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West Bank and Gaza

Assessment and Action Plan to improve payment for electricity services in the Palestinian Territories

Study on Electricity Sector Contribution to Net Lending

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Executive Summary

Non-Payment for Electricity Services in the Palestinian Territories

1. The Palestinian Territories (West Bank and Gaza Strip) are highly dependent on energy imports from neighboring countries due to the lack of domestic energy resources. The Palestinian Territories consumed 5,430 GWh of electricity as of 2013 (1,581 GWh in the Gaza Strip and 3,849 GWh in the West Bank). The Israeli Electricity Corporation (IEC) is the largest supplier of electricity providing the Territories with around 88% of its total electricity consumption. In 2013, 4,778 GWh were imported from IEC amounting to 2.4 billion ILS (US\$ 660 million).
2. In this context, the Palestinian Authority (PA) -with support from the international community- has been actively engaged in a comprehensive reform of the electricity sector to increase its overall efficiency for the benefit of the Palestinian population. The commitment and involvement of all stakeholders in this extensive restructuring has resulted in the creation of a well-structured electricity market. Additionally, the international community has been facilitating the strengthening, rehabilitation and extension of the transmission and distribution systems in order for the PA to be able to meet the growing demand for electricity in the Palestinian Territories.
3. Alongside the steady increase in electricity consumption, non-payment for electricity imported from the IEC has increased over the past few years, amounting to 58% of its total cost (equivalent to 1,407 million ILS or US\$ 381.3 million in 2013). Non-payment of IEC's electricity bills by Palestinian electricity distributors, including municipalities, village councils and Distribution Companies (DISCOs) remains a key challenge to the electricity sector and to the overall fiscal position of the PA. Outstanding payments owed to the IEC are either (i) deducted from the PA's clearance revenues by the Israeli Ministry of Finance and registered as "Net lending" or (ii) are accumulated as debt owed to the IEC.
4. Net lending reduced the PA's available revenues by an estimated 1 billion ILS in 2012 (US\$ 280 million), representing 13.5% of the PA's total revenues. The IEC only recovered part of the non-paid bills by Palestinian electricity distributors through Net lending, which led the outstanding debt to grow over the years reaching a total of 1.172 billion ILS (US\$ 330 million) as of February 2014. Even if a settlement of this historic debt is agreed upon by Palestinian and Israel stakeholders, additional debt would continue to accumulate in the future unless decisive actions are taken to address the underlying issues of non-payment for electricity services in the Palestinian Territories.
5. More recently, to complement the electricity sector reform, the Palestinian Energy and Natural Resources Authority (PENRA) initiated several measures specially targeted at reducing electricity non-payment. These measures include amendments to the Electricity Law covering punitive actions for electricity theft. While the initiatives introduced by PENRA may have a positive effect, a cohesive strategy is required to successfully deal with this problem.
6. This assessment aims to more precisely understand the sources and reasons for non-payment of electricity in the Palestinian Territories and to develop an action plan based on current programs and activities led by PENRA and the donor community.

Results of the assessment

7. To present a comprehensive overview, the report has assessed the impact of non-payment for electricity services throughout the complete financial payment cycle as follows:

a. IEC's invoice cycle:

There are no procedures for the invoicing of electricity from the IEC to the Palestinian distributors. The current process is not harmonized for all electricity distributors and lacks transparency. Distributors in various areas of the West Bank and Gaza do not have access to meters located in area C in the West Bank, and meters near the borders between Gaza and Israel. Further, some electricity distributors claim that they do not receive IEC's invoices on regular basis, which results in them not paying their bills. Any late payment leads to the addition of a late payment fee or an added interest. Interest rates for late payment are set unilaterally by the Israeli Public Utility Authority (PUA) and are high compared to commercial interest rates in both the Israeli and the Palestinian markets.

