



# Lambert

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electromec Ltd.

HYBRID POWER SOLUTIONS

# WHO WE ARE

Lambert Electromec Limited is an international leader in Engineering, Procurement & Construction (EPC) and in high quality Mechanical, Electrical and Plumbing (MEP) such as:



Power Solutions (including Power Plants, Substations, Energy Management, Hybrid Solutions etc.)



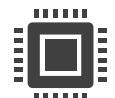
Oil & Gas Modular Refineries



MEP for infrastructural and enabling works in Rail-stations, Stadiums, Ports, etc.



Building services (Offices, Hospitals, Hotels, Institutions, Factories, Mixed-Use, Residential, etc.) and Industrial Plants



Data Centers



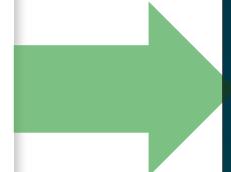
## OUR HISTORY

Lambert Somec Nig. Ltd. was created in 2001 in affiliation with Lambert Somec Inc., founded in 1954 in Quebec, Canada. Before separating from its Nigerian partner in 2004, Lambert Somec Inc. passed on its heritage of first-class professionalism, top engineers, and its exceptional overall operating system. In 2007, Lambert Somec Nig. Ltd. changed its name to Lambert Electromec Ltd. to operate separately in Africa.

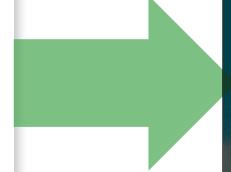


# OUR CAPABILITIES

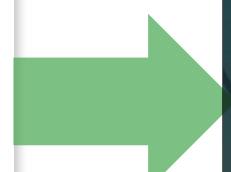
Engineering,  
Procurement,  
Construction (EPC)



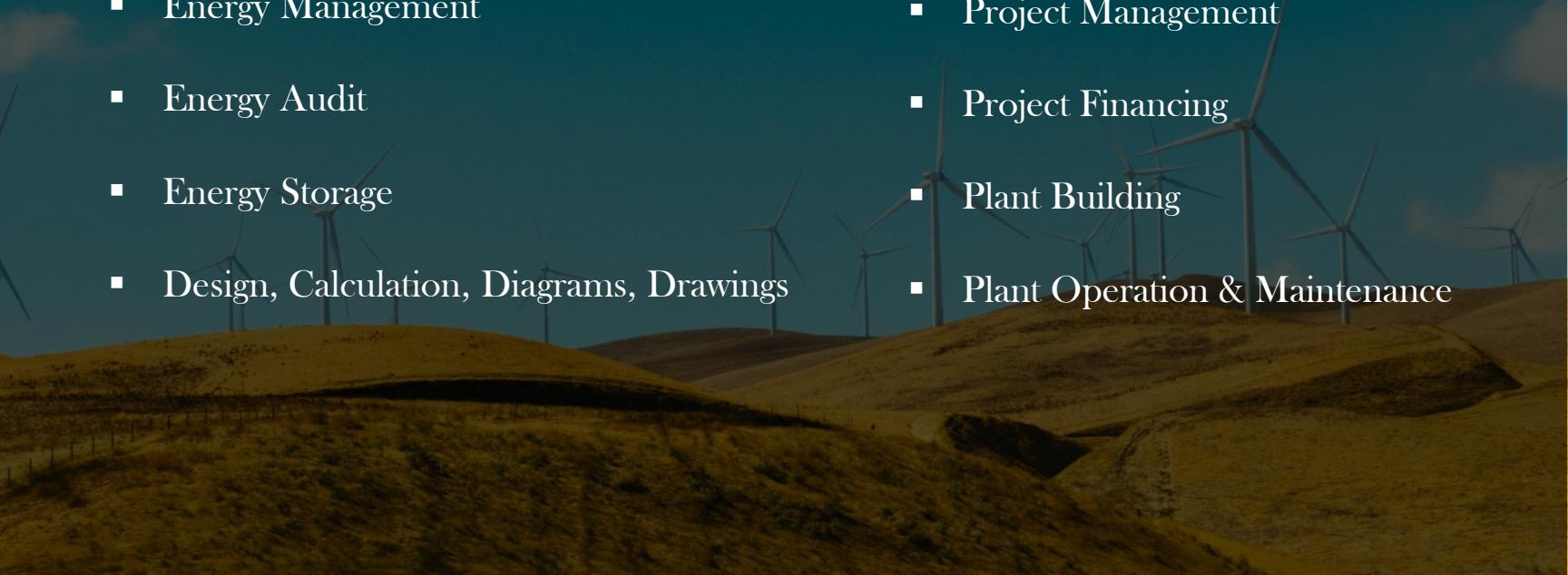
Build,  
Operate,  
Transfer (BOT)



