

### **SolarInnovate Energy Solutions**

# **Egypt household solar power generation system**





#### **Overview**

Through the award-winning 'Egypt-PV' project, UNDP and the government aim to remove the barriers to increase power generation by small, decentralized, grid-connected Photovoltaic (PV) systems, on easily replicable and scalable system design, implemented by households and small- and medium-sized businesses. How does solar energy work in Egypt?

Solar photovoltaic (PV) energy or PV solar energy directly converts sunlight into electricity, using a technology based on the photovoltaic effect. The Egyptian solar PV market is segmented by deployment. By deployment, the market is segmented into on-grid and off-grid.

Does Egypt have a solar energy grid?

Egypt connected a large solar energy capacity to the grid over the past few years. Most of this capacity is from large-scale ground-mounted projects. However, several grid-connected small-scale solar system projects are also connected to the grid.

How many solar power plants are there in Egypt?

ACHIEVEMENTS: Thus far, a total of 115 such solar-energy plants have been built in Egypt, yielding 8.2 MW in electricity. Every year, they produce 13 GW of electricity per hour. There have been 201 trainees working on the project, and the implemented systems are worth \$7.2 million in investments.

How much does a solar energy system cost?

The average cost for a KW of electricity generated using the system could range from LE10,000 to LE14,000 KW, according to market prices. The project's website includes a calculator to help people interested in installing the system to calculate the cost, the needed area, and the payback period for the system they want to install.

What is solar energy used for?



Solar energy can be used to provide electricity for all sectors (residential, commercial, industrial). It is environmentally friendly and a non-polluting source of energy, so it has a great effect and helps in climate change and global warming. Get to know the most important information needed before starting.

Is Egyptian Energy a 'life jacket'?

This type of investment has also been "a life jacket" for the Egyptian economy over the past couple of years. It now has the potential to provide the country with double its electricity needs, up to 58.3 Gigawatts (GW) compared to the 31.4 GW produced in the past.



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