



# Company Profile

**KASTOM  
TECHNOLOGIES  
LIMITED**



[www.kastom.co.ke](http://www.kastom.co.ke)

## OUR STORY

Kastom Energy is a professional renewable energy engineering contractor. We offer solutions for the installation of Solar Photovoltaic, Solar Water Heating Systems, Solar Water Pumping Solutions, Solar Street lighting, Grid-Tie solar systems.

We also offer energy audit services as well as conducting feasibility studies and project management for hydro, wind, and solar systems. Our unmatched expertise and quality are enhanced by the creativity we bring to each customer project.



## Our Vision

Our only focus is on improving the bottom line of the renewable energy sector. Our heart is serving individuals & organizations by providing solar energy solutions that instantly translate into savings, efficiency and reliability.

## Our Mission

Our mission is clear as our vision, we set out to lead the sustainable energy market by offering quality services and products at affordable prices through client-focused, committed professionals.

## Our Team Management

Our management team comprises of a blend of dedicated project managers and renewable energy experts with a vast experience in the energy sector and that makes it our most valuable asset.



**Eng. Joseph M. Murugami**

**C.E.O & Lead Engineer**

BSc. Electrical and Electronic Engineering (JKUAT), Vast Experience in Solar Industry



**Jesse Wainaina**

**Systems Designer & Project Manager**

System Designer, Electrical, Solar and ICT Expert



**Dixon Abincha**

**Technical Manager and O&M**

Executive: Experienced in Technical Sales



## Our Values

**We create tomorrow by inspiring our employees, clients, partners and community to reach their full potential through innovative technology solutions .**



### Partnerships

A strong belief that a company is only as good as its partners, including landowners, investors, and community members.



### Passion

We will never stop until our projects are a success, we are not perfectionists but we definitely committed to high quality work.



### Experience

We have over a decade of experience in solar projects development, operations, and maintenance & energy storage solutions.

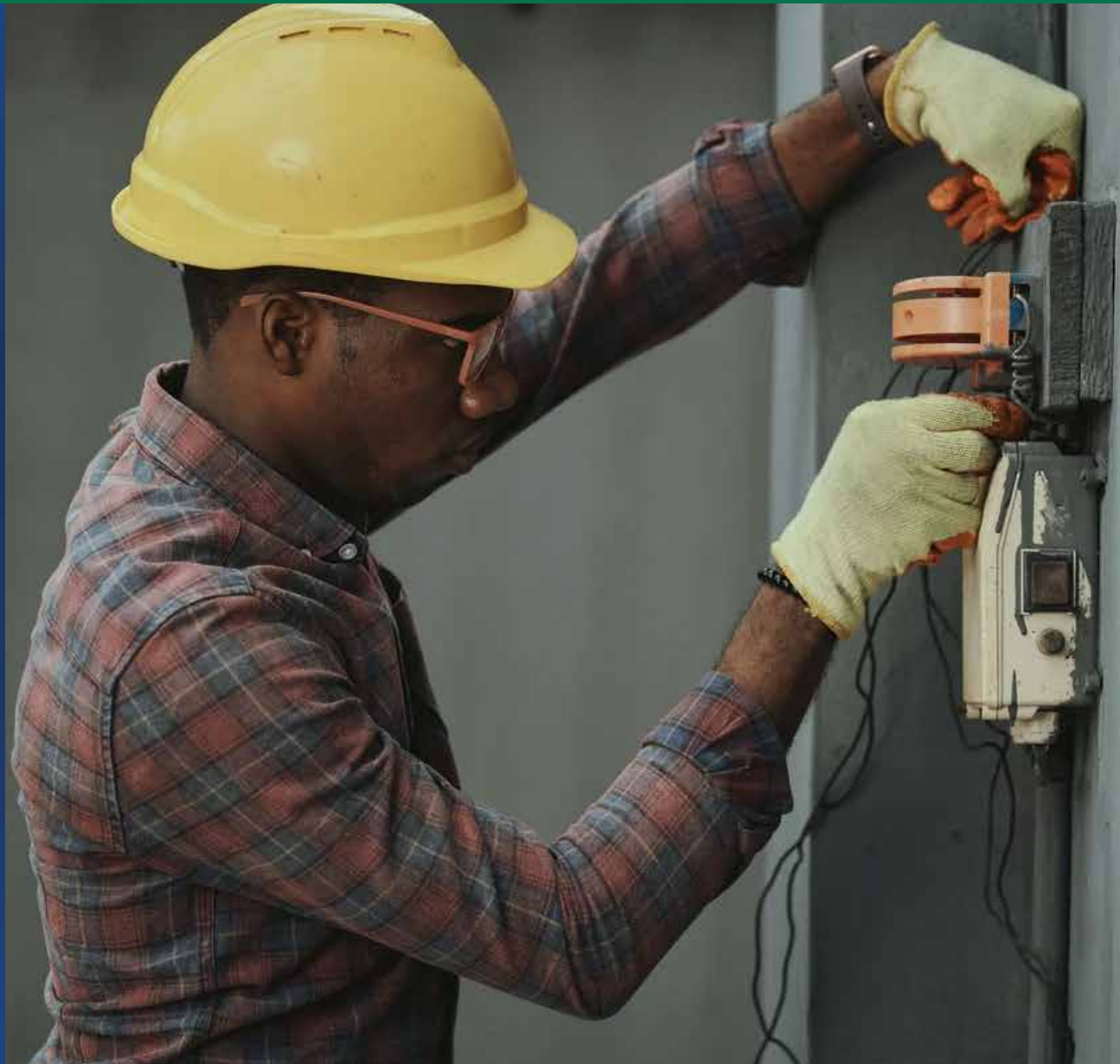


### Commitment

Putting our customers needs first and doing right by them serves as the foundation for growth and success of our company.

# OUR SOLUTIONS

- **Solar Energy**
- **Electrical Services**
- **Network Solutions**
- **Electric Mobility**
- **Internet Of Things**



## SOLAR ENERGY SOLUTIONS

We are experts across the full range of solar power applications, ranging from stand-alone solar water heating systems, solar electrical pv systems, solar water pumping solutions to complex projects with integrated energy storage.

### Residential Solar Energy Focus Areas

#### Get off to a bright start with commercial solar outdoor lights.

Solar lights are one of the best ways to save on your home's outdoor and indoor lighting costs, add ambiance to your garden, and to provide extra security for your home. Kastom energy offers a range of lighting options including: solar lamps, solar lanterns, solar garden lights, solar flood lights, solar security lights, solar street lights, and more, that are unique in design and that have been specifically designed to perform in African conditions.

