

SWITCH BOX



SWITCH BOX

We apply our industry  
knowledge and engineering  
capacity to bring the potential  
of solar to the world

# WHO WE ARE



Our team is trained and certified in different aspects of solar energy efficiency by international organizations such as the GIZ, IFC, Schneider Electric and other relevant international bodies within & outside Nigeria. We pride ourselves on neat installations backed by a thorough understanding of all the technical facets. Our systems are designed, installed and operated to the highest industry standards thereby allowing it to seamlessly integrate with your home, business or community.



**Aliyu Saidu Umar**  
MD/CEO

# MISSION

To empower communities by providing accessible, reliable, and innovative solar energy solutions that drive sustainable development and energy independence.

# MISSION

# VISION

To lead the transition to a sustainable future by making clean, renewable energy the primary source of power for communities worldwide.

# VISION

# SCOPE OF SERVICES

At SwitchBox, we provide smart, reliable, and sustainable energy solutions across Abuja. Our services include Solar Power System Design and Installation, tailored to meet your specific energy needs. We offer Smart Inverter Systems for efficient energy management and Smart Storage Systems for reliable backup power. We handle Energy Infrastructure Procurement, ensuring you get high-quality, durable components. Our Street Lighting solutions improve public safety using solar technology. Through Energy Auditing, we help identify ways to cut costs and boost efficiency. We also build Partially Off-Grid Power Stations for greater energy independence. With our Energy and Technical Consulting, you get expert advice every step of the way. And with our Maintenance and Support, we ensure your system runs smoothly, always.



**Solar Power System  
Design and Installation**



**Smart Inverter  
Systems**



**Energy Infrastructure  
Procurement**



**Energy and Technical  
Consulting**



**Street Lighting**



**Energy Auditing**



**Smart Storage  
Systems**



**Maintenance and  
Support**



**Partially off-grid  
Power Stations**



# INDUSTRIES WE SERVE



## RESIDENTIAL

1

We provide reliable and cost-effective solar and backup power solutions for homes, helping families reduce energy costs and enjoy uninterrupted power supply.



## HEALTHCARE

2

We ensure hospitals, clinics, and health centers have constant, clean power to support critical medical equipment and maintain patient care standards.



## INDUSTRIAL AND COMMERCIAL

3

Our custom energy systems support factories, offices, and businesses with efficient power management, reducing operational costs and minimizing downtime.



## AGRICULTURE

4

We deliver sustainable energy solutions for farms and agro-businesses, powering irrigation, processing, and storage systems even in remote locations.



## EDUCATION

5

Our energy systems keep schools, universities, and training centers powered for uninterrupted learning, both in urban and off-grid areas.

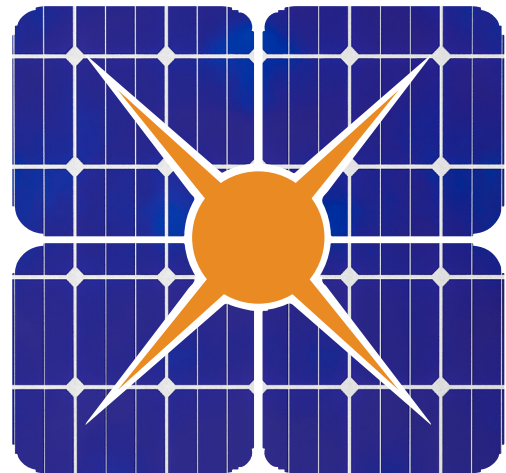


## GOVERNMENT AND NGOS

6

We partner with public institutions and non-profits to implement scalable, eco-friendly energy projects that improve infrastructure and community well-being.

# SOLUTIONS WE PROVIDE



## HYBRID AND OFF-GRID SOLUTIONS

We design and install hybrid and fully off-grid systems that combine solar, battery, and generator power to ensure energy independence in areas with unreliable or no grid access.

1



## SOLAR WATER PUMPING AND IRRIGATION FOR AGRICULTURE

Our solar-powered water systems provide a sustainable and cost-effective solution for agricultural irrigation, boosting productivity and supporting year-round farming.

