ONE-STOP ENERGY SOLUTION

DATA DRIVEN ENERGY SOLUTIONS SUPPORTED BY ARTIFICIAL INTELLIGENCE - AI AND INTERNET OF THINGS - IOT

Knowledge Beyond Borders
RC 1646690

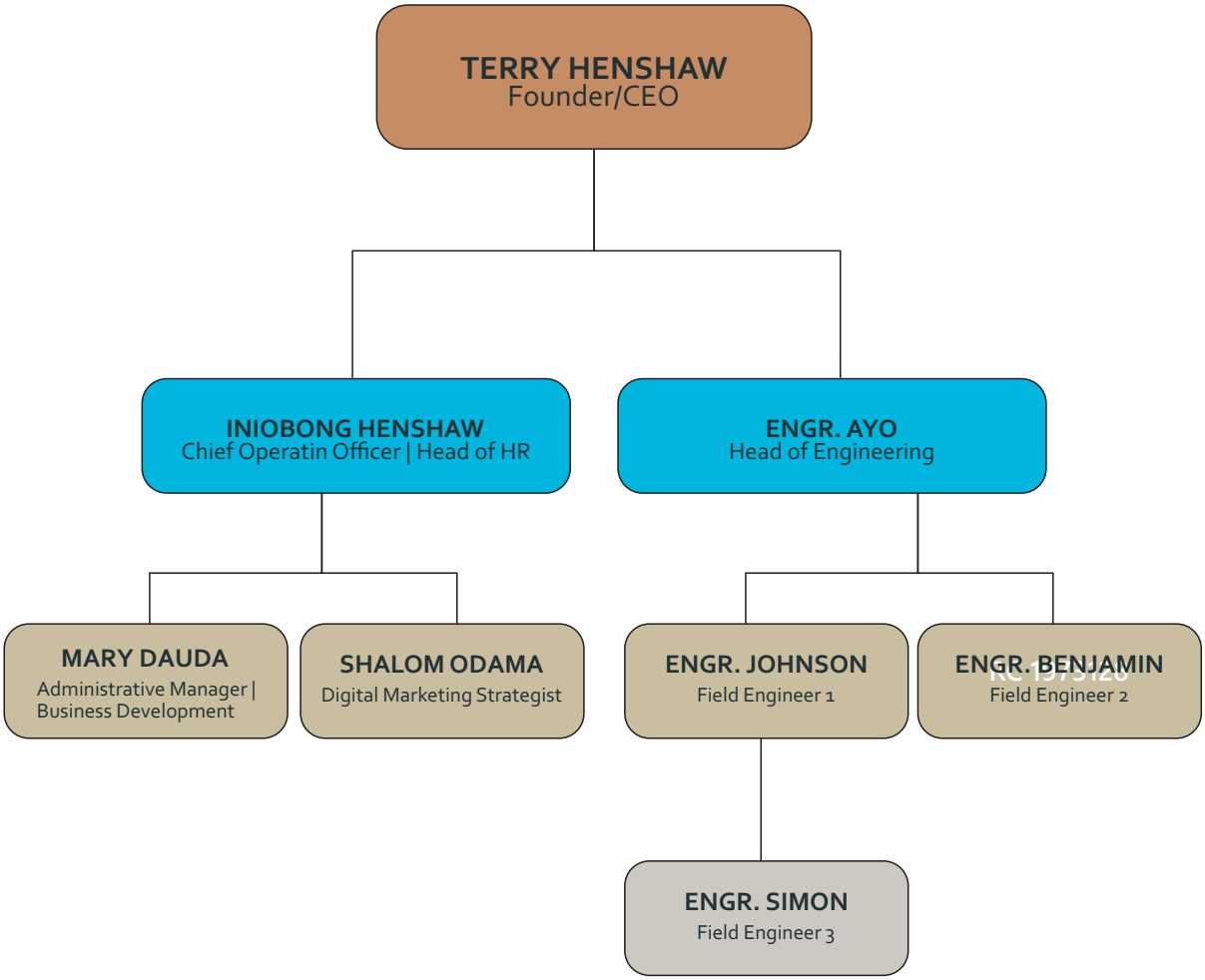
in collaboration with our
ENERGY ARM

EKISHI AFRICA
RC 1973128

ENERGY ARM OF

EKISHI AFRICA ORGANOGRAM

ORGANISATIONAL STRUCTURE



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Our **MISSION & VISION**

Mission	Our mission is to provide energy solutions that will protect the planet, and people while making a profit.
Tagline	Energy for planet, people, and profit.
Vision	Our vision is to see an Africa where EKISHI-AFRICA is a top leader in providing sustainable energy solutions to organizations and homes within Africa.

OUR SERVICES

- Energy audit and solar inverter system design
- Solar inverter installations and maintenance
- Solar/inverter and lithium battery testing and quality verifying.
- Large scale procurement of tier 1 solar panels, lithium batteries, and inverters for projects.
- Installation and metering for businesses
- Renewable energy business analysis for investors

WHAT SETS US APART FROM THE REST

- We partner with a global manufacturer so we can return faulty equipment without delay
- We are sponsored by an energy consulting company (KBB Limited), so we have designs for all our installations and are ready to install before payment.

OUR IMPACTS

200+

Lives impacted through provision of sustainable energy

$400k+

Worth of solar inverter systems installed across businesses, residents and community projects

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340KVA+

Total energy produced since inception

100KVA
Hospitals

20KVA
Churches

20KVA
Plaza

200KVA
Residential

2300KVA+

Total energy we have audited

500KVA
Hospitals

400KVA
Churches

600KVA
Banks

300KVA
Residential

500KVA
Plaza

OUR LONG-TERM GOAL

Every home in Africa should reduce its carbon footprint by 80% through EKISHI smart-net buildings

