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1. INTRODUCTION AND BACKGROUND

Eskom aims to localise the Solar PV panel manufacturing value chain and establish a facility at one of its existing sites in Mpumalanga.

The proposed project forms part of Eskom's broader strategy to support localisation of the renewable energy value chain, create green jobs and reduce reliance on imported PV products and components. Additionally, the project aims to improve long-term security of supply, introduce greater pricing stability over the life of solar deployment programme, stimulate local industrial competitiveness, and contribute to South Africa's Just Energy transition. The initiative also supports Eskom's objective of identifying new productive uses for existing sites and infrastructure, particularly within Mpumalanga, in a manner that promotes economic diversification and industrial renewal.

There is a critical need to assess the technical, financial, regulatory, legal, commercial, market, localisation, and implementation conditions required to develop a domestic solar PV manufacturing facility. This includes consideration of upstream inputs such as silicon extraction, beneficiation, and processing, and determining whether such an initiative would be feasible, competitive, bankable, and aligned with national development priorities.

In alignment with national policy and development instruments, including the Just Energy Transition Investment Plan (JET-IP), the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), the Green Economy Masterplan, and the National Infrastructure Plan 2050, Eskom considers there to be a compelling case to explore the feasibility of establishing a fully integrated or phased solar PV manufacturing value chain in South Africa

To support this objective, Eskom Holdings Soc Ltd seeks to appoint a suitably qualified and independent Transactional Advisor (TA) to undertake, coordinate, manage, integrate, and provide technical oversight on the comprehensive feasibility study, business case, commercial structuring, and pre-procurement preparation for the Project. The appointed TA shall act as Eskom's independent commercial, transaction, and implementation readiness advisor.

The TA shall be required to structure its work and outputs in a manner that supports Eskom's decision-making during the feasibility stage and, if the project proceeds, enables Eskom to use the TA during the EPC phase of the Project on a consultation / advisory basis, subject to Eskom's instruction and applicable procurement arrangements.

2. PURPOSE OF THE TA APPOINTMENT

The purpose of this appointment is for Eskom to secure a robust, bankable, and decision-grade feasibility study and business case, together with all supporting analyses, conceptual engineering, commercial and legal-structural frameworks, pre-procurement inputs, and transaction support required for Eskom to determine whether to proceed with a PV manufacturing facility.

The TA appointment shall enable Eskom to:

- Determine whether the proposed facility is technically feasible, commercially viable, financially bankable, legally and regulatorily achievable, and aligned with Eskom's strategic objectives.
- Assess the feasibility of a phased or fully integrated PV manufacturing value chain, including upstream beneficiation, midstream processing, downstream manufacturing, and end-of-life opportunities.
- Determine the most suitable point of entry into the PV value chain and the most appropriate phased localisation pathway.
- Evaluate Camden Power Station as the reference site while independently identifying the most optimum Eskom site for the facility.
- Assess relevant PV manufacturing technologies, production-line options, OEM engagement models, technology-transfer mechanisms, and IP / licensing considerations.

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- Evaluate South African manufacturers and industrial participants not only as suppliers, but also as possible industrial, operating, strategic, and investment partners.
- Develop ownership, partnership, funding, and commercial structuring options, including JV and non-JV models.
- Prepare the business/investment case and support documentation required for Eskom governance processes, government engagement, and potential investor engagement.
- Prepare procurement, transaction, and EPC/EPCM readiness inputs to enable Eskom to move into future implementation phases on a fair, transparent, and competition-preserving basis.
- Support Eskom during the future EPC phase on a consultation / advisory basis, if instructed by Eskom.

