



RONCHO ENERGY

Energy Solutions | ICT Solutions | Engineering Services



Corporate PROFILE

Technology at Work



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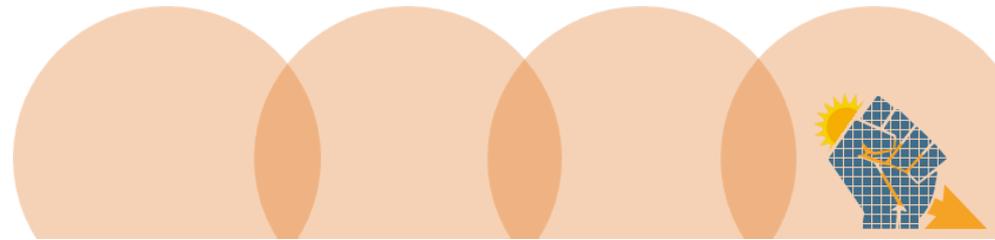
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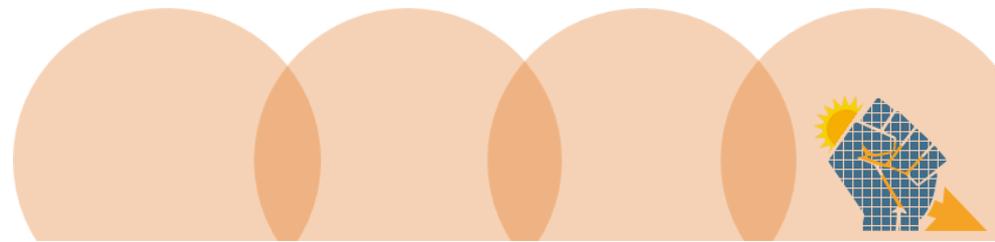


WHO WE ARE



WHO WE ARE

- Roncho Energy mobilises engineering and technology concepts to tackle 11 out of 17 sustainable development goals. Our key objectives are to improve access to clean energy and access to information within Nigeria.



WHO WE ARE

- Roncho Energy is a limited liability company incorporated since 2007.
- We provide **affordable and clean energy solutions, ICT solutions, and engineering services.**

- **Our Vision**

Roncho Energy will become the leading provider of technology solutions for clean energy and ICT systems in Nigeria by creating innovative solutions that are available, affordable and scalable.

- **Our Mission**

- To provide technology solutions by applying creative and innovative concepts to improve access to clean energy and information in Nigeria.

- **Find Us At:**

PORT HARCOURT

163A Okporo Road,
Rumuodara

LAGOS

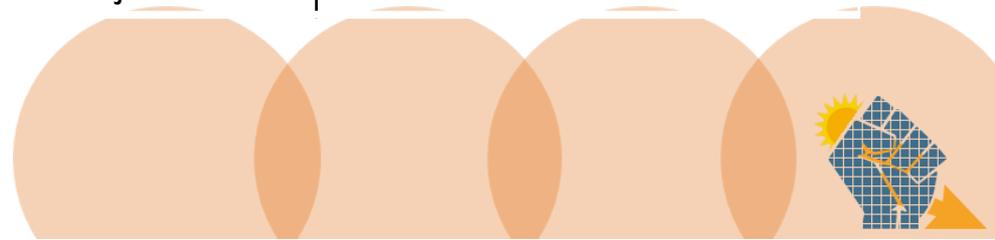
31B Remi Fani Kayode
GRA, Ikeja

ABUJA

Deogratias Plaza, Opp.
Modern Market, Utako

info@ronchoenergy.com

+234 803 735 7252



WHO WE ARE

Our Commitment to **QUALITY, HEALTH, SAFETY & ENVIRONMENT**

- Eliminate HSE incidents across our operations
- Prevent pollution
- Investigate and prevent recurrence of quality and HSE-related non-conformances.
- Set tough but achievable QHSE objectives, monitor progress and ensure continuous improvement.
- Minimise our impact on the environment.
- Train and develop all our employees
- Ensure compliance with applicable local and international legislation.

The company's integrated management system is based on the principles of ISO 9001: 2008, ISO 14001:2004 and OHSAS 18001 and incorporates the requirements of the IMO: ISM code for the safe management and operation of our facilities and projects.



WHO WE ARE

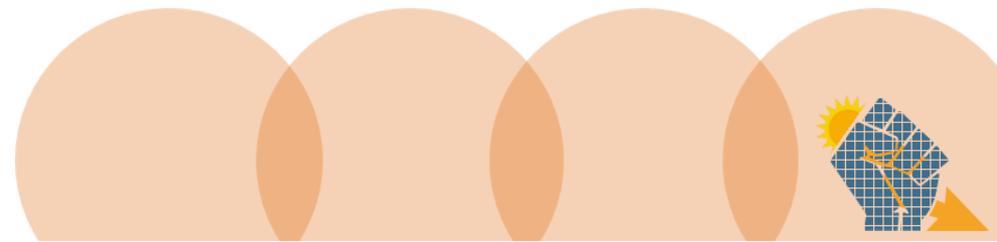
Technologies we use

T E S L A



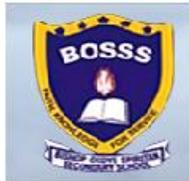
WHO WE ARE

- Our Partners - Development & Finance



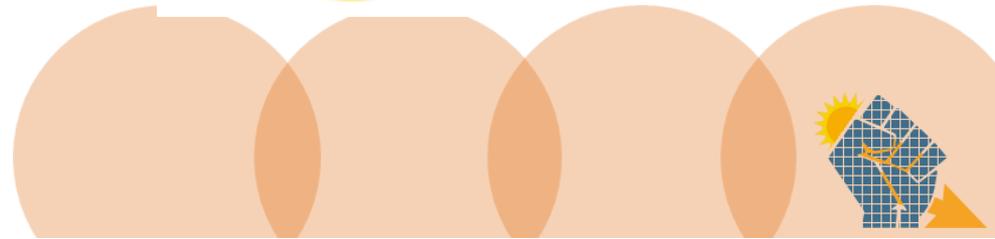
WHO WE ARE

- Our Key Clients

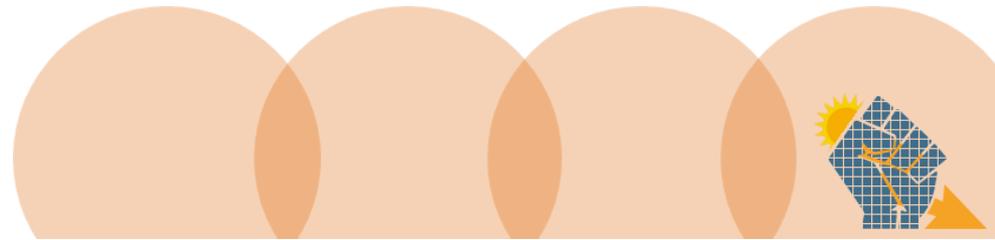


WHO WE ARE

- Licenses & Registrations



WHAT WE DO



WHAT WE DO



- **Energy Solutions (Development, Installation, O&M)**
 - Standalone Solar Systems (PV & Hybrid)
 - Energy Back-Up (UPS) systems
 - Solar-Powered Grids (Mini-Grids, Grid-Connected, Grid-Interleave)
 - Solar-Enabled Applications (Street Lights, Water pumps, water purification and Air-conditioning)
 - Grid Extension Projects including HVAC installations.
- **ICT Solutions (Development, Installation, O&M)**
 - Building/Facility Management Systems
 - (CCTV, Access Control, Alarms, PAGA Systems)
 - Bespoke Software/Applications
 - Computing Hardware, Networking and Server Management
- **Engineering Services**
 - Procurement, Installation, Operation & Maintenance
 - Consultancy Services
 - Information & Communication Systems & Technologies





RONCHO ENERGY

Energy Solutions



ENERGY Solutions

Technology at Work



Standalone Solar Solutions

Solar Plug & Play Products

We offer affordable Solar Plug & Play products that tackle the most essential power needs for underserved communities.