EKISHI SMART NET ZERO BUILDINGS

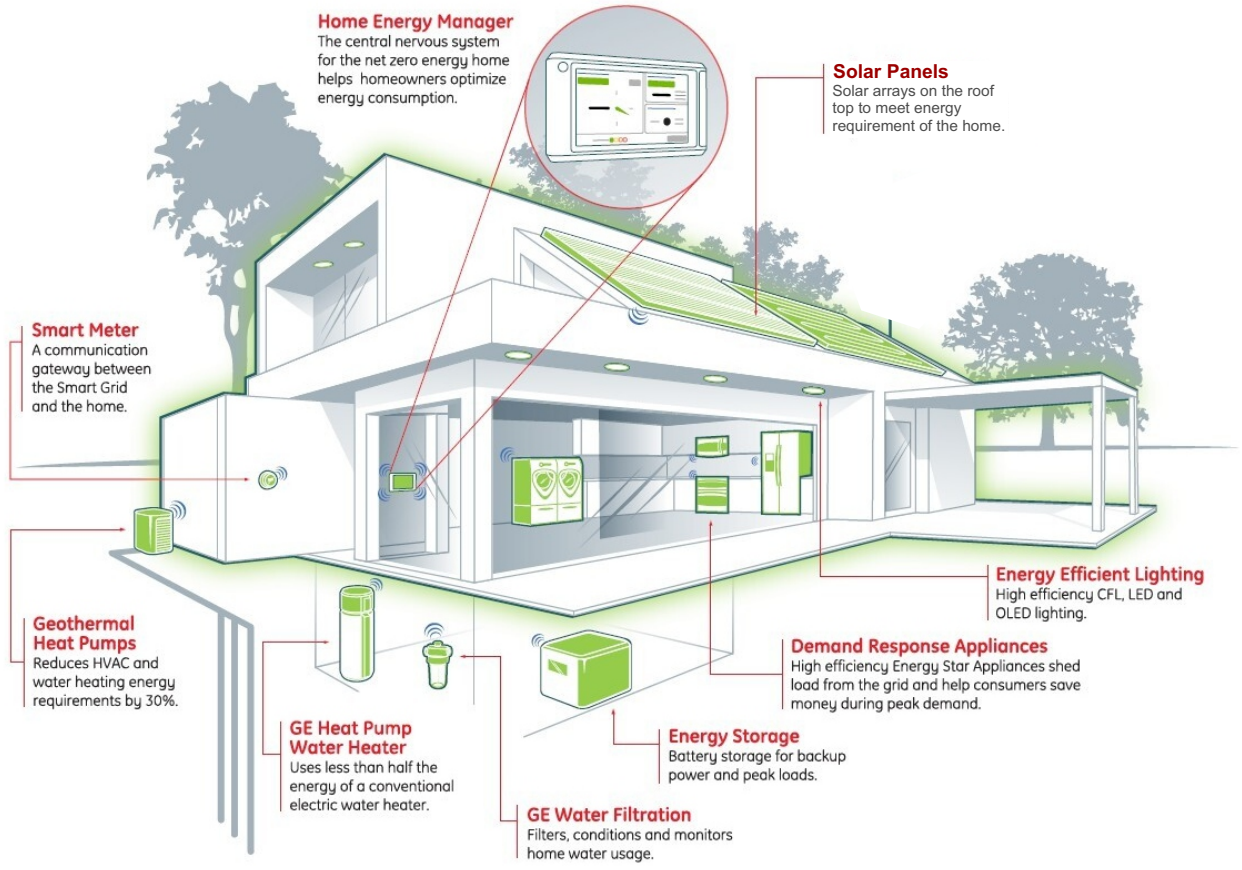
OUR TARGET

80% reduction in CARBON FOOTPRINT

OUR TRUSTED PARTNERS:

CROWN MICRO Carry On

Knowledge Beyond Borders

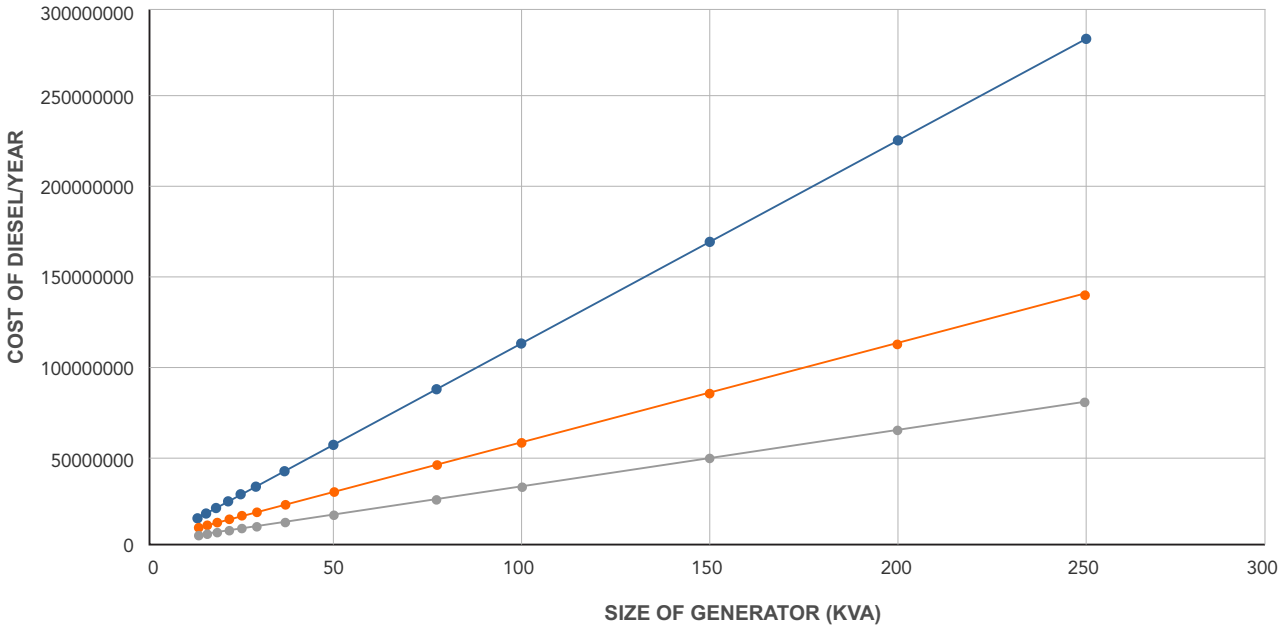


OUR TEST LABORATORY

- We test all products before we install for customers.
- Batteries are tested for capacity and duration of specific loads.
- Solar panels are tested for insulation and capacity.
- Inverters are tested for capacity

HOW TO KNOW WHAT AMOUNT TO INVEST IN SOLAR INVERTER SYSTEMS

COST OF DIESEL FOR INFRASTRUCTURE



When the size of your generator is known and how many hours the generator is used averagely daily. The chart above can be used to guide on the amount of money to invest in solar inverter systems.

