Green Energy
System Solutions
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BUSINESS PROFILE

EPC · OWNER'S ENGINEER · O&M CONTRACTOR

Commercial & Industrial · Utility-Scale Solar PV and Battery Energy Storage

MANAGING DIRECTOR: APELELE SONGO

PV
Team-reported solar experience

BESS
Storage programme development context

OE
Independent technical assurance

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COMPANY OVERVIEW

Who We Are

- GREENERGY SYSTEM SOLUTIONS (PTY) LTD operates as GES-Solutions, supporting C&I and utility-scale PV and BESS through EPC coordination, owners engineering and O&M advisory.
- We deliver across the full asset lifecycle — feasibility, design assurance, EPC execution, construction supervision, commissioning, and long-term O&M.
- Our team brings experience across solar PV, storage, wind and infrastructure. Prior employment and individual project experience are distinct from contracts delivered by GES-Solutions.
- As a Level 1 B-BBEE contributor, we combine technical rigor with a commitment to local-content growth and skills development across Southern Africa.

MISSION

Deliver independent, technically rigorous engineering assurance and turnkey EPC/O&M execution that protects our clients' capital and accelerates Africa's transition to reliable, sustainable energy.

VISION

Be Southern Africa's trusted engineering partner across the full renewable-energy value chain — from utility-scale generation and storage to complex, multi-discipline infrastructure corridors.

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OUR CAPABILITY

What We Do

Three integrated service lines spanning the full project lifecycle, for both C&I and utility-scale clients.

EPC

Engineering, Procurement & Construction of solar PV and BESS systems — single point of contractual accountability from design through energisation.

Owner's Engineer

Independent technical assurance on behalf of sponsors and lenders — design review, EPC tender support, construction supervision, commissioning oversight and Taking-Over Certification.

O&M

Long-term operations, maintenance and performance-audit services that protect asset performance and bankability through the defects-liability period and beyond.

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EPC SERVICES

Engineering, Procurement & Construction

Utility-Scale & C&I Solar PV / BESS

Feasibility studies & site surveys to confirm technical and financial viability.

Solar PV & BESS system design, electrical schematics and equipment selection.

Procurement & vendor management, sourcing quality materials at competitive terms.

Construction, installation and commissioning delivered by certified installer partners.

04

Grid-connection & regulatory approvals — NERSA, NTCSA, Eskom and municipalities.

Single point of contact under one agreement — one bill, one accountable delivery team.

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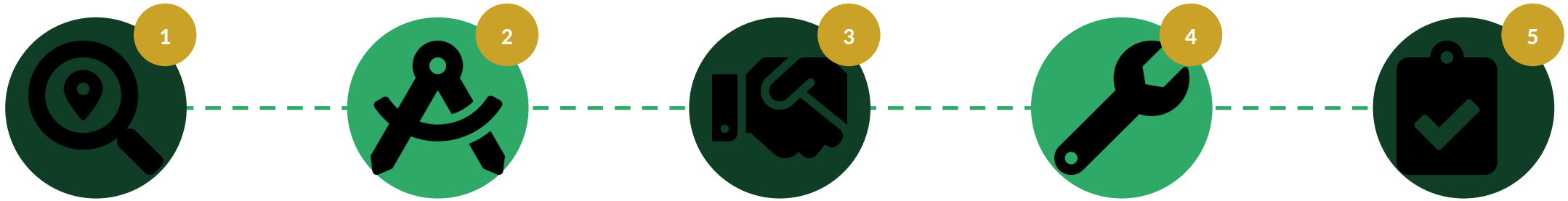
HOW WE DELIVER

EPC Delivery Process



Feasibility & Site Survey

Design & Engineering

Procurement

Construction & Installation

Commissioning & Handover

Delivered as a single, turnkey engagement — the same accountable team carries the project from first site visit through to grid-connected, performance-verified handover.

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OWNER'S ENGINEER

Independent Technical Assurance

- GES-Solutions acts as independent Owner's Engineer (OE) on behalf of project sponsors and lenders, providing technical assurance across EPC tender, construction and commissioning stages for utility-scale renewable, storage and infrastructure programmes.
- Team experience includes engineering support through ISAO on PV and BESS projects: design review, document control, construction monitoring and commissioning interfaces.
- The supplied portfolio includes preliminary engineering for the Lubombo/Pongola corridor concept. Wider owners-engineer appointment and programme delivery remain subject to mandate.