While Israeli deductions from the clearance revenues collected on behalf of the PA are not implemented in a transparent manner, some progress has recently been recorded. IEC, for example, provided PENRA and the World Bank with critical data and information to complete this assessment. Since then, the Palestinian Electricity Transmission Company Ltd. (PETL) stated that IEC has been sending regularly their invoices. This process should lead to an institutionalized, regulated and transparent cooperation between the IEC, PUA and PETL.

b. Non-payment by Palestinian electricity distributors to the IEC:

In the period 2010 to 2013, Palestinian electricity distributors in the West Bank did not pay 37% of their bills to the IEC. During the same period, non-payment reached 100% in Gaza. The Top 10+1 group of non-payers, which included the largest ten non-payers in the West Bank and the Gaza Electricity Distribution Company (GEDCO), represented 92% of the total nonpayment of Palestinian electricity distributors to IEC.

GEDCO was the single largest non-payer, accounting for more than 1.7 billion (US\$ 471 million) or 41.8% of the total non-payments to the IEC from 2009 to 2013. During the same period, JDECO was the second largest non-payer contributing to more than 1.1 billion ILS (US\$ 297 million) or 26.3% of the total IEC non-payments.

c. Electricity Losses:

Electricity losses were high and steady at 23-30% between 2010 and 2013. Distributors did not have proper tools to measure losses and could not differentiate between technical and nontechnical losses. GEDCO, in particular, did not have the necessary tools to assess its losses and could not access the meters required for an appropriate measurement and categorization of losses. Losses in GEDCO and JDECO concession areas were reported to reach very high levels and should be dealt with as a priority.

In 2013, electricity losses caused significant revenue loss to Palestinian distributors — estimated at 726 million ILS (US\$ 201 million). Due to high electricity losses, revenues from invoiced amounts to end customers in the West Bank were only able to cover the cost of electricity purchased from the IEC and did not cover the electricity distributor's operating and investment costs. The amount invoiced to customers in Gaza only accounted for two thirds of the electricity purchases for the whole Gaza Strip while one third of the purchased quantity (247 million ILS) was lost either as a technical or a non-technical loss.

d. Collection from customers:

The overall bill collection rate from end customers in the West Bank and Gaza for the period 2010-2013 was better than expected, but customer payment has consistently been decreasing in the West Bank and increasing in the Gaza Strip. The increase of payment in Gaza can perhaps be attributed to a program to roll-out pre-paid meters across Gaza and the successful implementation of an automatic electricity bill deduction from civil servant salaries.

Overall, Special areas such as refugee camps, i.e. areas with low collection rates and high electricity losses, and institutions of the Palestinian Authority are the poorest payers. Their poor payment performance is also claimed to negatively impact the payment behavior of other customers.

The main reasons attributed to the deterioration of the collection rate in the West Bank can be summarized as follows:

- Israeli deductions from the clearance revenue, e.g. November 2012, give the impression that customer bills are and will be paid for by the PA.
- PA introduced incentives for customers committed to pay their bills and for the indebted customers to reschedule their debts. As an example JDECO deducted 14 million ILS from committed customers since starting this initiative and cancelled 8 million ILS of debt for indebted customers. However, the Palestinian Government did not compensate JDECO for these amounts. Also, the Israeli deductions from clearance revenue in November 2012 and PA's measures for indebted customers created a disincentive for committed customers, which resulted in a significant decrease in JDECO's collection rate from 96% in 2012 to 83% in 2013
- Unpaid bills from PA institutions, in particular for water pumping, resulted in most of the electricity distributors unilaterally settling their debts¹ to the Ministry of Finance (MOF) from the unpaid consumption of the PA institutions. This unilateral settlement between the DISCOs and MOF was not done consistently or systematically and was time consuming. If PA institutions would pay for their electricity consumption, collection rates could increase by 3-5%.
- Municipalities are not paying for their bills for services such as street lighting and water pumping. If municipalities would pay for these services, collection rates could increase by 1.5-2.5%.
- Subsidies made available by DISCOs for social cases but then not repaid by the government also contribute to a lower collection rate.
- Special areas, such as refugee camps and certain villages have low collection rates. If bill collection rates from these Special areas could be increased to benchmark levels, collection rates would increase by 4-6%.
- The quality of the service provided by Palestinian electricity distributors to customers in the West Bank and Gaza is deemed to also be one of the reasons for the deterioration of the collection rate. Customers have voiced severe criticism on a declining service quality.

