



KNIGHTS ENERGY
for professional Solar Solutions



COMPANY PROFILE

HOME OF RENEWABLE ENERGY AND ELECTRICAL CONTRACTING

& Clean Mobility Consultants

www.knightenergy.co.ke | www.driveelectric.co.ke

Open Power for a brighter future.

We empower sustainable progress.



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About us

At Knights Energy, we provide solar solutions for industrial, commercial, and residential applications, that enable individuals and organizations to be part of a sustainable green energy powered world

About Knights Energy

Knights Energy is a Renewable Energy Company specializing in Low Carbon Technologies with a special emphasis on Solar and Wind Energy in Africa. The Company has the capacity to realize projects of variable complexity and provide the expertise to fully supply and install simple to complex on-grid and off-grid photovoltaic power plants with verifiable experience in the task at hand.

Over the years, the Company has become one of the biggest installers and maintenance partners for medium and large scale solar installations in the region with a considerable number of solutions for domestic and Industrial projects.

About Drivelectric

Drivelectric is a project of Knights Energy. We are the leading clean mobility consultants in Kenya & East Africa, specializing in eMobility. Our pivotal goal as Drivelectric is to develop, advocate and enhance mobility solutions that rely on renewable energy as their primary source of energy. We offer a counter measure against the soaring CO2 related emissions in the transport sector.

Our e-mobility and Eco-Hub initiatives are among core solutions we offer to varied clients.



FEASIBILITY STUDIES
FOR COMMERCIAL AND
INDUSTRIAL CLIENTS



SOLAR
INSTALLATION
& CONSTRUCTION



OPERATION &
MAINTAINANCE



TRAINING
AND CAPACITY
BUILDING

GOOD FOR YOU GOOD FOR THE PLANET

Our Vision



A Beacon in Provision of Quality and Sustainable Energy Services in Africa

Our Mission



Guided by Innovation, we provide Quality, Reliable Clean Energy Solutions towards a Carbon Neutral Environment.

Our Values

INTEGRITY

Guided by strong moral principles.

TEAM WORK

Working together to achieve clients' satisfaction.

INNOVATION

Researching & implementing creative products & services.

QUALITY

Excellence in the provision of distinct products and services.

SAFETY

Adherence to all safety standards in our daily activities.

PASSION

Self-driven, committed, disciplined, highly energized team

Why us for your Solar Solutions

Knights Energy is one of the Kenya's most versatile locally owned ICT and Renewable Energy Solutions with a wide coverage of Kenya and the East Africa Region. We provide solar solutions for industrial, commercial, and residential applications that enable individuals and organizations to be part of a sustainable green energy powered world. We work to provide options that meet the specific customer needs and are consistent with ensuring **Environmental Sustainability**.

These energy options reduce greenhouse gas emissions and particulates and freeing up fossil fuel for other key sectors, thus improving energy security. Investments in renewable energy are making a growing contribution towards migrating climate change, but to stay below a 2°C increase in average global temperature, these developments need to be significantly enhanced. By mixing these potentials. Kenya can contribute significantly to reduce global GHGs as well as its unhealthy reliance on imported fossil fuels.

Renewable energy can make a major contribution to the twin challenges of responding to a growing global demand for energy services while reducing the negative impacts associated with current production and use.

At Knights Energy Ltd, you will get a wide variety of solutions in today's Information technology and Power Solutions Industry.

Why Solar Energy?



What we do

At Knights Energy, we provide solar solutions for industrial, commercial, and residential applications, that enable individuals and organizations to be part of a sustainable green energy powered world. We work to provide options that meet the specific customer needs.

SERVICES

- Feasibility studies for commercial and industrial clients
- Design and engineering
- Solar Installation and construction as a 3rd party
- Testing and commissioning according to IEC 62446
- Operation & Maintenance (O&M)
- Training and capacity building

01 Mini-grids & Off-grid Solar Projects for Government & Institutions

Looking for ways to Save Energy costs? Looking to invest in an Energy System for your own consumption. There is a simple, reliable and low-cost solution for decentralized energy supply: **PV-powered off-grid systems**. They can be used to build stable, decentralized power distribution grids in remote locations not connected to the public power grid/want to be energy independent.