Flagship products (Orb Energy)



Solectric 10

Solar Lantern

- ✓ Charges mobile phones



Solectric 15

Small Home Lighting

- ✓ 2 LED Bulbs included
- ✓ Charges mobile phones



Solectric 30

Small Home Lighting

- ✓ 4 LED Bulbs included
- ✓ Charges mobile phones



Standalone Solar Solutions

Solar Plug & Play Products



Solectric 120

Small Home Entertainment System

- ✓ 40W Solar Panel
- ✓ Power Console with in-built battery
- ✓ 4 LED Bulbs included
- ✓ 22" DC LED TV included
- ✓ Easy to install

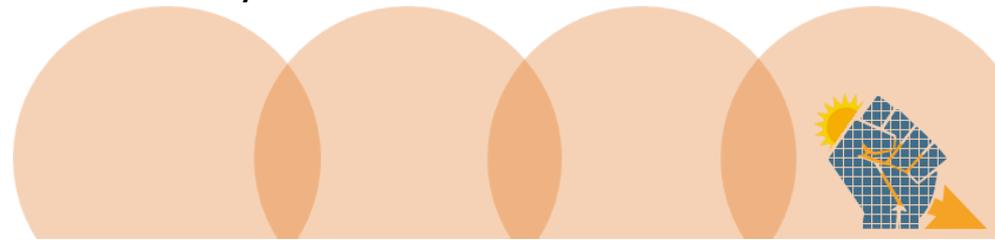
How to order (sales@ronchoenergy.com, 090 6992 0242):

We have distributors that make these plug and play products available anywhere in Nigeria. Contact us to connect you to the right channel.

yudala
...the largest online & offline retail chain
(Online)

Ibrahim Umar
(North East & South)

Brands Optimal
(West)



Standalone Solar Solutions

Component-Based Solar Solutions for your **home or office**

(SOLAR PANELS + INVERTER + ENERGY STORAGE)



Standalone Solar Solutions

Component-Based Solar Solutions for your home or office

Solar Panels + Inverters + Energy Storage are best for clients that:

- ✓ receive little or no electricity;
- ✓ want to reduce or stop paying electricity bills;
- ✓ Want to reduce or stop spending money on fuel.

At Roncho Energy we consult with our clients using a 5-stage process that guarantees maximum value from your investment in a power solution.

5-stage Installation Process

- Capture Client Requirements
- Preliminary System Design (Establish main system components)
- Site Assessment
- Final Bill of Material (Logistics, Civil Works and Finalised BOS)
- Mobilisation, Installation & Commissioning



Standalone Solar Solutions

Component-Based Solar Solutions for your **home or office**

Supported Components / Products

Solar Panel 



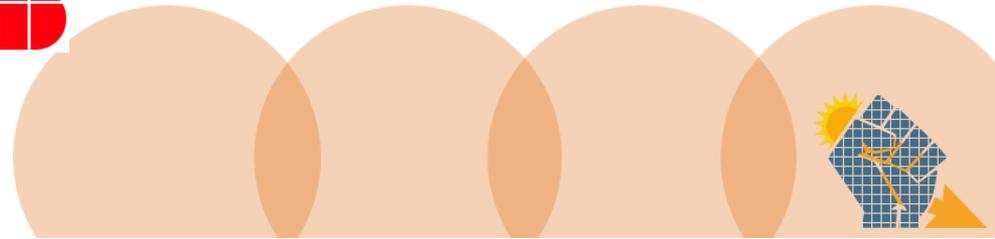
Inverters 



Batteries



BOS
Parts



Standalone Solar Solutions

Component-Based Solar Solutions for your **home or office**

CONTACT US TO DISCUSS YOUR PROJECT (inf@ronchoenergy.com)

Payment Options ¹



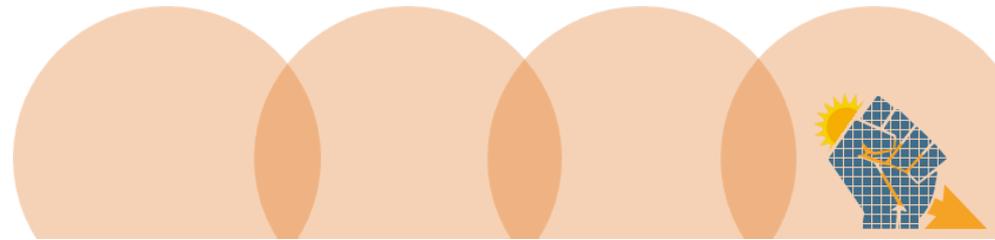
A **Direct purchase** requires full payment for the solution. This is attractive to customers that want to own the solution upfront.

A **Hire purchase** allows our customers to split the payment for the solution over several months.

A **Lease agreement** allows our customers to rent (but not own) the solar solutions.

A **Power Purchase Agreement** is similar to the lease arrangement, except that the client only pays for kWh consumed from the system. *This option is only available to businesses.*

¹ Some payment options require detailed due diligence including but not limited to financial checks to be performed on prospective clients before an offer is made. An offer is made solely at the discretion of Roncho Energy. Interest rates, Insurance, maintenance fees and other charges may apply.



Energy Back-Up Solutions

Back-Up Solutions for your **home, office and facilities**

(INVERTER + ENERGY STORAGE)



Energy Back-Up Solutions

Back-Up Solutions for your **home, office and facilities**

Energy storage systems are best for clients that:

- ✓ receive at least 6 hours of electricity (from grid or generator);
- ✓ Want to reduce or stop spending money on fuel.

At Roncho Energy we consult with our clients using a 5-stage process that guarantees maximum value from your investment in a power solution.

5-stage Installation Process

- Capture Client Requirements
- Preliminary System Design (Establish main system components)
- Site Assessment
- Final Bill of Material (Logistics, Civil Works and Finalised BOS)
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Energy Back-Up Solutions

Back-Up Solutions for your **home, office and facilities**

Supported Components / Products

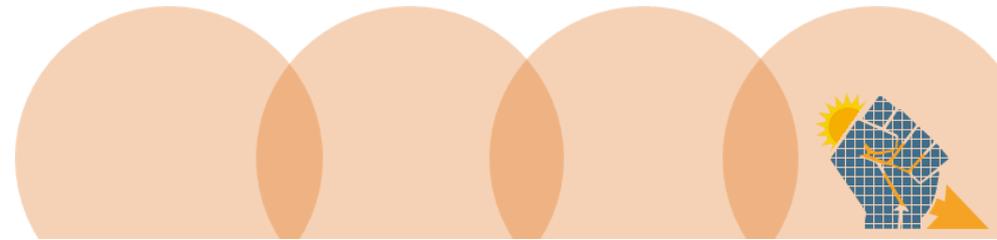
Inverter



Storage



BOS
Parts



Energy Back-Up Solutions

We are technology flexible, and can deploy your project using:



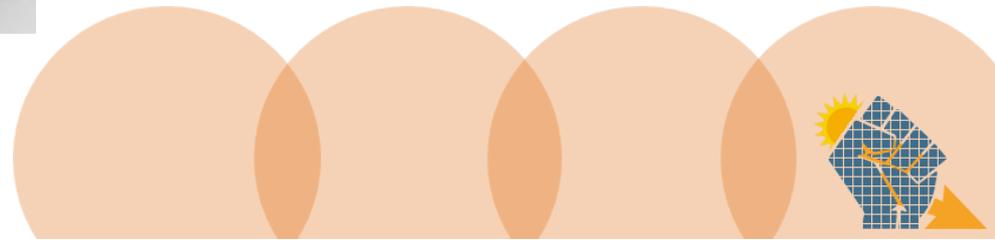
Lead-Acid Battery Stacks



Vanadium Redox Flow Battery



Lithium Ion Batteries



Energy Back-Up Solutions

Flagship Product – Lead Acid Batteries (Trojan)

Lead Acid battery at its best !!! Designed for Nigerian weather.



Technology

Deep cycle, Flooded

DoD vs Cycle

1650 cycles @ 50% DoD

Expected Lifetime

8 yrs based on IEC61427

Supported Applications

Solar self-consumption

Back-up power

Warranty

>1 yr (case by case)

Smart carbon integrated to compensate for PSOC.



Energy Back-Up Solutions

Flagship Solution – Lithium Ion Batteries (Tesla Power Wall)

Seamless backup power. With or without solar.