e. Tariff analysis:

The purchase tariff is set unilaterally by the Israeli Electricity Regulator (PURA) as a bulk tariff for medium or low voltage. This is contested by the Palestinian Authority (PA) as it does not consider the Palestinian electricity distributors as one unit. As the largest single customer to the Israeli Electricity Corporation (IEC), it is recommended that the tariff be set at an export wholesale price only including the cost components applicable to PA's consumption and removing non-applicable components, such as the renewable energy component.

The PA has been involved in talks with its Israeli counterpart for the past 10 years to negotiate a commercial agreement for the sale and purchase of electricity, i.e. Power Purchase Agreement. However, progress on reaching an agreement has been slow, and it is recommended that this process is brought to a conclusion as soon as possible.

As for the sales tariff, the Palestinian Electricity Regulator (PERC) has been setting the sales tariff to the Palestinian customers since 2011 based on a cost plus approach to cover the cost of electricity purchased from IEC as well as the operational expenses and an acceptable profit margin for electricity distributors. According to the methodology, the tariff would be reviewed yearly and be amended to include benchmarks for certain key performance indicators (KPIs), including losses and operating costs in order to enhance the efficiency of DISCOs. PERC is currently in the process of reviewing the tariff for the first time, which will include reviewing the different tariff components, such as the impact of removing subsidies and the inclusion of certain financial and quality KPIs.

The difference between the sales and the purchase tariff, also known as tariff margin, reached 54% after the new tariff was implemented in 2011. When the tariff was first applied, this margin was considered to be sufficient to cover all the cost of electricity distributors and was estimated to even allow them to earn a small profit. Since then, the tariff margin has decreased in the West Bank between 2010 and 2013 from 54% to 40% largely due to (i) subsidies included in the tariff, which are mostly not repaid by the Government, and (ii) a significant increase in the amount of electricity purchased from the IEC.

In order to avoid an increase in the sales tariff, the Palestinian Electricity Transmission Company Ltd. (PETL) should finalize the Power Purchase Agreement (PPA) with the IEC at a lower wholesale tariff, while PERC should set benchmarks for electricity distributors to reduce their operational expenses. At the same time, electricity distributors should cooperate with relevant electricity authorities to improve their efficiency. This further requires that all revenues from electricity services are primarily used to cover its purchase and operating costs.

As for Gaza, the average purchase tariff from all the sources² is nearly equal to the average sales tariff. GEDCO should review at least its commercial tariff, which is currently 20% less than the commercial tariff in the West Bank.

In order to reduce electricity generation cost from the Gaza Power Plant and to eventually use bill collections from customers to pay for IEC invoices, the PA has plans to supply the plant with natural gas instead of diesel. In addition to reducing the costs, this action by PA will also enable the plant to run at full capacity, which will then reduce the power shortages in Gaza.

In the West Bank, the PA introduced subsidies amounting to 200 million ILS (US\$ 55 million) as part of the tariff between 2011 and the end of 2013. These governmental subsidies were adopted for political reasons essentially to satisfy customers and to prevent public disturbance as a result of electricity price increase. Unfortunately, due to the weak financial situation of the PA, MOF only repaid 40 million ILS (US\$ 10.8 million) out of the 200 million ILS owed to electricity distributors³. The non-payment of these subsidies created more deficits to electricity distributors, which often chose to compensate for this cost by reducing their payments to the IEC. The outstanding unpaid subsidies owed to electricity distributors were 10.5 million ILS (US\$ 2.9 million) representing about 4% of the estimated electricity purchase cost of distributors in the West Bank between 2011-2013.

