

United Nations Development Programme

Programme of Assistance to the Palestinian People
برنامج الأمم المتحدة الإنمائي / برنامج مساعدة الشعب الفلسطيني



Ref: PAL 10 - 00096619

15 August 2017

Dear Mr Al Rawni,

Subject: Renewable Energy for All – Gaza Strip Progress Report

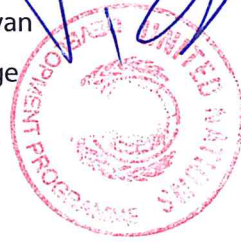
With reference to the contribution agreement between the Islamic Relief Canada and UNDP's Programme of Assistance to the Palestinian People for the "Renewable Energy for All – Gaza Strip" effective 11 October 2015, I am pleased to submit herewith the Narrative and Financial Annual Progress Report.

The report summarizes the progress of the Project as of 31 July 2017 and provides an overview of the achievements, challenges, lessons learned, financial status and way forward.

I thank the Islamic Relief Canada for its contributions to UNDP and look forward to strengthening our partnership in support of the Palestinian People.

Sincerely Yours,

Khaled M. Shahwan
Officer-In-Charge
UNDP/PAPP



Att. Mr Ziad Al Rawni
Chief Executive Officer
Islamic Relief Canada
Canada

I. Programme Summary

Project Title	Renewable energy for All – Gaza Strip PAL (10 - 00096619)
Donor	The Islamic Relief Canada (IRC)
Executing Agency:	United Nations Development Programme/Programme of Assistance to the Palestinian People (UNDP/PAPP)
Country	Occupied Palestinian territory
Implementing Partner(s)	Ministry of Health and Palestinian Energy and Natural Resources Authority - PENRA.
Project Start Date	03 May 2016
Project End Date	31 December 2017
Reporting Period	October 2015 – July 2017
Programme Budget:	USD 571,914.00
Received Amount	USD 400,339.80
Spent Amount	USD 302,597.29
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II. Executive summary

The health sector in the Gaza Strip experiences a chronic energy crisis since 2006, and particularly after 2014 summer hostilities on Gaza which led to massive destruction of the social and public infrastructure including hospitals and health facilities. The proposed project responds to the immediate need for providing emergency support to the health sector in the Gaza Strip. Maintaining good quality of the physical structure of health premises is one of the main domains that reflect the appropriateness of the health care system. Thus, the project contributes to developing a source of renewable energy in order to provide continuous access to electricity in main three hospitals in the northern and southern areas of the Gaza Strip.

The project aims at addressing the urgent needs of the health sector in order to maintain and improve health services delivery to the residents of the Gaza Strip. Minimizing the energy gap and providing electricity for longer hours is one of the vital initiatives to keep the performance of service delivery rolling. Funded by Islamic Relief Canada, this initiative will provide renewable source of energy as a sustainable solution to the current crisis. Solar photovoltaic (PV) panels offer a cost-effective and environmental friendly solution for urban, rural and remote areas. UNDP technical team is working in close cooperation with the concerned national stakeholders, namely, Ministry of Health (MOH) and the Palestinian Energy and Natural Resources Authority (PENRA), the regulator of the energy sector. The intervention is in line with the National Development Plan 2014-2017 and the (PENRA) plans regarding the use of renewable energy.

The targeted hospitals are the Indonesian Hospital in Beit Lahia, Al-Aqsa Hospital in Deir El-Balah and Beit Hanoun Hospital, which offer multiple health services to the people in these communities. The installation of the solar system in the Indonesian Hospital in Beit Lahia (30 KW) and Al-Aqsa Hospital in Deir El-Balah (50 KW) are in the commissioning phase after the installation of the PV panels, batteries and circuit breakers. As for Beit Hanoun Hospital (30 KW), the PV solar panels have just entered the Gaza Strip while the other materials are in the manufacturing process.