Usable Capacity	13.5 kWh
Depth of Discharge	100%
Efficiency	90% round-trip
Power	7kW peak / 5kW continuous
Supported Applications	Solar self-consumption Back-up power
Warranty	10 years
Scalable	Up to 10 Powerwall units

*** 1 Power Wall is equivalent to 11 units of 12V-200Ah Lead Acid battery.**



Energy Back-Up Solutions

Flagship Product – Flow Batteries (RedT Vanadium Flow Machine)

Secure your power supplies and cut diesel costs with redT at the heart of your off-grid system

Facilities often suffer from unreliable, expensive energy connections even when a backup diesel generator is provided. By storing and time shifting generated energy, redT flow machines provide dependable power to keep your site operating 24/7.

- ✓ Rugged
- ✓ Durable and secure
- ✓ Low maintenance
- ✓ Remote monitoring
- ✓ Discharge power for over 4 hours and cycle many times per day.



Energy Back-Up Solutions

Telecomms and Outdoor Installations

flexenclosure

eSite 

eSite™ x10 is the world's first hybrid power system purpose built for outdoor telecom sites and to outdoor telecom standards. It has a sealed, patented, tamper-proof unit with passive convection cooling, no filters, no moving parts and it requires no maintenance.

The eSite™ x10 is specifically designed for off-grid and bad grid cell sites. It cuts diesel costs, CO2 emissions and energy related OPEX by up to 90%.



CONTACT US TO DISCUSS YOUR PROJECT

27

 sales@ronchoenergy.com



Energy Back-Up Solutions

Telecomms and Outdoor Installations

flexenclosure



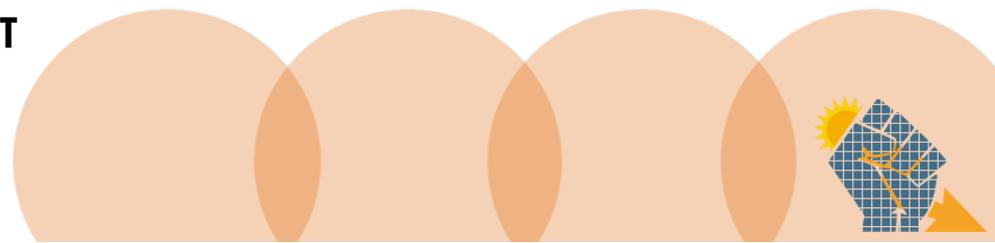
AWARDS WON BY THIS SOLUTION



CUSTOMERS THAT USE THIS SOLUTION



CONTACT US TO DISCUSS YOUR PROJECT

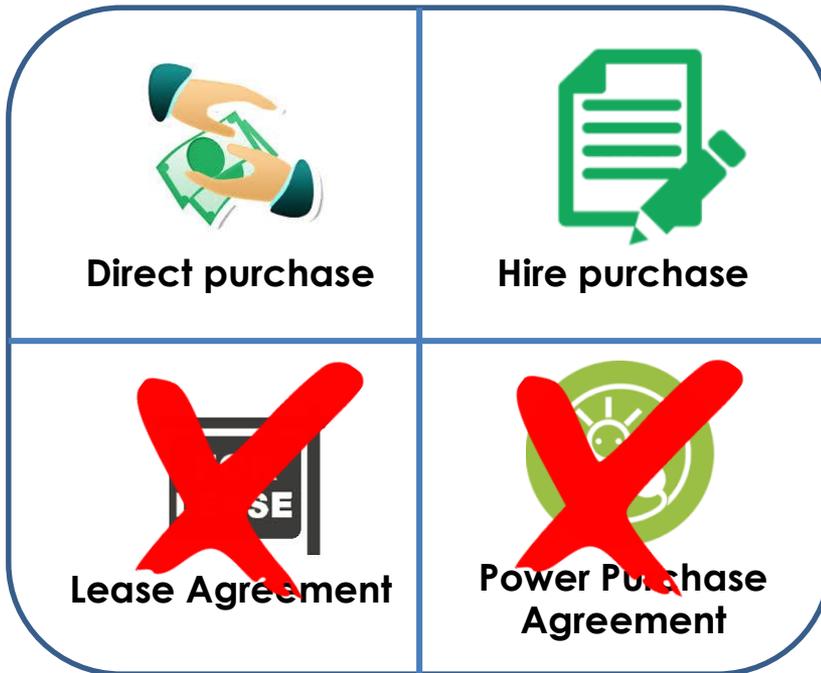


Energy Back-Up Solutions

Back-Up Solutions for your **home, office or facility**

CONTACT US TO DISCUSS YOUR PROJECT (sales@ronchoenergy.com)

Payment Options ¹



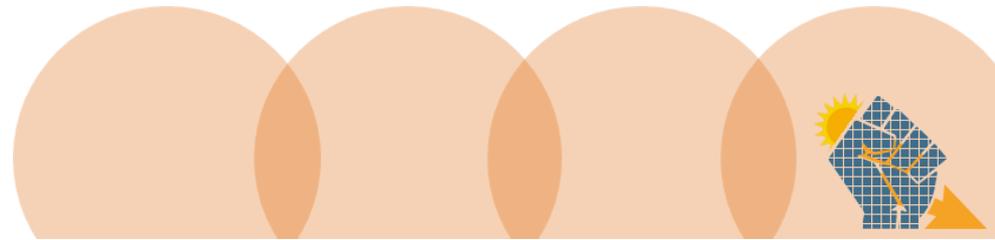
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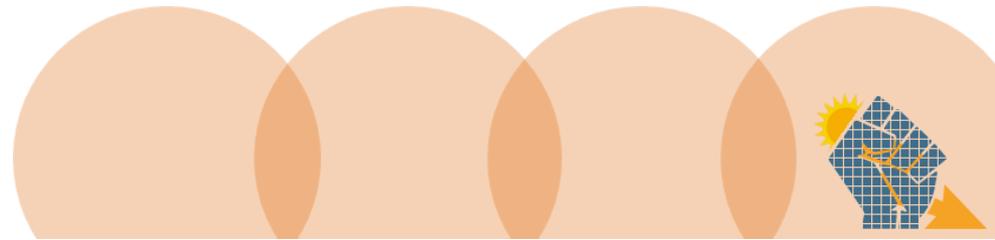


Solar-Powered Grids

Isolated Mini-Grid



<http://www.ennera.com/en/detail-solution/minigrids>



Solar-Powered Grids

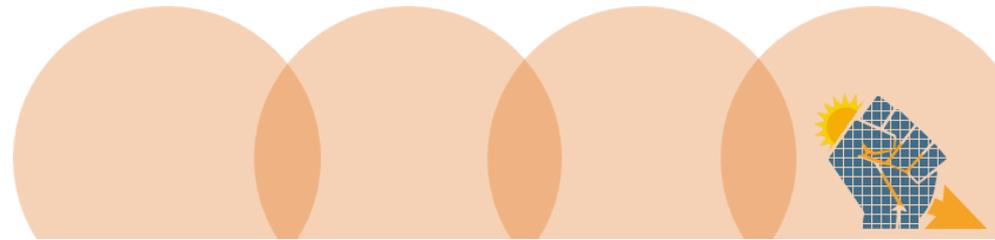
Isolated Mini-Grid

Access to electricity is the backbone of the economic development of a country. There are currently more than 1,500 million people in the world with no access to electricity at home.

The development of mini-grids is a competitive alternative to the expansion of national transmission and distribution grids, which can be commercially infeasible for some communities.

Our Mini Grid solutions are:

- ✓ Designed to operate under extreme conditions (remote locations)
- ✓ Ease of handling and operation: remote control
- ✓ Limited maintenance
- ✓ Quick installation: standard industrial container
- ✓ Customised solution for each situation
- ✓ Competitive pricing



Solar-Powered Grids

Isolated Mini-Grid – Compact Containerised Solution

Isolated Mini-Grids comprise three main sub-systems: generation; distribution; and demand side. We offer containerised solutions that significantly reduce implementation, commissioning & maintenance time.