OE, IN OUR OWN WORDS

"The Owner's Engineer is the Sponsor's independent technical-assurance arm — verifying, not executing, the EPC's design and delivery."

We hold this role on behalf of Sponsors, JV partners and lenders' technical advisors — protecting bankability from EPC tender through Taking-Over Certificate.

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OWNER'S ENGINEER

OE Scope in Detail

Design Review & Document Control

Independent review of the EPC's engineering pack; master document and deliverables register.

EPC Tender Support & Bid Evaluation

Technical specifications, pre-qualification, bid evaluation and EPC contract technical schedules.

Construction Supervision & QA/QC

Hold-points, witness-points, FAT/SAT attendance and non-conformance-report management.

Commissioning Oversight & Performance Testing

Witnessing energisation, performance-test protocols and acceptance recommendations.

Taking-Over Certificate & DLP Supervision

TOC recommendation memos and defects-liability-period monitoring through final completion.

HSE Assurance & Regulatory Interface

Independent HSE site-walks and technical liaison with NERSA, NTCSA and Eskom.

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O&M SERVICES

Operations & Maintenance

- Design, commissioning, operation and maintenance of solar PV and battery energy storage systems across C&I and utility-scale portfolios.
- O&M audits and independent surveillance for asset owners, investors and lenders — verifying performance against contractual and grid requirements.
- Continuous performance monitoring, fault diagnosis and reporting to protect energy yield across the asset's operating life.
- Preventive and corrective maintenance programmes, from single C&I rooftop systems to multi-site utility-scale portfolios.

TRACK RECORD

Team experience described in the supplied portfolio includes O&M audit and surveillance for Adams, Electra, Sishen and Gouda. Each new GES appointment defines its own scope and authority.

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TRACK RECORD

Capabilities Across the Lifecycle

PV

Team-reported PV experience across REIPPPP and other projects; individual roles attributed per reference.

BESS

BESS development context in the supplied corridor concept; not an executed operating GES portfolio.

EPC

Coordinated delivery across engineering, procurement and construction

OE

Independent technical assurance

FPV

Floating-PV concept context in source materials; scope and appointment vary by project.

O&M

Operations and maintenance advisory

LEADERSHIP

Leadership and Corporate Identity

APELELE SONGO

Managing Director

Leadership, operations and technical delivery

- Registered entity: GREENERGY SYSTEM SOLUTIONS (PTY) LTD, 2024/290803/07. Incorporation recorded by CIPC on 19 May 2024.
- Apelele Songo - Managing Director; Akhona Songo - Executive Technical Director; Mpho Moremi - Executive Director: Strategy and Business Development.
- Technical delivery covers feasibility inputs, engineering review, commissioning and operating-asset support.
- Each engagement assigns accountable human owners, competent specialists and appropriate technical checking.
- Statutory appointments and professional authority follow verified current records and the actual project scope.

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OUR TEAM

Apelele Songo

MANAGING DIRECTOR

Akhona Songo

EXECUTIVE TECHNICAL DIRECTOR

Mpho Moremi

EXECUTIVE DIRECTOR: STRATEGY AND BUSINESS DEVELOPMENT

Leadership and specialist delivery are coordinated through defined appointments, project responsibilities and competent review. Individual experience is attributed separately from GES company contracts.

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PROJECT REFERENCE

Sishen O&M Audit & Surveillance

LOCATION	Dibeng, Northern Cape, South Africa
PEAK CAPACITY	94.3 MWp
NOMINAL CAPACITY	74 MW
TECHNOLOGY	Photovoltaic solar with horizontal tracking
START-UP	2014
CLIENT	ACCIONA

OUR SCOPE

Independent O&M audit and surveillance — reviewing performance data, maintenance practices and contractual compliance for the asset owner, as part of the Hulisani RBH portfolio review.

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PROJECT REFERENCE

Utility-Scale REIPPPP Portfolio

75 MW

Jasper Power Company

Northern Cape, South Africa

Engineering, procurement, on-site Factory Acceptance Tests, final inspection and shipment (with Ingeteam).