III. Background

The health sector has been severely affected during the 2014 hostilities on Gaza. Damages to medical facilities and personnel, along with shortages of medicine, equipment and power supplies, caused the near collapse of the health sector where a number of health facilities were directly hit. During the hostilities, nearly half of all health facilities were unable to provide services due to damage or danger, leaving functioning facilities overwhelmed by increased demand and inadequate resources. The targeted hospitals have sustained partial damages, which reduced access to health care services. These hospitals serve around 350,000 people in the targeted communities.

The current electricity deficit is 75% of 450 MW, which is the current demand of Gaza Strip, and this is expected to increase in the near future. As the electricity supplied from Egypt and Israel is fixed at 22 MW and 120 MW¹ respectively, the only way to improve supply and to reduce deficit is by increasing the weekly amount of industrial fuel to Gaza's power plant to 3.5 million liters. This should increase the output of the power plant to from 80 MW to 120 MW.

The current 75% deficit is translated to 16-hours daily cuts of electricity, depending on the availability of fuel. This pattern may still get worse due to faults in the electricity distribution networks or to loss of feeding lines, during escalations. Electricity supply was only returned to the pre-war staggered schedule (eight hours on/ 12 hours off) in April 2015, seven months after the cease-fire.

Unfortunately, the main electricity network lines that serve residential, commercial and industrial areas also serve vital facilities in the Gaza Strip such as hospitals, water facilities and water pumping stations. Hence, they are all under a direct risk of sudden electricity outages. During the peak hours, all residential and public services facilities are served on an equal basis. This results in tremendous shortages, which, in turn, affects the provision of proper health, education, industrial and other services in Gaza. UNDP carried out an assessment of health facilities in the Gaza Strip guided by WHO in 2010 that revealed weak infrastructure in some of the hospitals and clinics and bad physical infrastructure to suit the purpose of carrying out safe health care services.

IV. Achievements Review:

Indicated output	Activities	Schedule Status	Activities status	Achievements
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¹ It is worth to highlight that due to recent political tension, the electricity supply from the Israeli lines has dropped into 80 MW.

		2016		2017					
		Q3	Q4	Q1	Q2	Q3	Q4		
Output 1: Installation of 50 KW Solar System at Al-Aqsa Hospital in Deir El- Balah	Design & Capacity Development of Palestinian Energy and Natural Resource Authority (PENRA)	X						Completed	Needs Assessment was carried out jointly by UNDP, MoH and PENRA and indicated the targeted departments as well as measuring the consumption of these departments. Targeted units are Operations Theatre, Cardiac Unit, Intensive Care, Dialysis Unit and Reception The assessment indicated the need for a lab for examining the solar system equipment and materials to PENRA. This has been completed and the lab equipment were supplied and installed.
	Construction of rooms on top of hospital for solar system		X					Completed	The contractor completed the construction of battery rooms for the solar system at the top of the hospital roof. All civil activities were finished and the rooms have been ready.
	Supply and installation of solar system				X	X	X		Completed
Output 2: Installation of 30 KW Solar System at	Design & Capacity Development of Palestinian Energy and Natural	X						Completed	Needs Assessment was carried out jointly by UNDP, MoH and PENRA and indicated the targeted departments as well as



Indonesian Hospital in Beit Lahia	Resource Authority (PENRA)								measuring the consumption of these departments. Targeted Departments are Operations Theatre, Cardiac Unit, Intensive Care, and Reception.
	Construction of rooms on top of hospital for solar system		X					Completed	The contractor completed the construction of battery rooms for the solar system at the top of the hospital roof. All civil activates were finished and the rooms have been ready.
	Supply and installation of solar system			X	X	X		Completed	All the PV solar components were supplied and installed on the roof top of the hospitals and all PV panels, batteries, inverters and cables were installed in the battery rooms. Currently, the system is in the commissioning phase upon the installation of the circuit breakers and is expected to be operational by mid-August 2017.