Solar lights are compact and efficient and work out more cost effective than designing a system to power existing lights. With our extensive range available, we are bound to have something suitable for your requirements.



## SOLAR OUTDOOR LIGHTING

### Solar Powered Street Lighting

Light up your entire community with solar powered street lights! Each light in a commercial system is independent from each other and doesn't need main power grid connectivity. Simply install and let the sun do the work!

### Solar Parking Lot Lighting

A commercial-grade lighting solution that uses solar power to energize LED lights is superior to traditional lighting for several reasons. Eliminate costly energy bills, avoid potential lot destruction and "go green" with hi-tech, low footprint parking lot lights.

### Solar Pathway Lighting

Light your pathway with our energy-saving commercial solar lighting. Each light uses high-efficiency mono-crystalline panels coupled with attractive light fixtures that beautify and illuminate any pathway. Enjoy your neighborhood park after hours safely with bright solar LED lights.

### Solar Security Lighting

Keep your business safe and secure with our commercial-grade solar-powered security & perimeter lights. Each light has a full configuration profile—configure it to turn on at the first hint of the night sky, or go to "full brightness" if a motion detector is tripped. Plus, no energy bills.

## POWER BACKUP SYSTEMS

### Home and office power backup systems

We understand the frustrations experienced by our clients with the current instability of the national grid and the frequent load shedding which is set to become a daily reality in Kenya.

This page outlines some of our standard Battery Backup Power Systems which will ensure that you are protected from the consequences of ongoing power outages and provide you with backup power when you need it.

A Hybrid Solar Solution comprises solar panels, battery energy storage as well as utility and/or generator power working together seamlessly, 24 hours a day, to provide power to your electrical appliances.

The battery provides backup power and stores the solar-generated energy for later use—reducing your electricity bill. Our systems include the ability to export power to the utility grid if you choose to. We are here to assist you in sizing and designing the optimal system for your requirements and budget.



### Protect Your Business from Long Power Interruptions with Battery Power Backup Systems.

Be prepared before the next time the power goes out with a standby battery powered generator. Build your own battery backup system for your home or business.

A battery backup system allows you to power your essentials when the grid is down. Using sealed AGM deep cycle batteries, this system is safe for indoor use; you can install this system in your closet, in the corner of your office, or make it portable by using a cart.

### Battery & Inverter Power Backup

Batteries are charged with grid power when it is available. Then during a power failure, the inverter automatically switches over and supplies your house or business with energy stored in the battery.

Then when the grid power comes back, the batteries are charged with the grid power again, ready for the next power failure. The perfect backup power for your home, home office or small business.

### Solar Power Backup Systems

This system allows you to enjoy uninterrupted power supply all the times and hence allow one to carry out daily functions without fearing for power cuts & trips.

They are noiseless and gives out back up power automatically without the input of a technician once installed. They're suitable for domestic and medium to high commercial applications.

# Solar Water Heating

Upgrading your home or business with a solar water heater to a more sustainable way of living will save you money, you can save up to 40% on your current electric bills. Statistics have shown that a typical household of four will save a 1/3 of their electricity bill, and the savings will pay back the cost of the solar water heater in a few years.

## Solar Water Heating Is More Affordable Than You Might Think

Kenya is blessed by prevalent sunshine, solar water heating can provide up to 75% of hot water energy needs and significantly reduce electricity bills. Kastom Energy has a range of solar heating systems and accessories to meet specific household needs.

A primary concern regarding the installation of solar heating systems is cost. Previously, the costs of solar energy were prohibitively high, but with technological advancements and an increasing awareness of the need to alleviate dependence on commercial energy sources, the average price of a solar heating system has decreased dramatically.

Studies have proven that solar heating systems can shave up to 40% off your overall monthly electricity bill.

## Solar Water heating solutions generate up to 80% savings

Electrical water heating makes up about 40% of a typical Kenyan total electricity bills. So what can we do about these water heating expenses? How can we reduce them?

Solar Water Heaters use the power of the sun to heat your water, they generate warm water through out the day without any maintenance . The system is maintained by a solar water heater controller which only uses your electricity when you specify it to.

A Solar Water Heating System can reduce up to 40% of your previous used electric expense.





## **We offer better quality products at an affordable price, and we offer the best solar water heating solutions.**

Solar water heating is efficient, eco-friendly, and economical. It's an investment that offers immediate cost savings and good long-term returns.

Install a solar water heating system in your home, and you're also guaranteed a consistent supply of hot water, round the clock and irrespective of Eskom power outages.

## **Reduce Your Electricity Bill**

In a typical Kenyan household, a hot water shower contributes approximately 60% of the total monthly electricity cost. By switching to a solar water heater you would have substantial savings every month up to 80% of this amount. Reduce your carbon footprint by going green.

## **Solar Means You're Also Going Green**

In addition to reducing your carbon footprint by switching to a solar water heater, you are also taking a big step towards living a greener, more sustainable lifestyle. This will not only benefit you and your family now but also the generations to come in the future.

## **Add Value to Your Property**

In the current tough economic times, property buyers are very discerning and will look for every feature available to them when making a property purchase.

Installing a solar water heater in your home now, not only benefits your family while living there but it also adds significant value to the resale value of your property.



**Water heating makes up a large part of your monthly electricity spend. It is, therefore, worthwhile to consider alternatives.**

A solar hot water heater can be a great investment if you're looking to replace an old, inefficient hot water heater, and particularly if you're trying to work out what kind of system to install in a new home. A solar hot water system gets most of its energy from the sun, so it cuts down on your energy bill and also produces a lot less greenhouse gas emissions.



# SOLAR WATER PUMPING

Solar water pumping present a clean, simple and energy-efficient alternative to traditional electric and fuel-driven pump sets. They are classified as an environmentally friendly solution in the agricultural sector.

## **SOLAR WATER PUMPING SOLUTIONS - perfect for water supply, livestock watering or irrigation purposes.**

Solar pumps are an energy efficient, environmentally friendly way to pump water for a variety of domestic and commercial purposes, including agricultural and residential purposes.

We offer a wide range of solar water pumping products, experience and after sales service support in the field of submersible solar borehole pumps, solar irrigation systems, solar drinking water solutions, solar bulk water supply as well as solar swimming pool products and circulation pumps.