f. Efficiency and transparency of Palestinian electricity distributors:

According to the Palestinian Electricity Law n°13, only licensed electricity distributors can sell electricity to customers. The law was implemented in 2009 to integrate municipalities, which were providing electricity services, in four efficient Distribution Companies (DISCOs) in the Palestinian Territories, three in the West Bank and one in Gaza. While many municipalities never joined the DISCOs, the existing DISCOs -which built structures to serve complete regions-, remained highly inefficient due to the absence of economies of scale. In parallel, those municipalities that did not join the DISCOs, kept their inefficient structure.

Distributors —and particularly municipalities and villages- have opaque financial systems with unclear payment mechanisms. MOLG reported that some municipalities have not yet proceeded with segregating their accounts. DISCOs also appear to be only moderately transparent showing an inability to report properly on their finances. Palestinian electricity distributors seem to be highly influenced by the internal political environment in which they operate.

Distributors choose to cover operational costs, investment costs and payments to shareholders before paying invoices to the IEC, which is one of the reasons for non-payment in the West Bank. Distributors were reported to have financed their shareholders through dividends and loans totaling 242 million ILS (US\$ 67 million) in 2013, in spite of not completing their invoice payments to the IEC. NEDCO, HEPCO and SELCO, in particular, indicated that they use part of the collection from customers to fund ad-hoc payments to their municipal shareholders.

Municipalities, on the other hand, disburse funds collected from electricity sales to cover the payment of other services, such as education, health, project finance and rehabilitation projects. All these payments are vaguely categorized under "municipal finance".

g. Other reasons for Non-payment of electricity:

The analysis of the special areas⁴ revealed that collection there is usually low, but significant differences in collection trends and behavior are nonetheless observed. In terms of absolute figures, the contribution of these areas to non-payment is quite low because they do not cover extensive areas or large numbers of customers, e.g. special areas in JDECO (refugee camps) only represent 5% of the total customers and 21% of JDECO non-payment to IEC in 2013.

It is critical to note, however, that in refugee camps the consumption per capita reached unprecedented levels, and non-technical losses are also significantly higher than in the rest of the Palestinian Territories.

Specific issues related to affordability and arrears in these areas were addressed by the PA through the introduction of incentives and subsidies for the benefit of social cases.

Unfortunately, the subsidies for social cases were not paid by the government to the electricity distributors thus impacting the non-payment negatively. On the other hand, incentives to refugee camps were never implemented due to the refusal of customers in refugee camps to pay for their electricity consumption.

The special arrears analyzed in this assessment, in particular the refugee camps and the old city of Hebron, are considered to be areas that require special political attention in order to constructively tackle non-payment. Law enforcement in these areas is challenging and indeed requires the endorsement of PA's highest authority as well as the representatives of these areas.

Distributors, in coordination with the PA, should nevertheless continue to address these issues. It is also crucial for DISCOs to improve public perception by launching media campaigns and developing customer service trainings for their employees.

The graph below illustrates the financial impact of the payment shortages in the payment cycle as well as issues arising from the purchase and sales tariff levels.

Chart 1: Overview of non-payment in the West Bank in 2013 (in million ILS)