<http://www.ennera.com/en/detail-solution/minigrids>



Solar-Powered Grids

OEM Support for our Solar-Powered Grid projects

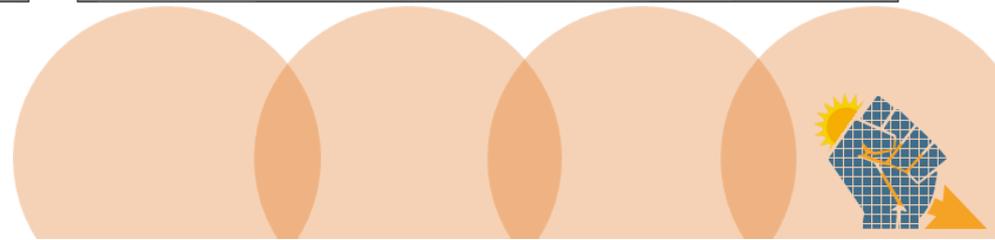


Technical & Project Partners for over 3 years



Orb Energy Private Limited designs, manufactures, markets, sells, installs, and services solar photovoltaic and solar water heating systems for residential and commercial customers. The company's products include solar inverters, solar lighting, solar street lights, solar rooftop, solar power plants, solar water pumping system, modular and centralized solar water heating systems, and heat pumps. It also franchises its branches to customers to sell its products. The company offers its products through a network of branches. Orb Energy Private Limited was founded in 2006 and is based in Bengaluru, India with an additional office in Singapore.

As a leading global specialist in photovoltaic system technology, SMA is setting the standards today for the decentralized, digital and renewable energy supply of tomorrow. More than 3,000 SMA employees in 20 countries have devoted themselves to this task. Our innovative solutions for every type of photovoltaic application offer people and companies worldwide greater independence in meeting their energy needs. In collaboration with our partners and customers, we are helping people transition to a self-sufficient, decentralized and renewable energy supply.

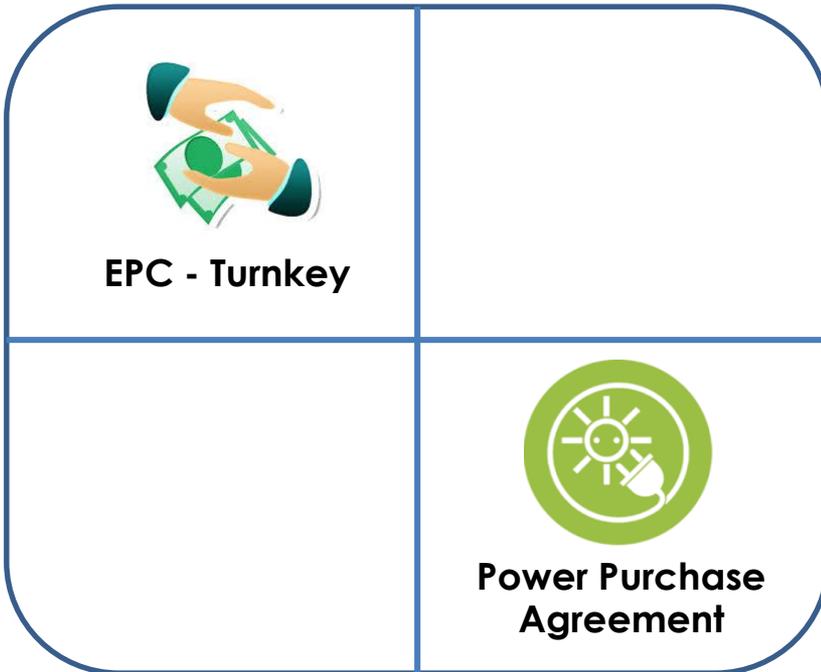


Solar-Powered Grids

Isolated Mini-Grids

CONTACT US TO DISCUSS YOUR **MINI-GRID** PROJECT
(sales@ronchoenergy.com)

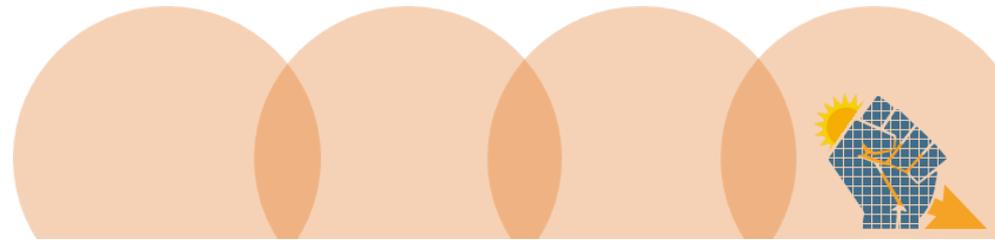
Payment Options ¹



An **EPC-Turn Key arrangement** The client purchases a mini-grid system on a turnkey basis. Roncho Energy will take charge of of the engineering, procurement and construction of the plant, as well as of the preliminary feasibility studies and the permits. This is attractive to customers that want to own and run a mini-grid solution in other to sell power to a community.

In a **Power Purchase Agreement** Roncho Energy shall be in charge of EPC as well as funding and operating the plant. This is the option that allows a greater flexibility. However the client will agree to consume an agreed quantity of electricity.

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Solar Enabled Applications

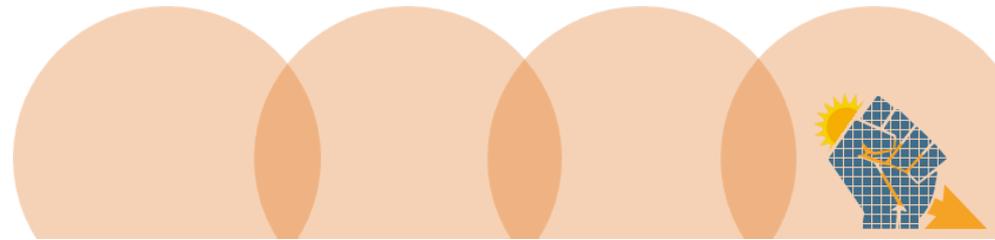
Solar Street Lights



Commercial Solar LED Street Lighting

Roncho Energy's solar powered street lighting systems are an efficient means to provide lighting without the need for standard utility power.

- ✓ Cost savings (No monthly bills).
- ✓ Neat and safe (No Cables).
- ✓ Several sizes (30W, 40W, 60W) available for different applications (highways, freeways, neighbourhood streets, rural roads, etc.)
- ✓ Improve security, sustainability and an overall green image.



Solar Enabled Applications

Solar Water pumps



Solar Enabled Applications

Solar water purification



Containerised Solar Water Purification

Roncho Energy's field tested and experienced water treatment technologies can come equipped with different filtration technologies depending on the raw water:

- Ultrafiltration (river water, lake water, well water).
- Reverse Osmosis (sea water, salted well water, brackish water)

The ultrafiltration membrane removes organic contaminants, viruses, bacteria, cysts, etc. down to a size of 0.04 micron.

In addition to water desalination the Reverse Osmosis technology removes all contaminants, viruses, bacteria, cysts etc. down to a size of 0.01 micron.

No toxic chemical treatment is applied.



Solar Enabled Applications

Solar DC Air-conditioner: Cool your home & office from Solar Energy



Solar Enabled Applications



48V Indoor Wall-Mount Unit



48V Outdoor Unit



48V DC Power System

Solar DC Air-conditioner

12,000 BTU DC Air Conditioner For Off-Grid Solar & Telecom Applications. It's designed to conserve power, and operate reliably for many years without maintenance

- System can be designed for 10, 15, 20 and 24 hr Operation.
- All DC - No inverter or AC supply needed
- Variable Speed & Capacity
- SeaSpray Anti-Corrosion Technology
- Can provide Cooling or Heating
- Exceptionally Quiet Operation



Solar Enabled Applications

CONTACT US TO DISCUSS YOUR PROJECT (sales@ronchoenergy.com)

Payment Options ¹



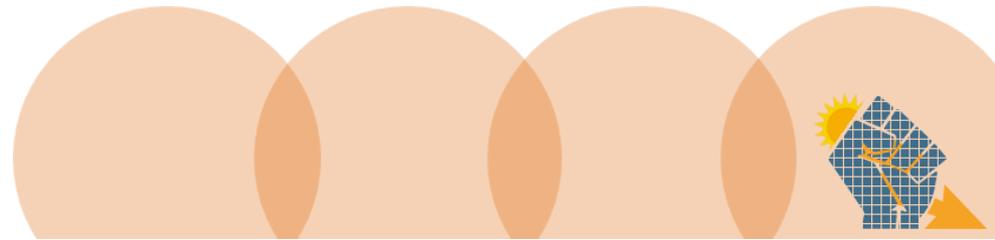
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Grid-Extension Projects