3. CLIENTS OBJECTIVE

The Client, ESKOM Holdings SOC Ltd, seeks to appoint a suitably qualified and independent Transactional Advisor (TA) to undertake, coordinate, manage, and provide advisory services for a comprehensive feasibility study for a vertically integrated Solar Photovoltaic (PV) manufacturing facility. The appointed TA shall act as Eskom's independent transactional, commercial, financial, and feasibility advisor for the purposes of planning, directing, integrating, reviewing, and advising on all study activities required to inform Eskom's investment decision

4. TRANSACTIONAL ADVISOR SCOPE OF WORK

4.1 SCOPE

1) In alignment with South Africa's renewable energy ambitions, industrialisation goals, and strategic economic development plans, ESKOM HOLDINGS SOC LTD intends to assess the feasibility of establishing a vertically integrated solar photovoltaic (PV) manufacturing facility. The facility is expected to have a minimum output of 1 GW, with potential scalability. The initiative is aimed at supporting the Just Energy Transition (JET), localisation, industrial capability development, supply-chain resilience, and sustainable job creation within the South African renewable energy sector.

2) The TA shall be responsible for leading and integrating all feasibility-stage workstreams required to produce a bankable, investable, transaction-ready, and procurement-ready outcome, including but not limited to market assessment, technical feasibility, financial and economic analysis, regulatory and legal review, localisation assessment, workforce and skills planning, site selection, mineral beneficiation assessment, local industry development assessment, ownership and partnership structuring, implementation planning, risk assessment, business case / investment case preparation, procurement strategy development, and preparation of pre-procurement documentation.The TA shall perform its services on a non-binding, non-exclusive, competition-neutral, and procurement-neutral basis. Nothing in the TA's work, recommendations, valuations, market consultations, or partner engagement shall confer any exclusivity, preference, or unfair advantage on any OEM, local manufacturer, supplier, investor, consortium member, or future implementation partner.

3) The appointed TA shall act as Eskom's independent transaction, commercial, financial, and feasibility advisor for the purposes of planning, directing, integrating, reviewing, and advising on all study activities required to inform Eskom's investment decision.

4) The TA shall apply rigorous due diligence to the technical, commercial, financial, legal, regulatory, localisation, implementation, ownership, partnership, funding, and risk dimensions of the proposed PV manufacturing project. Eskom may delegate to the TA such authority as is necessary for the efficient execution of the services and deliverables defined in this Scope of Work; provided that Eskom shall at all times retain ultimate responsibility, governance oversight, and decision-making authority for the Project.

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5) The TA shall be responsible for coordinating and integrating all feasibility-stage workstreams necessary to produce a bankable and procurement-ready study outcome, including the structured engagement of relevant Tier 1 OEMs, technology licensors, equipment suppliers, local manufacturers, toll manufacturers, licensed assemblers, investors, and other value-chain participants, without creating bias in favour of any one supplier, OEM, or future implementation partner.

6) The TA shall demonstrate the ability to engage with relevant OEMs, technology providers, industrial players, and local manufacturers on a non-exclusive and competition-neutral basis, for the purpose of informing technology selection, manufacturability, standards compliance, technology transfer pathways, ownership and partnership structuring, and implementation planning. Participation by OEMs and local manufacturers during the feasibility study shall not in itself confer any preferential position in any subsequent procurement process.

7) The TA shall establish and manage a dedicated workstream for local manufacturer participation and localisation assessment. This workstream shall identify and assess South African manufacturers and industrial participants currently operating, or capable of operating, within the PV value chain, including entities involved in toll manufacturing, licensed manufacturing, module assembly, inverter system assembly, mounting structures, cables, combiner boxes, transformers, electrical balance of plant, and related components. The TA shall assess such entities not only as suppliers, but also as potential industrial partners, operating partners, strategic alliance partners, investors, and potential shareholders / equity participants in the proposed facility.

8) The TA shall prepare feasibility outputs and related documentation in a manner that is technology-neutral, performance-based, and procurement-neutral to support Eskom's future decision-making and any subsequent EPC / EPCM, strategic partner, OEM, investor, or implementation procurement process.

9) The TA and its affiliates shall disclose all actual, potential, or perceived conflicts of interest and may be restricted from participation in subsequent implementation procurement processes where such participation would compromise procurement fairness or Eskom's governance requirements.