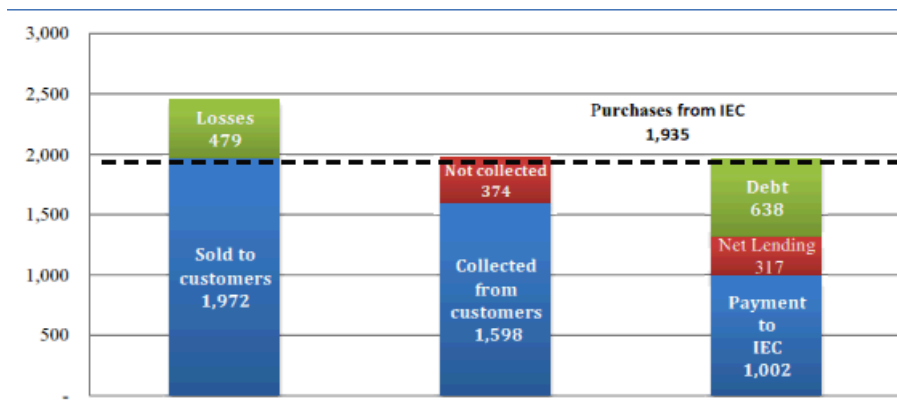
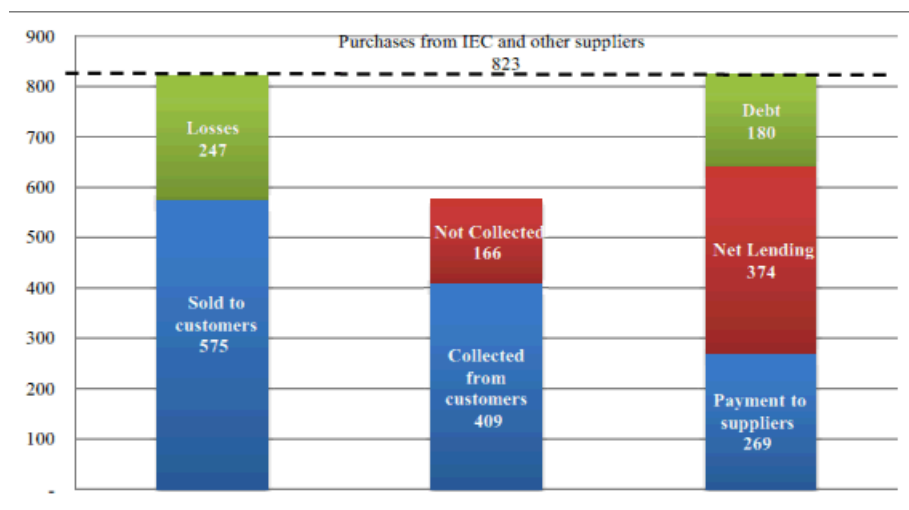


Chart 2: Overview of non-payment in Gaza in 2013* (in million ILS)



Recommended priority actions

8. The study reviewed the action plans from Palestinian stakeholders and the sectorial activities supported by donors to assess the extent to which these plans are addressing or will address nonpayment for electricity services. The action plan proposed in this assessment incorporates both insights drawn from the analytical results and from the strategies currently being implemented by PENRA and the PA—and supported by the international donor community. To be effective, the different actions suggested in the proposed action plan should be implemented as part of a cohesive broader plan monitored and regulated by a coordination entity comprising all sector stakeholders.

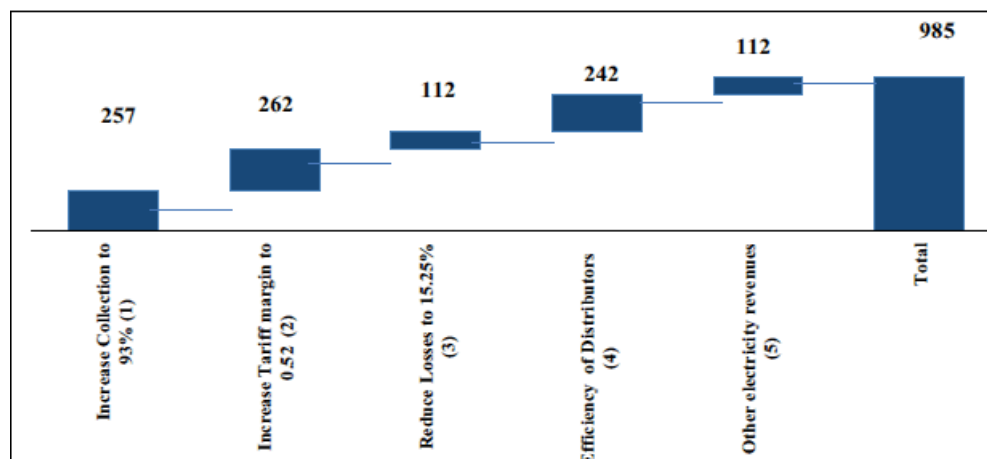
9. The action plan recommends to further develop the Palestinian electricity sector by continuing its on-going institutional reform, improving its legal and regulatory environment and developing key infrastructure to consolidate and monitor electricity supply. The success of the proposed action plan is highly reliant on steady donor support, which will need to be coordinated with a Special Committee that bears overall responsibility for the action plan, including the collaboration of all stakeholders, and monitoring payment improvement and progress in related aspects.

