



MESAMA ENERGY

MESAMA ENERGY

CORPORATE COMPANY PROFILE

Transitioning Africa to a Carbon Neutral Future

African Developer & Independent Power Producer • Established 2017





Overview



1

Standard Model for Corporates in Africa

- Invest in, and operate, own energy assets
- Relatively low capacity to reduce carbon footprint or improve energy efficiency, due to lack of skills and it's not their core business.
- Often highly dependent on fossil fuel price and electrical grids.
- Low efficiency of energy supply due to poor maintenance.

2

Challenges

- Previously limited interest and/or experience in the corporate PPA model in Africa.
- Industrials at decision-making level compare primary energy cost to utility cost, and are not fully focused on CO₂ reductions.
- Internal resources stretched across business lines.



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WHY MESAMA ENERGY

How Mesama Helps

1

MESAMA Value Proposition

- MESAMA designs, builds, owns and operates assets, allowing clients to focus on their core business.
- Client can outsource / externalize energy (or steam) system efficiency.
- Client reduces upfront capex spend.
- Project benefits from international IPP partners' scale of business, credit profile and previous investments.
- Faster way to decarbonize, save energy and money.
- Partners' reputation backs the long-term supply of power, steam, gas, battery systems, etc.

2

MESAMA Consultancy

- Conducts technical, commercial & financial due diligence on projects for lenders, equity providers, IPPs, etc.
- Provides assistance on bid preparation for IPPs for REIPPP and other bid submissions.
- Prepares bid requirements for competitive tendering processes, evaluates responses & recommends preferred bidders.
- Fund raising on projects in different phases of development for IPPs.
- Technical advisory services for financial close process.
- Assists on project development for IPPs.
- Compilation and maintenance of ED & SED plans & activities for IPPs.
- Sourcing of off-takers / PPAs for IPPs.



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STRATEGY

Off-Grid Private PPA – Key Targets & Strategy

OUR CLIENTS' SECTORS

- Food & Beverage
- Papermill
- Cement
- Sawmill
- FMCG
- Chemicals
- Mining
- Textile
- Automotive

1

An African Developer & IPP established in 2017 dedicated to creating new models, technologies and approaches tailored to Corporate clients

- Reaching out to medium & big players that will shape the future of Africa's energy business
- An environment where new innovative initiatives are incubated and tested until sustainable maturity levels are reached
- Focus on digitalization
- Provides technical, commercial & financial advisory services to clients developing new green economy policies & conducting DDs on projects
- Fund raising for projects at various stages in the development process
- Sourcing of off-takers for fellow IPPs

2

Aimed at offering high added-value green competitive solutions “as-a-service”

- Corporate 10 to 25 year bespoke PPAs
- Build, Own, Operate & Transfer model
- Assets owned by a dedicated SPV, majority owned by MESAMA Energy, technology providers, off-takers, incl. partners fulfilling local government procurement policies
- Replicable solution aiming to create a portfolio of projects

3

Keeping an active role in the development & operation of the project

- Internal engineering capacities, elsewhere liaise with a reliable key partner
- Governance majority in the SPV
- Operation & Maintenance done internally, elsewhere liaise with a reliable key partner



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SOLUTIONS

Industrial Energy Solutions: Hybrid Solutions



Energy Efficiency

Optimize O&M and design to save energy, e.g. use waste heat

Energy As a Service

Gas

Use solid waste (Biogas),
H₂, LNG, CNG

Power Quality

Batteries associated to PV, Wind
or gas engines

Biofuel Boilers

Remove fossil fuel, replace by a
carbon-neutral and cheaper fuel

Combined Heat Power

Gas engines or biomass boilers
associated to steam turbine

Technologies:

Wind, Solar PV, Storage, Biomass, Waste to Energy, Gas (LNG, CNG, H₂), DHC etc
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SECTOR FOCUS

Electro-Intensive – Offerings

Renewable, Competitive & Reliable Power Supply

- Corporate PPA (solar PV, wind, hydro)
- Onsite green power generation
- Storage and power quality solutions
- Energy Management System to regulate power generation
- Transmission lines and substations, HV, MV or LV distribution networks
- Hybrid power generation (combination of renewable and conventional generation)
- Tailor-made global offer for power assets including design, build, finance, O&M, EPC contract...

