



**PORTFOLIO
AZIMUT WORLD
2023**

azimut360

About us

Azimut360 is an engineering and installation company specialized in photovoltaic generation systems, founded in Barcelona in 2009.

Our team of engineers has over 20 years of experience in the photovoltaic sector.

In Africa, we are specialists in mini-grids and hybrid solutions adapted to the electrical needs of each area.

We are working to make electricity available everywhere in the world by stabilising systems and promoting energy savings by optimising the performance of solar plants.



We have worked in...



South Pacific



West Africa

They have already trusted us...



Duncan Sserwambala

Head of estates and transport
Medical Research Centre (MRC)
& LSHTM Uganda Research Unit

"Azimut 360 understood what we wanted and they listened to all the needs that we had."



Contact us!



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How we can help you



- Consultancy, specialised studies, dimensioning of the system and design of the project.



- Project management



- Management of permits, certificates, subsidies and grants



- Execution and commissioning of the installation



- Training and qualification



- Monitoring and maintenance

Self-consumption for companies

C&I and service sector



+ Resources + Sustainability + Competitiveness
with the latest photovoltaic technology

Monitor your solar installation and show your customers the clean energy you produce.



Self-consumption with batteries, 282kW MRC UGANDA - 2nd Phase

Medical Research Council

Location: Entebbe

Technical data

Panels:	513 (550w)
kWp:	282.15 kWp
Estimated annual Production:	485.241 kWh
Batteries production:	930kWh
Area m2:	1340m2

Tasks

- Design of the photovoltaic systems
- Economic and technical feasibility study
- Management and supervision of the work
- Training and education of the technical staff for maintenance
- Technical support during the guarantee period of the installations.

Challenge:

After the savings achieved in the first phase of the installation, they wanted to extend the photovoltaic field to promote further electricity savings.



P22053I

Self-Consumption 470kWp MRC

UGANDA

Medical Research Council

Location: Entebbe, Masaka, Kyamulibwa

Technical data

Panels:	1.175
kWp:	470kWp
Estimated annual Production:	688.569kWh
Estimated annual Savings:	97.508€

Tasks

- Design of the photovoltaic systems
- Economic and technical feasibility study
- Management and supervision of the work
- Training and education of the technical staff for maintenance
- Technical support during the guarantee period of the installations.

Challenge:

The reduction in electricity costs has allowed them to allocate more resources to staff training and the acquisition of new materials for research.



MRC Unit The GAMBIA

Medical Research Council

Location: Fajara, Keneba

Technical data

Panels:	1250
kWp power:	501.33 kWp
Estimated annual Production:	792 MWh
Estimated annual Savings:	179.005€

Tasks

- Design of photovoltaic systems
- Economic and technical feasibility study
- Management and supervision of the work
- Training and education of the technical staff for installation and maintenance
- Technical support during the guarantee period of the installations.

Challenge: 16 Roofs

The objectives of the project were, on the one hand, to provide the centre with net energy and to stabilise the electricity grid that had frequent blackouts. On the other hand, this installation was carried out by a team of 38 women from Fandema as part of the educational project of the association in Mbolo.



P1830I

MRC Unit The GAMBIA

Solar Container

Location: Walikunda

Technical data

Panels:	77
kWp power:	30,3kWp
Estimated annual production:	36.30 MWh
Battery capacity (kWh):	156kWh

The container is designed to feed a daily consumption of 108 kWh

Challenge:

The project aimed to develop a modular, containerized, and manufactured solar PV solution with built-in intelligence and self-learning capabilities that is easy to transport, install, setup and use.