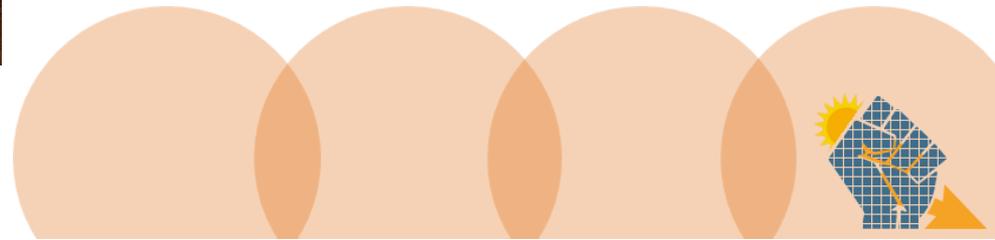
Roncho – Waltech Joint Venture

To complement their suite of offerings, Roncho Energy and Waltech Engineering entered into a Joint Venture.

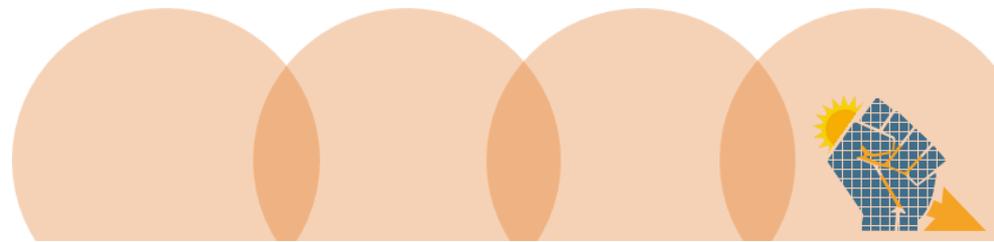
This Joint Venture boasts a combined expertise of over 30 years in the grid extension project sector.

Contact Us to discuss your grid extension and HVAC projects.

✉ sales@ronchoenergy.com

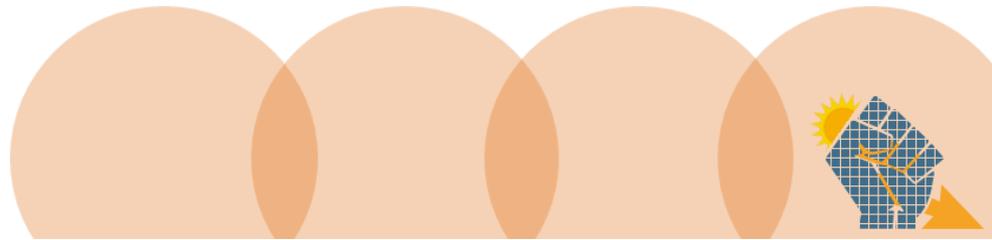


Energy Project Portfolio



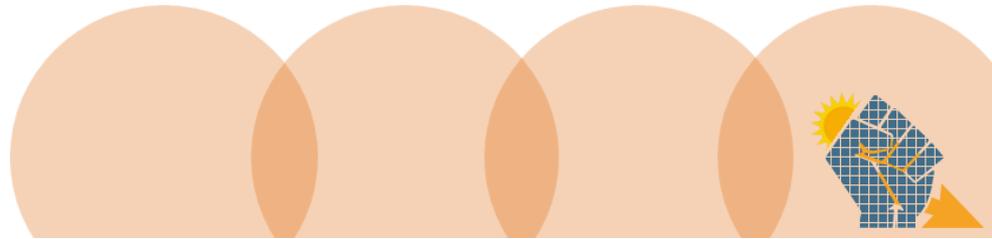
Case Study

- **System Integration: 3kW PV solution with battery bank and grid input for home at urban location.**
 - System Integration (Integration Completed, O&M contract ongoing)



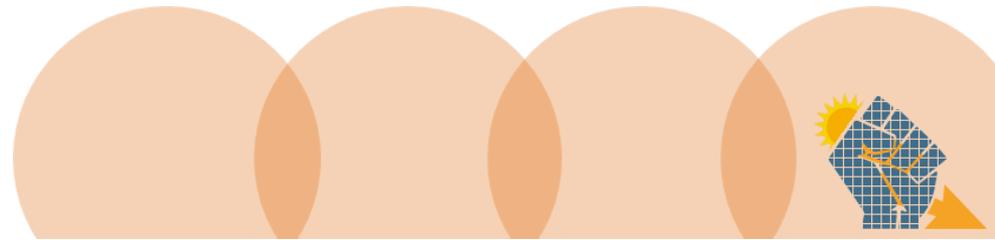
Case Study

- **Case Study: 2kW islanded PV solution with battery bank for home at rural location.**
 - System Integration (Integration Completed, O&M contract ongoing)



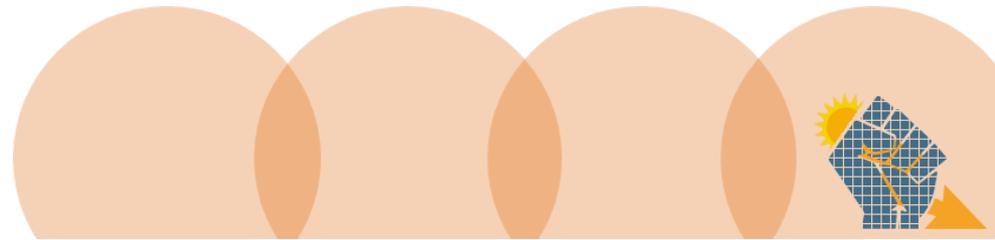
Case Study

- **System Integration: 4kW PV solution with battery bank and grid input for home at urban location.**
 - System Integration (Integration Completed, O&M contract ongoing)



Case Study

- **Case Study: 40kW PV – Diesel hybrid plant for bank at peri-urban islanded location.**
 - Project Development | System Integration | O&M)
 - Development Completed



Case Study

- **Case Study: Hybrid Battery-back up system with smart Auto Transfer Switch for bank at urban islanded location.**
 - System Integration & O&M (Awarded – Execution Ongoing)



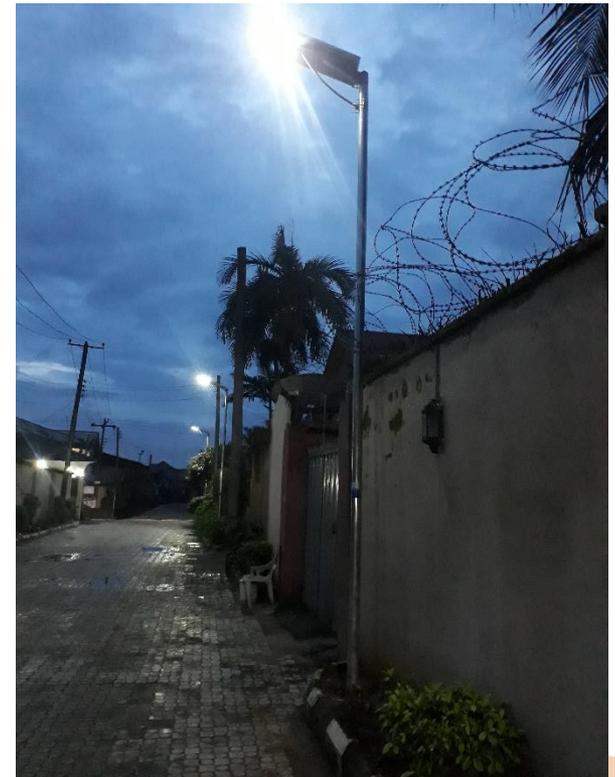
Case Study

- **Case Study: Energy storage Infrastructure management of a bank's nationwide network (286 locations, 20.6 MWh of storage)**
 - Process Optimisation | O&M (Awarded, Completed)
 - Completed (Handled a total of 8590 batteries)



Case Study

- **Case Study: Solar Street Lighting for an Estate road network**
 - Project Development | System Integration | O&M)
 - Completed



Case Study

- **Case Study: 57kW Dense penetration of Small Solar Home Systems for DFID-UKAID**

- System Integration (Awarded, Execution Ongoing)
- Project Scope: 1,140 small solar solutions installed to improve access to electricity.

