

Providing School buildings with PV solar system in WB / Palestine



ENERGY RESEARCH CENTER

The Energy Research Center plays an active role in research development, system design, feasibility studies and students' training in all conventional and renewable energy fields.

ERC has completed dozens of research and demonstration projects over the years:

- Clean Energy and Conservation Strategy
- Wind Potential for Power Generation in Palestine
- Rural Electrifications
- Establishment of Meteorological Stations
- Establishment of a Biogas Digester
- Energy Efficiency
- Electric Power Distribution Network
- Other Projects



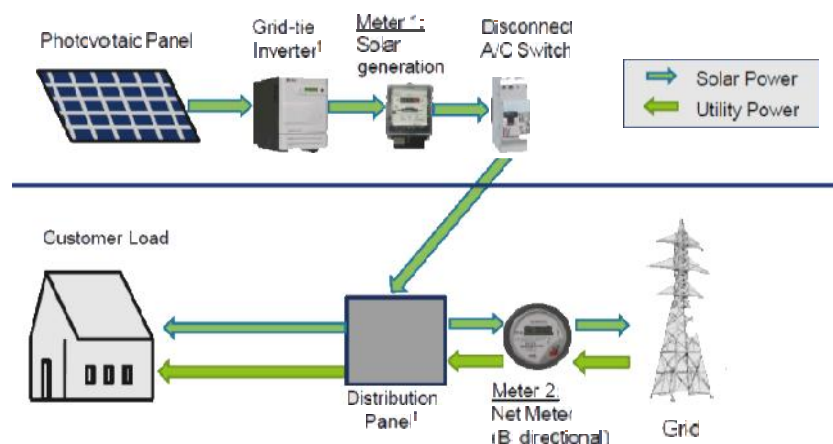
GREEN SCHOOL VIA PV SOLAR SYSTEM

The need for energy conservation, environmental protection and improved living conditions for the users of school premises has led to implement the On-grid PV Solar system on the rooftop of school buildings.

.....Solar Project Steps

- Site inspection
- Engineering design (solar module selection, component selection, monitoring design, power grid transmission design)
- Project design (system configuration, technical analysis, budgetary estimate, power output analysis, financial analysis)
- Feasibility study (location analysis, shade study)

“Make energy, Reduce CO₂ emission & Reduce the electricity bill... using Solar Energy Systems”



Al-Razi Boys School Project



The PV system was installed on the rooftops of Alrazi School by supervision of Energy Research center (ERC) at An-Najah National University.

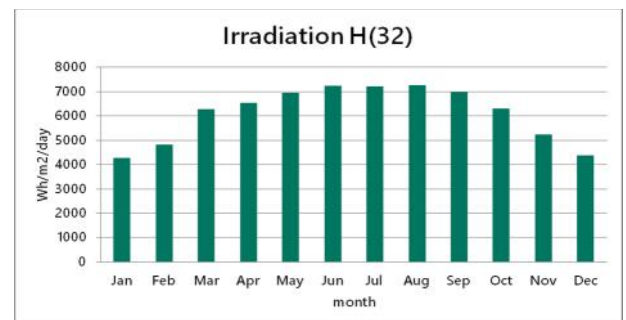
The project was implemented by local company (SATCO co.) and funded by Arizona State University (ASU)

The system was On-grid PV solar system , covered 35% of school demand, the school get the power they need while in session and, during off hours, send power to the grid for household and business use.

From educational perspective, to encourage students to engage with new technology which used to power their school .

Building Information

Location:	Qalqilia, WB
Number of Floor:	3
Est. electricity demand:	35497 kwh/year
Site coordination :	Lat: 32°11'41.23"N, Long: 34°58'19.48"E
Average Radiation:	6.14 KWh/m2/day



PV System Information

PV System Size	7.68 Kwp
Annual Energy Production	12.6 Mwh
Annual Environmental Savings	9450 kg CO2



Almueh Boys School Project

The PV system was installed on the rooftops of Alumeh School by supervision of Energy Research center (ERC) at An-Najah National University.