02 Commercial & Industrial Solar Solutions

We offer a complete commercial and industrial solar solutions for photovoltaic integration & connection, including inverters, transformers and switchgear, electrical distribution, monitoring, supervision and technical support. This is a full solution for DC output to the grid connection point of common coupling.

03 Residential Solar Solutions

Our Eco Smart Home System ensures that the solar power you produce is used in the best possible way. Besides offering great financial benefits improved energy efficiency and greater independence from rising electricity rates, a Smart Home also provides homeowners with a completely transparent energy budget.

04 Electric Mobility

Our current transport sector has to break away from energy- and carbon-intensive development paths that have resulted in higher energy costs, higher Carbon emissions, air pollution, poor public health etc. We all want better transport and lower costs that come from better efficiency.

05 Solar Water Heating

Hot water accounts for a big percentage of the energy. Solar Water heaters are a very effective method of using natural energy to save you money on your energy bills. There are hundreds of designs available to fit any budget.

06 Solar Water Pumping Systems

Our Solar Water Pumping System/Waterbox is specially designed for water supply and irrigation especially in remote areas where no reliable electricity supply is available. It is a complete "Plug & Play" solution for the simplest installation of a solar borehole pumping system.

07 Powerline Construction

Having undertaken the indicated works for Rural Electrification, now Rural & Renewable Energy Corporation, Knights Energy stands well in the experience of electricity generation and transmission. As such, construction of both low & High Voltage Transmission lines are works well within our capability.

Our Solar Solutions

Knights Energy serves its long-term objective of being a one-stop-solution provider for all your home, office and Industrial solutions.



Residential Solar Solutions



Commercial Solar Solutions



Industrial Solar Solutions



Electric Mobility

Energy Transformation in the Transport Sector

ELECTRIC is the new way to drive. It's cheaper, cleaner & quieter. For the longest time, we have talked about the future of mobility being electric, a subject that our Drivelectric team is very passionate about. Well, it's here, and you do not have to wait any longer.

But, after so many years of the same petrol or diesel cars and vans, it's understandable that you may have some questions about switching to electric. Let's get them answered and help you switch!

Why Switch

E-mobility is the development of electric-powered or electronic drivetrains- the progressive concept of moving away from the traditional vehicle design that makes use of fossil fuels and oils. We are committed to offering holistic solutions in the implementation of eMobility in various individual, business and organisational setups which increase efficiency and cost effectiveness, along with sustainable policies that reduce pollution.

We also have an Eco-Hub concept which proves that EV owners can charge their vehicles with solar power, which further lowers the operation cost for the owner significantly.

So why switch?



Savings

What's more, this convenient solution assures you of 70% savings on fuel consumption as you enjoy a smoother, quieter, and safer drive!



Easy Charging

The vast range of EVs fit most of the city's residents. The charging station can be installed at your home or office, providing you with a safe and reliable method of charging your vehicle.



Vast EVs Selection

Our extensive study shows that EV is the only sustainable transport solution today and if ever there was a good time to switch to an electric vehicle, now is the time. Switching is easy- all you need to do is call us!



eMobility Services



E-mobility consultancy

Getting the switch to eMobility from the start of the process is crucial, hence our extensive eMobility consultancy service. We will help you spot efficiencies and opportunities for cost savings that might otherwise be missed. Reducing expenses is our number one goal. Whether you run a fleet of 2 or 200 vehicles, our comprehensive approach can help minimize operating challenges and trim fleet expenses at every opportunity throughout your partnership with us.



Fleet Electrification and Analysis

With any new technology comes uncertainty, and industry-wide 'best practices' have yet to be clearly defined. How can you ensure that you will reap the maximum possible benefits from your investment in electric vehicles? You talk to us. We have in-depth expertise in the current and future performance and costs of EVs, the feasibility of deploying the technology into your fleet, and we are right in the centre of influence policy context that is driving the adoption of ultra-low emission vehicles.