Build,  
Own,  
Operate (BOO)



- Engineering
- Procurement
- Construction and Installation
- Testing and Commissioning
- Energy Management
- Energy Audit
- Energy Storage
- Design, Calculation, Diagrams, Drawings
- Space Requirement Advisory
- Documentation
- Equipment Delivery
- Installation / Construction
- Project Management
- Project Financing
- Plant Building
- Plant Operation & Maintenance



# OUR SERVICES

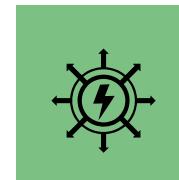
Our power division provides the following services



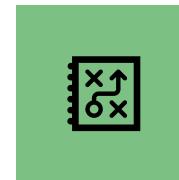
Power  
Generation



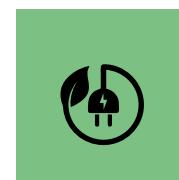
Energy Audit &  
Management



Power  
Distribution



Feasibility Studies  
(FEED & PRE-FEED)



Renewable  
Energy



Operation &  
Maintenance



Energy  
Storage

# POWER GENERATION

Lambert Power division leverages on its knowledge, expertise and technology as well as from its associates and partners worldwide, to provide cross-synergies to the power division business. The result is a wide array of experience used to optimize the technical, commercial and environmental impact of its power services.

**Lambert has the capabilities to provide: -**

- 5 -200 MW
- Reciprocating Engines -Turbines
  - Simple cycle
  - Combined cycle
  - CHP
- Different type of Fuel: Natural Gas, HFO, LFO.



# RENEWABLE ENERGY

Lambert is a reputable provider of renewable energy and storage solutions serving residential and commercial establishments. We offer expertise in the design and installation of the following:



Photovoltaic Solar  
& Solar Thermal



Biomass



Landfill Gas



Wind



Waste to Energy

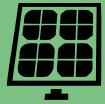


Waste Heat & Waste  
Gas Recovery

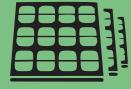
## RENEWABLE ENERGY

### PHOTOVOLTAIC SOLAR & SOLAR THERMAL

We design, install and maintain high-quality solar systems and inverter backup solutions that are efficient, cost effective and suited to customer's requirements.



On Grid Solar  
PV Systems



Off Grid Solar  
PV Systems



Hybrid Grid Solar  
PV Systems



## RENEWABLE ENERGY

### PARTNERSHIP IN RENEWABLE ENERGY - ([ECOSYS](#))

Lambert has forged a partnership in the renewable energy sector to deliver premium service with the best technical know-how. Our energy partner ([ECOSYS](#)) is renowned for its innovative approach to Renewable Energy and Power Solutions.

- ECOSYS mission is to promote and implement creative renewable energy & power solutions, by studying the specific needs of customers, and designing a customized solution combining the different components for best results.
- Help our clients reduce their energy cost.
- Contribute in preserving the mother earth through a sustainable development.
- Promote the green initiative culture among our clients and fellow citizens.



# ENERGY STORAGE

The Electrical Energy Storage System (EESS) is a brand new service of Lambert Power division.

- We offer different Energy Storage System solutions for different application scenarios, helping to improve the power supply structure with high-performance and high-security features.
- This system can be paired with PV modules to improve the use of new energy.
- This solution can be used in large power plant projects connected to the grid, commercial, and industrial on/off-grid power demand.