737 kWp of self-consumption at LLANSÀ S.A. Girona

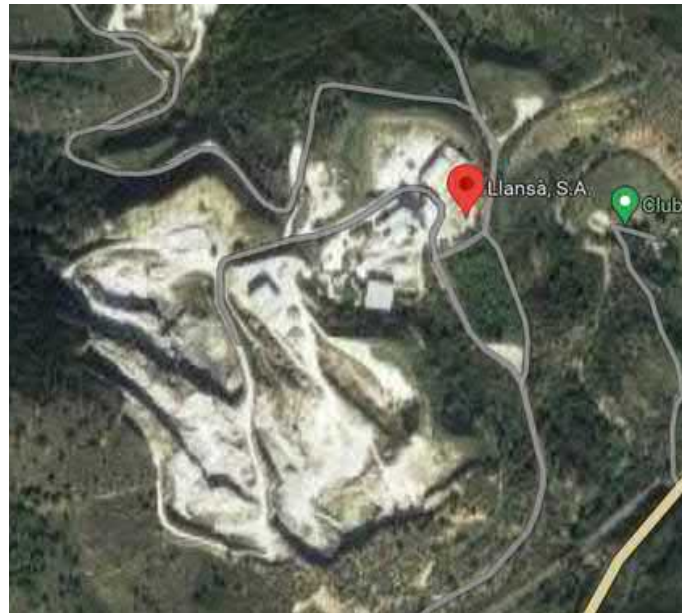
Location: Llança, Girona, Spagne
Installation Type: hangar Industriel
Taux d'autoconsommation: 80%

Technical Data:

No. panels: 1.586(465W)
kWp installed: 737.1 kWp
Nominal Power: 608kVA
Estimated annual productio:
Roof 1: 494.100 kWh/year
Roofs 2 et 3: 936.579 kWh/year
Area m2: 3.523,77m2

Challenge:

The stone quarry produces feldspar, a material used in making toilets. The company extracts and carries out the primary processing of this material, which consists of grinding the feldspar in order to be able to transport it. This process involves a very high energy cost.



CO2 Savings:

306.165 kg/year

Equivalent to:



Planting
25.513
trees



Going **27**
times around the
world



P22144N

Self-consumption installation in an industrial warehouse in Sant Fruitós del Bages

Location: Sant Fruitós del bages, Barcelona (Spain)

Direct self-consumption: 80%

Estimated annual savings: 27.852,45€/year

Return on investment: 4 years

Technical Data:

No. panels: 856 (280wp)

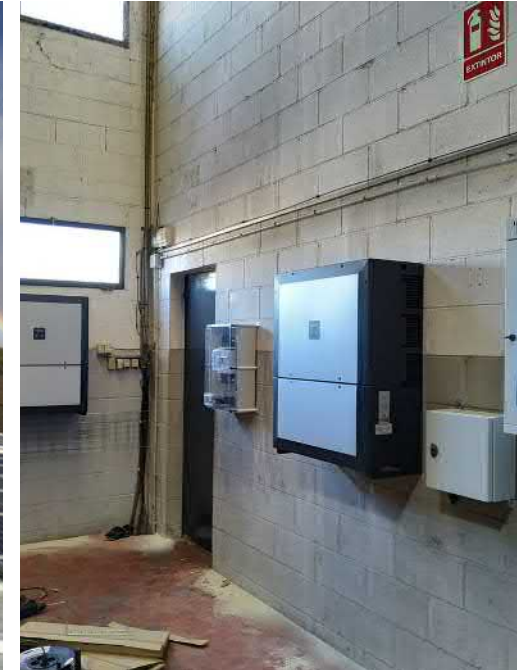
kWp installed: 239.68 kWp

Annual production estimate: 328,26MWh/year

Area m2: 2.140

Challenge:

Based on the consumption data provided, an estimate of 37% coverage of the requested energy has been made and a surplus generation of 23% is expected.



CO2 Savings

14.300 Kg/year

Which is equivalent to:



Planting
1191
trees



51.071
washing machine
loads



Self-consumption installation with pergola at Cosmocaixa

Direct self-consumption: 80%
Estimated annual savings: 7.400€/ year
Return on investment: 7 year

Technical Data:

No. panels: 270 (280/300/390 wp)
kWp installed: 84.64 kWp
Annual production estimate: 127.855kWh/year
Area m2: 439

Challenge:

Project based on the optimization of the available space. Different roofs were used with different orientations and inclinations. A pergola was used to achieve greater production.



