

**Final Report of/
Solar System Installation**

**To/ Stichting Palestina –
Rotterdam – Holland**

**From/ Dar Essalam Hospital
Palestine- Gaza Strip- Khanyounis**

Date: 03/01/2016

Dar Essalam Hospital Palestine \ Khanyounis



Attachments:

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Appreciation

Dar Esslam Hospital in Khanyounis\ Palestine thanks

Stichting Palestina – Rotterdam – Holland

For the grant of (10,000 €) presented for Dar Esslam Hospital to install a solar system operating the hospital during the cutoff electricity, and it has participated in improving the work of Dar Esslam hospital and keeping it working 24 hours daily to offer medical services for patients.

We appreciate your great efforts and pray for you success and prosperity to support Palestinian people and alleviate their suffering.

Hospital Director
Dr. Mohammed Al Astal



Background about the hospital:

Dar Essalam hospital is a non-profitable hospital. It was established in 1995 in Khanyounis in the southern of Gaza to be the unique benevolent hospital providing people in the south of Gaza strip with distinguished medical services.

It is a specialized hospital, consists of five floors, containing 20 beds. It contains operation department, gastro scope department of the digestive system and surgery unit in which external gastro scope is used. It also contains specialized clinics as follows:

- pediatric clinic,
- Orthopedic clinic,
- Gynecology clinic,
- Dental clinic,
- General surgery,
- Cardiology clinic,
- Urology clinic,
- Radiology department,
- Pharmacy,
- Laboratory and
- The blood bank.

The hospital cares about the poor and needy patients, who suffer from the hard circumstances. So, the hospital has created the **Poor Patient Fund** to treat the poor patients and offer free of charge medicine for them after a thorough social research is done. The fund is mainly supported from charitable societies and charitable people.

The hospital works 24 hours and has 80 employees.

Dar Essalam Hospital Vision:

Promotion of health services to be advanced and better to keep pace with scientific progress in the field of health.

Dar Essalam Hospital Mission:

Dar Essalam hospital is a charitable institute, provides health services for all society segments and contribute to the provision of free health services for poor and marginalized, to mitigating the suffering of citizens and the advancement of Palestinian health in the framework of transparency and good care.

Dar Essalam Hospital objectives:

1. Offering distinguished medical services for all citizens.
2. Promoting health awareness among citizens.
3. Establishing distinguished and diversified health institutions.
4. Contributing to the development of Palestinian medical cadres.

Fields of works:

1. Offering medical services including:
 - Surgical operations,
 - Specialized clinics,
 - Medical analysis,
 - X-ray department,
 - Pharmacy,
 - Reception and emergency room.
2. Health awareness promotion through lectures, meetings and first aid courses.
3. Arranging free medical days in the remote and marginalized areas.
4. Arranging blood donation campaigns in cooperation with the governmental medical institutions.
5. Helping the poor and needy patients through the **Poor Patient Fund**.

Poor Patient Fund:

The hospital cares about the poor and needy patients, who suffer from the hard circumstances. So, the hospital created the poor patient fund to treat the poor patients and offer free medications for them after a social search is done. The fund receives support from charitable societies and charitable people. The fund helped thousands of needy patients since it was established in 2000.

Hospital Departments

- 1- Reception and Emergency Department:** it receives patients and urgent cases 24 hours daily.
- 2- Specialized clinics Department:** the hospital runs and manages different specialized clinics where qualified specialists and consultants work as follows (general surgery, Internal medicine, E.N.T, Dental, Gynecology, Pediatric, Orthopedic, Neurology, Cardiology, Ophthalmic, Urology). Since the establishment of the hospital, the clinics receive hundreds of thousands of patients.
- 3- Surgery Department:** It contains two developed operation rooms equipped with modern and developed equipments. Qualified surgeons work in it. It performs different types of operations (Major, Moderate and Minor). Thousands of operations were performed since the hospital was established.
- 4- Endoscopy Unit:** in which Gastrointestinal endoscope (Gastroscope and Colonoscope) and urology endoscope are used
- 5- Radiology Department:** This department was started in 1998. It has an X-ray. There are also the ultrasound photography and 4D ultrasound.
- 6- The laboratory:** It performs all chemical, hormones and microbiological tests including stool and urine analysis, blood group and pregnancy test. Noticeably, the hospital lab has been credited by the government. It conduct analysis and tests for young couples

in order to protect themselves from Thalassemia. Hospital lab is the unique one performs this type of test in the southern zone of Gaza strip. The lab also supervises a lot of blood donation campaigns in the south of the Gaza Strip.