Electrical energy storage systems (EESS) for electrical installations are becoming more prevalent. Below are several reasons behind the increasing use of EESS:

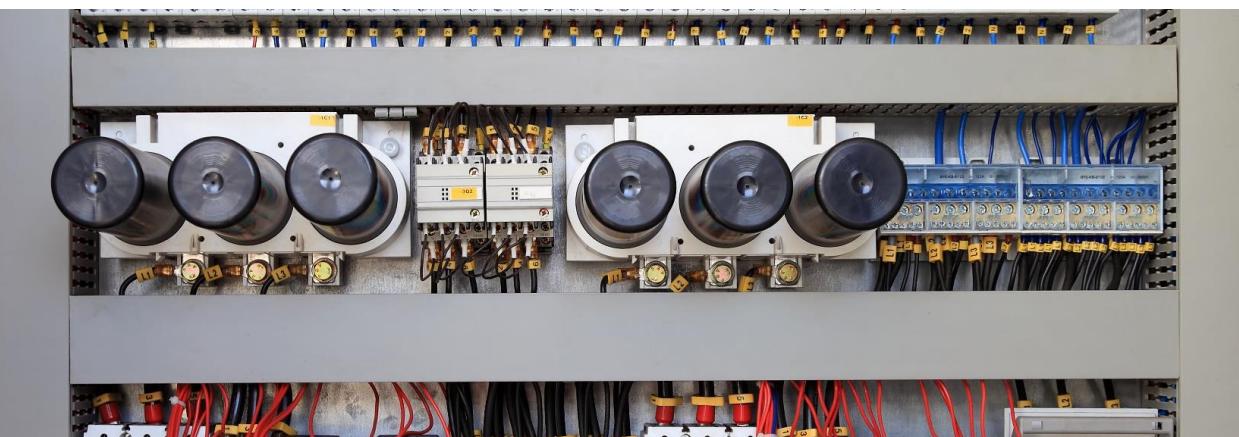
- EESS makes renewable energy more effective by ensuring that the energy generated from renewable sources is available when that energy source is not available.
- EESS makes energy available during the loss of the grid supply.
- The system allows for grid support services, including fast frequency response, demand and supply management, network constraints, and power quality management.
- The falling cost of EESS, notably lithium-ion batteries.

# POWER DISTRIBUTION

Lambert Electromec has over the years developed its Electrical Engineering arm into a veritable industry source noted for excellence in low, medium, and high-voltage installations. With solid and robust expertise in house technical and management services in the following fields.

## High & Medium Voltage

- Power Sub-stations and distribution
- Metering and Utility Connection



## Low Voltage

- Main Panels/Distribution Board, Synchronizing Panel, Motor Control Centre, Capacitor Bank
- Bus Duct Riser and Cable Engineering
- Surge, Earthing and Lightning Protection
- Uninterrupted Power Supply (UPS) and AVR



# ENERGY AUDIT & MANAGEMENT

At Lambert, we use a systematic approach to ensure energy efficiency which has improved:

- Cost-effectiveness
- Reduced Carbon Emission
- Improved Building's Environmental Conditions
- Reduced Energy-related Waste.

Lambert Electromec aims to decrease its impact on our environment and maximize the effective use of resources.



We support you in making the most cost-effective investments for your energy setup, with good ROI and payback period.

## Power Asset Sizing

- Performing a comprehensive energy assessment, which includes energy production and consumption to eliminate waste in terms of capital and operating expenditure.
- We eliminate waste and apply our power asset sizing model tailored to meet your energy needs.

## Solar Power Assessment

- Our energy consultants will provide you with a thorough evaluation to know if solar energy is a viable option that meet your needs, in a way that is best integrated to your power setup.



## OPERATION & MAINTENANCE



In accordance with the requirements of international standards, our operation and maintenance services for power plants seek to offer a comprehensive customer-focused package. We meet the growing demand for renewable energy using innovative solutions and technological knowhow.