Charging Infrastructure Development Powered by Solar

Installing an EV charging station at your business premises increases cost savings and convenience. We offer EV charger installation from the industry's top brands, matching the station to your needs. From the installation and online integration of every station, to the tracking and billing of all charging sessions, we help you operate and manage your charging stations with ease and efficiency.



Vehicle Sale and Leasing

It is no surprise that most of our clients chose to lease their vehicles. This service enables you to drive the car you want right away and it is also a more affordable approach. In order to accommodate the evolving needs of our clients, we try to give them as many options as possible when it comes to vehicle acquisition. Talk to us about our current inventory, we'll be happy to help you figure out if this is an avenue that makes sense for you.

Our Core EV Offering



Business case for 2-3 wheelers

Sales and Leasing of 2-3 wheelers for motor bikes to a larger population in urban and peri-urban and rural areas powered by solar and battery swapping.



Working class & C&I or corporate solution

Sales of Solar PV with EVs – using gradually financed solutions.



Training & capacity building

EV and Solar training Technical academy with pManifold targeting technical and engineering professionals.

We install, operate and maintain charging stations, as well as monitor their energy flow to analyse the EVs power consumption.

1 Charging at home

One of our services includes installation of charging stations in homes, which has proved to be a safe, efficient and reliable way to charge your EV. Majority of drivers simply plug in their electric cars at home overnight, just like plugging in their mobile phone.

2 Charging at work

For businesses and organizations, we explore options that best match your fleet's requirements and deliver the power you need. The charging infrastructure is reliable, sustainable and a sure bet for the go-green policy.

3 Eco-hub

Eco-Hub is a revolutionary clean energy concept and one of the things it helps deliver is charging EVs with solar power. This significantly lowers costs.

4 Charging Infrastructure

We offer comprehensive solutions for our customers ensuring your EV Charging Station program is implemented and runs smoothly. Our experts will guide you through the site selection for your new stations advising you on the appropriate station and mounting options available.



Why Drivelectric

Knights & Apps, through its DRIVELECTRIC program has been on the fore-front of advocacy and educating the masses on Evs. From our first EV import in June 2016 a blue Nissan leaf, We have Attended many EV related events and partnered with government and Non-governmental Organizations over the last few years to promote and sell the idea of zero emission transport. For the last 6 years our study in e-mobility has been pivotally in data collection in understanding viable business cases



Let's build a greener, eco-friendly environment.



Benefits of EVs

Choosing your EV

Our partnership with Nissan Kenya avails you a wide range of vehicles to choose from. EV's are available in three categories:

- 1. HYBRID ELECTRIC VEHICLES (HEVS):** They combine the benefits of gasoline engines and electric motors and can be configured to meet different objectives such as improved fuel economy, increased power, or additional auxiliary power for electronic devices and power tools
- 2. PLUG-IN HYBRID ELECTRIC VEHICLES (PHEVS):** These use a petrol or diesel engine alongside the electric motor, which can then take you many hundreds of miles. They have the ability to run on electric-only at lower speeds or for local journeys; or a combination of both.

- 3. 100% ELECTRIC VEHICLES (EVS):** These vehicles need to be charged. Their high performance batteries are used to provide power to an electric motor, which in-turn drives the wheels. Some of the new breed of 100% electric cars can drive over 200 miles on a single charge, and this is increasing all the time.

HOW FAR CAN YOU DRIVE?