2



## COMMERCIAL, INDUSTRIAL AND RESIDENTIAL SOLUTIONS

We deliver tailored energy systems to meet the unique needs of businesses, industries, and homes, optimizing performance and reducing long-term energy expenses.

3



## STREET LIGHTING

Our solar street lighting solutions enhance safety and visibility in public spaces while reducing energy costs and environmental impact.

4



## SMART ENERGY MANAGEMENT

We implement intelligent energy systems that monitor, control, and optimize power usage, helping clients maximize efficiency and reduce waste.

5



## SOLUTIONS FOR HEALTHCARE

We provide dependable energy systems for healthcare facilities, ensuring uninterrupted power for critical operations, equipment, and patient care.

6



# OUR SOLAR SOLUTIONS





# SOLAR FOR AGRICULTURE



## SOLAR DRYERS AND COLD ROOMS



### OUR SOLUTION

#### TEMPERATURE CONTROL



10°C to 24°C range with humidity control (65%-95%)



#### THERMAL ENERGY STORAGE

battery-less backup up to 30 hours



#### AI & IOT

Real-time data logging, remote monitoring, and predictive maintenance.



#### PORTABILITY

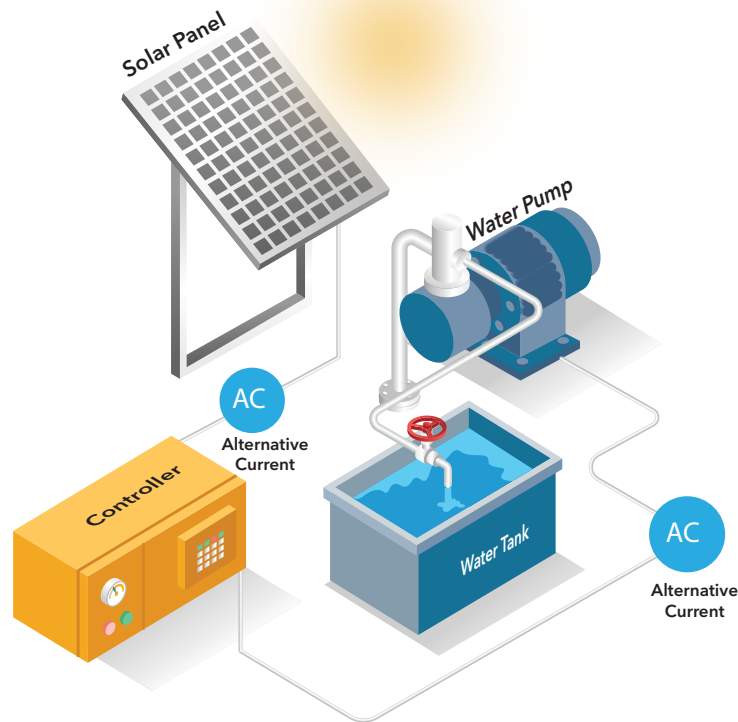
easily movable to align with seasonal farming patterns



#### FLEXIBLE CAPACITY

2 MT to 30 MT, customizable based on local demand

# SOLAR WATER PUMPS



## HOW THE SYSTEM WORKS:



**Solar Panels:** The system is powered primarily by solar panels, which capture energy from the sun. These panels convert sunlight into electricity (DC power), which is used to drive the water pump and other components.



**AC Power Source:** In addition to the solar panels, there is an AC (alternating current) power option. This could be from the grid or a generator, serving as a backup power source when sunlight is insufficient.



**Control Box:** The system includes a control box powered by both solar and AC power. This box regulates and distributes the power to the other components, ensuring efficient energy use and enabling the switch between solar and AC sources.



**Water Pump:** A solar-powered water pump is shown, which draws water from a reservoir or well. The solar energy powers the motor to pump water into a storage tank or directly into irrigation systems.



**Water Flow and Storage:** Water flows from the pump into a storage tank or a similar container. The tank stores water for distribution, either for irrigation or other purposes.

This setup allows for a reliable water supply system, which is primarily powered by renewable solar energy, making it ideal for remote areas or agricultural fields where access to grid power may be limited or unreliable. It also provides the flexibility of using an AC power backup if needed.