L-Member

Mid Clamp

Connecting Member

End Clamp

Metallic Profile

OUR TYPICAL ROOF DESIGN FOR HOMES AND OFFICES

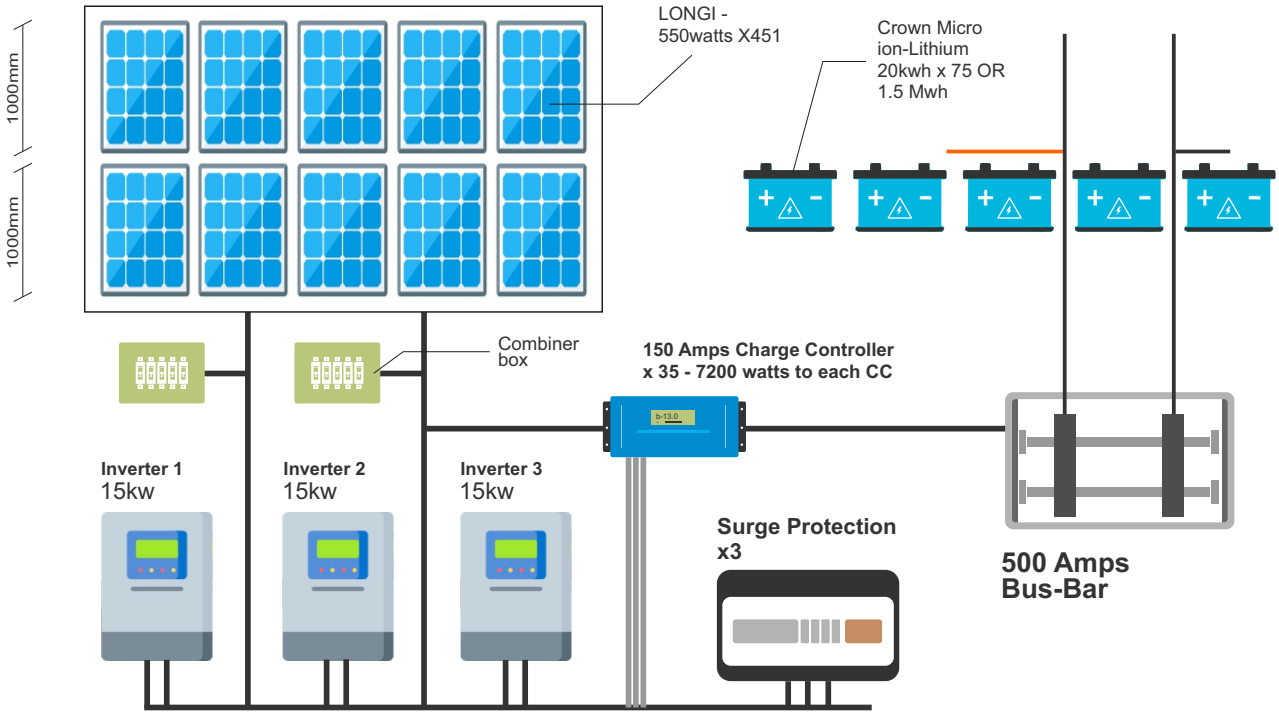
SAMPLE DESIGN FOR ALL SERVER ROOMS FOR A BANK

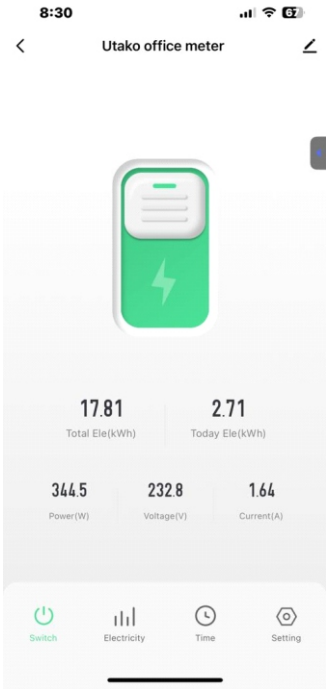
DESIGN SHEET

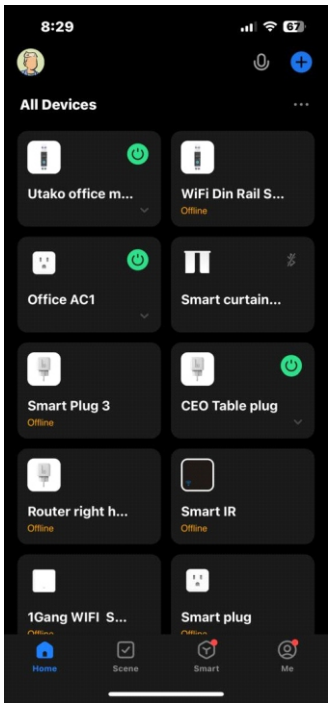
DESCRIPTION	INPUT	CALCULATION	OUTPUT
Estimation of the battery bank	Days of autonomy = 14 hours (0.58 days)	The battery bank required for the system = 744 * 0.58 days = 432 kwh Number of 10 kwh lithium battery = 432/10 = 43	Battery bank size = 432 KWh 43 numbers of 10 KWh lithium batteries
Solar panel array size	Battery bank = 432 kwh Hours of effective peak sunlight in the location = 6 hours	Solar array = battery bank / hours of effective sunlight = 432kwh /6 hours = 72 kw Number of solar panels = 72,000 watts/550 watts = 130 solar panels	Number of 550 watts Solar panels = 130
Solar charge controller size	Solar array size = 72kw	Charge controller size = 72,000/48 volts = 1,500 amps Using a 150-amp charge controller, the number of charge controllers needed = 1500/150 = 10	10 charge controllers of 150 amps will be required
Design Summary	All designed parameters	Inverter size – 45 kw (including 20% factor of safety) Battery bank – 432 kwh – 43 number 10 kwh lithium battery Solar panels – 130 numbers of 550 watts Charge controller – 2 numbers of 150-amp controller	Inverter is hybrid and comes with 15,000 watts charge controller, so the system needs just two charge controllers.