- Smart modular design for simple and cost effective serving & repair.
- Very strong ROI against diesel powered pumping.
- Suitable for drinking water supply livestock watering & Irrigation.
- Sound dampeners and insulators.
- Electrically conductive adhesives.





## Solar Water Pumping Products

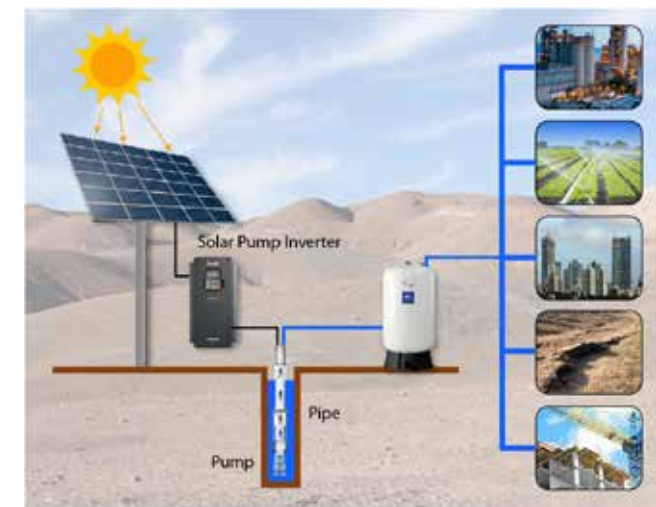
Our six years of experience and intensive local research and development helped us to develop a range of solar water pumps that is reliable and affordable. These pumps are built tough and perform well in local weather and water conditions.

## Solar Water Pumping System Design

We design Solar Pumping solutions suited to almost every situation making use of nature's resources to reduce running cost to the minimum. We can custom design each Solar Pump System to suit every individual requirement.

## Solar Water Pumping System Installations

We make use of well experienced specialist installation teams to assist with your pumping project wherever you may need assistance. We have together with our partners completed 100+ successful solar water pumping installations all over Kenya & East Africa.



**Pump water from any remote location without needing access to electricity.**

Our product range includes solar powered bore pumps, submersible pumps and surface pumps at very competitive prices. They are backed with a 2 year warranty.

All our solar water pumping system are designed to withstand harsh Kenyan water. They incorporate features from the best of the best solar pumps on the market and compress all this technology into a compact, robust and highly effective system that's been tried, tested and proven to last.



## Solar Water Pumping Applications

We are transforming agribusiness and irrigation with our solar water pumping solutions



**Agri-Business Solar Water Pumping**



**Solar Water Pumping for Institutions**



**Borehole Solar Water Pumping**



**Institution Solar Water Pumping**

## Commercial Solar Solutions

Solar power can and should be used not only at a private level by individuals, but also as a device for routine energy saving by both commercial and governments.

### Commercial Solar Energy Solutions for Businesses of Any Size

The biggest advantage of renewable sources of energy, besides eco-friendliness, is its cost-efficiency, which must be a tie-breaker in commercial and official institutions' decisions on whether to join or not. Generating your company's first step to electrical freedom.

The consumption curve of businesses usually coincides with the daily sunshine hours. It is therefore very economical to 'plug into the sun' and reduce your electrical operating costs.

Kastom Technologies commercial solar advisors will provide you a thorough analysis of the financial benefit to your company of installing solar, including when positive cash flow will be achieved and the tax benefits available to your company.

### Our Commercial Solar Energy Focus Areas

We design & supply scalable and efficient solar systems for commercial PV applications for businesses.

- Solar Water Pumping
- Grid-Tie Systems
- Solar Street Lighting
- Mini-Grid Systems



## Efficient solar irrigation and borehole water pumping solution

Solar Water Pumps start pumping when the sun is shining – saving money & resources. When you purchase any of our quality solar water pumps, they will pay for themselves in around 2 years or less.

We carry a range of both submersible & surface mounted solar pumps, and our factory has a complete range to meet each & every requirement. Please do not hesitate to get in touch for more information about a solar pump for your property.



### DC Solar Pumps

DC Solar water pumps run straight off power produced by solar panels. No batteries needed.g procedure processes.

### Precision & quality

Quickly coordinate e-business applications through revolutionary catalysts for change. Seamlessly underwhelm optimal testing procedure processes.



### Auto & aero manufacture

Quickly coordinate e-business applications through revolutionary catalysts for change. Seamlessly underwhelm optimal testing procedure processes.

### Quality replacement parts

Quickly coordinate e-business applications through revolutionary catalysts for change. Seamlessly underwhelm optimal testing procedure processes.



**Top quality Solar pumps and off grid solutions for the residential, agricultural and commercial industries.**

We offer a wide range of solar pump products, experience, and after-sales service support in the field of submersible solar borehole pumps, solar irrigation systems, solar drinking water solutions, solar bulk water supply as well as solar swimming pool products and circulation pumps. On the right is a great introduction video on solar water pumping and our solutions.



# Grid-Tie Systems

One of the most common applications for commercial solar energy systems is known as the grid-tie system. The excess energy produced each day is then shared with the utility grid, which earns your company credit on your energy bills.

## Grid Tied Solar Power Systems

For someone interested in reducing your monthly electricity bill a Grid-Tied System might be the answer for you. Grid-Tied systems work by supplementing grid electricity.

In recent years Grid-Tied systems have become more popular. This we are able to reduce your electricity usage in your organization.

The system provides electricity during the day and grid power is only used when the load exceeds the power that can be generated by the system. This means you use less power from the national grid and thus reduce your bill.



## How does a Grid-Tied System work?

A Grid-Tied system works by supplementing the national grid. Power generated by the solar panels is used to provide power to the load. If the load exceeds the power that can be provided by the system, grid power is used to supplement the remaining power needed.

The inverter is used to convert the DC power from the solar panels to AC power. A Grid-Tied system will NOT work when grid power is off because the system needs to be connected to the grid to function. There will also be no backup if the power is out because normally no batteries are used in these kinds of systems.





## Why Consider a Grid-tie System?

### Instant Savings

Grid-tie systems provide you with tangible savings from Day 1. It cushions you from the ever-growing power tariffs from the national grid.

### No Interruptions

Your business will not experience any interruptions during the installation of your solar power system, making it a hassle-free experience.

### Reliable Energy

The national power grid is notoriously unstable with rolling blackouts a common occurrence. With solar energy, your lights will always stay on.

### Cheap Energy

Save over 20% monthly when you use grid-tie solar power instead 100% reliability on the national grid – This gives you a quick return on investment.