CO2 Savings

27.574 Kg/year

Yearly Equivalence



Planting
2298
trees



98.482
washing machine
loads



P1833N

Self-consumption installation at the Agricultural Cooperative in El Vallès

Direct Self-Consumption: 80%
Estimated financial savings: 23.565,06€/year
Return on investment: 6.9 years

Technical Data:

No. panels: 160 (450w)
kWp installed: 72 kWp
Estimated annual production: 87.278 kWh/year
Area m2: 320

Challenge:

Coplanar installation on the sandwich type roof of an industrial building and in two east-west bays.



CO2 Savings:

21.820 Kg/year

Yearly Equivalence:



Planting
1818
trees



77.928
washing machine
loads



P2147N

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PROBITAS CONTAINER

Valentín de Pablo Health Center

Location: Bamako (Mali)

Technical data

Panels:	32
kWp power:	8
Estimated annual production:	11.730kWh/any
Battery:	10kw/h

Tasks

- Design of photovoltaic systems
- Economic and technical feasibility study
- Management and supervision of the work
- Training and education of the technical staff for installation and maintenance

Founding:



Challenge:

- Ensure that the laboratory devices can operate without grid connection, as protection against power cuts.
- Use photovoltaic power generation to reduce the electricity bill of the Primary Health Centre of Pablo Valentín.
- Transfer the knowledge of photovoltaic installations to local technicians, so they become responsible for maintaining the installation.



P1425I

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Added Value

The back-up photovoltaic system, along with the grid, **ensures an uninterrupted supply of electricity** and allows the economical sustainability of the GLI laboratory. This goal was achieved with the support of the Probitas Foundation.

The estimated population of the Téléphone Sans Fils (TSF) neighbourhood is 15,000 people. TSF is a **neighbourhood with a great lack of basic urban services**: there is a lack of drinking water, electricity, waste treatment and the sewage pipes are scarce.

The direct **beneficiaries** of the project are the 3,609 members of the Mutuelle who directly benefit from the quality of the service of the autonomous electricity supply. Among them, **1.641 are women**.

The reduction of the electricity bill and the improvement of the services offered will help to continue the upward trend of recent years in the number of members of the Centre and, therefore, of the population of the TSF neighbourhood who have access to primary health care.



AFRICMED- GÀMBIA

Technical data

kWp:	16.2Kwp
Diesel generator:	42.5 kVa
Grid side Inverter (kW):	15 kW

Tasks

- Feasibility study, simulation of PV production and consumption
- Design and development of the technical specifications for the supply and installations of the equipment
- Purchase and installation of the structure, PV modules, inverters, batteries and electric equipment
- Technical direction and execution of all the works

Challenge:

The main aim of the installation is the production of electrical energy from renewable sources in order to reduce the power bill. In this way Africmed Clinic can become more competitive in the development of its activities and can reduce its energetic dependence.



LSHTM Kambia Sierra Leone

London School of Hygiene & Tropical Medicine

Economic and technical feasibility study of 5 health centres

Project Office: 18 kWp + 38 kWh

K1: 20 kWp + 38 kWh

Mambolo: 20 kWp + 38 kWh

Rukupro: 7,2 kWp + 14 kWh

Depot+Lab:

Containerized solution with 264,8 kWp + 461 kWh



Challenge:

Design 5 off-grid hybrid systems (with PVs, batteries and gensets) to power the 5 clinics of LSTHM in Sierra Leone to limit the dependence on diesel and decrease expenses and emissions.



Mini-grids

Rural electrification specialists



+ Resources + Sustainability + Accessibility
with the latest photovoltaic technology

We deliver light where service is not guaranteed.



About the Mini-grids

Mini-grids are installation proposed for remote areas where there is no existing transmission line infrastructure and connection to the general grid.