10) The TA's advice, models, valuations, assessments, and recommendations shall be advisory only and shall not bind Eskom to any site, structure, bidder, partner, valuation, technology, or transaction path.

11) The TA shall ensure that its work does not disadvantage, restrict, bias against, or preclude the future participation of OEMs, local manufacturers, licensed assemblers, EPC Consultants, investors, or other value-chain participants in any future procurement or implementation phase.

12) The TA shall ensure that all work is performed in accordance with international best practice, South African regulations, and Eskom's policies and procedures.

13) The TA shall prepare all project cost estimates to a minimum of Class 3 in accordance with AACE International (18R-97: Cost Estimate Classification System), including an appropriate Basis of Estimate, estimate assumptions, exclusions, contingencies, estimate accuracy range, and sufficient scope definition to support feasibility, business case, and investment decision-making. Any shortfall in information required to achieve Class 3 shall be identified and reported to Eskom in writing, together with recommended corrective actions.

4.2 CONFLICT OF INTEREST AND EPC INELIGIBILITY

To avoid any actual, potential, or perceived conflict of interest, any entity appointed as the Transaction Advisor for the feasibility studies under this procurement shall be excluded from any subsequent EPC procurement related to the Project. This restriction shall apply whether the Transaction Advisor participates as a principal, consortium member, joint venture partner, subcontractor, subconsultant, affiliate, parent

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company and subsidiary. The Employer reserves the right to reject any bid or proposal that, in its sole discretion, breaches this provision.

4.3 THE SUBCONTRACTING, CONSORTIUMS, JOINT VENTURES AND STUDY INDEPENDENCE

1) The TA may, with the prior written approval of Eskom, subcontract defined specialist portions of the Services to qualified subconsultants, provided that:
2) The TA remains fully responsible and liable for the performance of all Services, whether performed by itself or by any sub-Consultant, subconsultant, consortium member, or joint venture partner.
3) All proposed sub-Consultants, consortium members, joint venture participants, and specialist advisors shall be fully disclosed to Eskom at tender stage or, where appointed after contract award, prior to their engagement.
4) The TA shall ensure that any subcontracting, consortium, or joint venture arrangement does not compromise the TA's independence, objectivity, competition neutrality, procurement neutrality, or conflict-of-interest obligations under this Contract.
5) The TA shall not, without Eskom's prior written approval, subcontract any part of the Services to, or enter into a consortium, joint venture, strategic alliance, or equivalent arrangement for purposes of this study with, any OEM, technology licensor, equipment supplier, local manufacturer, toll manufacturer, licensed assembler, investor, EPC Consultant, EPCM Consultant, or other party that may reasonably be expected to participate in a future implementation or procurement phase of the Project.
6) Where Eskom permits the involvement of such a party for specialist input, the TA shall ensure that:
    - the role of that party is ring-fenced and limited to the approved scope,
    - all conflicts of interest are declared and managed to Eskom's satisfaction,
    - such involvement does not create any exclusivity, preference, unfair advantage, or preferential status in any future procurement process, and
    - the TA maintains full decision-making independence in its analysis, recommendations, and deliverables.
7) The TA shall ensure that all subcontracts include provisions equivalent to the Consultant's obligations under this Contract, including obligations relating to confidentiality, intellectual property (patents, designs, copyrights, know-how), conflict disclosure, transfer of rights, auditability, and procurement neutrality.

For avoidance of doubt, structured engagement with OEMs, local manufacturers, investors, and other market participants for market consultation, technical input, licensing discussions, or commercial assessment shall not constitute approved subcontracting or a study consortium arrangement.

4.4 TRANSFER OF RIGHTS / EMPLOYER OWNERSHIP OF CONTRACT MATERIAL

1) The Employer shall own the Consultant's rights, title, and interest in and to all material prepared, originated, developed, written, compiled, designed, modelled, or produced by the TA specifically for this Contract, including all reports, studies, business cases, financial models, drawings, layouts, databases, analyses, memoranda, presentations, schedules, procurement documents, recommendations, and all other contract deliverables, except as otherwise expressly stated in this Scope of Work.