82.5 MW

Paleisheuwel Solar Park

Western Cape, South Africa

Third-party inspection & expediting for ENEL Green Power under REIPPPP; FAT and shipment sign-off.

82.5 MW each

Pulida & Adams Solar Parks

South Africa

REIPPPP on-site inspection, expediting, and Factory Acceptance Testing for ENEL Green Power.

rences describe team experience. Prior employer assignments are not represented as GES-delivered company contracts.

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PROJECT REFERENCE · OWNER'S ENGINEER

Lubombo / Pongola Corridor

Sponsor: Afrikainvest Power — Integrated Renewables, Storage, Data Centre & Cross-Border Connectivity

- 250 MWac floating PV at Pongola (within a 400MW concession)
- 1 GWh grid-forming BESS — 2 × 500MWh, Pongola & Lavumisa
- 50MW behind-the-meter data-centre load
- First-of-kind submarine HV + fibre crossing of Lake Jozini

TEAM EXPERIENCE

Incumbent design engineering consultant on the Pongola FPV programme — preliminary design report, PVsyst yield & uncertainty analysis, Huawei-aligned electrical configuration & Bill of Materials, array/inverter-block layouts, and the De Hoop and Sekhukhune companion studies.

Pursuing appointment as Lead Owner's Engineer across EPC tender, construction supervision and commissioning — coordinating FPV, BESS, submarine-HV and fibre sub-OE disciplines.

PROJECT REFERENCE · EPC

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Namibia Solar PV — Construction & Commissioning

Cross-border delivery beyond South Africa's borders

2 x 10 MW

Kokerboom Solar PV Farm

2 x 10MW solar PV plant — construction and commissioning delivered for the Namibian market.

2 x 10 MW

Mariental Solar PV Farm

2 x 10MW solar PV plant — construction and commissioning delivered alongside Kokerboom.

Prior project-engineer experience for AEC Solar is presented as individual experience, separate from GES company appointments.

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PROJECT REFERENCE

Wind — Met Mast Installation & Verification

Installation inspection and verification, 2021–2022

32.5 MW

Excelsior Wind Energy Facility

Swellendam, Western Cape

145 MW

Garob Wind Power Station

Copperton, Northern Cape

120 MW

Golden Valley Wind Power Project

Eastern Cape

Additional meteorological mast installation, inspection and verification (to IEC 61400-12-1) at Kleinsee, Gouda, Loeriesfontein and Poffadder, South Africa, and in Ghana.

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WHO WE SERVE

Sectors We Serve

Utility-Scale IPP & REIPPPP Generation

Grid-connected solar PV plants procured under South Africa's REIPPPP and comparable programmes.

Battery Energy Storage

Grid-forming and behind-the-meter BESS, from single-site hybrid systems to multi-hundred-MWh programmes.

Commercial & Industrial (C&I)

Factories, warehouses, corporate campuses and shopping centres reducing costs and grid dependence.

Cross-Border & Multi-Discipline Corridors

Integrated FPV, BESS, data-centre and submarine HV/fibre infrastructure programmes.

Sponsors, IPPs & Lenders

Owner's Engineer and Lender's Technical Advisor support for project sponsors and financiers.

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TECHNICAL REVIEW

PV and BESS Technical Risk Review

R45,000 | Defined scope | Seven working days

One project: up to ten agreed documents or 150 pages; maximum 30 specialist hours.

Sizing, selected equipment, interfaces, warranty wording and commissioning requirements.

Prioritised findings register and concise management summary.

One remote closeout up to 60 minutes and one factual clarification round.

Starts after appointment, complete inputs and R22,500 mobilisation; R22,500 due on final issue.

Desktop advisory only; design, site work, studies and certification are separately scoped.

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SPECIALIST SERVICES

Engineering and Circular Service Interfaces

Coordinated appointments | Defined authority

PV and BESS design review, equipment interfaces and technical due diligence.

Grid, protection and substation study coordination with appointed specialists.

Project controls, construction assurance, FAT/SAT and handover readiness.

Civil, structural, HSE and environmental interfaces with competent practitioners.

GES Circular: PV collection, assessment and qualified recovery in development.

Model-specific BESS preservation and mobile support, subject to OEM authority.

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Thank You

Let's build Africa's energy transition together.

CONTACT US

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