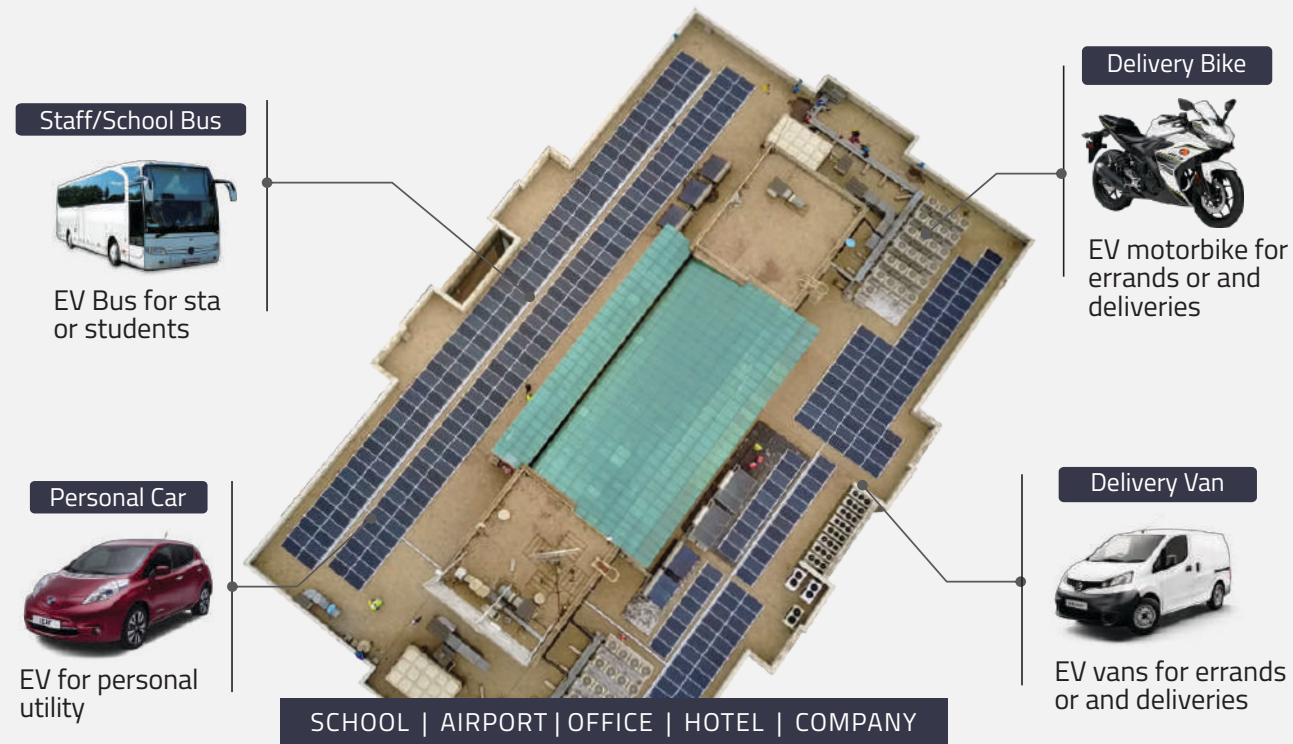
With a 100% EV, you're well able to drive over 160kms on a single charge with ease (and some considerably further). However, we recommend these for short distances within the city. Should you be driving further, PHEV is a better option for you. This hybrid model, makes that possible by running on both the electric motor and the conventional petrol or diesel engine. The overall range here is of hundreds of kilometres.

The Future of Mobility is Electric. Transport is one of the main sources of urban air pollution. This sector contributes approximately one quarter of all energy related carbon dioxide emissions to the atmosphere. Fuel consumption by transport is expected to increase rapidly due to urbanization and economic growth, so it really is the right time to switch to Evs. Switching to EVs is an absolute win for you and our environment and benefits you in multiple ways;



- Lowering your costs by up to 70% is good enough reason to switch
- Low maintenance costs due to minimal wear & tear from the propulsion system of the EVs
- Zero emissions
- Smoother acceleration
- The lowered center of gravity improves on safety of the vehicle
- Regenerative braking adds mileage to the car owner
- Reduced noise pollution

