

Project Name: Mazowe High School - Zimbabwe



Company: Mazowe High School
 Installed by Sunchoice Energy
 Powered by Samansco

Location: Zimbabwe

Project Date: May 7, 2020

Main Contact: Milton Chitombo, Technical Dir.

Application: Education – Power for eLearning
 Agriculture/Clean water

Customer Type: Government

Phocos Product: **Any-Grid PSW-H Hybrid Inverter**

Quantity: 3 units (2 separate locations on campus)

Project Description/ Key Details

- The existing utility grid available to the secondary school provided intermittent power which created problems and frustrations for administrators, teachers, students, and their families. Basic teaching, learning, and campus day to day function and upkeep were negatively impacted when the utility power was not available.
- The school set goals to improve conditions
 - Secure and stabilize the school’s power independence
 - Promote eLearning for the students
 - Increase test scores, grades, and general learning opportunities for students
 - Be 100% independent for campus water requirements to solve existing unreliable and clean water access challenges. Sustain itself by doing agricultural project irrigation and obtain clean water from a borehole.

Solution/ Results

- The installer designed the school’s new solar system with the feature rich, Phocos Hybrid Any-Grid Inverter (PSW-H), to work in combination with the unreliable utility grid so the school could have consistent, stable power and focus their attention on the student’s success. The utility grid will supplement the school’s power to help reduce electric bills when there is no solar input. The expected electrical savings will be 45%, which creates a return on investment (ROI) of 3 years and 4 months.
- Current installation: 10kW system for the admin and staff meeting room and common spaces, and a 5kW system for the classroom blocks. The school can support students to attend night classes or study at night with consistent power, and now do electronic data capturing instead of traditional paperwork.
- The pass rate of the school and its students will significantly improve because the children can study/learn at night
- Future Installation 10kW: The dining room, classrooms, and dormitory for students will have the same approach of a solar, grid, battery combination with a Phocos Any-Grid Hybrid Inverter (PSW-H) as the foundation, for smooth operation and stability
- The free PhocosLink Mobile App made set up and ongoing system management simple
- Phocos has built a partnership with the distributor and installer to supply a trusted solution using the PSW-H for multiple school projects to improve campuses for better student and staff conditions and learning opportunities

The Phocos Any-Grid Hybrid Inverter performs very well, providing reliable and sustainable energy for our customers . It has an integrated MPPT charge controller accommodating high voltage PV connection, hence reducing project costs and greatly improving productivity.'

-- Mr. Milton Chitombo, Technical Director

45% Savings

On electricity expenses

3.4 Year ROI

The customer will realize a 3 year, 4 month payback, based on their electrical savings

Featured Product:



**Any-Grid
 PSW-H-5kW-230/48V**