



AFRICAN SUSTAINABLE ENERGIES

COMPANY PROFILE





FORWARD

Our personal philosophy, shared value and ethical business conduct, with constant pursuit for excellence forms the basis of our desired emergence as Africa's solar energy provider. When combined with the quality of our service, an incredible platform for business success is created for our company, partners and clean energy development across Africa.

We remain committed to share and live out our corporate values by deploying state of the art services, underpinned with innovative methodology in providing investors with high return on investment through sustainable growth whilst maintaining our deep respect to our environment.

We trust that by holding fast to our shared values and principles, we will move closer to the attainment of our collective objectives as a business in harnessing the power of the sun.

Go green!

Engr. Francis Odim

Chief Executive Officer

Introduction

African Sustainable Energies (**AFS Energies**) is an integrated technical, consulting and servicing firm specializing in installing, maintaining, generating and providing sustainable energies for Nigeria and Africa at large using its technological models, human resource assets, innovative strategies and intercontinental cooperation for the African energy market.

We consult, design, procure, supply, install, maintain, and service various renewable energy projects in West Africa. We provide high technical quality with the aid of our internationally experienced expert engineers and energy personnel in the various kinds of renewable energy. Our aim is to ensure that households, offices, buildings, facilities and business places have sufficient, reliable, and sustainable energy at cost effective prices.

We are at the forefront of planning and execution of solar and wind projects; On-Grid Solar Farm, Independent Solar Power Plant, Roof-Top Project, and Solar Powered Water Pumps for community and agricultural projects. Be it Solar Lighting, Family/Estate Solar Systems, Wind/Solar Micro Grids, Inverter Systems, Solar Backup/Standalone/Hybrid systems, we provide clean, cheap, efficient and safe systems using high quality simulations and exercises. We also ensure site monitoring with various energy monitoring & management systems to ensure best practices, and are open as to location of job, and are willing to travel far for such jobs.

AFSEnergies is registered with Nigerian Corporate Affairs Commission (RC 1219814) as a Limited Liability Company and has the right to operate in African through its vast network of partners. We are open to conducting a free Energy Feasibility Survey and Semi-Audit for your energy system demand to determine what best practice and system will be customized for you. We believe in servicing this limited market better than existing firms and would therefore like to quench the quest for a steady, clean, cheap, and efficient power supply for your facility at an affordable cost to you.

OUR MISSION

“We aim to provide sustainable and affordable energy to homes and businesses through provision of quality products and services in strict conformity with recognized Global standards and sound engineering practices.”

OUR VISION

“We long to be a clear leader in the provision of Sustainable Solar and Wind Energy solutions for over Five (5) million African Homes and Businesses using innovative and eco-friendly technologies.”

About Us

MANAGEMENT TEAM

AFS Energies is manned by the most versatile personnel with vast experience in the Renewable Energy Industry. We pride ourselves as a balanced job opportunity provider and strive to ensure all our staff are hired through the most robust recruitment system. We aim to be a Renewable Energy utility company providing renewable energy electricity to people in both urban and rural areas in Africa. Our Senior Management profiles include:



Engr. Francis O. Odim: CEO Operations

Francis is a **Renewable Energy Systems Planning Personnel** with an Extensive experience in **Rural Electrification** and Renewable Energy projects and a focus on off-grid technologies (SHS, and mini-grids). He has over Seven (7) years of experience in the energy industry. He had his first degree in Petroleum Engineering from Federal University of Technology Owerri, Nigeria. Francis has gained vast experience in both electrical engineering and the energy business. He has attended various international trainings on renewable energy technologies. Applying his business experience and military skills, he coordinates & steers AFSE team towards success.



Engr. Prosper Malife: Senior Engineer

Prosper has over 10 years of experience in Engineering Consulting, International Development and Optimization of Energy Related Resources. He has a bachelor's Degree in electrical engineering with focus on Industrial System Engineering. His academic & practical knowledge covers areas in Energy Management and Storage, Sustainability, Renewable Energy Technologies, Technology Futures & Business Strategy, Environmental Impact Assessment, Process Intensification amongst others.. He is a member of the Energy Institute of Nigeria.