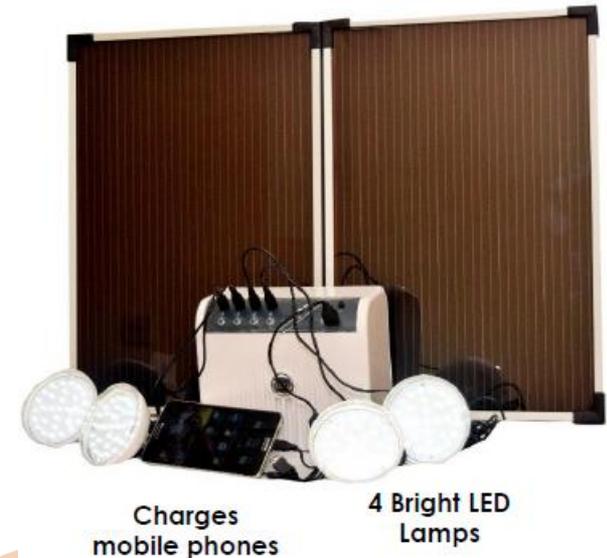
3W
Solar Panel



5W
Solar Panel



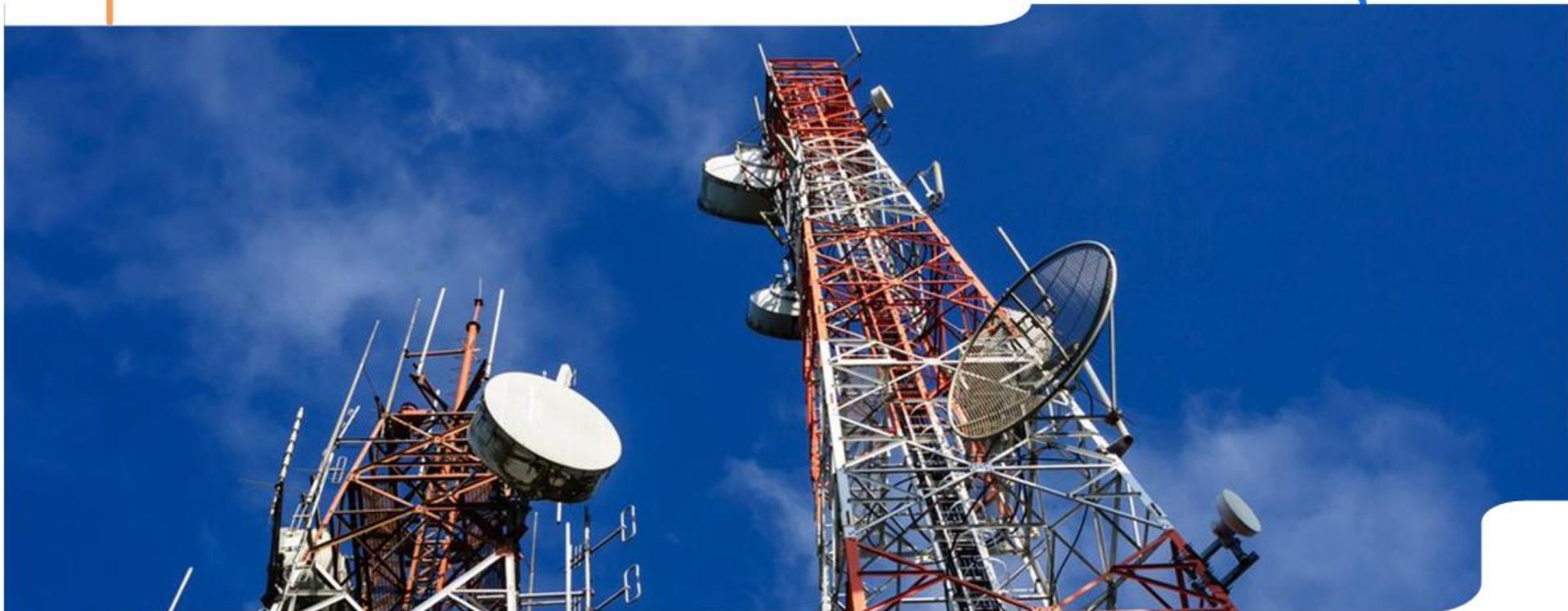
10W
Solar Panel





RONCHO ENERGY

ICT Solutions



ICT Solutions

Technology at Work



Computing & Networking

- Structured Networking Solutions



Contact Us to discuss your Networking projects



Computing & Networking

- Server Architecture Design | Management | Maintenance



Contact Us to discuss your server management projects



Computing & Networking

- Computing Hardware



Contact Us to discuss your Home & Office Computing requirements



Computing & Networking

- Computing Hardware powered by  Compulab

Filet mini PC – Fanless Computer for Compact & Industrial Applications



filet is a fanless mini PC with high performance, excellent graphics, up to 4 LAN ports and 5 year warranty. filet is among the smallest PCs available and packs more features than any similar PC.

Contact Us to discuss your Industrial Computing requirements



Computing & Networking

- Computing Hardware powered by  Compulab

Filet2 PC – Fanless Computer for Compact & Industrial Applications



filet2 is based on quad-core Apollo-Lake Atom with up to 16 GB RAM.

It provides performance that not long ago required a Core CPU that could not be fitted in such a small passively-cooled footprint due to higher power consumption.

Contact Us to discuss your Industrial Computing requirements



Computing & Networking

- Computing Hardware powered by  CompuLab

FitPC 4 – Fanless Computer for Compact & Industrial Applications



- ✓ AMD “Jaguar” Quad-core 2
- ✓ Dual HDMI, dual Gbit Ethernet
- ✓ Linux or Windows 7
- ✓ Fanless, ruggedized, all aluminum miniature casing
- ✓ 3 year warranty

fit-PC4 is based on AMD Embedded G-series system-on-chip with 64-bit quad-core CPU and AMD radeon HD GPU. Rich functionality, connectivity and modularity, low power consumption and silent operation made the fit-PC4 stand out.

Contact Us to discuss your Industrial Computing requirements



Computing & Networking

- Computing Hardware powered by  Compulab

Airtop – Natural Airflow Desktop for Everyday use



Airtop is a small and silent high performance desktop PC.

Zero fans, Zero noise, Zero Maintenance.

- ✓ 7 4K displays
- ✓ 6 Gbit Ethernet ports & internal storage devices
- ✓ 5 year warranty
- ✓ 4 Hard disks
- ✓ 3 serial ports & extension cards
- ✓ 2 Gbit Ethernet ports, 2 SIM cards, 2 power supplies – main and backup
- ✓ 1 graphics card.

