ANNEXURE 1: DESCRIPTION OF SERVICES FOR THE ENERGY PERFORMANCE CONTRACT - EnPC

1. Overall Purpose and Scope of Services

The primary objective of this Energy Performance Contract (EnPC) is to enhance the operational competitiveness and sustainability of the East London Industrial Development Zone (ELIDZ) through the implementation of a comprehensive, turnkey Energy Efficiency Solution. Under this engagement, the appointed Energy Services Company (ESCO) is mandated to deliver a full-service, performance-based energy management program designed to reduce electrical consumption and associated costs across the designated ELIDZ premises.

1.1 Turnkey Responsibilities

The ESCO shall act as the principal service provider for the end-to-end lifecycle of the Energy Efficiency Solution. This responsibility encompasses the following integrated phases:

- **Design and Engineering:** Conducting comprehensive energy audits and designing optimal lighting and control systems tailored to ELIDZ's specific operational requirements.
- **Full Financing:** The ESCO shall provide, secure, or facilitate the total capital investment required for the procurement and installation of all infrastructure, ensuring no upfront capital expenditure by ELIDZ.
- **Supply, Installation, and Commissioning:** The sourcing, physical installation, and integration of high-performance, IoT-ready LED luminaires, intelligent controllers, and a robust Central Management System (CMS).
- **Operation and Maintenance:** Proactive management, monitoring, and corrective/preventive maintenance of all installed Energy Efficiency Equipment to ensure continuous high-performance standards throughout the Contract Term.

1.2 Scope of Energy Efficiency Solutions

The scope of services specifically targets the modernization of existing lighting infrastructure. The ESCO is responsible for the transition of current systems to an intelligent, networked infrastructure capable of real-time performance monitoring. Key technical deliverables include:

Component	Scope Description
IoT-Ready LED Luminaires	Supply and installation of high-efficiency LED units meeting all relevant SANS/IEC standards.
Control Infrastructure	Implementation of intelligent controllers to enable remote dimming, scheduling, and fault detection.
Central Management System (CMS)	Deployment of a cloud-based or local server CMS to provide granular data on energy usage and system health.

1.3 Performance-Based Objective

This Agreement is based on the generation of **guaranteed energy savings**. The ESCO's remuneration is directly linked to the actual, verified reduction in energy consumption achieved compared to the baseline established during the study phase. These savings shall be quantified through a rigorous Measurement and Verification (M&V) protocol, aligned with the International Performance Measurement and Verification Protocol (IPMVP) and SANS 50010 standards.

Key Performance Commitment:

The ESCO guarantees that the installed solution will deliver, at a minimum, the Energy Savings Target proposed in the tender. Savings achieved in excess of the baseline shall be shared between ELIDZ and the ESCO according to the pre-agreed ratios stipulated in the Financial Proposal, ensuring a mutual interest in the sustained success of the project.

ESCO acknowledges that this is a shared-savings model where the risk of performance failure rests with the ESCO. Consequently, the ESCO warrants that all equipment and management strategies will adhere to Good Industry Practice to ensure that User Comfort Requirements are maintained and that energy reduction goals are met without compromising the operational integrity of the ELIDZ.

2. Phase 1 Services: Study and Design

During the Study Phase the ESCO is required to perform rigorous data collection and technical analysis to define the project scope, performance metrics, and financial viability. This phase shall commence immediately upon the Signature Date and shall be completed within a period of one (1) month, unless otherwise mutually agreed upon by the Parties.

2.1 Energy Efficiency Audit
Within thirty (30) Business Days of the Signature Date, the ESCO shall conduct a comprehensive Energy Efficiency Audit of the ELIDZ premises. This audit shall be executed in strict accordance with EN 16247 or ISO 50002 (Energy Audit Type II) standards. The scope of this audit includes, but is not limited to:

- Detailed inventory and assessment of all existing lighting and electrical infrastructure (Existing Installations).
- Measurement and analysis of current power quality, load profiles, and usage patterns.
- Identification of site-specific constraints, spatial requirements, and environmental conditions affecting potential efficiency improvements.
- Evaluation of existing compliance with ELIDZ's 'Users' Comfort Requirements'.

2.2 Establishment of Baselines
The ESCO shall formally establish and document the following parameters, which shall serve as the reference points for all subsequent M&V activities:

- **Baseline Conditions:** A comprehensive report documenting the prevailing operational conditions, occupancy patterns, and environmental factors at the Property during the Baseline Period.
- **Electrical Consumption Baseline:** A verified data set representing the historical electrical consumption of the Existing Installations. This baseline must be adjusted for any documented variations to ensure a fair and accurate comparison during the Operational Phase.