Engr. Anthony Okolo: Business Operations Manager

Anthony has over 8 years of experience in the Energy industry. He holds a B.Eng in Electrical Engineering with focus on Power. He has worked in Chevron Nigeria, Nigerian National Petroleum Corporation, and Salvic Petroleum Nigeria. He has achieved various feats in energy and business making him uniquely positioned with an unrivalled advantage as he currently heads the operations and business portfolio for African Sustainable Energies.



Engr. Michael Okoye: Senior Business Development Manager

Michael holds a B.Eng. in Electrical Electronics Engineering. He previously worked with the Governor of Enugu State with focus on various energy developments in the Region. He has over 7 years' experience with the Public and Private Sectors, State and Federal Government of Nigeria on different levels. He has undergone various Business trainings and conferences across the globe including attaining a height as a Microsoft Certified IT Professional (MCITIP)



Mr. Stanley Ezeokoli: IT Manager

Stanley has over 8 years of experience in IT and Logistics from China and enjoys launching new ventures. He had his bachelor's degree in Computer Science at Nnamdi Azikiwe University and a master's degree in IT from Nottingham University Business School in Beijing, China. He has a keen interest in International Marketing, Strategy, Supply Chain Management, Sustainable Energies Development and Sino-Africa partnership. He is highly motivated and drives his commitments with his skills & experience across the globe.



- Solar Products and Installations
- Wind Energy Services and Installation
- Renewable Energy Consultancy Services
- Energy Management Services
- Independent Solar Power Plant Construction
- Commercial (On-Grid) Energy Generation
- Rural Community Development Projects
- Agricultural Solar Powered Irrigation Projects

MARKET OPPORTUNITIES IN AFRICA

More than a century after the light bulb was invented most of the African continent is still in the dark after nightfall. According to the World Bank, 32 of the 48 nations on the continent is still in energy crisis, and from 2006 to 2013, GDP for over half of the countries in Sub Saharan Africa rose by over 5.5% annually, while generation capacity grew at a rate of 1.5%. The resultant slow growth in energy has affected education, businesses, and clinics cannot refrigerate medicine or vaccines. It has also slowed down production/services in most industries, hampering economic growth, jobs, and livelihoods. At AFSE, the above problem means opportunities and we constantly work to provide solution using renewable energy.



OUR MARKET SEGMENTS

Our products and services will span the length of the income ladder, as we aim to make energy a commodity for all to enjoy. Below is a chart of our available target market.



Our target market is Sub-Saharan Africa. This is crucial given its yearly abundant sunlight and our local expertise. Our idea is simple: Install a Solar/Wind System in every House, Office, Village, or Community in Africa. Every house will have a small pre-paid energy meter, which can be controlled and monitored remotely. The meter will monitor the energy consumption of the house, energy generated, energy stored, and energy that can be shared with other neighbors, or pushed into the grid.

AFS Energies is also deploying base of the pyramid strategy in bringing clean energy to millions of African living below poverty line, a segment that constitute about 70% of the total population. We are also developing a portable solar system and have deployed the One-Home-One-Bulb campaign. A marketing solution that provides “light at night” to rural communities and farmers in disconnected locations.



OUR TARGET INDUSTRIES

Telecommunication Facilities
Health Sectors
Residential houses
Office Facilities
Educational Institutions
Production Facilities
Agriculture Farms
I.T. Establishments
Recreational Facilities and Parks
Government Facilities
Financial Institutions and Banks

Past Projects & Experience

We envision a time when our Indigenous Energy generation becomes highly developed, and every African has access to our energy services. We aim to provide Africa with leading energy generation technologies. Our strategic mission is to continue to design, procure, and construct various solar energy systems in Africa, while developing local content. Some of our past projects are shown below.