7- The Pharmacy: the external pharmacy initiated work as soon as the hospital began working. It has all the drugs needed for the patients with low cost.

8- Delivery Department: It works 24 hours daily, and supervised by qualified gynecologist.

9- Dental Clinic: As soon as the hospital was established, the dental clinic starts working. The clinic works in two shifts with qualified dentists. The process of drilling and filling, modifying teeth, and pulling out are done at the clinic. Hundreds of patients visit the clinic monthly.

10-Internal Department: It was established in 1996. It has 16 beds, 8 ones for men and 8 ones for women. The rooms are provided with air conditioned. The department provides excellent services, and there is a possibility to accompany a patient. A patient can choose to stay alone in a room.

General Background about the Project:

Gaza strip has a sunny weather during the year especially at Summer. This weather qualifies Gaza to be suitable for using solar systems, especially it suffers from electricity cutoff for 16 hours daily. The 16 hours system is the best model of electricity cutoff problem. Sometimes it reaches 20 hours daily, depending on political situations (open or close crosses) and weather.

Project Description:

This project has provided the hospital with electricity generated from solar energy for 24 hours daily.

Solar cells are installed on the floor in front of sun, taking sun rays converting them into electricity by converters and using it during the daytime to operate the hospital instead of the ordinary electricity during electricity cutoff.

When the electricity is on, the power generated from solar system is stored in batteries and to be extracted later at night or when electricity is off.

This project saves money and keep environment clean. It saves money used to buy fuel required to operate electric generator which consumes 35 liter/hr, and of course it has no bad effects on environment.

The hospital has five floors, as follows:

1. **Ground floor:** contains Reception & Emergency and Pharmacy.
2. **First Floor:** contains Laboratory, Radiology and some of specialized clinics.
3. **Second Floor:** contains Delivery, Endoscopy unit and specialized clinics.
4. **Third Floor:** contains Surgeries department and inpatient.
5. **Fourth Floor:** Management and Sterilization Department.

The electricity consumption of each floor is demonstrated as follows:

#	Floor no.	Power Consumption (KW)
1	Ground	5
2	First	8
3	Second	16
4	Third	10
5	Fourth	11
Total		50

We have installed the solar cells to operate the ground floor (Reception, Emergency and Pharmacy), laboratory and The fourth floor (Management Floor). The system has been installed illustrated as follows for each floor:

#	Floor no.	Power Consumption (KW)
1	Ground	1.4
2	First	1.4
3	Second	1.4
4	Third	2.2
5	Fourth	2.2
Total		8.6

Project Monitoring:

Early stages of the project that include contracting and delivery equipments were monitored by the hospital management and financial department through reviewing all related documents and assuring that they meet the required specifications. Moreover, service delivery and the overall progression of the project activities was monitored through proper documentation and admin supervision.

Recommendations for future projects:

As the Israeli strict closure and the problem of electricity prolong, all life sectors are threatened to stop working especially health sector, which may threaten patients life. We recommend to continue support to alternate the electric generators with solar systems especially that Gaza strip has a sunny weather during the year especially at Summer. This weather qualifies Gaza to be suitable for using solar systems which keep health institutions working and complete their medical and human mission.

The invoice of Equipments:

Sharq International Technology - SITTCO
 Palestine ST 48 P.O.
 P.O Box 644

Preform Invoice : 1072624
 Date: 05/11/2015



Nabius - Palestinian Territories
 Tel Fax : 00 97 2 2387422

VAT No. 562 414 060
 Original

Our BANK Details

بنك فلسطين
 فرع نابلس
 حساب رقم: 175537

Customer Name :

Dar Essalam Hospital

Customer Ref Number	Currency	V.A.T	Payment	SHIP METHOD	Prepared By/ed			
	EURO	Included	Immediately					
Line No.	Manufacturer / Cat / Model	Description	Manufacturer Name	ORIGIN	UNIT	Order Quantity	Unit Price	Total Price
1	Ritar	Battery 200 A	Ritar	China		24	450.00	10,800.00
2	Solar Cells		Ritar	China		12	230.00	2,760.00
3	Inverter 5 KVA		Ritar	China		3	470.00	1,410.00
Grand Total Including VAT EURO								14,970.00



Signature

Photos of project implementation:





A link of short video documents the activities of the project:

https://www.youtube.com/watch?v=sjo_BYpt82o