SAMPLE DESIGN FOR ALL SERVER ROOMS FOR A BANK

DESIGN SCHEMATICS

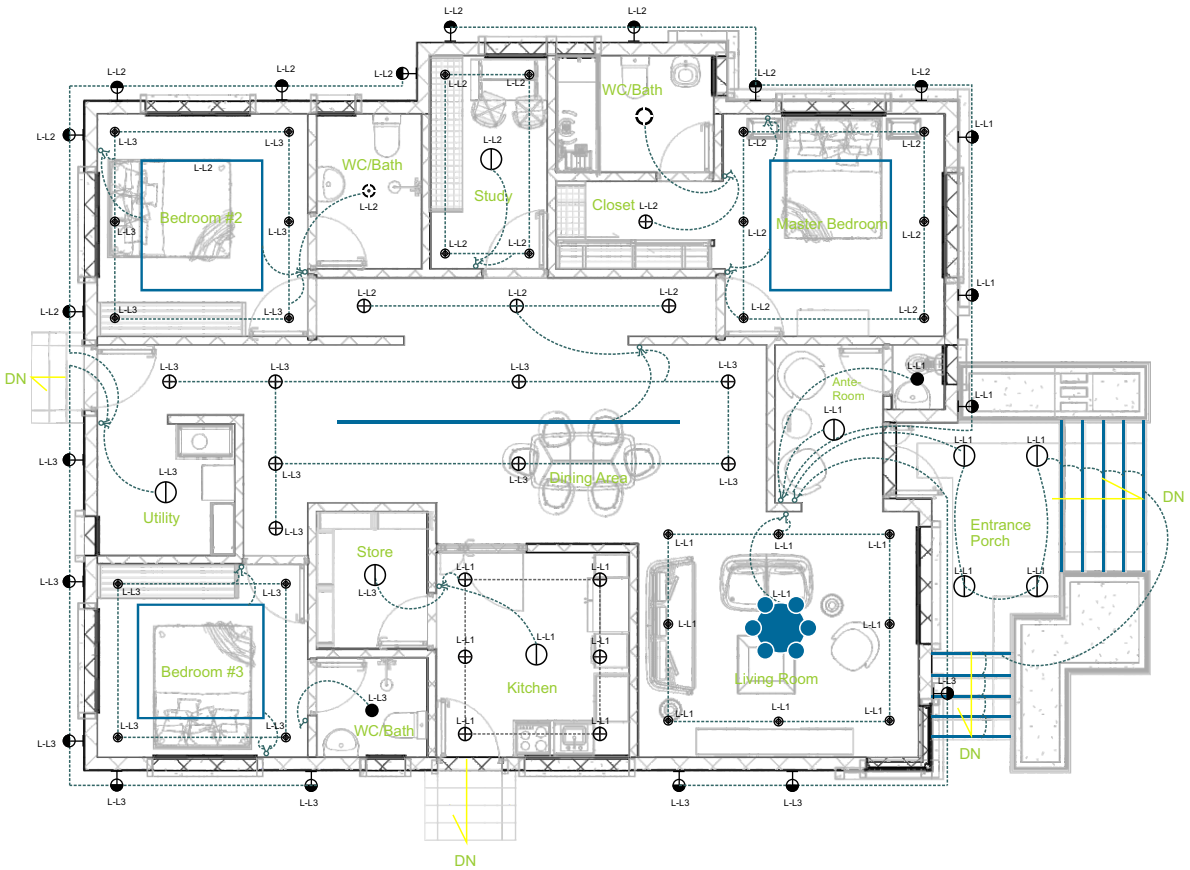




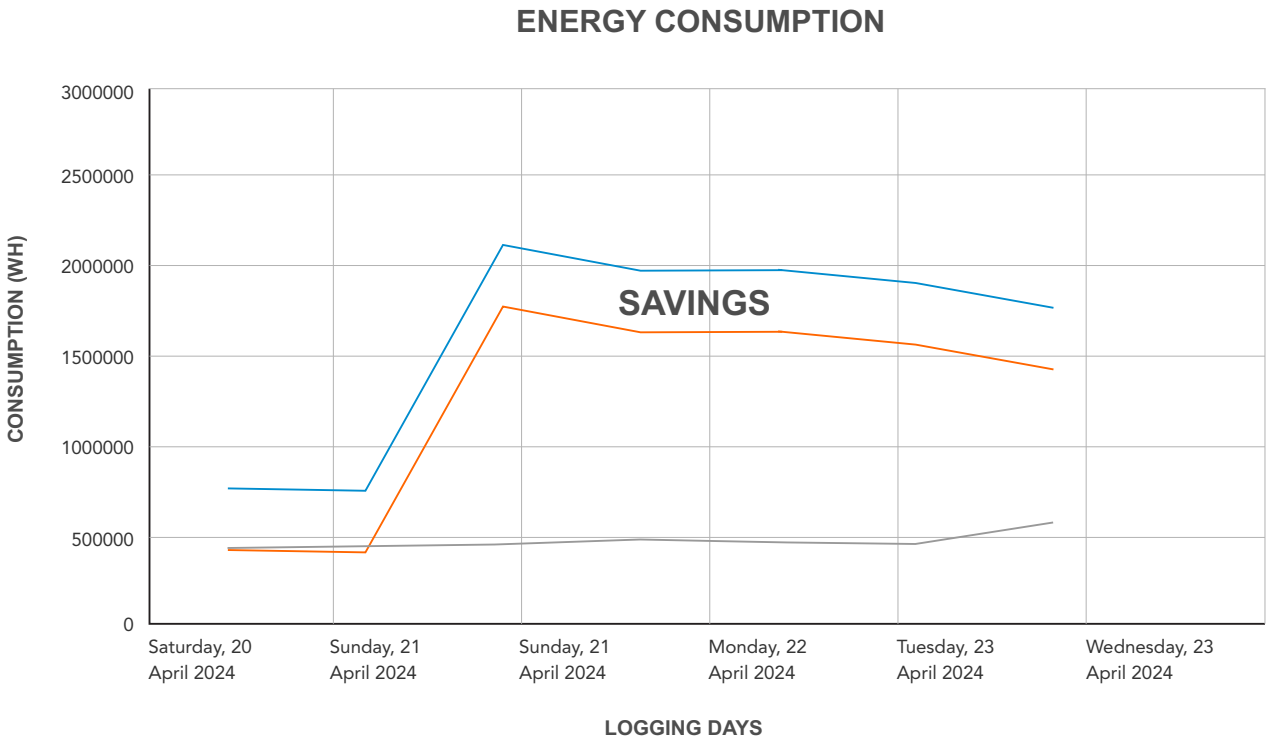


OUR PRODUCTS AND SOLUTIONS

Implementing Energy Management Systems (software and IoTs)



Defining solar inverter wire lines and distribution boxes during construction



Energy audit and reports for organizations to discover significant areas to save energy costs.

Routine maintenance on solar inverter systems.

- Solar panel cleaning
- Heat sensor checks for loose points
- Battery performance checks with battery analyzer

Solar inverter system upgrade.

- Addition of solar panels
- Addition of lithium batteries
- Scaling up the design autonomy time with external charge controllers
- Addition of inverters to scale up the power capacity.

Solar inverter pumps for homes and communities.

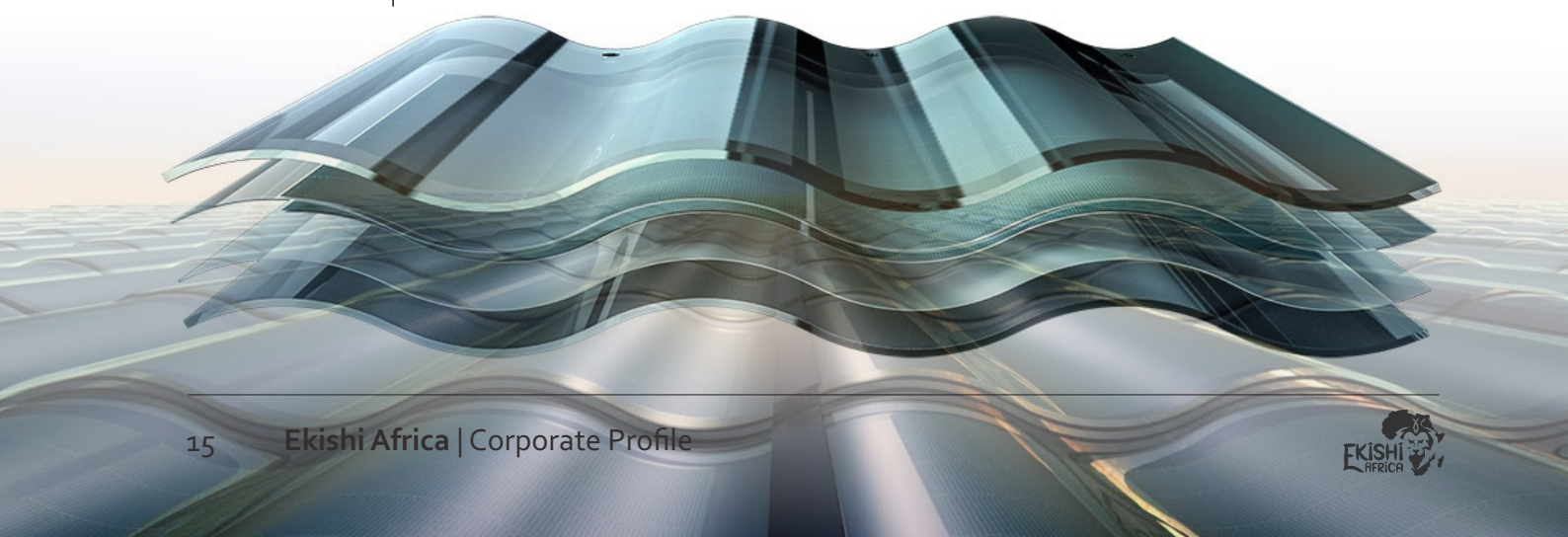
- Design and install solar pumps

  Use only solar panels to produce and store water.