# Solar Street Lighting

Our street lighting solutions maximize the sun's energy to give you an affordable, stable, and clean street lighting system in any weather conditions

**Top-quality solar powered street lighting without outrageous electrical infrastructure fees.**

Kastom Technologies solar street lights provide high-intensity lighting at night while consuming no electricity. These quality solar-powered street lighting solutions are extremely cost-effective, best for enhancing safety, easy to install, and require no monthly fees for electricity usage.

The solar LED street lights use top-quality components that last several years, your investment will keep shining continuously, every night, for a long time.

## Solar Streetlight Applications

Applications for commercial solar LED lighting solutions are our specialty.



### Solar Security Lights

Configurable CCTV solar LED lighting system to ensure the safety of remote areas etc.



### Solar Highway Lights

Improving safety and standard lighting solution for highway illuminated.



### Solar Pathway Light

Light up paths, sidewalks and remote trails with off-grid solar systems.



### Solar Parking Lot Light

Provide visibility and security for outdoor parking lot.

## Solar Mini-Grids Development

Access to Electricity is essential for people's lives and livelihoods. Where major uses involve powering fridges to store food and medicine; charging mobile phones to stay connected; lighting up households and schools at night, powering local businesses among many.

In some regions of developing countries, this is not the case. Electricity is a rare commodity and those who have access often rely on polluting unreliable and costly diesel-powered generators.

### Standby Generator Installation

After almost ten years of building solar mini-grids in rural Sub-Saharan Africa, we decided to share our knowledge and expertise with other companies to speed up universal energy access and maximize our impact on local economic development.

Solar-powered mini-grids is the answer to rural access and end of dirty energy. Well-suited to small, remote communities, renewable energy mini-grids can now be the cheaper, greener option for rural electrification.

Mini-grids are the answer to communities where grid extension and standalone solar systems aren't viable for larger electricity needs. Essentially they are independent, decentralized electricity networks that can function separately from a national grid.





## **RELIABLE**

With mini-grids, especially hybrid mini-grid systems, the reliability of power supply to underserved areas is greater when compared to the current national grid. With hybrid systems, there is a guarantee of the availability of power when one resource is unavailable.

## **MINI-GRIDS ARE FLEXIBLE**

The financial and technical implications involved in extending the national grid to off-grid locations mountainous regions. are on the high end. However, mini-grids are an easier approach as they can be deployed anywhere and the designs can be altered to be site-specific.

## **VERSATILE**

When compared with other decentralized energy solutions such as Pico solar lanterns, solar home systems and more innovative approaches, mini-grids stand out. providing power for all uses including, welding, cooling, basic lighting, milling amongst others.

## **REDUCED POWER LOSSES**

Mini-grids are deployed in proximity to where they are needed. Therefore, the electrical power losses will be reduced when compared with the national power grid. This also guarantees power quality and security.

## Solar Project Financing

Kastom Energy propels solar finance programs. Active advisory committees comprised utilities, municipalities, public entities, and contractors.

### **Make your solar project an affordable reality with our financing options.**

Through years of experience, the Kastom Technologies Limited team and its partners have successfully been able to optimize financing structures, which can be customized for each project and client.

We have working relationships with multiple investors and lenders to facilitate small to large transactions ranging from Ksh 1 Million to upwards of Ksh 1 Billion. We allow you to finance your project on or off-balance sheet.

## CleanTech Project Financing

Through our products and services, we partner with institutions with a passion for renewable energy, sustainable agribusiness, and clean transportation to deliver projects through financing models.

Projects that qualify should be from commercial enterprises investing in their own solar power systems, clean agribusiness equipment, and electric mobility solutions. Contact us to Apply.

## Utility Scale Solar Financing

Our solar lending team members are experts in utility-scale and C&I solar, community solar and energy storage project financing nationwide.

## Energy Storage Financing

We finance both solar plus storage projects as well as standalone storage projects. We know the asset class and can provide value with long-term, project-level debt.

## Community Solar Financing

We consider community solar projects with investment grade, non-investment grade, and/or residential subscribers under all types of subscription agreements.





## ELECTRICAL SERVICES

We provide a full consultancy and design electrical service, enabling us to guide you through the technical and legislative issues, leaving your company with an electrical system that not only meets your needs for today but also for tomorrow.

### **Residential**

Safety in your home should always be your top priority. When you have an electrical design project or a faulty issue, turn to the experts.

### **Commercial**

We are dedicated to helping your business run at its best electrical capacity while saving you money on your energy costs.

### **Industrial**

Our Industrial electricians & engineers are the best at working in manufacturing plants and production facilities.

## OUR ELECTRICAL SERVICES FOCUS AREAS

Electrical solutions for residential and commercial establishments.

- Electrical System Design
- Installation & Testing
- Backup Generators Installation
- Safety Audits



## ELECTRICAL SYSTEMS DESIGN & CONSULTATION

We understand that designing an electrical system is a daunting task. We'll work with you at any stage in the design process.

Whether you need us to assist with your current design or design a complete electrical system from the ground up we will ensure that you are meeting code requirements and finish with a system that is complete and efficient.

From the beginning, we'll start with a free consultation and schedule a no-cost site survey to determine your needs. After understanding your desired results we will put together a comprehensive quote detailing the scope.



## **Electrical Installations Testing**

The only way to confirm that electrical installations are safe is by combining all these test procedures. And, remember, these are not tests that can be completed by anyone. You need a fully qualified electrician to carry out these tests safely and accurately.

- Electrical continuity and conductivity tests
- Insulation resistance tests between live conductors and the protective conductors
- Insulation resistance/impedance of floors and walls
- Additional protection by verifying the effectiveness of the protective measure
- Polarity test where the rules prohibit the installation of single-pole switching devices in the neutral conductor.
- Check of phase sequence in case of multiphase circuit
- Functional test of switchgear and control gear by verifying their installation and adjustment
- Earth resistance testing

## **Comprehensive expert electrical testing to ensure building safety and compliance**

Electrical products are an essential part of modern living. Without these innovative (and sometimes lifesaving) products life would be very different. However, electricity is also unpredictable and without regular and rigorous testing can be incredibly dangerous.

That's why there's so much legislation in place when it comes to working with electricity. So, to ensure that your electrical installations are safe you need to work with certified experts. Not only will this keep you within the boundaries of the law, but it will also provide a much needed layer of safety. Naturally, you will want to understand the test procedures that these experts will use, so let's take a closer look at them.