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2) The TA warrants that the Employer's use of the Contract material in accordance with this Contract shall not infringe the rights of any third party, and the Consultant shall indemnify the Employer against any claim arising from a failure to secure the rights contemplated in this clause. Proprietary OEM or vendor inputs obtained during the study shall, to the extent practicable, be translated into neutral performance, interface, commercial, and design requirements, unless otherwise expressly approved by Eskom.

4.5 CONSULTANT'S DUTY AS SUBJECT MATTER EXPERT

1) The Scope of Work sets out the primary responsibilities assigned to the Consultant. The Consultant is appointed as the Transactional Advisor and subject matter expert for the Project and shall apply the degree of skill, care, diligence, and professional judgment expected of an experienced specialist undertaking work of a similar nature, complexity, and importance.
2) It shall be the Consultant's responsibility to ensure that all activities, investigations, analyses, studies, assessments, reviews, consultations, deliverables, and recommendations necessary for the successful completion of the Works are identified and carried out in full compliance with applicable laws, regulations, standards, Eskom requirements, and recognised industry best practice, whether or not each such activity is expressly described in detail in this Scope of Work.
3) Where, in the Consultant's professional opinion, any activity, study element, deliverable, assumption, interface, investigation, or workstream has been omitted from the Scope of Work, or where a deviation from the stated scope, methodology, sequencing, or assumptions would be beneficial to the quality, completeness, bankability, technical robustness, commercial soundness, or overall outcome of the study, the Consultant shall promptly notify Eskom in writing.
4) The Consultant shall not proceed with any material deviation from the agreed Scope of Work without Eskom's written approval, but the Consultant shall remain responsible for advising Eskom of any such deviations, omissions, improvements, or additional requirements that a competent subject matter expert would reasonably identify while performing the Services.
5) No failure by the Consultant to identify, advise on, or execute any activity that is reasonably necessary for the proper and professional completion of the Works shall be excused solely on the grounds that such activity was not expressly listed in this Scope of Work.

4.6 RELATED/SUPPORTING DOCUMENTS

NORMATIVE

[1] ISO 9000: Quality Management Systems.

[2] Occupational Health and Safety Act (Osh Act; Act 85 of 93)

[3] 240-6860471: Design Base Standard

INFORMATIVE

[4] 240-53113953 Manage Engineering Accountability Procedure

[5] 240-53114026 Project Engineering Change Management Procedure

[6] 240-53114002 Engineering Change Management Procedure

[7] 240-50317699 Manage Technical Queries Procedure

[8] 240-53113685 Design Review Procedure

[9] 240-48929482 Tender Technical Evaluation Procedure

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[10] 240-49910527 Procedure for Plan and Select Technologies

[11] 240-76992014 Project/Plant Specific Technical Documents and Records Management Work Instruction.

4.7 DEFINITIONS

Definition	Description
Employer/ Client	Refers to Eskom Holdings
Consultant	Refers to the Transactional advisor/consultant

4.8 ABBREVIATIONS

Abbreviation	Meaning given to the abbreviation
AACE	Association for the Advancement of Cost Engineering
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortisation
EDWL	Engineering Design Work Lead
EPC	Engineering, Procurement and Construction
EPCM	Engineering, Procurement and Construction Management
IP	Intellectual Property
IRR	Internal Rate of Return
JET	Just Energy Transition
JET-IP	Just Energy Transition Investment Plan
JV	Joint Venture
NPV	Net Present Value
OEM	Original Equipment Manufacturer
PFD	Process Flow Diagram
PV	Photovoltaic
R&D	Research and Development
REIPPPP	Renewable Energy Independent Power Producer Procurement Programme
RFP	Request for Proposal
ROI	Return On Investment
SADC	Southern African Development Community
SEZ	Special Economic Zone
SPV	Special Purpose Vehicle

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TA	Transactional Advisor
TVET	Technical and Vocational Education and Training