We provide a full scope of operation and maintenance services with our experienced operation and maintenance staff to guarantee high availability, high MW output, low heat rate and low overall O&M cost.

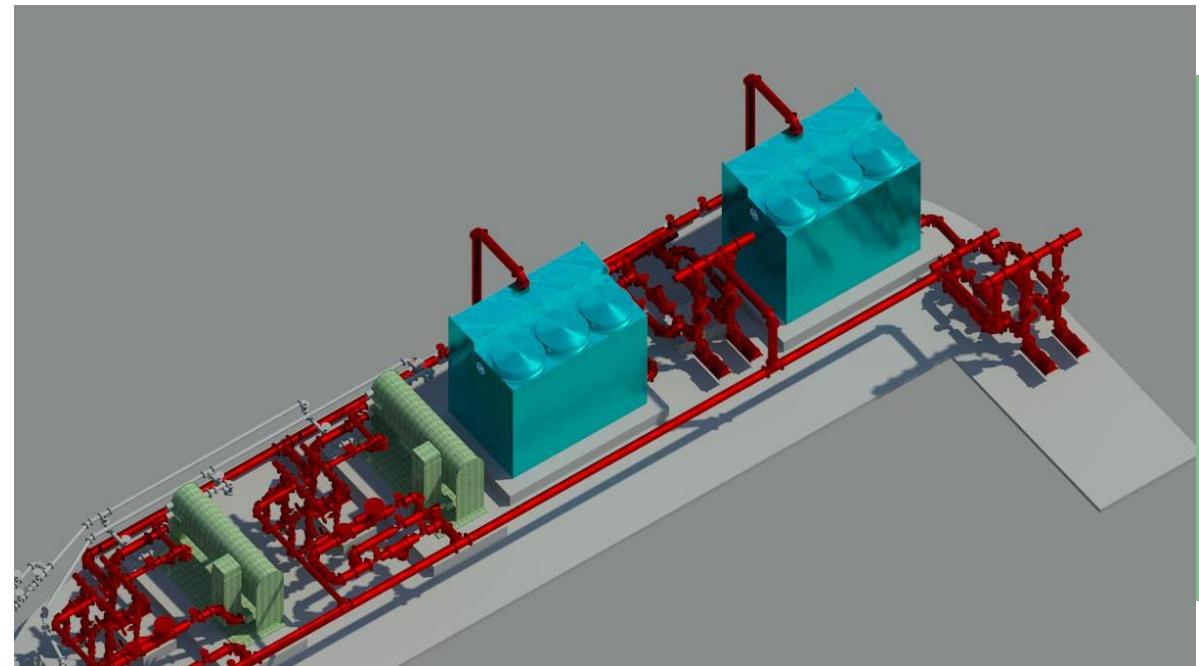


# PROJECTS



## TOTAL POWER PLANT 16.5MW GAS TURBINES PORT HARCOURT, NIGERIA

GAS Turbine for Office Complex Joint Venture NNPC ELF PETROLEUM - TransAmadi, Port Harcourt. Installation of 3 Gas Turbines 5.5MW each, complete with all its balance of plant equipment, 33/11KV substation and distribution, supplying existing and new office complex of NNPC-ELF JV in Port Harcourt-Nigeria.



## BAT TRI - GENRATION PLANT IBADAN - NIGERIA

Engineering, Installation and Design review for the Tri - Generation Power Plant for British American Tobacco (BAT) Ibadan PLANT. The Power Plant consists of one diesel fired low speed engine - generator with an installed capacity of approximately 4.7 MW, heat exchanger with a capacity of 2.38 MW, absorption chillers with a generator heat duty of around 1.74 MW each, and appropriate cooling towers (air-cooled) with a thermal load of about 3.00 MW each.

# PROJECTS



**EKO POWER STATION  
LAGOS - NIGERIA**

New Power Station of 20 MW, centralizing the power generation of Eko Hotel and its extensions, Victoria Island, Lagos, Nigeria.