1. Construction of a 5KVA Hybrid Solar System in Lagos, Nigeria - For Brianok Engineering, Ojodu, Lagos



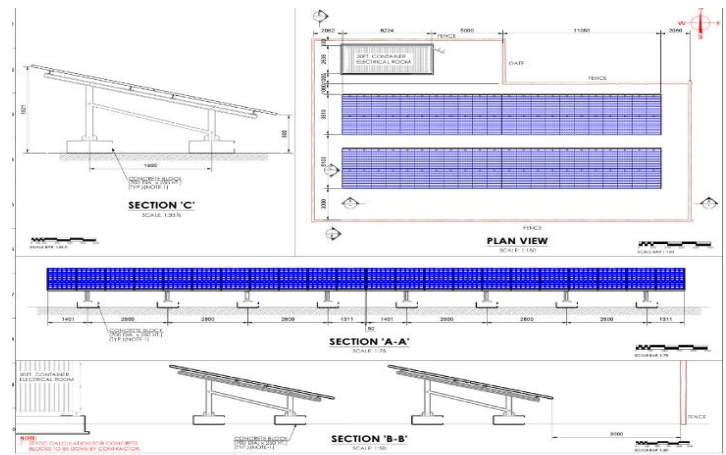
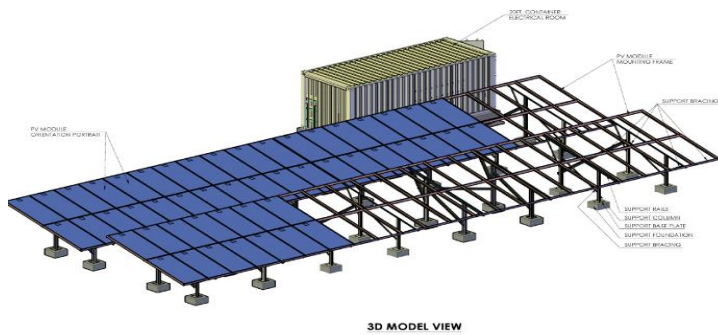
2. Construction of a 3.5KVA Hybrid Solar Home System in Asaba, Delta, Nigeria