The Ecohub Concept

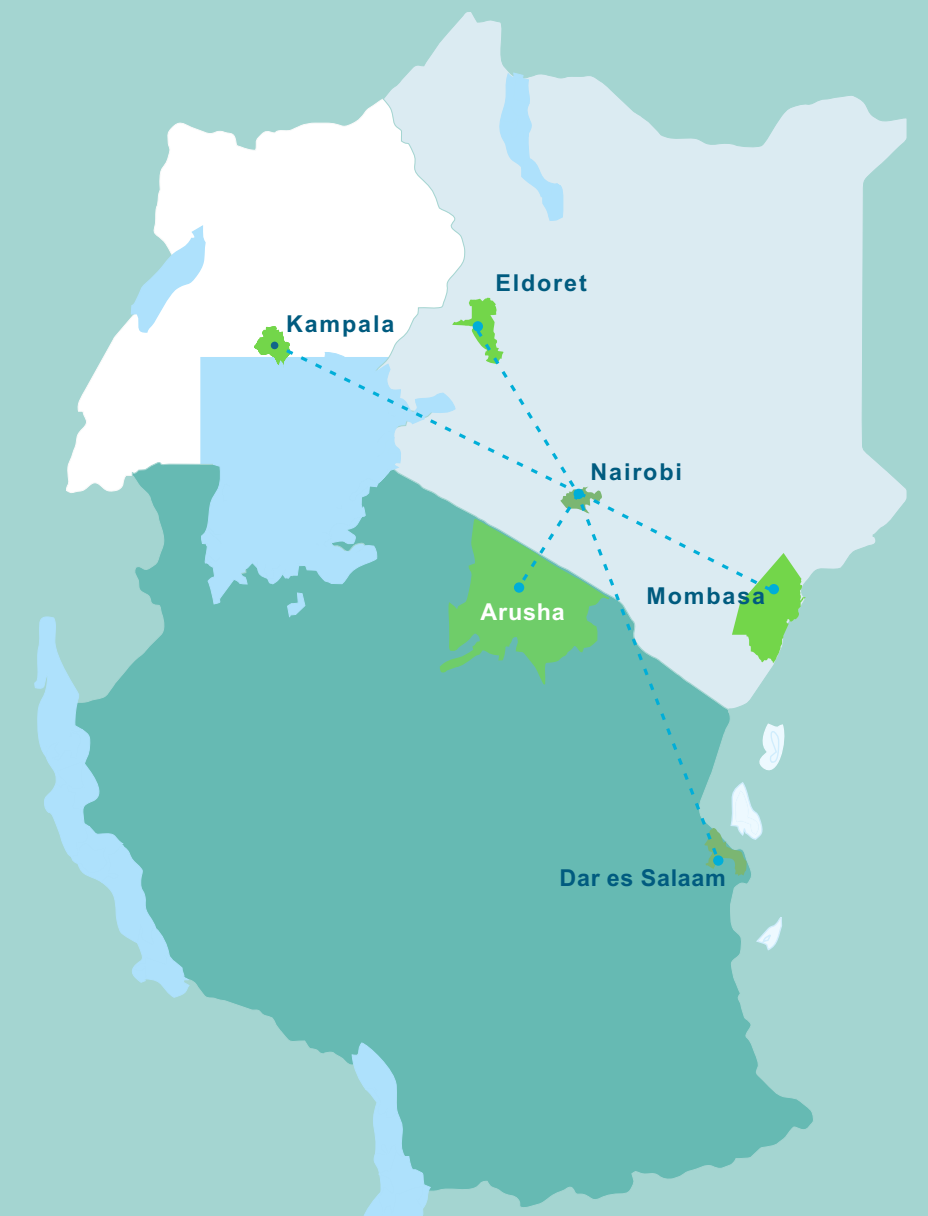


Revolutionizing Transport and Achieving Energy Security

We are proud to be pioneering the **ECOHUB CONCEPT** that is truly revolutionizing the transport sector. Whether it is reducing maintenance costs, realizing huge fuel savings or meeting sustainability goals, it is clear that electric vehicles are a better choice for business and this concept is at the heart of that agenda.

The Eco-Hub Concept involves the development of an integrated electro mobility ecosystem powered by solar. This is a sustainable business model that can be implemented across various transport models resulting in a magnitude of energy and cost saving as well as environmental benefits.

