



Energy sources in the Gaza Strip | An Overview

Despite claims of a fuel crisis, the essential facilities in the Gaza Strip are in fact continuing to operate on the basis of locally supplied power

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On October 7th, 2023, Hamas started a war against Israel.

In the Gaza Strip, the demand for energy routinely exceeds the available supply of energy. The constant lack of energy led to an understanding of the vital need for alternative local energy sources- for a variety of uses such as infrastructure, institutes, businesses, domestic use, etc. Due to Israel's enabling civilian policy along with the support of the international community, the majority of facilities in the Gaza Strip are connected to an alternative power source- the main alternatives used are PV power (solar) and generators which are powered by fuel.

Solar energy

In recent years, Israel promoted significant efforts to expand the solar-based production (PV) of electricity.

PV systems were installed systematically on all hospitals, most of the UN facilities, and at vital infrastructure sites such as wastewater treatment plants. It appears that in most of the vital facilities in the Gaza Strip, localized alternative energy production can maintain continuity of operation.

Alongside with major facilities, local residents and businesses installed

private PV systems to reduce the dependency on the power grid and enhance their independent producing of power.

The installation of PV systems provided a response for principal facilities that must continue operating continuously for the sake of everyday requirements and supply private power for owners of PV systems.

The approximate volume of energy produced by solar energy in the Gaza Strip (PV) is 40 megawatts.



**NGEST Wastewater
Treatment Plant**



**Gaza Industrial Estate (GIE)
Produces 7.3 MW**



Nasser Hospital



Al-Quds Hospital



European Gaza Hospital



Generators and fuel reserves

The second power alternative is based on Generators which generate electricity directly to the facilities- private homes, hospitals, infrastructure, industrial zones, businesses etc. Those are powered by fuel which is kept in designated tanks whose capacity is in accordance to the generator's output.

All vital facilities have generators enabling them to operate uninterruptedly in everyday conditions (compensating for the routine shortfall in power) and in times of emergency, in order to continue providing vital services.

Fuel reservoirs are scattered throughout the Gaza Strip and are owned by Hamas, by private sector, and by international organizations. Along with those, there are major reservoirs and local petrol stations.

Hamas has large scale fuel reservoirs that are used for its terror activities, as well as supplies for civilian facilities in accordance to their prioritizing. The capacity of those sums up to millions of liters.

An example for one is the fuel reservoir near the Rafah crossing. As of today, it holds reserves of 350,000 liters of diesel fuel and half a million liters of gasoline, The amount of fuel in it could meet the needs of Gaza Strip's 14 main hospitals for a month:



Bottom lines

- Vital facilities in the Gaza Strip have local power alternatives that function on a routine basis in order to compensate for the chronic power shortage.
- Most vital facilities (hospitals, central water pumping stations, wastewater treatment plants, and shelters) are equipped with PV systems (solar panels) alongside with designated generators and fuel tanks.
- The Gaza Strip withholds private owned designated fuel tanks and general reservoirs that facilitate generators and civilian needs.
- Hamas owns numerous reservoirs that are widely spread through the Gaza Strip and hold a large capacity of fuel that have the ability to supply Gaza Strip's vital facilities.
- Heads of Gazan institutes have been reporting of a remaining fuel supply for only 24 hours since the beginning of the war, and yet they have continued operating up until today.