## New Installation Testing

**Our full range of electrical testing services include:**

- Design review of electrical installations.
- Mandatory initial inspection of electrical installations.
- Periodical verification of electrical installations (first & recurring).
- Specific missions for insurers.
- Power measurement of electrical installations.
- Perturbation measurement of electrical installations.
- Electrical failure risk analysis.
- Technical advisory on how to design and use electrical installations.
- Thermographic measurement of electrical installations.
- Lightning protection.

## Key Customer Benefits

With our in-depth experience and knowledge in the field of low-voltage electrical inspections, the electrical testing service from Kastom Technologies assists clients to:

- Ensure the safety of people and property.
- Ensure the quality of measurements, avoiding fraud.
- Safeguard the normal operation of electrical installations, preventing disturbances to other installations and services.
- Avoid electricity blackouts.
- Comply with all codes, standards and current legislation covering low-voltage electrical installations.

## Backup Generator Installation

We perform total Turn-Key Installations to make sure your generator is expertly installed in a safe manner. We consult with our customers to ensure that they are choosing the correct generator for the amount of load they require.

## Standby Generator Installation

Generator Installations is at the forefront of supplying generator services across Kenya. With over 40 years' experience of installing and maintaining diesel generators, we are confident our company can support you in your enquiry.

Our work portfolio comprises installation and maintenance of generators across Kenya in the following areas, to name but a few: Banks, hospitals, financial institutions, data centres, prisons, hotels, residential and office buildings.

## Commercial Power Backup

We offer financing for your generator installation projects, complete your project and stay on budget with fixed monthly payments.

## Industrial Power Backup

Licensed (where applicable), insured and background-checked for your peace of mind.



## Educational Institutions

We give 100% to each job, big or small! As a testament to that, all our services are backed by our 100% satisfaction guarantee.

## Farms

We offer financing for your generator installation projects, complete your project and stay on budget with fixed monthly payments.

## Electrical Safety Audits

Electricity has become an integral part of our everyday life and we better understand its importance in our life during a few minutes of power outages. In recent times, with the rapid growth of industries and commercial space, we are witnessing an exponential increase in the number of electrical accidents.

Electrical Safety Audit is examining the security of electrical installations of any industrial unit or organization. Electrical Safety Audit is performed by enquiry, inspection, testing and verification. Electrical Safety Audits are conducted by experienced professionals who assist clients in reducing risk and help to ensure compliance with applicable Safety Standards and Regulations.

## Scope of Electrical Safety Audit

The Electrical Safety Audit includes the review of documentation with respect to the scope covered in audit, an on-site visit, and data collection, their review and analysis. This will also require the cross-check and verification of information and data which may include industry norms and peer data. Following is the methodology which we follow at EnKing International for conducting an Electrical Safety Audit in detail:

- A Pre-Audit Meeting (opening meeting).
- On-site visit and inspection
- Discussion with members of the house.
- Review of Documentation / Records
- Submission of final electrical safety audit (ESA) report





## Data Networking

With front-running technologies, we established, industry-leading tools to design and create networking and IT infrastructure that will help maximize productivity, reduce operational costs, and manage complex consolidations.

Switch-on high performance, efficiency and agility with next-generation networking solutions. With front-running technologies, we utilize established, industry-leading tools to design and create networking and IT infrastructure that will help maximize productivity, reduce operational costs, and manage complex consolidations.

Managed network services are vital for today's small businesses and medium-sized enterprises, it helps run the applications that fuel your day-to-day business, enhance communication and sharing tools, and improve business flexibility and agility.

## Our Networking Focus Areas

We Use the power of networks to multiply your impact and align with business goals and benchmarks.

### Network Assessment

Quickly coordinate e-business applications through revolutionary catalysts for change. Seamlessly underwhelm optimal testing procedure processes.

### LAN/ WAN Optimization

Dramatically disseminate standardized metrics after resource-leveling processes. Objectively pursue diverse catalysts for change for interoperable meta-services.

### Network Cabling / Fibre solutions

Dramatically engage high-payoff infomediaries rather than client-centric imperatives. Efficiently initiate world class applications after centric infomediaries.

### Network Management

Phosfluorescently expedite impactful supply chains via focused results. Holistically generate open-source applications through bleeding-edge sources.

## FIBER OPTIC INSTALLATION

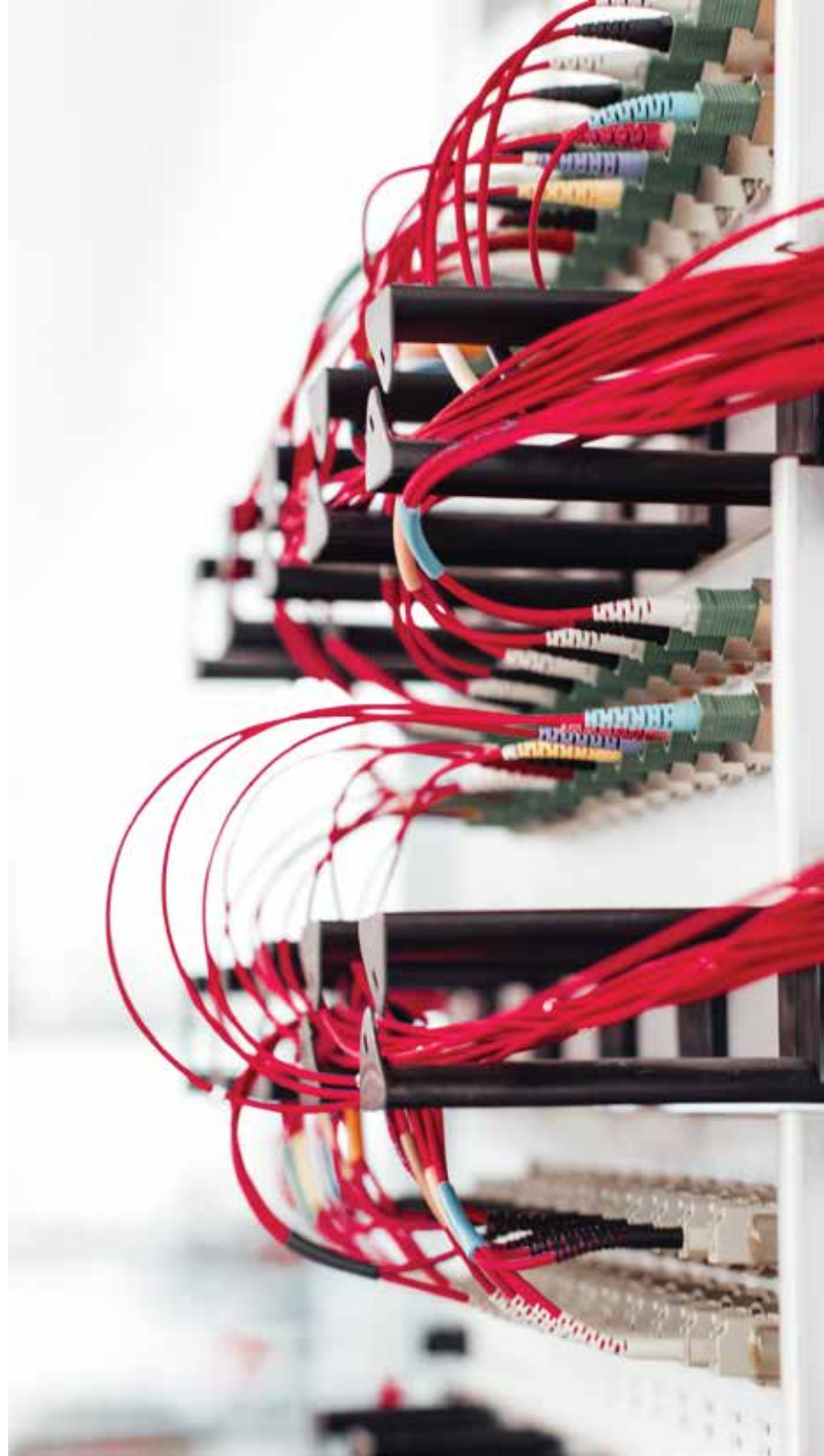
Fiber optic installation is a tricky and expensive process, but is it worth it for the high download speeds? We'll look at some of the considerations for installing fiber optics at your worksite and if it makes sense for you to upgrade.