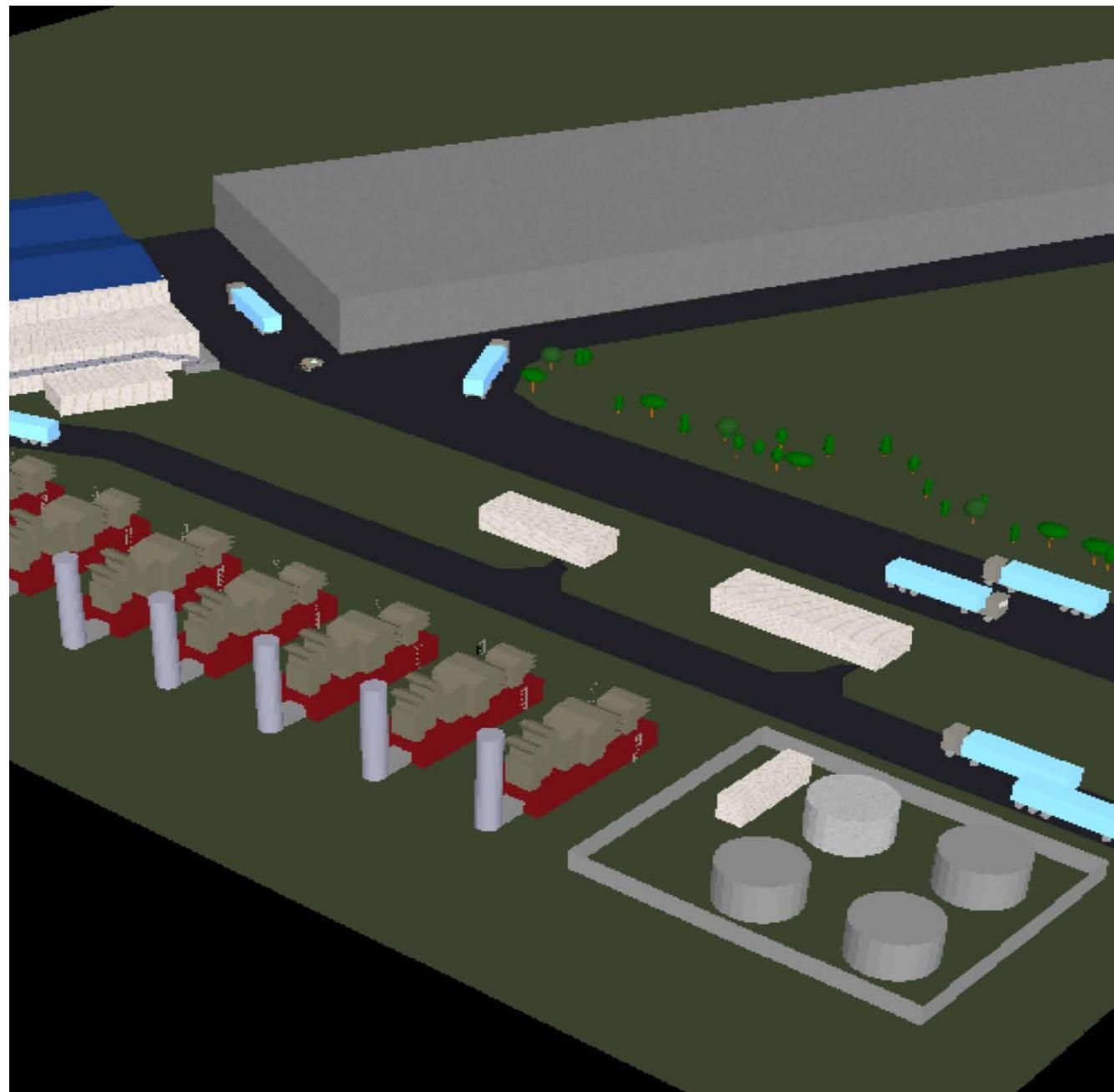
**PROCTER AND GAMBLE FACTORY  
LAGOS - NIGERIA**

Power plant for the P&G factory of 9MW; Fuel: Natural Gas - Diesel;  
Voltage: 11 KV I in Ota -Ogun State, Nigeria

# PROJECTS

## 150 MW STEEL MILL

Lambert Electromec executed the Design and installation of 150mw Dual fuel Gas Turbine power plant and the complete Mechanical and Electrical works of the Steel Mill.