Supply of tier 1 solar panels with a life of 30 years and a warranty of 10 years.

- Longi solar panels – 570 watts
- Canadian solar panels – 550 watts
- Znshine solar panels – 550 watts

ALL TERRAIN DURABLE SOLAR PANELS



Our most installed inverters

- Crown micro 3.6 kw
- Crown micro – 5.6 kw
- Crown micro – 6kw/8kw – IP65
- Crown micro – 10kw/12kw/15kw – 3 phase - Ip65

We distribute crown products in Nigeria and our best are the ELEGO series which are rugged for all terrains.

CROWN MICRO *Carry on*

CROWN micro Carry On Global Best Choice

EKISHI AFRICA

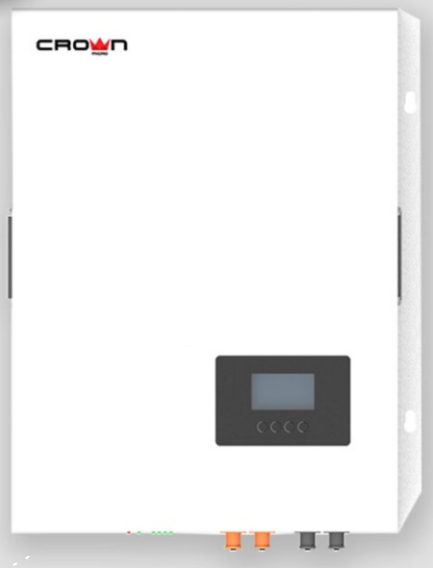
Providing insured sustainable energy products and services

GET AN INSURED LITHIUM BATTERY SO YOU ARE COVERED FOR ANY REPLACEMENT WITHIN 5 YEARS

5 YEARS WARRANTY

LITHIUM ION BATTERY

AMERICAN STANDARD
12V - 25.6V - 48V



Features:

- Grade A High Quality Battery Cells
- High Discharge Support Upto 1C
- Longer Cycle Life Upto 5000 Cycles
- Supports Scalability
- Smart and Intelligent Battery Monitoring System
- High Depth of Discharge Supported Upto 90%
- High Energy Density
- Wilder Operating Temperature Range
- Compatible with all Standard Inverter Brands

Product Design by: Crown Global
Product Insured by: Ekishi Africa
www.ekishiafrica.com.ng

WITH QUALITY AND INSURANCE, YOU ARE COVERED

REPLACEABLE

HIGH
QUALITY

SOLAR
STREET LIGHTS

We procure and install high grade solar street lights.
We are major distributors of ROADSMART street lights

Road Smart

Ekishi Solar Categories for OUTRIGHT SALES

WHAT MAKES US SPECIAL-

HIGH QUALITY SERVICES & PRODUCTS

At Ekishi, we are poised towards contributing to a greener, cleaner and healthier environment for all by 2030, through RENEWABLE ENERGY initiatives that are affordable, sustainable and reliable.

3.6KW Inverter

Battery Size: 48V, 200Ah (1 battery bank, 9.6kWh)

Solar Panels: 4kwp (10 number, 400 watts panel)

Load Capacity: Can power small household appliances or a small office

5 LED bulbs (20W each)
3 Ceiling fans (100W each)
1 Refrigerator/deep freezer (250W)
1 TV (300W)
2 Laptops (250W each)

Estimated Runtime: 4 - 8 hours (with all appliances running)

COST

$2,500 - $4,000

Including batteries and installation. Actual cost depends on the battery size and number of solar panels to start with. We also sell in Naira.

5KW Inverter

Battery Size: 48V, 400Ah (2 battery banks, 19.2 kWh)

Solar Panels: 7kwp (16 number 400 watts panels)

Load Capacity: Suitable for medium-sized homes or small offices.

10 LED bulbs (20W each)
5 ceiling fans (100W each)
2 refrigerators / deep freezer (250W each)
1 microwave (1200W, intermittent use)
2 TVs (300W each)
3 laptops (250W each)

Estimated Runtime: 5-7 hours (with all appliances running)

COST

$4,500 - $7,000

Including batteries and installation. Actual cost depends on the battery size and number of solar panels to start with

We also sell in Naira.

7.5KW Inverter

Battery Size: 48V, 600Ah (3 battery banks, 28.8 kWh)

Solar Panels: 8kwp (20 number 400 watts panels)

Load Capacity: Ideal for larger households or medium-sized offices.

15 LED bulbs (20W each)
6 ceiling fans (100W each)
2 refrigerators / deep freezers (250W each)
1 microwave (1200W)
2 air conditioners (1,500W each)
1 water pump (1,500W)

Estimated Runtime: 4 - 6 hours (with all appliances running)

COST

$7,000 - $9,500

Including batteries and installation.
Actual cost depends on the battery size and number of solar panels to start with

We also sell in Naira.

10KW Inverter

Battery Size: 48V, 800Ah (4 battery banks, 38.4 kWh)

Solar Panels: 12kwp (30 number 400 watts panels)

Load Capacity: Suitable for larger homes, offices, or small commercial setups.

20 LED bulbs (20W each)
8 ceiling fans (100W each)
2 refrigerators (250W each)
1 microwave (1,200W)
3 air conditioners (1,500W each)
1 water pump (1,200W)
1 washing machine (1000W)

Estimated Runtime: 5 - 8 hours (with all appliances running)

COST

$9,000 - $12,000

Including batteries and installation.
Actual cost depends on the battery size and number of solar panels to start with

We also sell in Naira.

12KW INVERTER

Battery Size: 96V, 800Ah (2 banks of 48V, 76.8 kWh)

Solar Panels: 15kwp (40 number 400 watts panels)

Load Capacity: Suitable for larger offices, commercial setups, or estates.

25 LED bulbs (20W each)
10 ceiling fans (100W each)
3 refrigerators / deep Freezer (250W each)
2 microwaves (1,200W each)
4 air conditioners (1,500W each)
1 water pump (1,200W)
1 washing machine (1000W)
2 desktops (250W each)

Estimated Runtime: 5 - 8 hours (with all appliances running)

COST

$12,000 - $15,000

Including batteries and installation.
Actual cost depends on the battery size
and number of solar panels to start with

We also sell in Naira.

15KW INVERTER

Battery Size: 96V, 1,000Ah (2 banks of 48V, 96 kWh)

Solar Panels: 12kwp (50 number 400 watts panels)

Load Capacity: Ideal for large commercial buildings or estates..

30 LED bulbs (20W each)
12 ceiling fans (100W each)
4 refrigerators / deep freezers (250W each)
2 microwaves (1,200W each)
6 air conditioners (1,500W each)
1 water pump (1,200W)
2 washing machines (1000W each)
3 desktops (250W each)
1 electric cooker (2,000W, intermittent use)

Estimated Runtime: 4 - 6 hours (with all appliances running)

COST

$15,000 - $20,000

Including batteries and installation.
Actual cost depends on the battery size
and number of solar panels to start with

We also sell in Naira.