The project was implemented by local company (SATCO co.) and funded by Arizona State University (ASU).

From educational perspective, to encourage students to engage with new technology which used to power their school

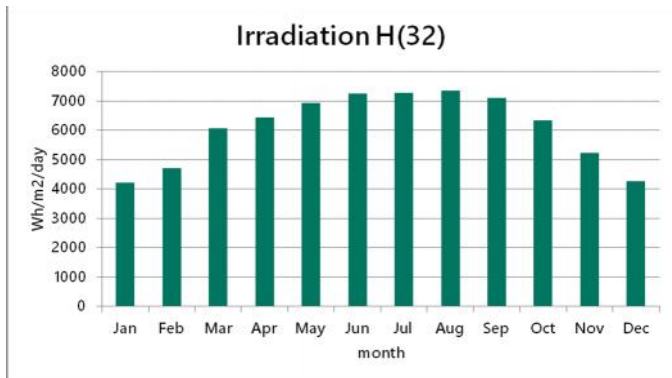
Building Information

Location:	Aram, WB
Number of Floor:	3
Est. electricity demand:	16800 kwh/year
Site coordination :	Lat: 31°50'50.28"N, Long: 35°13'52.84"E
Average Radiation:	6.11 KWh/m2/day



PV System Information

PV System Size	7.68 Kwp
Annual Energy Production	12.7 Mwh
Annual Environmental Savings	9525 kg CO2



The system was On-grid PV solar system , covered 75.6% of school demand, the school get the power they need while in session and, during off hours, send power to the grid for household and business use.



Khawleh Bent Al Azwar Girls School Project

The PV system was installed on the rooftops of Bent Alazwar School by supervision of Energy Research center (ERC) at An-Najah National University.

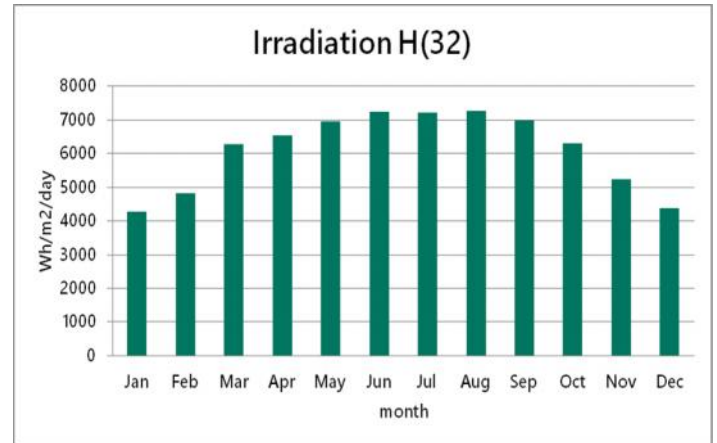
The project was implemented by local company (SATCO co.) and funded by Arizona State University (ASU).



From educational perspective, to encourage students to engage with new technology which used to power their school

Building Information

Location:	Al-Bireh, WB
Number of Floor:	3
Est. electricity demand:	15600 kwh/year
Site coordination :	Lat: 31°54'14.63"N, Long: 35°12'52.05"E
Average Radiation:	6.14 KWh/m2/day



The system was On-grid PV solar system , covered 82% of school demand, the school get the power they need while in session and, during off hours, send power to the grid for household and business use.

PV System Information

PV System Size	7.68 Kwp
Annual Energy Production	12.8 Mwh
Annual Environmental Savings	9600 kg CO2



For more information.....



Contact Us

Energy Research center (ERC) at An-Najah National University

PO. Box 7

Nablus, West Bank, Palestine

0097092345982 EXT.3010

iibrik@najah.edu

<https://www.najah.edu/en/community/scientific-centers/energy-research-center/>