# PROJECTS

## NIGERIA CONTENT TOWER, BAYELSA

### PV SYSTEM SPECIFICATION

<b>PV SIZE</b>	85.60kWp
<b>PV MODULE &amp; POWER CLASS</b>	275W, 1.00x1.65m, Polycrystalline
<b>BATTERY USED</b>	4710Ah @ C100, 3650Ah @ C10, 2V
<b>BATTERY BANK SIZE</b>	14130Ah @ C100, 10950Ah @ C10, 48V
<b>BATTERY TYPE &amp; RATING</b>	OPzV 2V, around 3000 cycles at DOD 50%
<b>PV INVERTERS</b>	Sunny Tripower total of 85kWp
<b>OFFGRID INVERTERS</b>	Sunny Island, 3 x 8kW per phase (24kW/phase)
<b>POWER OUTPUT PER PHASE</b>	18kW Nominal, 24kW for 30 minutes, 33kW for 3 seconds
<b>MOUNTING SYSTEM</b>	Aluminium delta supports & rails, with stainless steel clamps



# PROJECTS

## PARKVIEW OFFICE DEVELOPMENT, LAGOS

### PV SYSTEM SPECIFICATION

PV SIZE	32 kWp
PV MODULE & POWER CLASS	JA Solar 330 wp Poly crystalline
PV INVERTERS	SMA STP 20
ON GRID INVERTERS	SMA STP 20
POWER OUTPUT PER PHASE	Inverter Total Rating is 20kW
MOUNTING SYSTEM	Aluminium K2 brand



## PROJECT EXPERIENCE - (ECOSYS)



### SMLC PHASE 1 - 2 - 3

- 2,636 kWp
- 17,912 m<sup>2</sup>
- 2,900 MWh production/year
- 1,885 Tons CO<sub>2</sub> offset/year



### ZAHRANI OIL INSTALLATIONS

- 1.09 MWp
- 8,000 m<sup>2</sup>
- 1,525 MWh production/year
- 1,230 Tons CO<sub>2</sub> offset/year



### NEWTON - SIERRA LEONE

- 6,015 kWp
- 40,000 m<sup>2</sup>
- 8,400 MWh production/year
- 5,800 tons CO<sub>2</sub> offset/year



### UNOPS AFGHANISTAN

- 2,000 kWp
- 3,500 m<sup>2</sup>
- 3,000 MWh production/year
- 2,100 tons CO<sub>2</sub> offset/year



### SOMALILAND

- 7,000 kWp
- 44,300 m<sup>2</sup>
- 11,817 MWh production/year
- 7,700 tons CO<sub>2</sub> offset/year



### BOMA - SIERRA LEONE - SERENGETI



### BELLEVUE MEDICAL CENTER



### UNDP HOSPITALS



### LAS SALINAS RESORT

# OUR CORE VALUES/SUCCESS PILLARS



High Quality, Precision  
Engineering and Installation



Added Value Engineering  
/Alternate Solutions



Highly Skilled Workforce



Timely Delivery



Quality Assurance  
and Control



Best-in-Class HSE  
Measures and Procedures



## CANADIAN HERITAGE

Technical and work culture  
from the Canadian company  
Lambert Somec



## GEOGRAPHIC PRESENCE

- Offices in the Gulf, Europe & Africa
- Leverage technology knowledge across international offices.
- Enhanced procurement



