Brochure Brief

Page 1: Welcome

MSG Energy has been at the fore front of solar energy technology since its first test in Nigeria, 2011.

With offices in Lagos and London, MSG Energy is the leading service provider that designs installs, finances and lease solar power plants across Africa.

Page 2: The MSG Advantage – Why MSG

The MSG advantage

* Online Dashboard
  + Online monitoring
  + Real time email alert
  + Offsite Troubleshooting and maintenance
* 25 years guarantee on panels
* 8 Years replacement service including batteries
* Project simulation
  + Advance mitigation strategy
  + Predictive forecast of performance
* Unbeatable Technical Expertise mixed with local knowledge
* Integrated Smart Inverters
  + Use as complete Off Gird
  + Use in combination with Generators to reduce load and diesel consumption
  + Can cover critical areas only such as Air Conditions and Lights while the generator covers
* other load units simultaneously
* They can be increased on a modular scale from 5 to 999kVA
* We are the only one in the market that can power up to 999kVA (with batteries) at one single time
* We can build complete Off Grid systems that can run 24/7 round the clock
  + A big difference from all the big utility scale plants that need PHCN before they can
* produce power
  + We can produce power independently from national grid
* All products used are tried and tested with international track record of achievements
* We are the ONLY Company in Nigeria using Two-Bi-Direction inverters. This means the solar inverter can independently supply power during the day without using the batteries - Just strictly power from the Sun. This design prolongs the battery's life span. The battery inverter eventually picks up when the sun goes down and switches off when the sun set at 7:00am. Both inverters can combine power when energy demand is high
* The inverters can be fitted with relays that can remotely switch on and off the generator as to when required by the load demand

Page 3: CAPEx Dash –

Revolutionary Capital Expenditure Dashboard that allows your company to see exactly how much money is spent per site on diesel and general energy running cost and savings with solar.

This is designed for large corporations with numerous sites and a heavy capital expenditure on diesel generators spread across a particular region. MSG Energy is the first company to build a CAPEx dashboard capturing all the Longitude and Latitude of Africa, with special knowledge on local states and regions. The CAPEx Dashboard is a useful online visualization tool, hosted on MSG Energy's website to put into cost perspective per location how much these companies are spending on generators and most important data on exactly how much MSG Energy can save on their CAPEx. The CAPEx interactive Dashboard features, location, how many www.msgenergy.co.uk litres used, cost per location, how much energy used and how much energy generated and savings in local currency. The CAPEx Dashboard will be delivered free to any prospective client.

*MSG Energy will install a power device that automatically uploads your power and energy usage unto our cloud database, including diesel usage. We will use your energy data to build your own CAPEx Dashboard FREE of charge. Your company will have its own secure log in details to view and monitor your power and diesel consumption in real time in the office, on your tablet and on your phone.*

*It’s totally free and no contract involved. Contact us now for your own free CAPex Dashboard*

Page 4: Diaspora

Millions of people are migrating to Africa, to join of the great emergence of some of the fastest growing economies in the world. We want to make sure your relocation is enhanced by providing the option of constant power supply from our solar system. This product is focused on meeting your needs right before you arrive in Africa. If you are relocating to Africa, building/buying a holiday home, setting up a [small business](http://www.msgenergy.co.uk/sme) or [buying for mum's house](http://www.msgenergy.co.uk/blog) or dad's mansion, we want to make 24 hour power access a reality.

We promise you will get the same quality of delivery you might expect to get anywhere in the world with some of the quality names you are familiar with. We will give you that top notch service that exceeds your expectation.

Imagine the benefit of not worrying about getting petrol, diesel for that generator or the noise and fumes it will produce at night or if there will be power from the grid to run the pumping machine.

*This is the ultimate level of luxury you deserve.  If you are moving back to Africa or what to buy for a family member*

[*Contact us*](http://www.msgenergy.co.uk/contactus)*, tell us where you are, what you need, and when you need it.* [Drop us a message](https://mayo-oyesiku-s788.squarespace.com/contactus) on Facebook

Page 5: SME

Small-Scale Medium Enterprises are the backbone of the African economy providing 80% of its employment workforce. These SME often struggle to provide sustainable business model with the increasing energy crisis.