There are many components that make up a successful fiber optic installation. At Kastom Technologies Limited we specialize in multiple cable installation services such as fiber optic fusion splicing and fiber optic cable repair.

We have certified fiber optic contractors that will ensure your business gets the reliability and speed of all kinds of internet tasks. Should your newly installed fiber optic cables get damaged in any way, our contractors can speedily repair all damages.

When your business invests in fiber optic cables, you will receive higher bandwidth capacity and will become less vulnerable to electromagnetic interference. Regardless of your working environment, our skilled fiber optic engineering will guarantee appropriate integration of fiber optic cabling into new or existing buildings.

The security, performance and sustainability needs of your project will be addressed by our team to meet your business requirements. We will also perform network audit services to inform you of what you currently have in your facility.



## Fibre Optic Network Design

Let our fibre optic installation team design & install your fibre optic network solution from end to end, day one to completion, on time and always on budget.

## Fibre Optic Installation

You can count on our fibre optic installation and design solutions team to take care of all your fibre optic cabling needs. All our fibre optic solutions are bespoke with your budget and data cabling needs in mind.

## Fibre Optic Splicing

In order to keep your network running at the optimum level, we would recommend a regular maintenance package. With our state of the art cable testing equipment, we can identify any potential problems

## Fibre Optic Maintenance

In order to keep your network running at the optimum level we would recommend a regular maintenance package. With our state of the art cable testing equipment we can identify any potential problems.



# STRUCTURED CABLING

When it comes to business, speed and structured communications help systems run smoothly. Structured cabling solutions give you greater efficiency with voice, data, audio and video signals for your network.

## Copper/ Fiber Optic Cabling Infrastructure Solutions

Structured cabling is a telecommunications cabling infrastructure that is composed of several structured elements that follow International network cabling standards. The standards specify the layout of the wiring for data centres, offices and buildings for data or voice communications. Structured cabling has many benefits that make it supersede point-to-point cabling in larger networking systems.

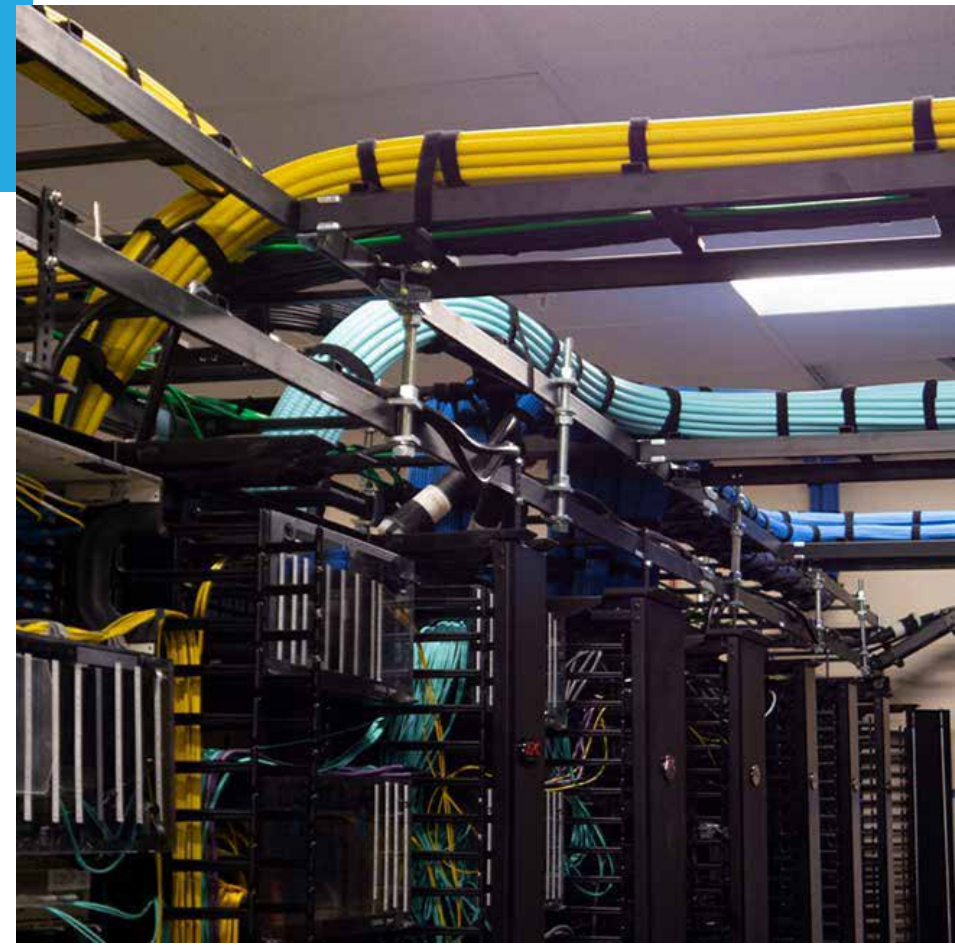
- Infrastructure Design / Build
- Complete Voice, Data & Video Cabling
- Riser, and Backbone Cabling ( OSP )
- Moves, Adds, and Changes
- Conduit Systems & Cable Trays

## Voice and Data Cabling

Get network cabling services that are tailored to your specific needs. Our data installers design systems that will support multiple hardware uses and meet current and future requirements. Safe and Sound voice and data cabling contractors service businesses of all sizes.