## CERTIFICATIONS

- ISO 9001:2015
- ISO 14001:2015
- ISO 45001:2018

High standard related to quality management and communication systems

## PARTNERS

**SIEMENS**

**Schneider**  
Electric

**ECO**SYS  
An ITO Company



**Nexans**

**Prysmian**  
Group

**Jinko**<sup>Solar</sup>

**MAN**

# LOCATIONS

## CÔTE D'IVOIRE

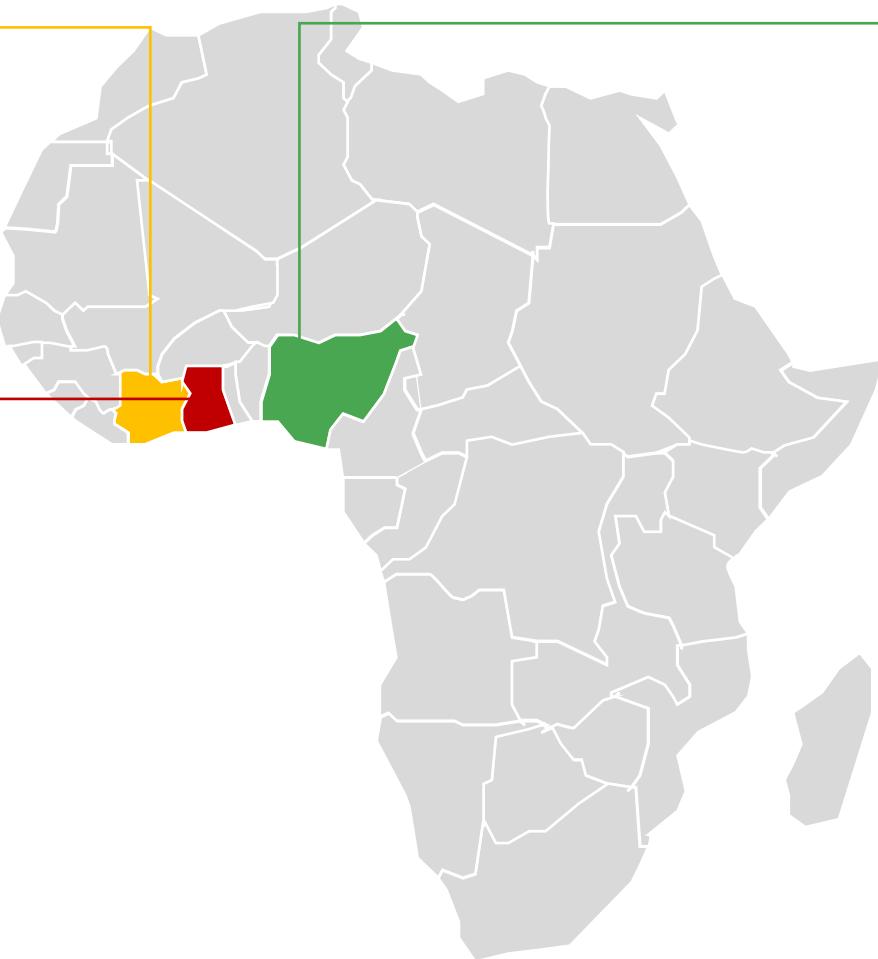
### Abidjan

Cocody Danga Villa,  
N°6 - Rue des Cannas  
26 BP 13777 Abidjan 26  
- Côte d'Ivoire  
Cell: +225 64 02 37 23

## GHANA

### Accra

Plot No. 8, 4<sup>TH</sup> Circular Street  
6<sup>th</sup> link close, Cantonments  
Accra East District, Ghana.  
Tel: +233 54 333 68 12,  
+233 54 511 75950



## NIGERIA

### Lagos

21, Ahmed Onibudo Street,  
Ground floor, Left Wing,  
Victoria Island, Lagos.  
Tel: +234 (0) 1 462 82 90/91/92

### Abuja

2 Dar-Es-Salaam Crescent.  
Off Aminu Kano Crescent,  
Wuse 2, Abuja,  
FCT.

### Port Harcourt

48 Ordinance Road,  
Trans Amadi layout,  
River State, Nigeria.  
P.O. Box 6469, Port Harcourt.  
Tel: +234 (84) 487 844/232 501



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