In recent years, mini-grids have become one of the most efficient, reliable and economic solutions for improving rural electrification in african communities and other parts of the world where access to electricity is not guaranteed.



FUNAE- mini-grids

Promoter: FUNAE

Location: Mozambique

As part of the efforts of the Government of Mozambique to increase access to electricity services in rural areas, FUNAE - Energy Fund intends to electrify the administrative localities of Chintolo in the District of Cahora Bassa, Xipera in the District of Maràvia, Province of Tete and Mapulanguene, in the District of Magude, Province of Maputo through photovoltaic energy.

With this intention, FUNAE intends to build mini-grids of 60 and 100 kWp, in order to provide basic electricity services to these localities, to improve the quality of life and increase access to energy in the country.

Challenge:

The mini-grids must be designed and constructed to be prepared to the increase in energy consumption and to be interconnected in the future to the distribution network, which will be built by another contractor.



ZAN ZAN 7 Mini-grids

Location: Ivory Coast

The design and construction of the mini-grids allowed 7 communities of the Zan Zan region to finally have access to electricity.

Electricity is assured for community uses (health, education, water pumping and religious buildings) and enables productive activities such as community refrigerators, freezers, mills, water pumping, water pumping, water treatment and distribution systems.

Overall consumer satisfaction is very high, especially in small towns that have uninterrupted energy supply.

Challenge:

The aim of the project was to provide a decentralised and sustainable basic electrification infrastructure to the inhabitants of the seven communities, allowing these remote rural villages to benefit not only from basic domestic electrification, but also from energy for productive uses, that enable economic growth.



Micro grid- ZAN ZAN

Location: Ivory Coast

The Zanzan region is located in the north-east of Ivory Coast and is one of the less developed region of the country.

ZAMOU :

Total monthly energy consumption (kWh): 3.376 kWh/month
Nocturnal energy consumption (kWh): 2.717 kWh/month
Nominal power of the installation (kW): 29 Kw

SOLOKAYE :

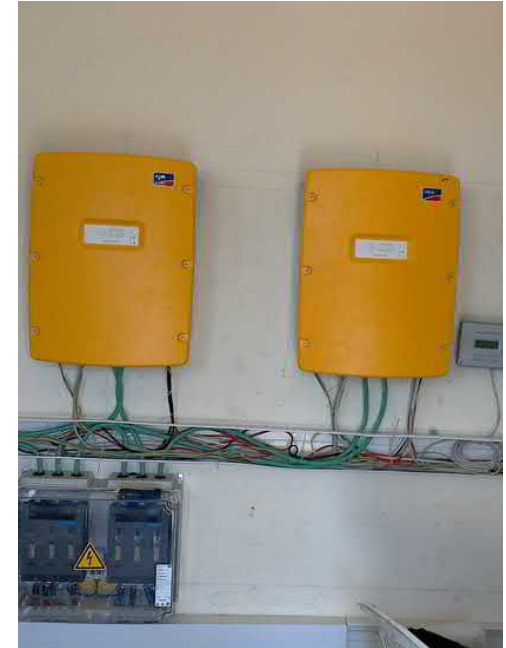
Total monthly energy consumption (kWh): 1.552 kWh/month
Nocturnal energy consumption (kWh): 1.027 kWh/month
Nominal power of the installation (kW): 16 Kw

KAPE :

Total monthly energy consumption (kWh): 1.967 kWh/month
Nocturnal energy consumption (kWh): 1.001 kWh/month
Nominal power of the installation (kW): 18 kW

KAKPIN :

Total monthly energy consumption (kWh): 2.753 kWh/month
Nocturnal energy consumption (kWh): 1.628 kWh/month
Nominal power of the installation (kW): 32 kW



GANSÉ

Total monthly energy consumption (kWh): 3.924 kWh/month
Nocturnal energy consumption (kWh): 3.083 kWh/month
Nominal power of the installation (kW): 27 kW