Africa's SME are heavily reliant on generators, in other words Africa's economy is totally backed by generators. However current dependency on generators is proving more costly and detrimental to the environment. But with today's advancement in solar technology, we are reversing the conversation from a generator backed economy to solar powered economy

MSG Energy has initiated a new product called Help To Buy Scheme to help SMEs and small businesses get on the ladder of power independence. The product will offer a manageable Pay Us You Go for solar systems from 5kVa to 25kVa. SMEs will have the benefit of having power generation for 24hrs at a cheaper rate than current diesel generators and conventional grid.

We want to hear from you if you are Small-Scale Medium Enterprise operating anywhere in Africa. If you are a bakery owner, poultry farmer, cold room store operative. If you consider your business as a small business, and you want to stop using the noisy, erratic generator. If you want to have access to electricity round the clock 365 days at a cheaper rate, we want to support that vision.

*If you need a solar plant for your business from 5kva to 350kva and you want a pay as you go option, contact us now.*

Page 6: Real Estate and Residential

Our number one priority is to make your project a huge success. From building one house to multiple homes of different sizes, we will design, procure and install the best solar option for your project.

Ideally we will like to join your project at the initiations stage, exchanging ideas with architects and foremen. However, its never late to bring power autonomy to your project. So if you are just starting out or just completed, if are thinking about 1 housing unit or a 100 units, give us a call.

*Our solar systems will be your first utility service provider and the generator and the national grid will act as back up when necessary. All your energy requirements will be supplied by our state of the German inverters, solar panels and batteries - Air Conditions, Microwave, Washing Machine, Dish Washers, Pumping Machine, Deep Freezers, Irons, Fans, all taken care off.*

Page 7: The MSG Promise –

We would replace any defected component with 48hrs of event logging. The minimum expected life span of our solar plant is 11 years

The performance of the plant will be connected via the internet to our monitoring software. We can also provide the option of capturing this monitoring feature on the client’s phone, or on the flat screen in the office.

The monitoring software features in real time, energy generated, energy use, state of charge of batteries, general health of the plant

There are no revolving parts, so it’s absolutely quiet. It will be practical for proximity to residential areas

It is very scalable to meet business needs, whether expansion or efficiency projects

Reduces the needless production of harmful waste like CO2

Reduce the increase cost of constant fueling

Prolong the life span of the generators as they will be rarely used

Its design as Off-Grid mode, so can be deployed to areas that are very remote and reduces the need for constant on-site access, ie islands and villages riverine areas

Page 8: MSG Design:Our System

MSG Energy is the only company in Nigeria with the competency required to install some of the world's leading bi-directional inverters. We use a two-way inverter technology - meaning all our installation comes with two different inverters. One works with the solar panels during the day and the other works with the battery for ONLY FOR NIGHT USE. This design ultimately gives you double capacity and prolongs the lifespan of the battery

Photovoltaic

1. Panels: Designed to generate enough electricity through sun radiation between the hours of 7.00am to 7.00pm. The panels along with the Day Inverter to supply power during the day, if required, request more from the Night Inverter. During off-peak hours, the panels will concentrate on replacing any lost charge from the Batteries, and during peak hours, the panel and the Day Inverter will supply power to load requirements.
2. Day Inverter: One of the Two-Inverter systems dedicated to converting and monitoring the DC current coming from the sun through the panels to AC. The DAY INVERTER has a small LD graphic display, detailing how much energy generated, how much used, and the state of the panels. The DAY INVERTER connects the system to a data logger that transmits its usage through the Internet in real time to our database. This helps us to continuously oversee the performance of the plant remotely.
3. Smart PAYG Card Meter: This meter allows you to top up and recharge your meter as often you want. The smart meters allow the user control how much they spend. They come with state of the art monitoring software for optimal security.
4. Night Inverter: This is the second of the Two-Inverter system. This part of the design allows the battery inverter focus on power supply at night when panels are out of service. The NIGHT INVERTER has twice the capacity of its twin to handle things like Air-Condition, Freezers all on its own. It does this by generating AC current from the batteries. At the rise of the sun, the NIGHT INVERTER will gradually handover power supply duties to DAY INVERTER allowing it to recover from the work done through the night and preserve the State-of-Charge (SoC) of the Batteries. During the Rainy season when irradiation is low, NIGHT INVERTER will handle power supply day and night, especially during typical Lagos 7 Day Rain.
5. Batteries: These are specialised solar batteries for heavy duty discharged and short recharge. They are designed to last 11 years on constant use. Battery usage is remotely monitored and we will send you text alerts when necessary to help manage the health of your battery.