Output 3: Installation of 30 KW Solar System at Beit Hanoun Hospital in Beit Hanoun.	Design & Capacity Development of Palestinian Energy and Natural Resource Authority (PENRA)			X			Completed	Needs Assessment was carried out jointly by UNDP, MoH and PENRA which indicated the targeted departments as well as measuring the consumption of these departments. Targeted Departments are Operations Theatre, Labs, and Reception.
	Construction of Rooms on top of hospital for solar system				X		Completed	The contractor completed the construction of battery rooms for the solar system at the top of the hospital roof. All civil activates were finished and the rooms have been ready.
	Supply and installation of solar system				X		Ongoing	PV panels were supplied into the Gaza Strip and installed on the roof top of the hospital, meanwhile the batteries, inverters and cables are still waiting the coordination to enter the Gaza Strip.

V. Lessons Learned

- 1) The estimated cost of the project showed significant decrease in prices after completing the tendering process. Such surplus was utilized based on MoH priorities after the approval of the donor
- 2) Entry of solar panels and equipment requires prolonged procedures and restrictions. UNDP uses its access and coordination mechanism to facilitate the entry of such materials.

VI. Conclusions and Way Forward

The project is of crucial importance to ensure effective operation of the Palestinian health sector facilities and sustainability of health service delivery. So far, the installation of the solar system has been completed in two hospitals: Al Aqsa and the Indonesian Hospitals, which are expected to be functional by mid-August 2017. On the other hand, the finalization of the solar system in Beit Hanoun hospital is pending the entry the required solar system equipment, where UNDP access coordination team is following up, despite the Israeli restrictions and prolonged approval mechanism of such materials. Overall, the project remains highly relevant and needed under the current conditions of the Gaza Strip.

VII. Financial Status

Budget Main Items (According to Proposal)	A. Original budget USD	B. Disbursement USD	C. Balance USD (A-B)	D. Rate of Disbursement (%) (B/A*100)
1. Lighting of two health hospital by using PV solar cells.	471,250.00	280,182.00	191,068.00	59.46%
2. Total project implementation unit (PIU)	58,300.00	0.00	58,300.00	0.00%
Sub -Total	529,550.00	280,182.00	249,368.00	52.91%
GMS (8%)	42,364.00	22,414.61	19,949.39	52.91%
Grand Total	571,914.00	302,596.61	269,317.39	52.91%

Notes on the Financial Status:

- Total disbursement (USD 302,596.6) amounts to 75.6% of the received payment (USD 400,339.8).
- Due to difficulties in the entry of materials, collection of the PIU cost was postponed to 3rd and 4th Quarters of 2017 to ensure proper completion of the activities by the technical staff.
- It is important to highlight that the financial figures in the report are temporary and may be corrected at a later stage due to exchange rate fluctuations, realized gain/loss or any other possible corrections.

VIII. Annex I : Photo Gallery

First: The Indonesian Hospital in Beit Lahia, North of Gaza



Figure 1: The Indonesian Hospital in Beit Lahia



Figure 2: PV Solar Panels on the top of the Indonesian Hospital



Figure 3: Construction of the Batteries Room on the top of the Indonesian Hospital



Figure 4: Construction of the Batteries Room on the top of the Indonesian Hospital



Figure 5: Supplied Batteries in the Batteries Room at Indonesian Hospital

Second: The Al-Aqsa Hospital in Deir El Balah, Middle Area of Gaza Strip:



Figure 6: Solar Panels on the top of Al Aqsa Hospital in Deir El Balah



Figure 7: Solar Panels on the top of Al Aqsa Hospital



Figure 8: Testing the Installation of Solar System in Al Aqsa Hospital



Figure 9: Testing the Installation of Solar System in Al Aqsa Hospital



Figure 10: Solar Panels on the top of Al Aqsa Hospital

Third: Beit Hanoun Hospital, North of Gaza Strip:



Figure 11: Solar Panels just installed on the top of Beit Hanoun Hospital



Figure 12: Checking the Steel Structure of the Solar Panels in Beit Hanoun Hospital



Figure 13: Solar System equipment entered into Gaza stored at UNDP's Warehouse