METERED BILLING

Starting From

▸ N205/kWH

You can also opt for our metered billing plan. Ekishi will install, maintain and provide constant power to your property, while you pay on a monthly bases for total KWH of electricity consumed.

Ekishi Solar Categories for LEASE TO OWN

3.6 KW 1YEARS PLAN

Starting From
$352.35 - $588.24

Features:

Battery Size: 48V, 200Ah (1 battery bank, 9.6kWh)
Solar Panels: 4kwp (10 number, 400 watts panel)
Load Capacity: Can power small household appliances or a small office
Installation supports – rails, combiner boxes, fittings, bus bar, DC cables

5 KW 1YEARS PLAN

Starting From
$64647 - $794.12

Features:

Battery Size: 48V, 400Ah (2 battery banks, 19.2 kWh)
Solar Panels: 7kwp (16 number 400 watts panels)
Load Capacity: Suitable for medium-sized homes or small offices.
Installation supports – rails, combiner boxes, fittings, bus bar, DC cables

7.5 KW 1YEARS PLAN

Starting From
$794.12 - $9941

Features:

Battery Size: 48V, 600Ah (3 battery banks, 28.8 kWh)
Solar Panels: 8kwp (20 number 400 watts panels)
Load Capacity: Ideal for larger households or medium-sized offices.
Installation supports – rails, combiner boxes, fittings, bus bar, DC cables

10 KW 1YEARS PLAN

Starting From
$1,000 - $1,117.06

Features:

Battery Size: 48V, 800Ah (4 battery banks, 38.4 kWh)
Solar Panels: 12kwp (30 number 400 watts panels)
Load Capacity: Suitable for larger homes, offices, or small commercial setups.
Installation supports – rails, combiner boxes, fittings, bus bar, DC cables

12 KW 1YEARS PLAN

Starting From
$1,147.06 - $1,352.35

Features:

Battery Size: 96V, 800Ah (2 banks of 48V, 76.8 kWh)
Solar Panels: 15kwp (40 number 400 watts panels)
Load Capacity: Suitable for larger offices, commercial setups, or estates.
Installation supports – rails, combiner boxes, fittings, bus bar, DC cables

15 KW 1YEARS PLAN

Starting From
$1,500 - $1,764.12

Features:

Battery Size: 96V, 1,000Ah (2 banks of 48V, 96 kWh)
Solar Panels: 12kwp (50 number 400 watts panels)
Load Capacity: Ideal for large commercial buildings or estates..
Installation supports – rails, combiner boxes, fittings, bus bar, DC cables

88 KVA MODULAR SYSTEM FOR NEURO-PSYCHIATRIC HOSPITAL.

LOCATION: CALABAR

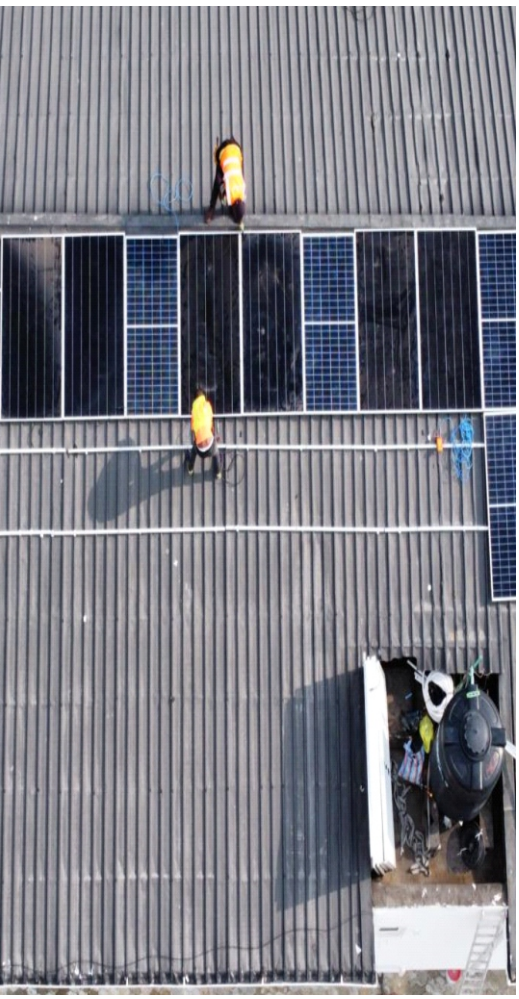
PROJECT YEAR: JAN 2021

CASE STUDY

10 KVA OFF-GRID SOLUTION

LOCATION: LAGOS

PROJECT YEAR: MARCH 2022



CASE STUDY

OFF-GRID SWIMMING POOL AND HOME SOLUTION (17.5 KVA)

LOCATION: ABUJA

PROJECT YEAR: OCTOBER 2022

CASE STUDY

60 WATTS SOLAR STREET LIGHT INSTALLATION

LOCATION: ABUJA

PROJECT YEAR: MARCH 2023

CASE STUDY

AUDIT AND MAINTENANCE OF 15KW FOR UNITED NATION

LOCATION: SOKOTO BRANCH

PROJECT YEAR: JANUARY 2024

CASE STUDY

15 KVA SOLAR INVERTER INSTALLATION (7.5kva + 7.5kva)

LOCATION: KANO

PROJECT YEAR: AUGUST 2023

The client wanted an inverter system to carry critical loads like lights and sockets for a 5-bedroom duplex and 2-bedroom boy's quarters

CASE STUDY

12.5 KVA SOLAR INVERTER INSTALLATION

LOCATION: ENUGU

PROJECT YEAR: MARCH 2024

The client wanted a system to carry the critical loads in his 4-bedroom duplex.

7 KVA SOLAR INVERTER INSTALLATION

LOCATION: OWERRI

PROJECT YEAR: FEBRUARY 2024

The client lives in a 2-bedroom flat and wanted an inverter energy source to keep his 2 two-horsepower AC for at least 6 hours in case of a power outage.