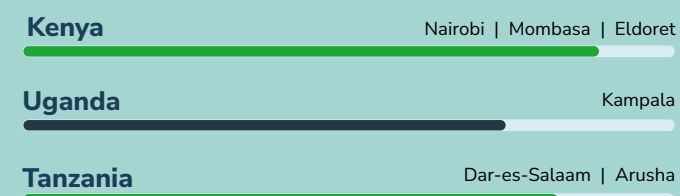
- **Eco-hub for Electric Vehicles :** in public transport in the city to reduce emissions due the rapid growth of 2 to 3 wheelers in public transport. Excess energy can be used to charge spare batteries
- **Commercial Eco-Hub:** Centrally located in a facility with a large number of personnel using EVs.
- **Small Office or Home Eco-Hub:** Personal EVs can be charged using this hub at Home or at the office. Surplus energy can offset costs at the location of the hub – as is for Knights Energy Karen Branch business case.
- **Institutional Eco-Hub:** Located in an institutional setup with mass transport using electric busses or large organizations with staff busses such as schools and factories.



Where we've been

Our core values make us the best at what we do. We assist our clients in achieving their goals of cost stability, energy independence, and environmental stewardship.

With a top of the class team, we have built a long list of clients (both in the commercial and residential sectors) who cover a wide geographical scope, in and out of the country; some of whom you can see on the map on the right.



Our Competitive Advantage



Cost Reduction

Most energy consumers have **aggressive cost reduction** initiatives as well as sustainable goals for their utility budgets- **utility energy purchases and fuel costs**. Knights Energy, brings a unique value proposition focusing on the niche energy/transport and environment/ and related cost reduction and sustainable solutions. We have variable experience in **renewable energy; energy management and Electric Mobility** to help lower costs for our customers and help organizations meet their sustainable goals.



Un-parallel Expertise

Our expertise covers Energy generation, Energy Management & Electric Mobility which leads to generation consumption and reporting on energy usage and efficiency.