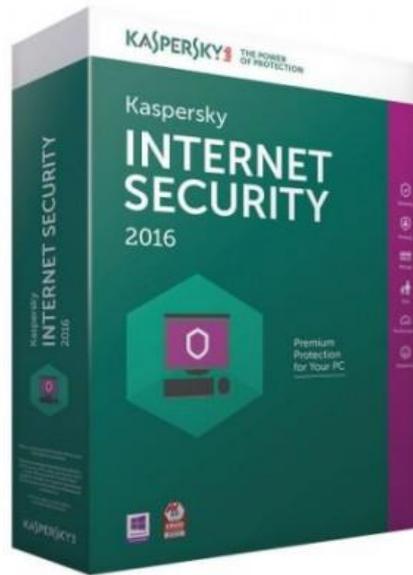
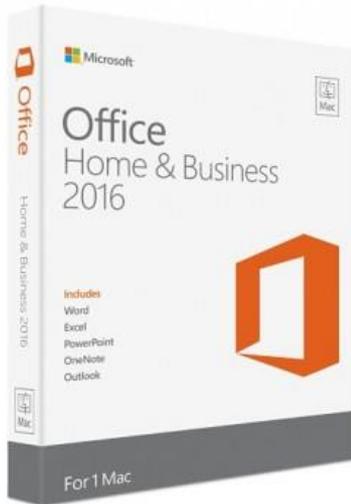
Contact Us to discuss your Industrial Computing requirements



Computing & Networking

Our other solutions include:

- **Computing Software**
 - Operating systems
 - Essential Applications



- We also design and maintain custom-made Applications (IN-HOUSE)

Contact Us to discuss your Software requirements

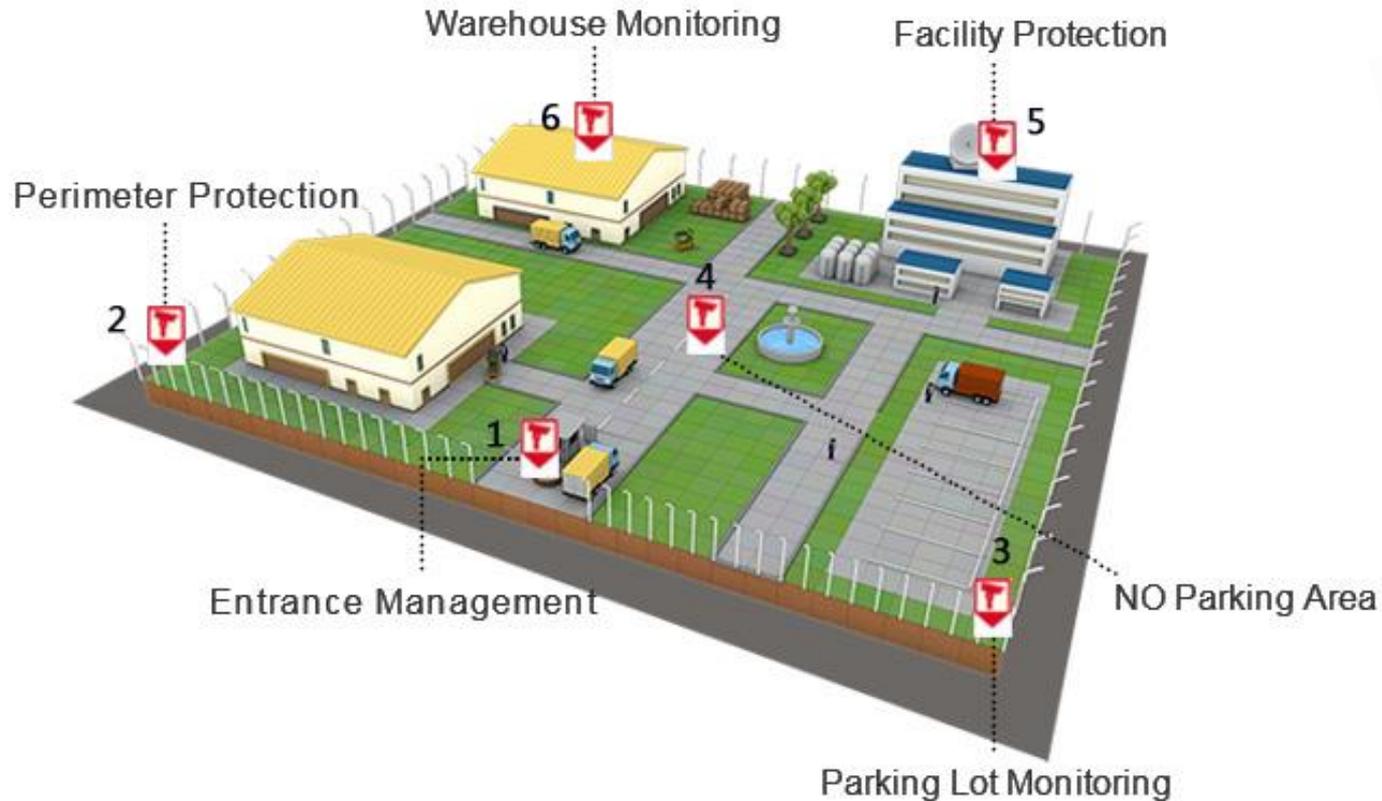


Building/Facility Control

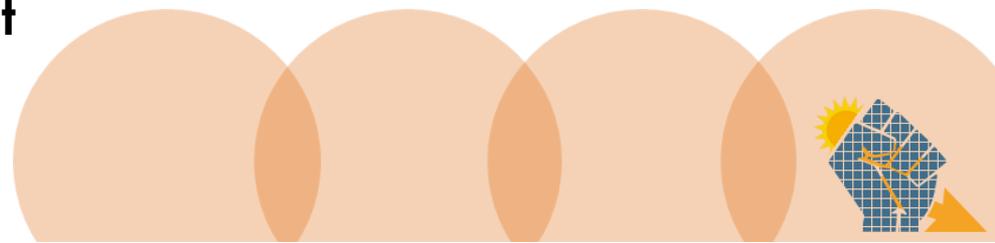
- CCTV Solutions powered by **HIKVISION**® and



BOSCH
Invented for life



Call Us to discuss your CCTV project



Building/Facility Control



- Access Control Solutions powered by  **BOSCH**
Invented for life

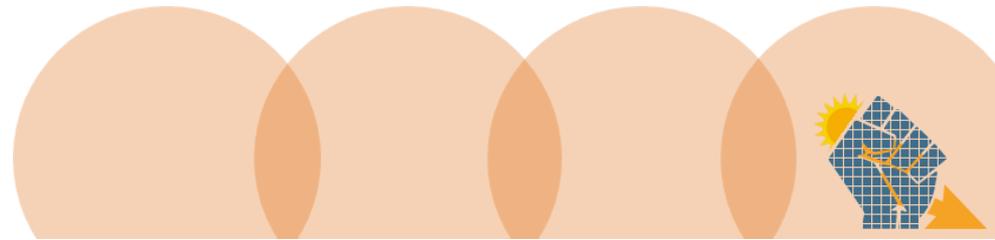
- Investing in the right technology is central to the protection of your employees, site visitors and ultimately the success of your company. While you naturally want your business premises to be as open and welcoming as possible – as well as making it easy for staff and visitors to move around the building – you need to ensure maximum protection against unauthorized intruders.

Comprehensive access control offer

Flexible solutions for any project



Contact Us to discuss your project



Building/Facility Control

- PAGA (Public Address & General Alarm) Systems by



BOSCH

Invented for life



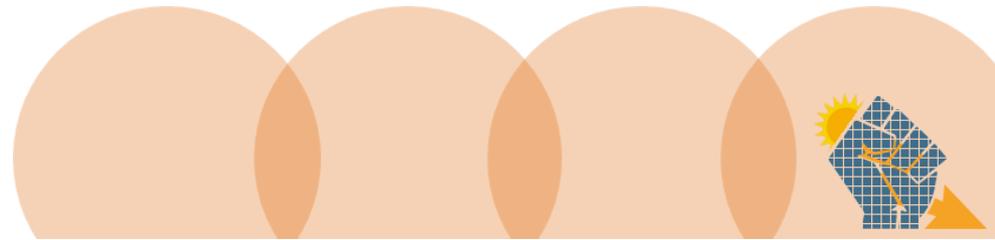
High-quality public address and voice evacuation systems are essential for dealing with security and safety challenges.

To be truly effective, a public address and emergency sound system must deliver exceptional performance and reliability. Roncho Energy provides PAGA solutions for major transportation terminals, houses of worship, public buildings, office buildings, schools and shopping malls in Nigeria.