# COMMERCIAL, INDUSTRIAL AND RESIDENTIAL SOLUTIONS

## OUR SOLUTION



### RELIABLE 24/7 ELECTRICITY

At SwitchBox Limited, we prioritize delivering uninterrupted power supply through advanced energy systems designed for consistency and resilience. Our solutions eliminate the frustrations of frequent outages by ensuring 24/7 electricity, empowering homes, businesses, and critical facilities to operate seamlessly without dependence on unstable grid supply. With our technology, clients enjoy peace of mind knowing their power needs are always met.



### REDUCED COSTS

SwitchBox Limited helps you significantly lower your electricity bills by integrating energy-efficient systems and renewable power sources like solar. Our tailored solutions are designed to optimize energy consumption while reducing dependency on expensive diesel generators or unstable utility supply. By investing in our systems, clients experience long-term savings and improved financial control over their energy expenses.



### MINI GRIDS/OFF-GRID SYSTEMS

For communities and businesses located in remote or underserved areas, SwitchBox Limited offers robust mini-grid and off-grid power solutions. These self-sustaining systems provide reliable energy without requiring access to the national grid. Whether it's a rural village, a farm, or an industrial site, our scalable and eco-friendly power setups are engineered to deliver consistent energy where it's needed most.



### PARTIAL OFF-GRID SYSTEMS

SwitchBox Limited also offers partial off-grid systems that combine the benefits of renewable energy with the flexibility of grid connection. These hybrid setups allow users to reduce their reliance on the grid by supplementing with solar or battery storage, especially during peak hours or outages. This smart approach ensures energy reliability while maximizing efficiency and minimizing operating costs.



# SOLAR APPLICATION IN HEALTHCARE

SwitchBox Limited offers a range of innovative solar-powered solutions tailored to improve lives and support essential services. From providing reliable solar energy systems for clinics and hospitals to powering mobile clinics in remote areas, SwitchBox ensures uninterrupted healthcare delivery. The company also offers efficient solar water heating systems for homes and institutions, as well as solar-powered water purification and pumping solutions that guarantee clean water access in off-grid communities. Through these sustainable technologies, SwitchBox is driving energy independence, reducing operational costs, and promoting healthier, more resilient communities

## OUR SOLAR SOLUTIONS FOR HEALTH CARE



### Hospital Power Supply

Solar panels provide reliable electricity for healthcare facilities, ensuring uninterrupted medical services.



### Telemedicine

Solar energy powers telemedicine equipment, expanding access to healthcare in underserved communities



### Vaccines/Medicine Storage

Solar-powered refrigeration systems maintain the proper temperature for vaccine and medicine storage in hospitals and remote areas.



# SOLAR FOR EDUCATION



## SOLAR POWER SYSTEMS FOR SCHOOLS AND UNIVERSITIES

SwitchBox Limited provides dependable solar power systems designed specifically for educational institutions. Our solutions ensure continuous electricity supply for schools and universities, enabling uninterrupted learning, efficient administration, and reduced energy costs. These systems are ideal for institutions looking to transition to clean energy while creating a stable learning environment free from power disruptions



## SOLAR POWERED DIGITAL CLASSROOMS

We equip schools with solar-powered digital classrooms that support modern, tech-driven education even in remote or low-power areas. SwitchBox Limited combines solar energy with smart classroom technology to deliver a sustainable, interactive learning experience. This enables teachers and students to use digital tools, multimedia content, and e-learning platforms without relying on unstable grid power.



## SOLAR POWERED ICT LABS

SwitchBox Limited designs and installs solar-powered ICT labs that give students access to computer education and digital resources in a reliable and energy-efficient way. These labs are equipped to run smoothly even in regions with limited electricity access, empowering schools to offer 21st-century skills training while reducing their energy footprint.