3. Construction of a 28kwp System in Boki Village, Say Region, Niger Republic



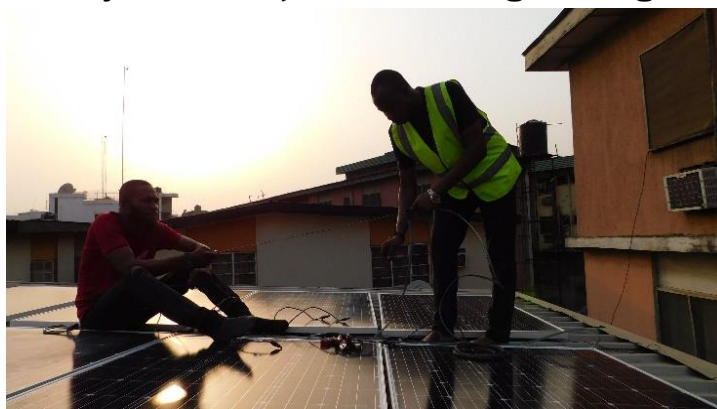




4. Construction of a 40kva Solar Micro-Grid in Tarkwa, Western Region, Ghana



5. Construction of a 4kw Solar Hybrid Home System in Ajao Estate, Lagos – Nigeria



6. Construction of a 5kva Solar Home System in Lekki Gardens Phase 3, Lagos – Nigeria





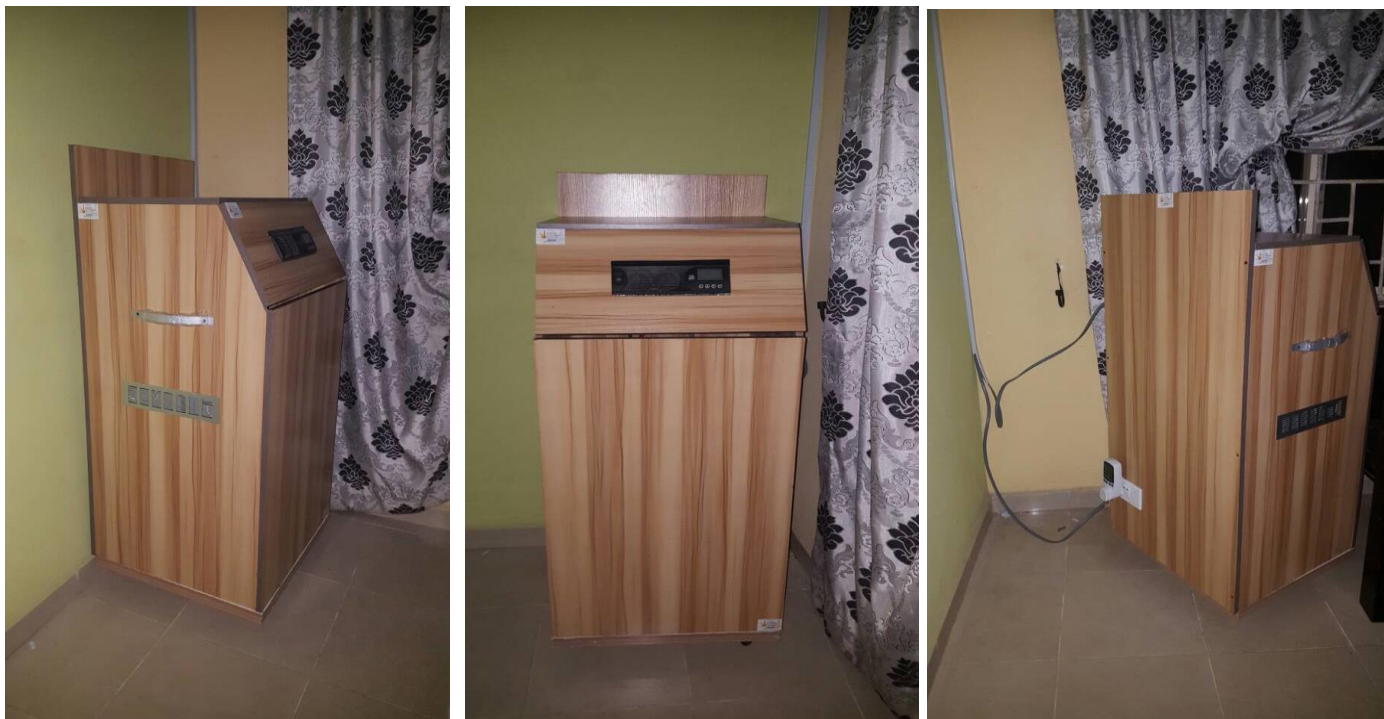
7. Installation of a 10kw Group Solar Streetlight in Akwa-Ibom – Nigeria



8. Installation of a 3kw Solar Hybrid Home System in Iyana Ipaja, Lagos – Nigeria



9. Installation of a 3kw Solar Backup Home System in Lekki, Lagos – Nigeria



10. Installation of a 3kw Solar Hybrid Car Port Home System in Ikorodu, Lagos – Nigeria



11. Installation of a 5kw Solar Hybrid Home System in Lekki Garden, Lagos – Nigeria



12. Installation of an 80w Solar Streetlight in Niamey, Niger Republic





13. Professional Solar Training of Students, Dec. 2017 at Lagos – Nigeria





DON'T MISS THIS OPPORTUNITY TO TRAIN
EXPAND YOUR CAPABILITIES IN 2018

SOLAR AND ENERGY MANAGEMENT TRAINING

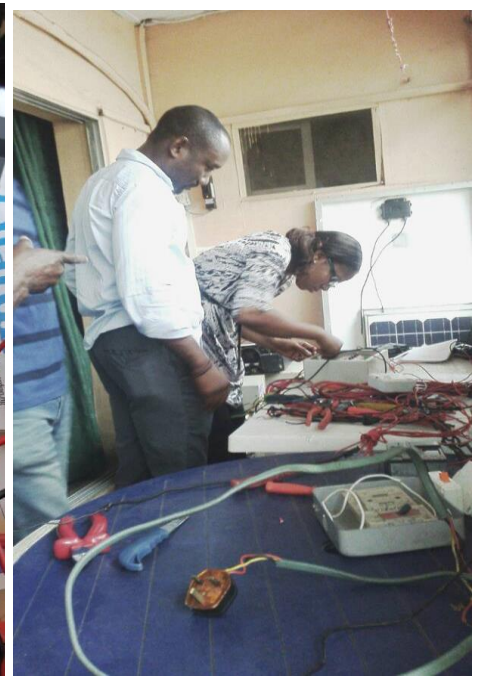
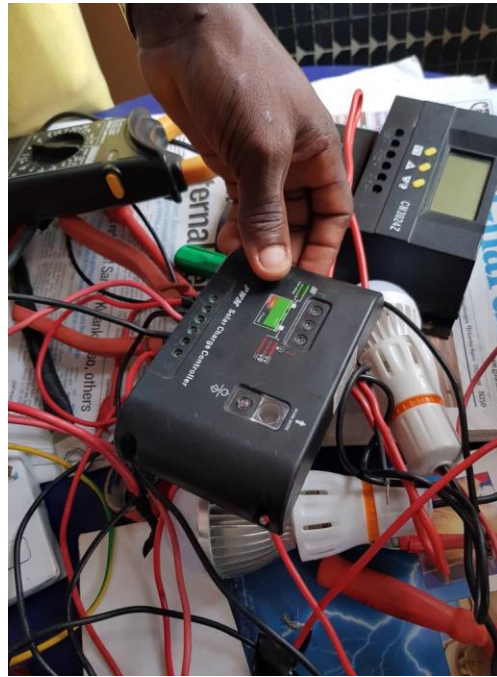
ENROLL FOR OUR TRAINING WORKSHOP:

FOCUS AREAS:
PV SYSTEMS CONFIGURATIONS •
ENERGY AUDITS & APPLICATIONS •
ENERGY MGT & COST BENEFIT ANALYSIS •
INVESTMENTS & INVESTORS IN THE SOLAR INDUSTRY •

TIME: 9AM PROMPT
VENUE: 2 AINA STREET BEHIND
ZENITH BANK OJODU BERGER, LAGOS

PRICE TAG:
60,000
(PACKAGE INCLUSIVE)

Enquires: solar@afsenergies.com | Tel:08152678590



14. Installation of a 5kw Solar Hybrid Home System in Lekki Garden, Lagos – Nigeria



15. Solar Designed Car Park to Power office complex in Jabi, Abuja, Nigeria



16. Commissioning of Kebbi State Solar Powered Irrigation Rice Farms by the CBN Governor Nigeria, Governor of Kebbi State, and Minister for Agriculture.





17. Solar Irrigation System for Gumel, Jigawa State, Nigeria.



18. Provision of our Efficient Solar urban Dwellers (UD) Box Series – Nigeria



Solar RD 1 Series for Barbers



Solar RD 2 Series for Market shops



Solar UD 1 Series



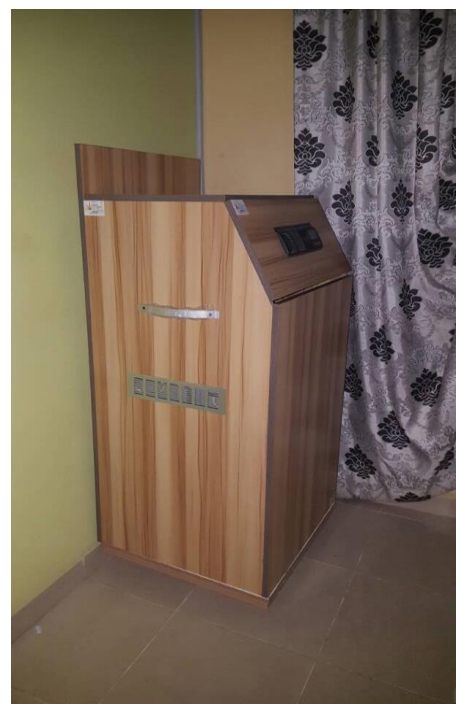
Solar UD 2 Series



Solar UD 3 Series



Solar UD 4 Series



19. Construction of a 2hp Solar System for Rice farmers in Kebbi State, Nigeria



20. Construction of a 10,000Liter Tank Solar Borehole for Energy Commission of Nigeria (ECN) at Arochukwu LGA, Abia State, Nigeria.



21. Installation of a 10KVA Solar Hybrid System in Lekki, Lagos State.



22. Installation of a Solar Water System of 1,000 Liters at Jos, Plateau State, Nigeria.




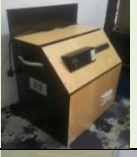




Our aim is to provide clean energy solutions to households, business offices, commercial and industrial facilities at an affordable cost. This would be achieved by the decisions we make, the leadership we show, the dedication with which we serve and the result which we achieve for our investors. The quality and integrity of our team is embedded in our managerial and technical expertise, and the ability to control our supply and value chain. It is the intent of AFSEnergies to design, and construct Energy facilities in strict conformity with the obligations in the field of health and safety at work by international/national regulatory requirements and by contractual conditions.