2.3 Technical Design and Savings Target
Based on the audit findings, the ESCO shall develop a final technical design for the Energy Efficiency Solutions. This design must include:

- Proposed specifications for the IoT-ready LED luminaires, controllers, and CMS architecture.
- Detailed methodology for the integration of new equipment with ELIDZ's existing infrastructure.
- Calculation of the **Energy Savings Target**, expressed in kilowatt-hours (kWh) per annum, derived from the difference between the Baseline Electrical Consumption and the projected post-installation performance including Maintenance cost savings targets.

Review and Approval Process:

The ESCO shall submit the Audit Report, Technical Design, and Energy Savings and Maintenace Cost Savings Targets to the appointed M&V Agent for independent review. The ESCO is responsible for addressing all queries raised by the M&V Agent or the ELIDZ. Formal acceptance of these documents by both the M&V Agent and ELIDZ is a mandatory prerequisite before the ESCO may proceed to the Implementation Phase and secure the necessary Financing Agreements.

In the event that the M&V process indicates a material deviation from the savings potential originally estimated during the tender process, the ESCO shall provide a formal reconciliation statement. The Parties shall engage in good faith to resolve any discrepancies, ensuring that the finalized Energy Savings Target is realistic, technically achievable, and verifiable under the M&V Plan.

3. Phase 2 Services: Financing and Implementation

Upon the formal acceptance of the Study Phase deliverables and the execution of the necessary contractual documentation, the ESCO shall initiate the Implementation Phase. This phase is characterized by the ESCO's total commitment to project financing and the execution of all engineering and installation works required to realize the energy savings objectives.

3.1 Full Project Financing

The ESCO assumes full and sole responsibility for the procurement, provision, and management of 100% of the capital required to execute the Energy Efficiency Solutions. ELIDZ shall have no obligation to provide upfront capital or project financing. The ESCO warrants that it has secured, or will secure, the necessary financial resources through its chosen Financing Agreements to complete the works as specified. All financial risks associated with the procurement, logistics, and installation remain with the ESCO.

3.2 Implementation and Execution

The ESCO shall execute the supply, delivery, installation, and commissioning of the Energy Efficiency Equipment strictly in accordance with the project-specific 'Implementation Schedule'. Implementation services include:

- **Procurement and Logistics:** Sourcing high-quality, certified equipment and managing all transportation and on-site storage requirements.
- **Construction and Installation:** Performing all engineering and technical installation works with the skill, care, and diligence expected of a qualified service provider.
- **Commissioning and Testing:** Conducting comprehensive functional testing of the IoT-ready luminaires, controllers, and the Central Management System (CMS) to verify performance against the Energy Savings Target.

3.3 Standards and Safety Compliance

All services during this phase must be performed in strict adherence to **Good Industry Practice**. The ESCO is responsible for:

- Ensuring full compliance with all relevant South African legislation, national standards (SANS), and safety regulations.
- Managing site safety, health, and environmental (SHE) risks, including the provision of a project-specific SHE file and necessary risk assessments.
- Coordinating work schedules with ELIDZ to minimize disruption to industrial and administrative operations.

Notice of Completion and As-Built Documentation:
Upon finalizing the installation and passing performance tests, the ESCO shall issue a formal 'Notice of Completion of Works'. The ESCO must submit a comprehensive set of
As-Built Documentation

This documentation is a prerequisite for the formal transition to the Operational Phase and must include, at a minimum, single-line electrical diagrams, updated equipment datasheets, system control logic configurations, and final commissioning reports

Failure to meet the milestones stipulated in the Implementation Schedule may trigger liquidated damages as defined in the main Agreement, unless such delays are directly attributable to Force Majeure or client-side interventions. ELIDZ reserves the right to inspect the works throughout the Implementation Phase to verify compliance with the design specifications and overall quality standards before issuing formal acceptance.

4. Phase 3 Services: Operation and Maintenance

Upon the formal acceptance of the Notice of Completion of Works, the project shall transition into the Operational Phase. During this term, the ESCO assumes full and sole responsibility for the active management, operation, and maintenance of the installed Energy Efficiency Equipment to ensure the continued achievement of the Energy Savings Target.

4.1 Active Energy Management and CMS Operation

The ESCO shall maintain continuous operational control over the Central Management System (CMS). Services provided during this phase include:

- **Remote Monitoring:** Utilizing real-time data from the CMS to monitor energy consumption patterns and system performance.
- **System Optimization:** Proactively adjusting control parameters, dimming schedules, and setpoints to maximize energy savings while adhering to operational requirements.
- **Performance Analytics:** Identifying and addressing technical anomalies or operational inefficiencies revealed by the monitoring software within one (1) Business Day of detection.

4.2 Compliance with Users' Comfort Requirements

The ESCO acknowledges that energy efficiency must not come at the expense of occupant safety or productivity. Consequently, the ESCO is obligated to ensure that all lighting and control systems consistently operate within the parameters defined in the **Users' Comfort Requirements**. The ESCO shall perform regular audits of these comfort levels and implement immediate corrective measures should any performance non-compliance be identified or reported by ELIDZ.