## Fiber Optic Installation

With higher bandwidth capacity and less susceptibility to electromagnetic interference, fiber optic cable installation is designed for high-performance data networking. We're proud to be a leader among structured cabling companies for businesses in need of fiber optic cabling projects.





## ELECTRIC MOBILITY

At Kastom Technologies, we are committed to sustainable mobility as a key tool in the move towards an emissions-free energy model and combating climate change. Discover how we work to facilitate access to electric mobility for all citizens.

We are promoting sustainable mobility so that it is within everyone's reach. Electric mobility is the future, and that future starts today. All over Africa, there has been a global shift towards the adoption of electric vehicles with rising consumer interest making a significant impact. Combining decades of global experience with a portfolio of specially designed solutions, our team is here to help you navigate the fast-moving world of e-mobility and develop the next generation of electric and autonomous vehicles.

- Hybrid electric vehicles (HEVs).
- Plug-in hybrid electric vehicles (PHEVs)
- 100% electric vehicles (EVs)

## Our Solutions

We are transforming various sectors in Africa by charting the future of electric vehicles in Kenya.



**Corporate Commute**



**Electric Logistics Solutions**



**EV Charging Stations**

## Charging Stations setup

Choosing the right EV chargers for your business is crucial. We partner with organizations to build Kenya's leading network of electric car charging stations, to create the next step in EV mobility solutions for businesses.

## Electric Mobility Solutions for Businesses

We provide smart transportation solutions from EV chargers for businesses, through electrified fleet depots and opportunity charging in restaurants, office complexes, or hotels, to high-power chargers for the highway stations of the future.

## Electric cars Leasing

Electric or hybrid vehicles are often more expensive to buy than their petrol or diesel equivalents. Leasing, however, offers a decidedly affordable gateway to being able to drive a green vehicle and at the same time take advantage of the many other benefits of leasing green.

## Quality replacement parts

For many, owning an electric vehicle is a major convenience, but of course, it also comes with much responsibility. Electric cars require routine service and the occasional repair from time to time, but no matter what service your vehicle needs it is important to use quality parts.



## INTERNET OF THINGS

Bridging the physical and digital worlds to create intelligent eco-systems that deliver value at every step.

### **Make a smarter approach to business by harnessing the power of IoT.**

The Internet of Things (IoT) intelligently connects physical devices and is capable of collecting and exchanging real-time data from user environments, driving massive gains in efficiency, business growth, and quality of service.

We leverage the capabilities of IoT to build cutting edge energy and utility solutions that promote efficiency, easy monitoring with remote control and simplicity in energy consumption for households and industrial applications.

### **Our IoT Focus Areas**

Leveraging our experience in Artificial Intelligence (AI) and Machine Learning (ML), we have developed the infrastructure for Predictive Maintenance in industries and intuitive Driver Monitoring Apps.

- Energy management with real-time data logging
- Resource Tracking and data logging
- Water & Gas Resource Management and Billing
- Agribusiness Automation & Monitoring





## Industries

Our industry expertise allows us to share the latest research & our thinking on emerging industry trends, as well as finding solutions to accounting or technical issues unique to a particular industry sector.

### **We understand your industry, and the road ahead**

Design Group's seasoned professionals provide total operational solutions to a broad range of industries and market sectors, including Life Sciences, Semiconductor, Industrial, Food and Beverage, Dairy, Household and Personal Care, Industrial Machinery and Equipment, and Oil and Gas.

- Solutions for your manufacturing business
- Production of bespoke tools and machines
- Delivering the best results for reasonable cost

## RENEWABLE ENERGY

Kastom Energy Limited is our subsidiary renewable energy solutions provider offering a 360-degree total solutions package to its customers that covers the entire spectrum of solar energy projects.

For more than two decades, our turnkey solutions and lifetime support combined with the best-in-class products have created value for our customers throughout Africa.

### Building Future-ready Energy Solutions

Worldwide and in Kenya, solar power generation is gaining more and more prominence with each passing day. Solar energy is an essential energy resource that has the potential to improve power supply in Kenya, predominantly in remote areas, while augmenting the overall security of Kenya's energy supply.

### Utility-Scale Solutions

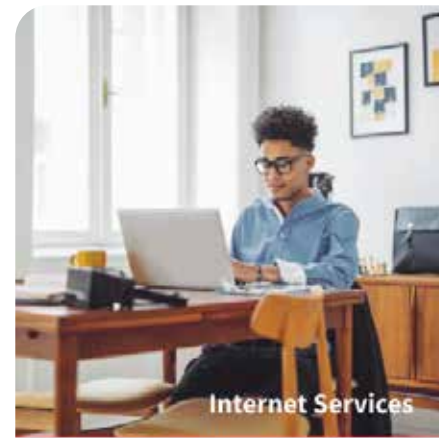
As electricity costs continue to rise and concerns over emissions and pollution mount, solar power offers a clean, renewable alternative for utility-scale energy providers.

### Commercial Solutions

We specialize in developing solar energy solutions with a keen interest in helping companies reduce the cost of electricity by generating and utilizing solar energy for their operations. Our solution is ideal for agricultural activities, commercial buildings and factories.

### Residential Solutions

We make clean energy available to homeowners, businesses, schools, non-profits and government organizations at a lower cost than they pay for energy generated by burning fossil fuels like coal, oil, and natural gas.



### Operation & Maintenance

We have complete industry experience and over 15+ years of expertise in the design, installation, operation & maintenance of solar PV energy systems. We have successfully installed a large number of Solar Power projects across Kenya.

# BUSINESS SOLUTIONS

Our business solutions leverage technology and creative solutions to cut operating costs, grow your client base, as well as increase operational efficiencies, and enhance opportunities to increase revenue.