Performance in Mining Operations

- Electrical engineering, automation system (design, build and maintenance)
- Utilities production: heat, steam, compressed air, demineralised water (design, build, maintenance and finance)
- Energy supply, energy efficiency (audit, smart monitoring, dashboard)
- Multi-technical maintenance, FM
- Smart management / data-driven O&M: SCADA, production optimisation, predictive maintenance...
- Alternative fuels for mining vehicles (electricity, hydrogen)
- Hydrogen optimised ecosystem for mines: heavy mobility, high temperature process and power storage

Decarbonation & CSR

- Carbon footprint: management and reporting
- Environmental monitoring and consulting
- Energy access: supply communities with power
- Green mobility: access to electric mobility
- Consulting on social acceptance for industrial projects



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VALUE CHAIN

Contractual solutions - Scope of services

Audit & Studies

- Standard energy audit on industrial process, utilities, industrial buildings
- EIA studies
- Permits (national, provincial, local, DOE, DM, DFFE etc.)
- Resource assessments (solar, wind, biomass, hydro, gas)
- Feasibility study & computational simulation
- Energy integration, measurement & data mining
- Field test & lab characterization of new tech
- Due Diligence (Technical, Commercial & Financial)
- Biomass methanisation/gasification
- CEL/BQ Eskom Process

Engineering

- Defining energy solution to optimise performance
- Sizing and design of networks
- Metering, command & control for thermal process
- Electrical substation, compressed air
- Electrical, mechanical, BMS, civil & structural design
- 3D model & writing of specifications
- Professional engineering services (multidisciplinary)

Procurement

- Manage RFQ and vendor quotation
- technical analysis for combustion/thermal systems
- Powerful procurement with worldwide manufacturers
- Professional engineering services (multidisciplinary)

Installation

- Self delivery and/or subcontracting
- Risk management for long-term operation
- Oversee installation activities
- Owner's engineer
- Lender's technical advisory

Operation & Maintenance

- Operate the utilities, procure the primary energy, bill the utility
- Preventative & corrective maintenance
- Major maintenance (Elec, Mech, Civil, SCADA)
- Reporting to the client, manage availability
- Condition monitoring (Elec, Mech, Civil, Structural, SCADA)
- Owner's engineering, grid compliance & power quality
- Spares and inventory management

Asset Management

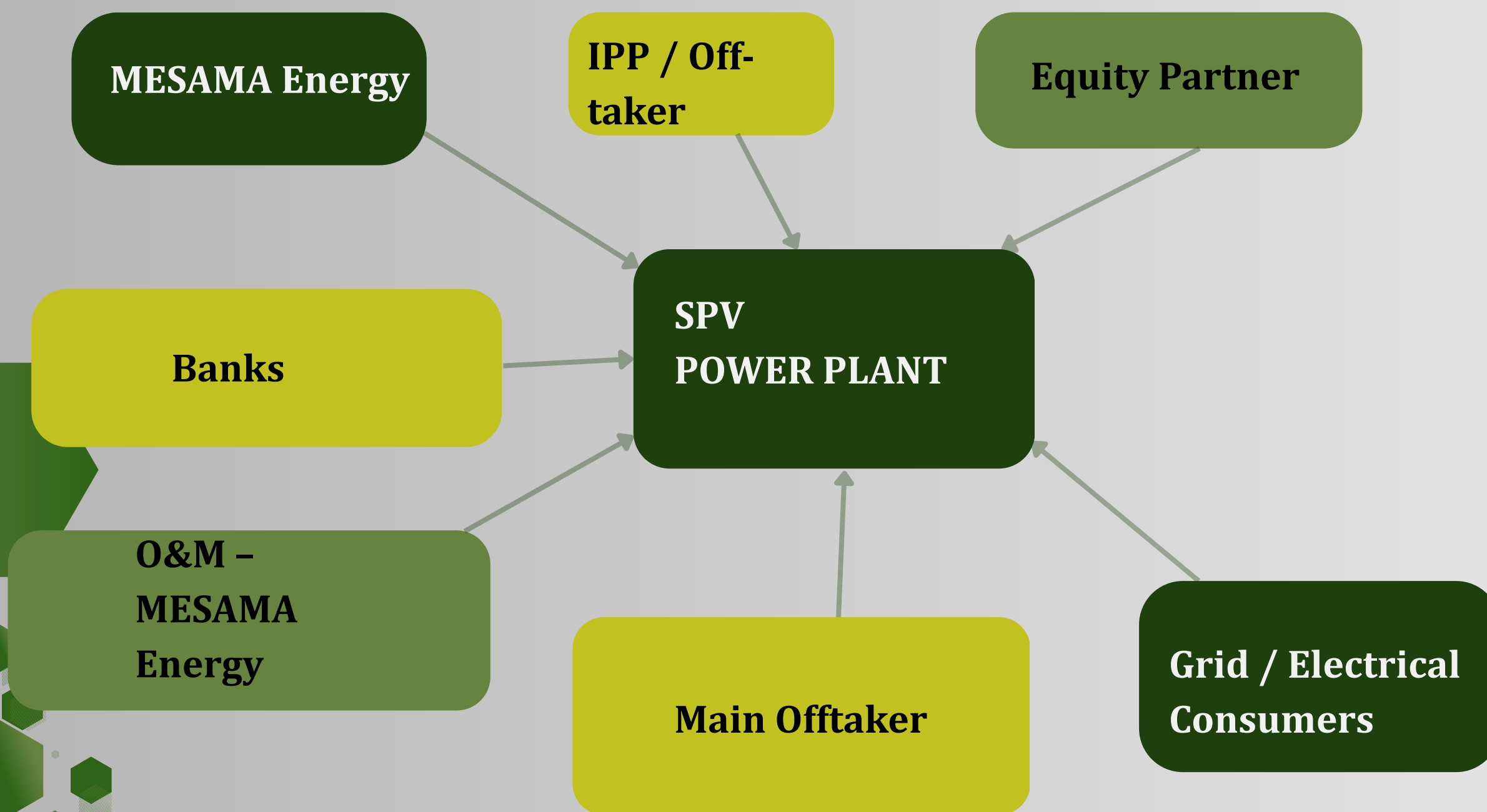
- Asset health & predictive analytics
- Risk management, revenue assurance & optimisation
- Independent performance & grid compliance
- Export optimisation
- ESG, lender & technical reporting
- Commercial & financial model optimisation
- Lender's technical advisory, asset audits