4.3 Scheduled and Corrective Maintenance

The ESCO shall execute all maintenance activities as detailed in the **Maintenance Plan**. This commitment includes:

- **Preventive Maintenance:** Executing scheduled inspections, cleaning, testing, and component servicing to prevent equipment failure and maintain optimal performance over the contract lifecycle.
- **Corrective Maintenance:** Rapid response and repair of any faulty equipment, including the replacement of defective luminaires, sensors, or communication hardware.
- **Resource Provisioning:** The ESCO shall bear all costs associated with maintenance, including highly skilled labor, specialized tools, spare parts, logistical support, and administrative overhead.

Maintenance Standards and Logbook:

The ESCO shall maintain a detailed digital or physical logbook recording all maintenance events, system adjustments, and interventions. This logbook shall be accessible to ELIDZ at all times and will serve as a primary reference for annual performance reviews. All maintenance works must be

conducted in compliance with relevant safety standards (OHS Act) and shall be performed in a manner that ensures minimal disruption to ELIDZ business activities.

The ESCO is prohibited from subcontracting maintenance obligations during the Operational Phase without prior written consent from ELIDZ. Should the ESCO fail to perform necessary maintenance or fail to resolve faults within the stipulated timeframes, ELIDZ reserves the right to exercise its remedies, including but not limited to, the implementation of remedial actions at the ESCO's expense through retention or withholding of the Energy Savings Payment.

5. Measurement, Verification (M&V), and Reporting Services

The integrity of the EnPC is underpinned by the accurate, transparent, and verifiable quantification of energy savings. The ESCO is responsible for the continuous monitoring of energy performance and the subsequent generation of comprehensive reports that serve as the audit trail for all performance-based payments.

5.1 Continuous Monitoring and Data Collection
The ESCO shall utilize the installed Monitoring Equipment and the Central Management System (CMS) to capture and record the **Real Electrical Consumption** on a continuous basis. This data collection process shall be automated, secure, and resilient against data loss. The ESCO must ensure that all monitoring hardware is calibrated and maintained to meet the accuracy requirements specified in the M&V Plan.

5.2 Calculation Methodology
The ESCO shall calculate the monthly **Energy Savings** by determining the variance between the defined Baseline Electrical Consumption and the measured Real Electrical Consumption, adjusted for any relevant independent variables (such as operational hours, occupancy levels, or seasonal variations) as stipulated in the M&V Plan. All calculations shall be performed in strict accordance with **SANS 50010** (Measurement and Verification of Energy Performance) and the internationally accepted **IPMVP** (International Performance Measurement and Verification Protocol).

Calculation Element	Description
Baseline Consumption	The historical energy consumption adjusted for current operating conditions as per the baseline report.
Real Consumption	The actual energy consumed by the installed solution as recorded by the metering infrastructure.
Net Energy Savings	(Baseline Consumption - Real Consumption) +/- Routine/Non-Routine Adjustments.

5.3 Monthly Reporting and Invoicing
The ESCO is required to submit an **Energy Savings Report** to the ELIDZ within ten (10) Business Days following the conclusion of each calendar month. The report shall, at a minimum, contain the following:

- Summary of energy consumption data for the reporting period, including peak and off-peak profiles.

• Detailed breakdown of calculated Energy Savings expressed in both kWh and monetary value.

• Verification of the 'Users' Comfort Requirements' status during the reporting period.

• Evidence of compliance with all operational and maintenance KPIs.

• A formal invoice for the **Energy Savings + Maintenance Savings Payment** based on the agreed-upon savings share.

Verification by Independent M&V Agent:

The Energy Savings Report may be subject to audit and verification by an independent M&V Agent appointed by ELIDZ. The ESCO shall provide full transparency, including access to raw data logs, metering certificates, and calculation models. Payment of the Energy Savings invoice is contingent upon the M&V Agent's endorsement that the reported savings are accurate and have been calculated in accordance with the agreed-upon M&V Plan.
Should any discrepancy be identified in the reporting or calculation, the ESCO shall be responsible for performing a re-calculation and issuing a corrected report within five (5) Business Days. Repeated failure to provide accurate or timely reports may be considered a material breach of the Agreement.

6. Training and Handover Services

To ensure the long-term sustainability of the project and the continued proficiency of ELIDZ operational staff, the ESCO is obligated to perform structured knowledge transfer and comprehensive handover services throughout the contract term and upon its conclusion.

6.1 Training and Capacity Building

The ESCO shall develop and deliver a comprehensive training program for designated ELIDZ technical and maintenance personnel. This program is intended to empower ELIDZ staff with the knowledge required to oversee the system, respond to basic operational alerts, and perform essential housekeeping tasks. Training shall include:

• **System Orientation:** Understanding the architecture of the IoT-ready LED luminaires and the interface of the Central Management System (CMS).

