investment Bank). This sub-component would contribute to the Palestinian power supply consolidation process while reducing technical losses.

Component 3: Support to Energy Efficiency and Renewable Energy development (US$3.5m). This component will implement selected recommendations of the Energy Efficiency Action Plan and will focus on a number of pilot projects as well as on creating a line of credit to support small-scale investments in energy efficiency and renewable energy within the public and private sectors. Some initial ideas include support to small solar roof-top PV projects in public buildings, such as hospitals and schools. The proposed project will also support PENRA in its efforts to implement the second phase of its strategy to develop energy efficient street lighting in municipalities. The proposed project will work closely with the Bank-supported Municipal Development Program to achieve these goals. Following successful completion of 3-5 pilots, the component will seek to expand their implementation in other areas of the West Bank while seeking partnerships with private sector and donors to scale them up. This component will include a sub-component with training and technical advisory services to PENRA staff on renewable energy and energy efficiency topics. The component would contribute to the outcome related to increased renewable energy production under the project.

Component 4: Technical assistance to PETL and PERC (US$2.5m). This component will provide technical assistance to PETL to enhance its technical expertise for the completion of the contractual arrangements related to the planned Jenin gas-fired power plant. PETL is expected to purchase the entire output of the Jenin power plant under a 23-year power purchase agreement. The component will also provide initial technical assistance to the nascent Palestinian petroleum sector governance, including conducting an institutional assessment of PENRA's ability to regulate the petroleum sector and an institutional staffing plan.

IV. Safeguard Policies that Might Apply

Safeguard Policies Triggered by the Project	**Yes**	**No**	**TBD**
Environmental Assessment OP/BP 4.01	**X**		
Natural Habitats OP/BP 4.04			**X**
Forests OP/BP 4.36		**X**	
Pest Management OP 4.09		**X**	
Physical Cultural Resources OP/BP 4.11			**X**
Indigenous Peoples OP/BP 4.10		**X**	
Involuntary Resettlement OP/BP 4.12			**X**
Safety of Dams OP/BP 4.37		**X**	
Projects on International Waterways OP/BP 7.50		**X**	
Projects in Disputed Areas OP/BP 7.60		**X**	

V. Financing (in USD Million)

Total Project Cost:	13.00	Total Bank Financing:	0.00
Financing Gap:	0.00		

Financing Source	**Amount**
Islamic Development Bank	5.00
State and Peace Building Fund	2.00
Special Financing	6.00
Total	13.00

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