## **Offering End-to-End IT, Marketing, Creative & Business Value Tools – From Promise to Proof.**

Our solutions reflect a deep understanding of real-world business challenges, thanks to our utilization of technology to render practical solutions. As a result, we have successfully completed 300 plus projects within and outside the African markets.

Our Business Solutions was built on core values and continuously works towards excellence, which results in uncompromising quality and outstanding performance.

## **Business Applications**

Business in the modern age require modern tools to keep up with the ever changing technological land scape. We provide businesses with advanced CRM and ERP applications for easier management, customer interactions and simplified operations.

## **Cloud Solutions**

We believe that now more than ever, organizations need secure systems in place to aid collaboration. Therefore, we help connect people, operations, products, and customers for organizations of all sizes.

## **PBX Telephony Solutions**

Our Cloud PBX (Private Branch Exchange) offering promises to minimise management and operational headaches, while improving client relationships and ensuring seamless communications across all your devices.



## **Digital Assets & Marketing**

Our digital creative division offers small to medium sized businesses creative products and solutions such as digital marketing solutions and online visibility tools such as websites development and mobile applications development as well as other important digital assets for your organization

## INTERNET SERVICES

Amwerk supports customers through every step of the manufacturing process. From prototyping to delivery, each customer is assigned a dedicated support team to seamlessly move programs through production.

### **Fast, affordable and reliable internet for your home or business**

StimaNet is a company formed from our resilience during the covid-19 pandemic. It's a company built to offer affordable internet connections to middle income parts of Kenya as well as providing free internet to Charitable and humanitarian organizations within the areas we operate . Our solutions allow our clients to communicate and collaborate reliably and securely.

Whether you are at the office or you work from home, we've got you covered with everything you need to stay connected.

### **Pioneering Affordable Internet for homes in Kenya**

Leveraging our experience in Artificial Intelligence (AI) and Machine Learning (ML), we have developed the infrastructure for Predictive Maintenance in industries and intuitive Driver Monitoring Apps.



# PORTFOLIO



## Residential Power Backup

CAPACITY: 5Kw

Karen Hardy



## 40KW REA Minigrids

CAPACITY: 40Kw

Nairobi



## Commercial Ground Mount PV System

CAPACITY: 170KW Kitengela



## Commercial Roof Mount PV System

CAPACITY: 700KW

Nairobi



## Residential Hybrid 3 Phase System

CAPACITY: 10KW

Nairobi





### Solar PV System

CAPACITY: 5KW

Wote



### Common Area Solar PV

CAPACITY: 5Kw

Kenol Muranga



### Vivo Shell Kahawa Sukari

CAPACITY: 12Kw

Kahawa Sukari, Nairobi



### Borehole Solarization

CAPACITY: 8 KW

Narok



### Kamulu Borehole

CAPACITY: 11KW

Kamulu, Machakos



### Lang'ata Residential Solar PV System

CAPACITY: 6Kw

Lang'ata, Nairobi



### Kamakia A01 Residential PV System

CAPACITY:

1Kw Kamakia



### Commercial Grid-Tie System

CAPACITY: 600KW  
Nakuru

### Kamulu Solar Water Pumping System

CAPACITY: 15Kw  
Kamulu

### Nanyuki Commercial PV System

CAPACITY: 100Kw  
Nanyuki



### Solar Water Heating System

CAPACITY: 6400 Liters  
Dorothy Park Langata By Sekandi Holdings



### 100Kw Roof Mount System

Nairobi



### Solar Water Pumping

CAPACITY: 11KW

Kabiria

### Sultan Hamud Borehole

CAPACITY: 4KW

Sultan Hamud





**Ridgeways 10kw Residential Hybrid System**

CAPACITY: 10KW

Nairobi



**Solar Borehole Water Pumping**

CAPACITY: 4Kw

Emali, Makueni



**Pressurized Flat Plate Solar Water Heaters**

CAPACITY: 1600 Liters  
Ngoingwa for Spus Ventures, Thika



**Solar Water Heater Installation**

CAPACITY: 200 Liters Non-Pressurized  
Komarock Heights



**Roof Mount System**

CAPACITY: 600 KW  
Naivasha



**Roof Mount System**

CAPACITY: 600 KW  
Naivasha





**Goodwe Grid-tie System**  
Nairobi, Kenya

**Ridgeways 10kw Residential Hybrid System**

CAPACITY: 10KW

Nairobi



**Off-grid PV System**

CAPACITY: 100KW

Karen, Nairobi



**SMA Multiclustor System**

CAPACITY: 50KW

Nairobi

**Apex Steel industries: Megawatt range projects**

Nairobi







**Multicluster SMA Residential off-grid System**  
Nairobi



**Kastom Technologies Limited**  
Major Projects Portfolio 2023



12 KWp Jinko | 10KW Sermatech | 40 Kwh Pylontech Residential ESS Ridgeways Nairobi



350 KWp Jinko | 300Kw -1.080 Mwh Jinko BESS Containerized Offgrid System | Busisi Island Uganda



145.22KWp Jinko | 125Kw SMA - Ongrid Loseto Flowers Farm Nakuru, Kenya



8KWp Jinko | 8KW Inverter Deye | 10 KWh Felicity Residential system - Loresho Nairobi, Kenya

**Kastom Technologies Limited**  
Major Projects Portfolio 2023



24 KWp Jinko | 24KW Jinko | 40 Kwh SEPLOS MGAS Utawala e-bike charging station



22 KWp Jinko | 15Kw -Borehole Solarization In Machakos County Private Farm



843 KWp Jinko | 700Kw Huawei - Ongrid Kenchic Thika in Partnership with Chloride Exide Kenya Limited



843 KWp Jinko | 700Kw Huawei - Ongrid Kenchic Thika in Partnership with Chloride Exide Kenya Limited

# Kastom Technologies Limited

## Major Projects Portfolio 2023



24 KWp Jinko | 24KW Jinko | 32 Kwh BYD Masai Mara Solar Offgrid System



8 KWp Jinko | 8 Kw TBB Riiosun II | 10 KWh Eastman Lead Acid – Thika Greens Residential Carport

**Commercial Brands Partners.**

**Deye**



**Jinko Solar**  
*Building Your Trust in Solar*



**SHIFTING THE LIMITS**



**ELFBULB**  
POWER YOUR LIFE

**WECCO**



**SUNGROW**  
Clean power for all

powering tomorrow  
**Growatt**



**GOODWE**  
YOUR SOLAR ENGINE



**JA SOLAR**



# OUR CLIENTS





# Kastom

Technologies Limited

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