Contact Us to discuss your PAGA project



ICT Project Portfolio

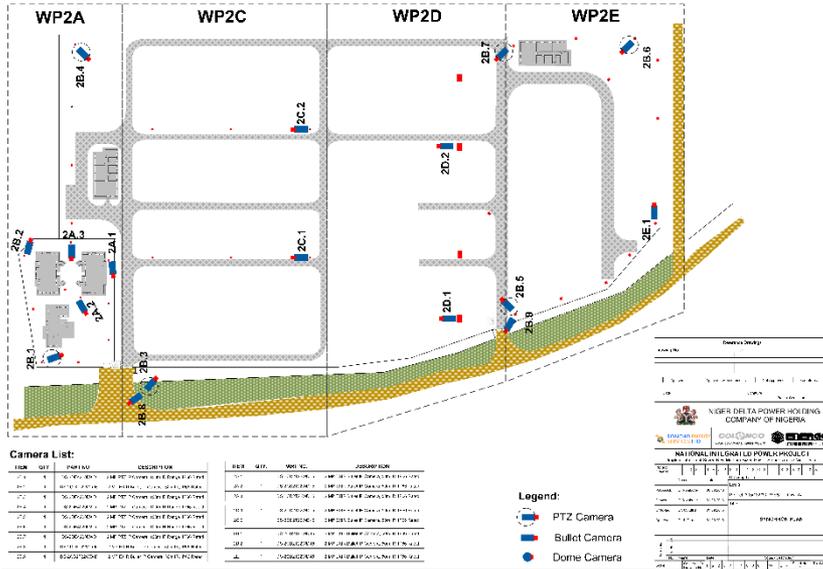


ICT Project Portfolio



- **Case Study: Development of CCTV solution for a Power Transmission facility at remote location.**

- Project Development
- Development Completed

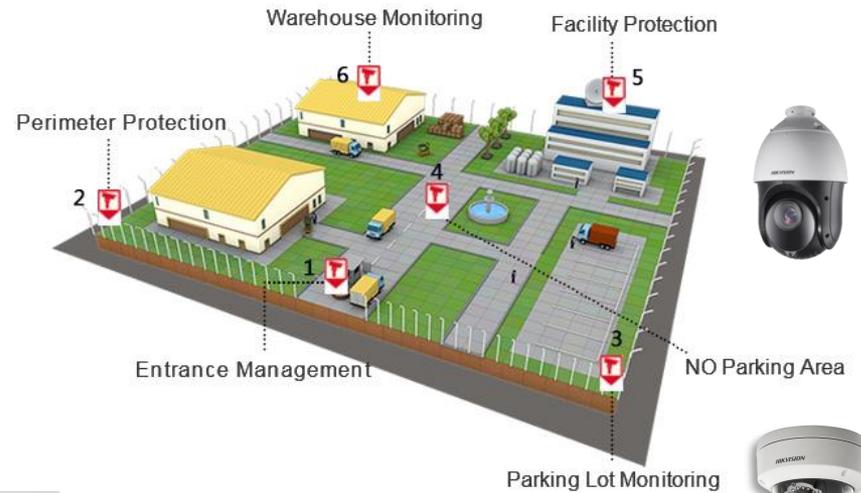


ICT Portfolio



- **Case Study: CCTV solution for Secondary School at urban location.**

- Project Development | System Integration | O&M (On-going)
- Implementation Completed/ O&M On-going



ICT Portfolio



- **Case Study: CCTV solution for perimeter surveillance of Secondary School at peri-urban location.**
 - Project Development | System Integration (On-going) | O&M
 - Development Completed / Implementation On-going





RONCHO ENERGY

Engineering Services



Engineering SERVICES

Technology at Work



ENGINEERING SERVICES



- **Procurement & Installation**

We are licensed to provide the following products by the Department of Petroleum resources and under our NIPEX registration.



Direct Fired Heaters & Accessories



Steam Boilers & Accessories



Electric Heaters & Accessories



Stacks, Flares and Accessories



Coolers, Condensers & Accessories



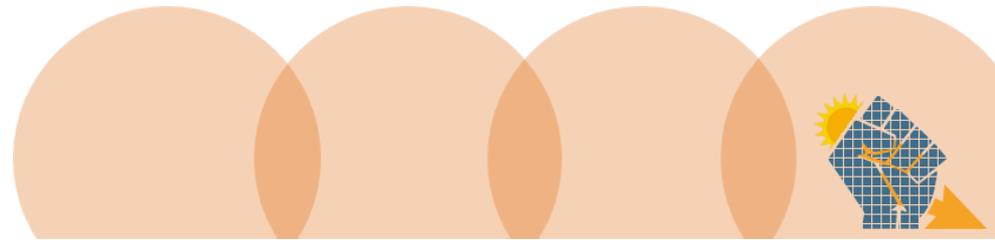
Heat Exchangers & Accessories



Distribution & Control Equipment



Rectifiers, Inverters & Converters



ENGINEERING SERVICES



- Procurement & Installation



Lamps, Lighting Fixtures & Equipment



Cables, Cords & Accessories



Gaskets, Jointings, Packings, Tightenings



Stacks, Flares and Accessories



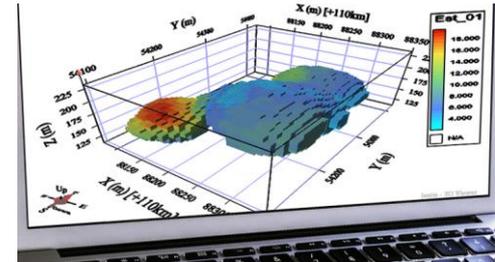
Metal bearings & Seals



Heat Exchangers & Accessories



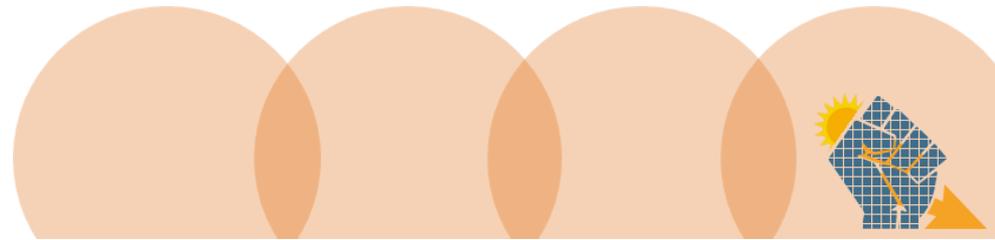
Network Installation & Support Services



Computer-Based Modelling Simulation & Training



CAD / CAM Services

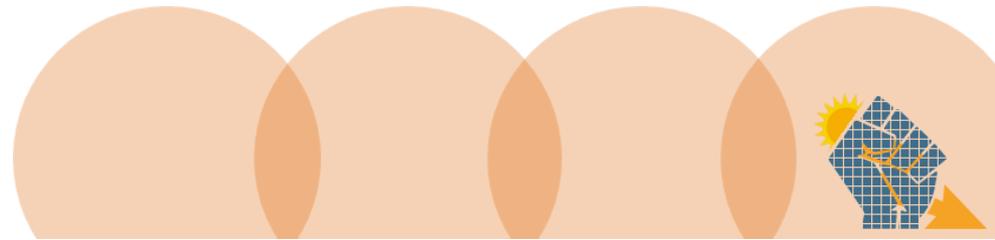


ENGINEERING SERVICES



- **Operation & Maintenance**
- Electrical, Mechanical & Civil Maintenance Services
- Preservation Services (Corrosion Control)

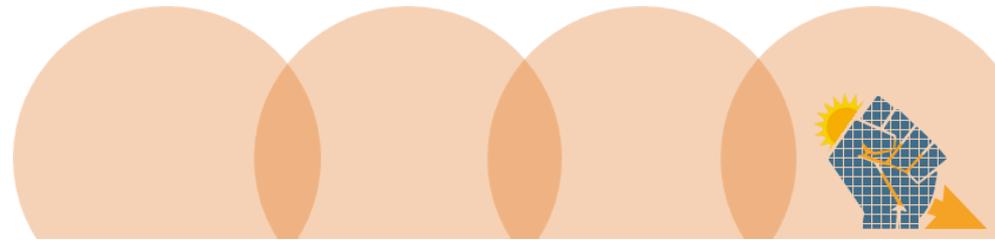
- **Information Systems & Technology / Communication Systems**
- Web Design
- Data Management Services
- Hardware Installation Support
- User Support / Help Desk Services
- Network Support Services
- Software Development & Support Services
- IT Management



ENGINEERING SERVICES



- **Consultancy Services**
- Manpower Supply (Technical & Admin)
- Human Resources & Development Consultancy
- Material Management
- Cost and Planning
- Technical Documentation / Document Control
- Industrial Design





**RONCHO ENERGY
SERVICES LTD**

Thank You

For any inquiries, contact:

info@ronchoenergy.com

+234 803 735 7252