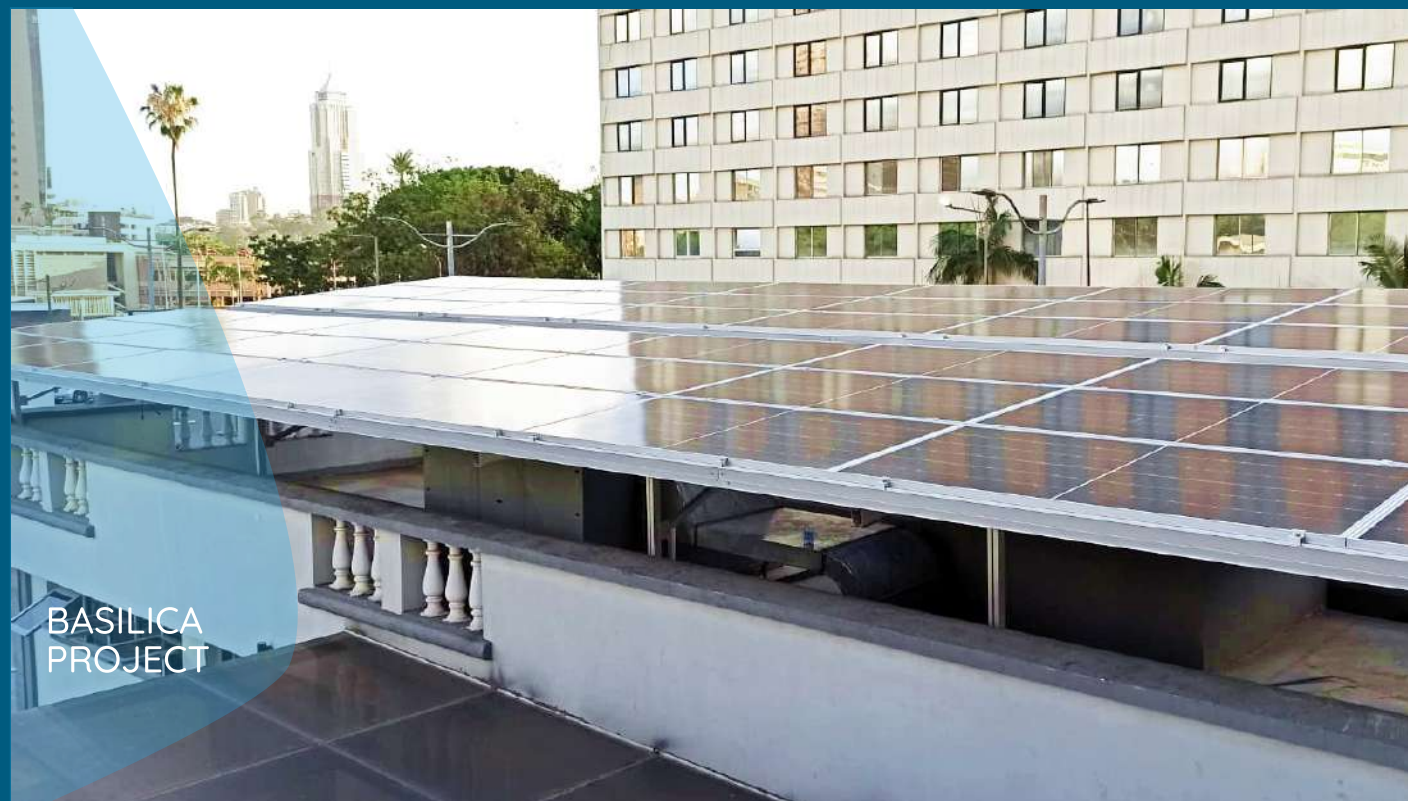
Climate advantage

Due to greater financial pressures on manufacturers and climate changes goals, reducing the environmental footprint of industrial operations has become more important than ever. It is no longer acceptable to attain sufficient profitability without continuous efforts to improve efficiency and reduce cost. Knights Energy helps companies who have changed strategies and are now becoming "greener" focusing on a more efficient use of resources.



Manufacturer collaboration for Technical expertise

Our experts begin by reviewing energy and fuel consumptions to identify cost savings and target processing areas where resource conservation opportunities exist.



Meet Our Team

"We are at the forefront of Renewables Technology and Energy Transformation in the region. As we spread the awareness of the escalating CO2 emissions, we help organizations meet their CO2 and Energy costs offset targets. Pioneering e-Mobility in the region is something we are also very proud of."



Romano Francis

A Successful training Consultant with a 15 years' experience in corporate training and business Development consultancy. He is the co-founder of Knights and apps Ltd and a current Managing director. He holds a Bachelor of Arts in Philosophy and Psychology from the Urbaniana University of Rome and is a certified Microsoft ICT engineer. Romano is an ardent proponent of use of renewable energy, environmental management and energy efficiency and management with emphasis on practical ways of investment in energy.



Japheth Kipkirui

Japheth is profoundly and directly involved in the renewable energy industry. His extensive knowledge of renewable energy coupled with eMobility transition passion makes him the perfect addition to the Drivelectric team. His extensive network and strong relationships with international developers position him perfectly within this rapidly developing industry. Japheth is a skilled and proven negotiator with a creative involvement in all aspects of Drivelectric.



John Weyama

Arguably one of the most diligent and inquisitive minds at Knights Energy. He is an Electrical Engineer with 2 years' experience and has gained extensive experience in Renewable Energy Technologies and is key in the development of Eco-Hubs towards the Transformation of Energy in Transport.



Felix Muchiri

Felix is a Renewable Energy enthusiast with a passion in the development and adoption of renewable and sustainable energy solutions. He has 2 years of extensive experience in Research, social media relations and project development. He has helped inform the development of Electrical Mobility standards in Kenya.

Reference Projects

Our Reference Projects are testament to our success in delivering world-class solar power plants to leading investors in the PV sector.

1. IBER AFRICA
2. TWO RIVERS MALL
3. BASILICA
4. KISUMU DEPOT
5. SAI RAJ
6. GLOSEC MEGAPACK
7. OXYPLUS INT'L
8. BAT LIKONI
9. SIGINON
10. BAT THIKA
- 11.



1



2



3



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7



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9



10



11



12



KNIGHTS ENERGY
for professional Solar Solutions



THANK YOU

Let's build a greener eco-friendly environment

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