10. The action plan puts forward a set of recommendations classified by priority level (see Section 5.3 of the assessment for the complete list). The high priority recommendations are the following:

- Expand the mandate of the existing "Net lending" governmental committee to be able to manage and monitor all actions proposed in the action plan to reduce non-payment. The performance of this specialized committee, which will ensure that all actions are coordinated and implemented correctly, is a precondition for the successful implementation of the action plan.
- Continue capacity-building activities for PERC and PETL to ensure that both institutions are ready to implement satisfactorily key actions proposed in the plan.
- Finalize a Power Purchase Agreement (PPA) between PETL and the IEC, which will (i) settle the issues related to the invoice cycle with the definition of clear invoice and payment procedures, (ii) set the purchase tariff at wholesale levels, and (iii) reduce non-payment to the IEC.
- Establish a web-based database between PETL and the IEC to ensure timely transfer of invoices and payments to the IEC and to establish a reliable system to monitor payment cycles for all electricity stakeholders.
- Install monitoring meters to measure and identify the location of non-technical losses in the Palestinian Territories and be able to take appropriate actions.
- Rehabilitate electricity networks to reduce technical losses.
- Install additional prepaid meters and smart metering systems to increase collections and timely payment from customers.
- Conduct regular awareness campaigns.
- Enable law enforcement and implementation of the legal actions arising under the amended electricity law.

11. The chart below illustrates the saving targets that could be reached with the cohesive implementation of all high priority actions proposed in the action plan. The saving targets set in the chart entails an increase in customer collection up to 93%, assumes a tariff margin set at around 0.52, with losses reduced to a mere 15.25% and revenue from electricity services used only to cover electricity expenses.

Chart 3: Savings in million ILS expected from the implementation of the action plan



(1) Increasing the collection rate to 93% will increase decrease non-payment by 257 million ILS.

(2) Increasing the tariff margin to 0.52 by reducing the whole sale price will decrease non-payment by 262 million ILS.

(3) Reducing the total losses to 15.25% will decrease non-payment by 112 million ILS.

(4) Increasing the efficiency of the Distributors by using the revenues from the electricity service to cover only the cost of the electricity will decrease non-payment by 242 million ILS.

(5) Utilizing other revenues from the electricity service such as fees, customer contribution in grid connection, fixed charge and other fees will reduce the non-payment by 112 million ILS.

Notes

³ For the purpose of this engagement Net Lending refers to the indirect payment made by the PA to IEC through deductions by the Israeli Ministry of Finance on clearance revenues collected on behalf of the PA. These deductions are made to cover unpaid electricity bills from Palestinian electricity Distributors

⁴ Amounts owed by Palestinian Electricity distributors to the Ministry of Finance (MOF) related to Net Lending.

⁵ Gaza is supplied from IEC, Egypt and Gaza power plant which is fuel operated

⁶ Distributors apply these subsidies in the tariff and need to be reimbursed by MOF

⁷ Areas of low collection and high losses such as refugee camps.

⁸ Suppliers to Gaza are IEC, GPGC and Egypt

<http://www.worldbank.org/en/country/westbankandgaza/publication/assessment-and-action-plan-to-improve-payment-for-electricity-services-in-the-palestinian-territories>

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