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OWNERSHIP STRUCTURE

SPV - Structure: Plant Ownership



Structure to be developed per project – a more global structure or ownership (multisite / multi-country) to be investigated as well.

Win-Win Partnership

- Construction and O&M skills in the SPV.
- Optimisation of shareholding and responsibilities per core business.
- 85 average jobs created per project, depending on the technology deployed.



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TRACK RECORD

Delivered Projects

OUR PROJECTS — OVER 15MW INSTALLED CAPACITY

Vibrac

Ford

**Bidvest
Prestige**

Kathesa

**Bokang
Africa**

**PM Solar
Solution**

**Dept. of
Labour (RSA)**

**Dept. of
Education
(RSA)**

1500+

Residential households reached through onsite solar & storage rollouts

ADVISORY PROJECTS

Technical, Commercial & Financial

- Banking institutions
- Mining
- Farming
- FMCG
- Municipality
- Logistics
- Dept. of Education
- Sugar Milling
- Private Equity Investors
- DFIs
- IPPs



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TRACK RECORD

Notable Delivered Projects

POS	CLIENT	PROJECT DESCRIPTION	DURATION
1	PIC	DD: Waste to Energy, Solar PV, Wind, eMobility. Owner's Engineer: CSP	2024 – On going
2	Genesis Energy	DD: Solar PV, Wind Farm, BESS Project Development: Gas to Power, Solar PV, BESS	2023 – On going
3	Divaine Growth Solutions	DD: Solar PV, Waste to Energy Project Development / Owner's Engineer: eMobility, Solar PV + BESS O&M & Asset Management: Solar PV	2022 – On going
4	Tshwane Municipality	O&M: Substations	2023 – 2026
5	Transnet	O&M: Substations, Condition Monitoring	2024 – On going
6	Enpower	EPCM: Solar PV Commercial: PPA + Shareholder sourcing	2022 – On going
7	Jeka Resources	Project Development: Solar PV EPCM: Solar PV Capital raise: Solar PV	2022 – On going



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OUR PEOPLE

Team

Melusi Tshabalala
CEO

Busani Ngcamu
Team Lead

Sphehile Jacobs
Team Member

Linda Cele
Team Member

Nelisiwe Mathebula
Team Member

Kwazi Sangweni
Team Member

Lisa Justice
Team Member

Sibusiso Duma
Team Member

Tumelo Ramolula
Team Member

Brendon Mabwe
Team Member

Oaratwa Masilo
Team Member

Mary-Joy Masetlane
Team Member

Karabo Tosa
Team Member

The team combined has over **100 years** of experience in the generation, transmission and distribution of energy — over **1.5GW** of energy projects development experience and over **400MW** executed, across Wind, Solar PV, CSP, Hydro power, Biomass, Gas to Power & Mobility (LNG, CNG, LPG, H₂), and Waste to Energy. With qualifications up to Master's level across technical, business, finance & commercial backgrounds, the team delivers competitive, technically suitable projects for our customers.



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Let's Connect

GET IN TOUCH

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Transitioning Africa to a Carbon Neutral Future

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