## SOLAR CHARGING STATIONS

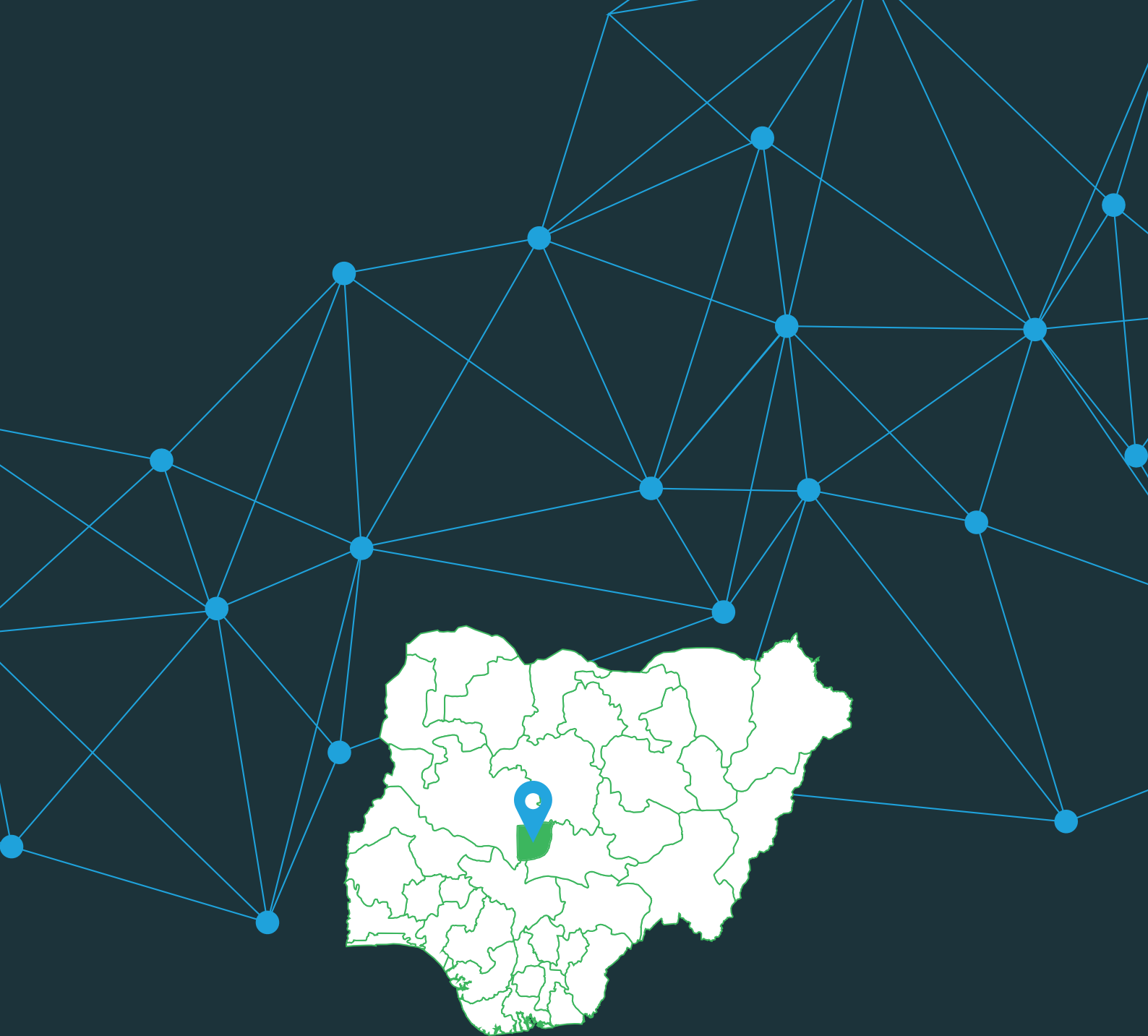
To support students, teachers, and campus communities, SwitchBox Limited offers solar charging stations that provide convenient, clean energy for charging laptops, phones, tablets, and other portable devices. These stations can be installed in strategic campus locations, ensuring access to power throughout the day while promoting sustainability and energy awareness.

# Project Gallery



# Project Gallery





SwitchBox Limited is conveniently located in Suite A1 on the Ground Floor of Morija Close, situated at Plot 122Y, just off Adetokunbo Ademola Crescent in the heart of Wuse 2, Abuja, 900001. Our office is easily accessible, with a prominent landmark being OT Carpet, which is located nearby. Whether you're visiting for a consultation or exploring our energy solutions, our central location ensures a seamless and welcoming experience.