URBAN DWELLERS (UD) AND RURAL DWELLERS SERIES (RD)

We have recently developed a new, innovative and efficient Urban Dwellers (**UD**) and Rural Dwellers (**RD**) Solar System and Inverter System box for our clients. With the ever increasing demand for constant and stable power supply in Nigeria, the UD Series and RD Series eliminates the frustration from the shortages of power supply experienced from the National grid. The UD series focuses on providing 24 hours power supply for your house at a very cost effective price, while the RD series focuses on the rural areas.

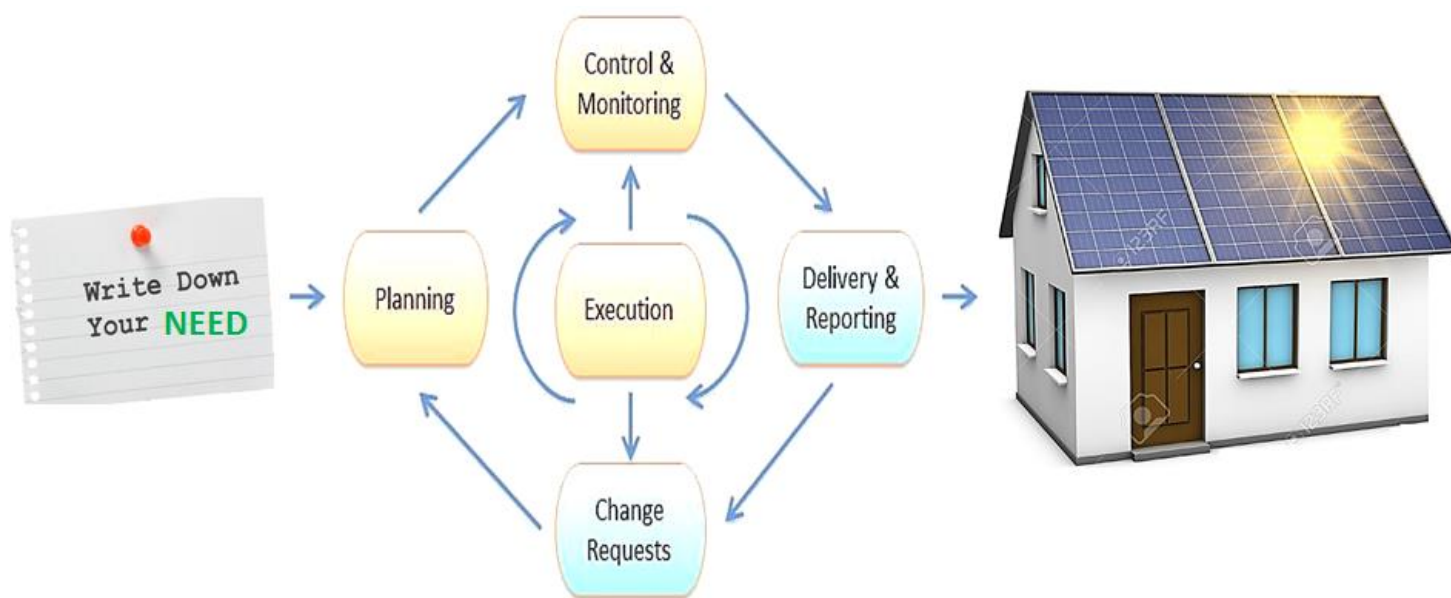
Our newly designed products offers aesthetics to the core ruggedized in operation and have gone through many stages of evolution over time with each new one having a better feature than the previous. Our driving force on each modification is to arrive at a product that meets all engineering design, a product that customers can trust to be reliable at all times and most especially a product that is simple to operate. Our aim is to ensure that all Households, Offices, and Business places have sufficient and reliable energy at cost effective prices.