CASE STUDY

4.5 KVA SOLAR INVERTER INSTALLATION

LOCATION: ABUJA

PROJECT YEAR: AUGUST 2023

4.5 KVA SOLAR INVERTER INSTALLATION

LOCATION: NASARAWA

PROJECT YEAR: JUNE 2024

CASE STUDY

7.5 KVA SOLAR INVERTER INSTALLATION

LOCATION: ABUJA

PROJECT YEAR: JUNE 2024

30 KVA PRAG STABILIZER INSTALLATION

LOCATION: UNITED NATIONS SOKOTO

PROJECT YEAR: MARCH 2024

CASE STUDY

4.5 KVA AND 10 KVA SOLAR INVERTER INSTALLATION

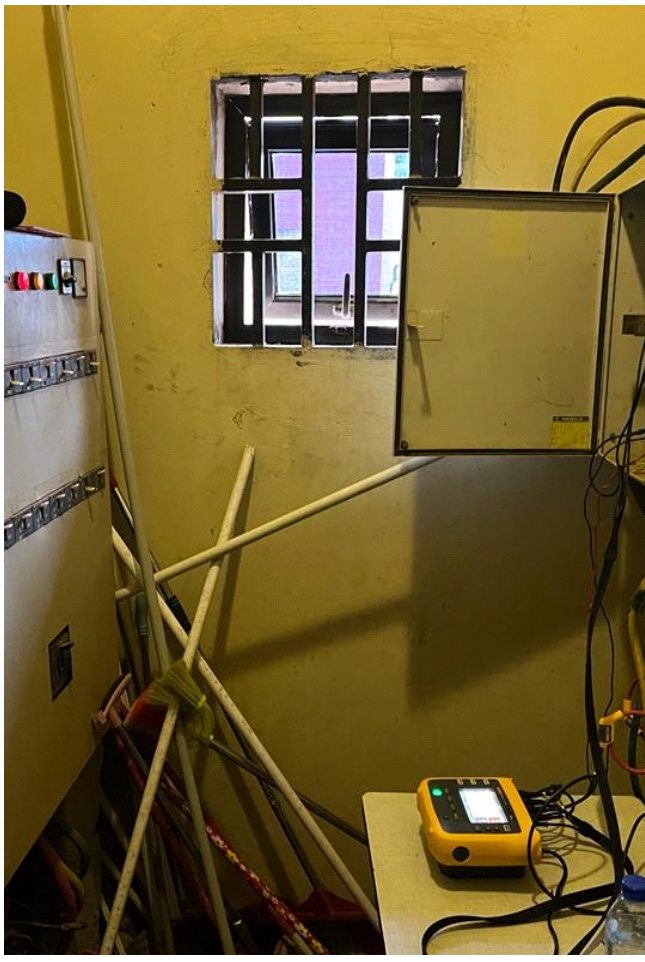
LOCATION: ABUJA

PROJECT YEAR: MARCH 2024

ENERGY AUDIT FOR SUMMIT CHURCH

LOCATION: ABUJA

PROJECT YEAR: 2022



CASE STUDY

12.5 KVA WITH 2 NUMBER 10 KWH LITHIUM BATTERIES AND 14 NUMBER 460 WATTS SOLAR PANELS

LOCATION: APO, ABUJA

PROJECT YEAR: 2024

GUZAPE INSTALLATION IS 12.5 KVA WITH 4 NUMBER 10 KWH LITHIUM BATTERIES AND 24 SOLAR PANELS OF 460 WATTS CAPACITY

LOCATION: GUZAPE, ABUJA

PROJECT YEAR: 2024

CASE STUDY

6KW INSTALLATION IN GAMES VILLAGE ESTATE

LOCATION: ABUJA

PROJECT YEAR: 2023

SOLAR LIGHTS INSTALLATION FOR NNPC GAS MARKETING LIMITED

LOCATION: ABUJA

PROJECT YEAR: 2024

CASE STUDY

7.5KVA WITH 14 NUMBER 400WATTS HIGH VOLTAGE SOLAR PANELS WITH 10 KWH LITHIUM BATTERY

LOCATION: LOKOGOMA, ABUJA

PROJECT YEAR: 2024

12.5 KVA WITH 1 NUMBER 10 KWH LITHIUM BATTERY

LOCATION: SHELL CORPORATIZE ESTATE

PROJECT YEAR: 2024

CASE STUDY

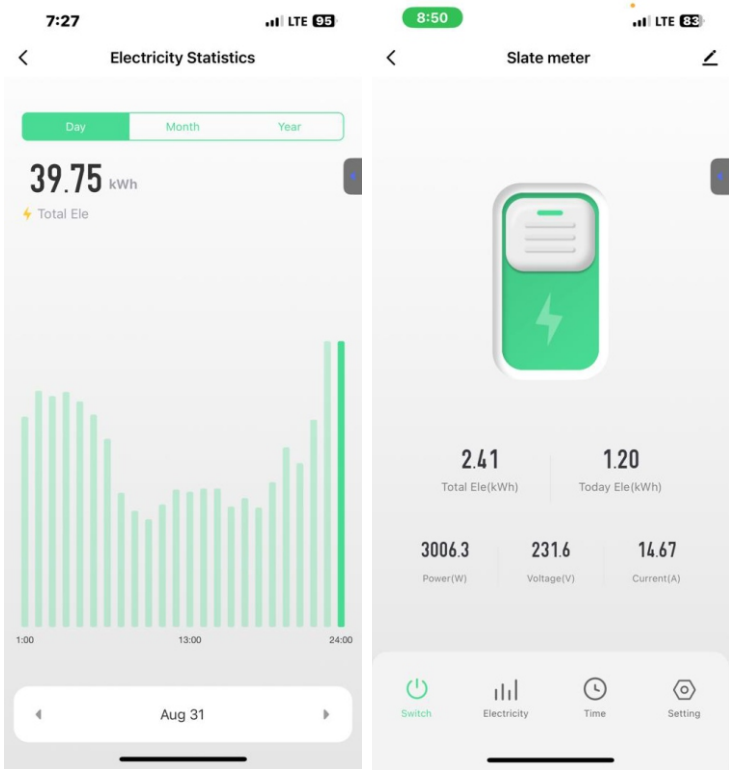
12.5 KVA WITH 1 NUMBER 10 KWH LITHIUM BATTERY

LOCATION: WUSE 2, ABUJA

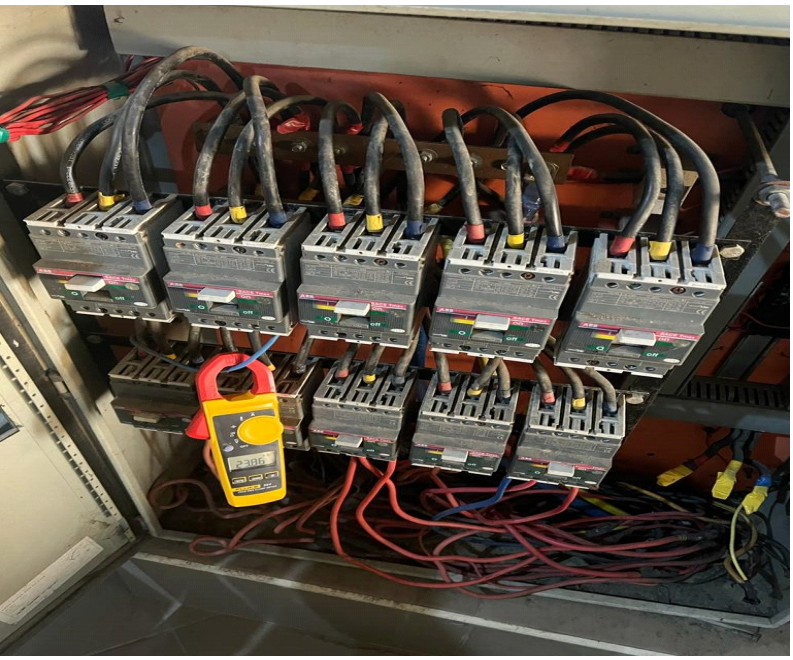
PROJECT YEAR: 2024

LIVE DATA DRIVEN APPROACH

WITH OUR ENERGY MONITORING DASHBOARDS, YOU CAN GET LIVE ENERGY USAGE, STATUS & PATTERNS FOR EFFICIENT EQUIPMENT AND SYSTEM MANAGEMENT



SCREEN SHOOTS OF LIVE DASHBOARD READINGS



ENERGY AUDIT AND DESIGN FOR CHILD CARE HOSPITAL

LOCATION: ABUJA

PROJECT YEAR: 2023

POWER AUDIT FOR NNPC GAS MARKETING (NGML)

LOCATION: ABUJA

PROJECT YEAR: 2024

CASE STUDY

DESIGN AND POWER AUDIT FOR CBN

LOCATION: AWKA

PROJECT YEAR: 2024

CASE STUDY

We know that quality solar inverter systems don't come cheap so we have designed a system that makes it easy to achieve your design goal in stages. We have done this for many customers and it is a successful concept.

