



ELEMENTARY TECHNOLOGIES

SOLAR PROJECT INSTALLATIONS

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North Bank Lane, Century City, Cape Town

PROJECT: AFRITOP



Industry: Industrial & Office.

Area: Sandton, Gauteng.

Tag: Hybrid Solar System.

Client Requirement:

- | Energy consumption reduction.
- | Up to stage 6 loadshedding immunity.

Electricity saved: 60-70%.

Back-up duration: 6-7 hrs.

PROJECT SUMMARY

The Afritop solar project is located in the industrial area of Sandton, Johannesburg. The facility required a hybrid solar system to reduce their energy consumption and battery storage to become immune to loadshedding.

The project was fitted with a 24 kW Three-phase hybrid solar system that can generate up to 29 kWp of solar energy while allowing for the storage of 57.6 kWh. The system will feed the facility through either solar power, provided by the solar panels, or the battery bank, if there is insufficient sunlight. If there is not enough power being generated or stored, the facility can still be powered through the municipal grid.

Additionally, the user-friendly inverter interface allows the business to monitor real-time system performance, control energy allocation, and manually switch between power sources if required. A graphical user interface is also provided to view historical consumption and any errors in the system.

TECHNICAL DETAILS

- | Peak power generated = 29 kWp.
- | Battery Capacity = 57.6 kWh.
- | Inverter size = 24 kW 3-Phase.
- | Level of loadshedding avoided = 6.
- | Hardware devices used.
 - Inverter – Deye
 - Solar Panel – JA Solar
 - Battery – Pylontech

RESULTS ACHIEVED THUS FAR (12 MONTHS)

- | Solar power generated: 20.76 MWh.
- | Total money saved: R 43 803.
- | Hours of loadshedding avoided: 870 hrs.
- | CO2 emission prevention: 20.1 Tonnes.

INSTALLER INFO

- | UGOT POWER (Pty) Ltd.
- | PV Greencard No: INST-5777037