BOUDOU :

Total monthly energy consumption (kWh): 1.702 kWh/month
Nocturnal energy consumption (kWh): 1.027 kWh/month
Nominal power of the installation (kW): 24 Kw

KROMAMBIRA :

Total monthly energy consumption (kWh): 1.681 kWh/month
Nocturnal energy consumption (kWh): 1.040 kWh/month
Nominal power of the installation (kW): 21 kW

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Consultancy



+ Solutions + Analysis + Competitiveness
with the latest photovoltaic technology

Project consultancy from the best experts in photovoltaic systems.



GRENADA POWER SYSTEM

Integrated Assessment

Consultancy project

Client: UNPD

Location: Grenada (Caribbean)

Tasks:

- Assessment and proposal for upgrading the grid.
- Investment plan
- Implementation of digital tool for grid efficient operation and management, with the utility as beneficiary

Challenge:

The objective of this study is to undertake an integrated assessment of the power system in Grenada to improve the resilience of the network and increase the penetration of intermittent least cost renewable generation resources. The study shall prepare a prioritized and costed investment plan, listing probable pipeline projects.



*Empowered lives.
Resilient nations.*



GHANA SCALING-UP RENEWABLE ENERGY PROGRAMME (SREP)

Consultancy services for selection, assessment and sensitization of Public Institutions for net-metering solar PV

Client: Ministry of Energy (Ghana) - African Development Bank

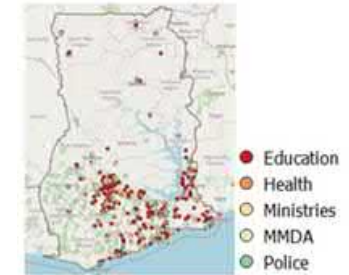
Location: Ghana

Tasks:

- Identification and selection of Public Institution Buildings to be included in the project
- Assessment of Energy Consumption of Public Institutions' Buildings
- Determination of the Area available for PV System
- Installation and preliminary design of solar PV
- Sustainability assessment of each of the buildings

Challenge:

The objective is to select and assess public buildings for Net-Metering Solar PV (NMPV) under the Scaling-up Renewable Energy Program (SREP) to reduce the costs of energy consumption in public facilities and contribute to the achievement of 10% renewable energy target policy objective in Ghana.



Cooperation



+ Solutions + Resources + Wellbeing

we put photovoltaic technology at the service of the world.



Improved health services at the kotiakró health center and maternity ward

Location: Bouaké, Ivorian Coast

Photovoltaic solution kWp: 10.72 kWp

Annual Production Estimate: 12.267,1 kWh/year

CO2 savings: 5.017,2 kg/CO2/year

Funding:  Agència Catalana de Cooperació al Desenvolupament

 Generalitat de Catalunya

Implementation: 2021-2022

Challenge:

Installation of reliable O2 concentrators to guarantee 24 hours a day.

Frequent power outages. Mothers and children must be cared for in the dark.

Before the project, a sick person often had to travel more than 40 km to reach the CHU hospital in order to receive this life-saving treatment.



P2079CP

CASA DO GAIATO

Consultancy project

Client: Giz



Location: Maputo, Mozambique

Tasks:

- Assessment and proposal for upgrading the grid.
- Investment plan
- Project management

Challenge:

42kw that will feed on electricity the orphanage where more than 160 creatures currently live. The installation will give reliability to a network that suffers frequent light outages and will have batteries support to minimize outages.

The project also aims to train the local teenagers on solar energy installation and subsequent maintenance of the solar plant. It is precisely this group of young people who, under the tutelage of the technicians, are carrying out the installation.



If you want to know more about the **Cooperation** and **Oxygen** projects

Request portfolios in the Documents section of the website

<https://azimut360.coop/en/documents/>

or in  info@azimut360.coop.

**+ Resources + Services
+ Human rights
with the latest photovoltaic
technology**



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