TYPE	CAPACITY	SPECIFICATION	LOAD	STANDBYTIME	IMAGE
UD 1	800W	AC/DC Cables + Installation + 1unit of 100Ah Battery + 4units of 150W Solar Panel + 4 USB Ports + 4 AC Socket	1 Shop/Salon/Office/ room Fans, TVs, DvDs, Lights, Decoder, Computer & Gadgets	6Hrs – 12Hrs	
UD 2	1.0KVA	AC/DC Cables + Installation + 1unit of 150Ah Battery + 6units of 150W Solar Panel + 7 USB Ports + 4 AC Socket	2 Bedrooms/Office Fans, TVs, DvDs, Lights, Decoder, Computers & Gadgets	6Hrs – 12Hrs	
UD 3	1.2KVA	AC/DC Cables + Installation + 2units of 150Ah Battery + 8units of 150W Solar Panel + 7 USB Ports + 4 AC Socket	3 Bedroom Apartment/ Offices Fans, TVs, DvDs, Lights, Decoder, Computers & Gadgets, Small Fridge	12Hrs - 24Hrs	
UD 4	2.5KVA	AC/DC Cables + Installation + 4units of 150Ah Battery + 12units of 200W Solar Panel + 7 USB Ports + 4 AC Socket	4 Bedroom Duplex/ Offices Fans, TVs, DvDs, Lights, Decoder, Computers & Gadgets, Fridge, Blender	12Hrs – 24Hrs	
UD 5	3.0KVA	AC/DC Cables + Installation + 4units of 150Ah Battery + 12units of 200W Solar Panel + 7 USB Ports + 4 AC Socket	5 Bedroom Duplex/ Offices Fans, TVs, DvDs, Lights, Decoder, Computers & Gadgets, Fridge, Freezer, Blender, etc	12Hrs – 24Hrs	
UD 6	5.0KVA	AC/DC Cables + Installation + 8units of 150Ah Battery + 24units of 200W Solar Panel + 7 USB Ports + 4 AC Socket	6 Bedroom Duplex/ Offices Fans, TVs, DvDs, Lights, Decoder, Computers & Gadgets, Fridge, Freezer, AC, Dispenser, Blender, Washing Machine	12Hrs – 24Hrs	

TYPE	CAPACITY	SPECS	LOAD	STANDBY TIME	IMAGE
RD 1	500W	AC/DC Cables + Installation + 1unit of 42Ah Battery + 1unit of 150W Solar Panel + 2 USB Ports + 2 AC Socket	1 Small hut/shop Fans, Lights, Phones & Gadgets	6Hrs – 12Hrs	
RD 2	1000W	AC/DC Cables + Installation + 1unit of 100Ah Battery + 4units of 150W Solar Panel + 4 USB Ports + 4 AC Socket	Single room/Office/hut Fans, TVs, DvDs, Lights, Decoder, Phones & Gadgets	6Hrs – 12Hrs	

PROJECT EXECUTION PLAN (PEP)

At AFS Energies, we carry out an end-to-end project execution based on our client's energy demand. Our projects are sequentially carried out in line with PEP methodology. Our project team ensures tasks are executed on time, on budget and to customer's specification. Our works are executed in strict conformity to international safety standards.



Today people use mostly fuel (generators) and kerosene for lighting, which is risky (fires, accidents), including polluting our environment. People in Nigeria make use of a lot of energy consistently in their homes and offices. We aim to provide such energies. Our environmental and health impact is less and very safe compared to the alternative fossil fuels and kerosene systems. We have also developed foreign partnership with some manufacturers on quality products.

QUALITY CONTROL/ASSURANCE

It is the intent and policy of AFSE to meet the quality requirements of projects by designing, installing and supervising construction facilities in strict conformity with recognized and sound engineering practices, applicable codes, regulatory requirements and contractual commitments. The resultant facilities and other services provided are intended to make provision for the protection and preservation of public health and safety.

While the Project Managers and Directors are primarily responsible for the development and implementation of the overall Quality Assurance Programme, it is the responsibility of each Project Engineer to ensure that our policy is strictly carried out, regardless of scope and location.

The Project Managers and Directors develop and implement written quality plans for the projects, which defines the procedures to be followed in meeting the requirements of AFS Energies, client and regulatory bodies during the design and construction phases and the safety management organization responsible for verifying compliance with the plan. Each Project Engineer is responsible for knowing, understanding and conforming to the requirements of each assigned task and for initiating action to change requirements which are no longer valid. In the event of a quality problem being unresolved by the Project Engineer it shall be reported to the Project Manager for his action.



SAFETY MANAGEMENT

The Project Engineer will, via the imposed conditions of contract and otherwise, co-ordinate and monitor the safety performance of Contractors and Sub-Contractors which includes the submission of written method statements; participation in safety incentive schemes and accident reporting.



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