• **Operational Protocols:** Instruction on how to log in, view performance dashboards, interpret energy consumption data, and modify system settings within established comfort parameters.

• **Basic Troubleshooting:** Training on identifying common alarm codes, performing system resets, and executing minor diagnostic checks.

• **Safety Procedures:** Essential safety protocols regarding the interaction with high-voltage lighting control systems.

The ESCO shall provide a detailed **User Manual / Training Guide** (in both digital and hard-copy formats) which serves as a technical reference for ELIDZ personnel. This guide must include step-by-step operating procedures, FAQs, and contact information for the ESCO's support desk.

6.2 End-of-Contract Handover

At the conclusion of the EnPC term, or in the event of earlier contract termination, the ESCO shall conduct a formal handover process to ensure that the Energy Efficiency Equipment is returned to the possession and full control of ELIDZ in good working condition. This process shall include:

• **Final Condition Assessment:** The ESCO and ELIDZ shall perform a joint final inspection of all installed hardware to verify that the equipment is functional, safe, and complies with original performance specifications (allowing for normal wear and tear).

• **Asset Reconciliation:** A full inventory verification of all installed luminaires, controllers, and metering hardware.

• **Data and License Migration:** The transfer of all administrative rights, software licenses, and historical energy data logs associated with the CMS to ELIDZ.

• **Documentation Transfer:** Formal submission of all updated technical drawings, warranty certificates for remaining equipment lifespan, and final maintenance reports.

Transfer of Ownership:

Upon successful completion of the final inspection and the signing of the 'Certificate of Handover', ownership of all Energy Efficiency Equipment shall officially transfer from the ESCO to ELIDZ, free of all liens, charges, or encumbrances. The ESCO warrants that at the time of handover, all systems are free from defects and represent a fully integrated, high-performance lighting solution ready for continued use by the facility.

Any deficiencies identified during the final inspection must be rectified by the ESCO at its own expense prior to the release of the final performance-related retention or the issuance of the official handover certificate.

The ESCO is required to submit a detailed Lifecycle Maintenance Forecast for the 3-year period immediately succeeding the expiration or termination of the EnPC Contract. This submission must:

Itemize anticipated maintenance, repair, and replacement costs required to maintain the installed IoT-ready LED luminaires and CMS at the agreed-upon Performance

7. Standards.Social Performance and Compliance Services

The ESCO acknowledges that this EnPC is not merely a technical intervention but a vehicle for social and economic transformation within the Eastern Cape Province. Consequently, the ESCO is obligated to actively contribute to the socio-economic development objectives stipulated in the original Request for Proposals (RFP) and shall report on these contributions with transparency and rigor throughout the contract term.

7.1 Monitoring and Reporting Obligations

The ESCO shall establish a robust monitoring framework to track its socio-economic performance. This data shall be consolidated into a **Quarterly Social Performance Report**, which must be submitted to the ELIDZ Project Manager within fifteen (15) days of the end of each fiscal quarter. This report shall document the tangible impact of the project within the local provincial context.

7.2 Key Performance Indicators (KPIs)

The Quarterly Social Performance Report must include, at a minimum, detailed metrics regarding the following indicators:

• **Job Creation:** The number of direct and indirect jobs created as a result of the project, disaggregated by: Skill Level (Unskilled, Semi-skilled, and Highly skilled);Gender (Male/Female/Non-binary); and Age Group (Youth vs. Non-youth).

- Skill Level (Unskilled, Semi-skilled, and Highly skilled);
- Gender (Male/Female/Non-binary); and
- Age Group (Youth vs. Non-youth).

• **Skills Development and Training:** The number of individuals who have received accredited or internal project-specific training, including details on the type of certification or competencies gained during the project implementation phase.

• **Local SME Engagement:** The number and total monetary value of contracts awarded to local Small, Medium, and Micro Enterprises (SMEs). The ESCO shall specifically highlight

its commitment to supporting: Women-led enterprises; Youth-led enterprises; and Enterprises located within the direct geographical vicinity of the ELIDZ zone.

- Women-led enterprises;
- Youth-led enterprises; and
- Enterprises located within the direct geographical vicinity of the ELIDZ zone.

7.3 Commitment to Transformation

The ESCO is required to proactively seek opportunities to enhance the socio-economic impact of the project. This includes encouraging its supply chain partners to adhere to local procurement requirements and promoting a working environment that upholds national labor standards, promotes diversity, and fosters inclusive economic growth. The ESCO shall participate in annual review meetings with ELIDZ stakeholders to discuss the efficacy of these social performance initiatives and adjust strategies if necessary to maximize the intended provincial benefit.