BUILD YOUR SOLAR LIKE LEGO

Are you on a tight budget and can't afford a complete solar inverter system on a go, then the **LEGO Package** is your sure bet.

BUILDING SOLAR INVERTER SYSTEMS IN STAGES

Phase 1: Systems required to power specific appliances for a specific duration/day while supporting more on Generator and the Grid.

Phase 2: Additional systems required to power specific appliances for a specific duration/day while supporting less on Grid only.

Phase 3: Additional systems required to power specific appliances for specific duration/day without need for Generator or Grid.

Phase 3: Additional systems required to power specific appliances for additional duration/day. *(OPTIONAL)

Meet Mr. TIM

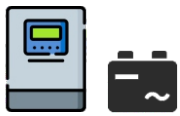
Mr. Tim own's a Fashion Design Business. He own's some high tech sewing & embroidery machines that runs fully on Generator and AEDC power grid for at least 12 hours each day. Tim spends a lot of money on running generator for this long each day due to epileptic power supply from the main grid and high AEDC tariff. Though not cash-bouyant to make an instant switch to Solar Power, Tim still went on to contact Ekishi Africa for a reliable solution.

Our Solution for Tim? Lego!

Based on the site measurements collected using a logger, Tim needs the following:

1 8kva Inverter + **16** 465watts Solar Panels + **4** 5kw Batteries = **N11,338,992.50** VAT Inclusive

LEGO SOLAR PACKAGE



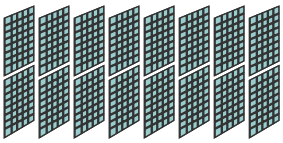
First Phase

N3,923,212.50 VAT Inclusive

1 8kva Inverter + **1** 5kw Batteries

Inclusive of installation accessories

Tim still require support of grid and generator to charge



Second Phase

N2,869,927.50 VAT Inclusive

16 465watts Solar Panels

Inclusive of installation accessories

Tim will require minimal support of generator

Third Phase

N3,547,000.00 VAT Inclusive

2 5kw Batteries

Inclusive of installation accessories

Tim might not need a generator anymore

Fourth Phase

N1,773,750.00 VAT Inclusive

1 5kw Batteries (Optional)

Inclusive of installation accessories

Tim only needs this if he requires additional hours

UPGRADED FROM 1 NUMBER 5 KWH TO 2 NUMBER 5 KWH LITHIUM BATTERY

UPGRADED FROM 1 NUMBER 5 KWH TO 2 NUMBER 5 KWH LITHIUM BATTERY

UPGRADES

UPGRADED FROM 1 NUMBER 5 KWH TO 3 NUMBER 5 KWH LITHIUM BATTERY

UPGRADED FROM 1 NUMBER 2.5 KWH TO 2 NUMBER 2.5 KWH LITHIUM BATTERY

UPGRADES

UPGRADED FROM 1 NUMBER 5 KWH TO 2 NUMBER 5 KWH LITHIUM BATTERY AND A 15 KVA PRAG STABILIZER

UPGRADED FROM 1 NUMBER 10 KWH TO 2 NUMBER 10 KWH LITHIUM BATTERY AND A 20 KVA PRAG STABILIZER

UPGRADES

AN UPGRADE FROM 1 NUMBER 5 KWH LITHIUM BATTERY TO 2 NUMBER 5 KWH LITHIUM BATTERY

UPGRADES

WAYS WE CAN DELIVER OUR PRODUCT AND SERVICES

Outright buying model

In this category a client's facility is audited, and a quote is given to the client which the client pays and the proposed system is installed.

Lease to own

In the category a client's facility is audited, a quote is prepared, and the payment structure is estimated for the client to approve.

Metered Services

In this category a client's facility is audited and a system is installed. The power delivered to the client is measured with an installed online meter and the client pays for the power monthly. Our rate for metered customers is 495/kwh

Test to buy

When a serious client has doubts about our level of quality, we are ready to install it so the client can test if it satisfies their needs. After 4 weeks, if the client is satisfied, they pay; if not, we can uninstall.

WHY BUSINESSES SHOULD INVEST IN SOLAR INVERTER SYSTEMS

1 Many governments worldwide are providing a supportive regulatory environment for organizations and investors and one such policy adopted in recent times is the Environmental, Social and Governmental (ESG) principles which makes it very easy for businesses to be socially accepted when they prove they align with the 6 principles which are; work-related issues, net new hires, employee engagement, board diversity, renewable energy, and green gas emission. From the six principles, it is obvious the company needs a form of renewable energy to align with renewable energy and green gas emissions and this is why we estimate carbon footprint reduction for our customers.

2 Investing in solar inverter systems aligns with global sustainability goals, providing organizations with the opportunity to contribute to environmental conservation while achieving substantial financial returns and attracting investors.

3 Ongoing advancements in technology offering advance energy management systems where organizations can automate putting their appliances on inverter systems during off work hours, weekends and holiday. This method has proven to save organizations the cost of running large-capacity diesel generators during such periods.

TESTIMONIALS

What our clients say

We are so excited with this system and have since saved over 80% on our energy yearly energy budget – God bless Ekishi Africa

Idy Ekanem, Lagos

We are so happy we have finally seen professionals that can install a system and it works very well after 2 years. I have been a victim of poor installation in the past so I was skeptical of EKISHI Africa but my wife insisted we take a bet on them, and it turn out perfectly well.

Barr. Lekon, Abuja

This is fantastic and an AC lover like me can run my room AC all through the night. This is so amazing.

Ama, Enugu

FREQUENTLY ASKED QUESTIONS (FAQ)

How long do solar panels last?

A tier-1 solar panel should last 25-30 years but in recent times people have produced tier-3 solar panels that don't last up to 10 years.

Why are solar systems so expensive?

The initial cost of solar systems is so expensive because all that is needed is procured from the beginning unlike generators the fuel is continuously bought during the life of the generator. When solar inverter systems are compared with other sources of energy over a life of 10 to 20 years it becomes cheaper.

Will I get power from my system on cloudy or rainy days?

This is taken care of in a good design through a concept called days of autonomy. Every solar inverter system is designed to give a 2 – 3 days period of storage assuming cloudy or rainy days.

Is it a must to have solar panels in my inverter system?

It is not a must but depends on the amount of power gotten from the grid. For instance, if the power downtime in your area is 3 hours daily and you have a system with a battery backup that can do those hours then you may not need solar panels.

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