5. SCOPE OF SERVICES

The scope of services required for the feasibility study and business case shall include, but not be limited to, the following phases and associated services:

1. Project Planning and Development Phase
2. Feasibility Study and Conceptual / Front-End Development Phase
3. Business Case/ Investment Case Development Phase
4. Commercial Structuring and Transaction Preparation Phase
5. Pre-Procurement and EPC / EPCM Advisory Readiness Phase
6. EPC-Phase Consultation / Advisory Support Phase, if required by Eskom

The general TA's scope shall comprise, but not be limited to, the following activities:

- Project planning, study mobilisation, and overall feasibility and business case management.
- Stakeholder identification, engagement, and coordination.
- Engagement with relevant tier 1 OEMs, technology licensors, equipment suppliers, process-line integrators, local manufacturers, toll manufacturers, licensed assemblers, and other value-chain participants on a non-exclusive and competition-neutral basis.
- Market assessment, market segmentation, capacity sizing, demand analysis, and competitiveness assessment.
- Technology assessment, process selection, manufacturability review, and conceptual design development.
- Produce a waste management plan for the plant. This includes designing for recyclability of process waste, collecting used panels, and ensuring they are recycled or reused.
- Undertaking a detailed feasibility assessment of Camden power station as the nominated reference site for the proposed facility.
- Assessing Camden power station in respect of land availability, existing infrastructure, utilities, electrical infrastructure, water availability, logistics access, brownfield re-use potential, permitting constraints, workforce availability, implementation readiness, scalability, and overall suitability for the proposed facility.
- Undertaking a separate comparative site selection assessment to identify and recommend the most optimum site for the proposed facility, with Camden power station included as one of the assessed sites.
- Preparing a site selection methodology, shortlist, weighted evaluation matrix, comparative assessment, sensitivity analysis, and final preferred site recommendation.
- Assessing whether Camden power station should remain the preferred site, a fallback site, or a non-preferred site, and setting out the technical, commercial, schedule, infrastructure, and risk implications thereof.
- Assessment of localisation pathways, supplier development opportunities, and local industrial participation.
- Assessment of South African manufacturers not only as suppliers, but also as potential industrial partners, operating partners, strategic alliance partners, and potential shareholders/equity participants in the proposed facility.
- Infrastructure, utilities, site, logistics, and implementation readiness assessments.
- Regulatory, permitting, legal, standards, certification, and compliance assessments.

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- Intellectual property, technology transfer, and licensing considerations.
- Financial, economic, commercial, and risk assessments.
- Development of ownership, partnership, and commercial structuring options.
- Development of workforce, skills transfer, and capacity-building requirements.
- Preparation of the business case / investment case for Eskom governance and investment decision-making.
- Preparation of pre-procurement documentation, procurement strategy recommendations, transaction structuring recommendations, and advisory inputs for future EPC / EPCM Works Information. Technical assurance, integration, review, and reporting across all feasibility, business case, site selection, and pre-procurement workstreams.
- Battery limits and detailed interfaces shall be defined in more detail in the Division of Responsibilities (DOR) Document, to be jointly agreed between the Client and the Consultant after contract award.

5.1 PROJECT PLANNING AND DEVELOPMENT PHASE ACTIVITIES

The Consultant shall plan, coordinate, and manage all feasibility-stage activities required to establish the project basis, study framework, stakeholder engagement approach, work plan, programme, interfaces, assumptions, governance arrangements, and reporting structure for the proposed PV manufacturing facility.

The scope of services required includes but is not limited to:

(1) **Project Planning and Schedule Management** including but not limited to:

1. Project definition and preparing early project schedules, plans and design criteria including related deliverable.
2. Development of a work breakdown structure (WBS) and integrated engineering schedules covering all aspects of project development and execution, identifying all interfaces required for the successful delivery of the project. The schedules must be developed to level 4, which will include as a minimum the following:
    a. All milestones
    b. All key activities
    c. All Sub-activities
    d. Works instruction level
    e. Risk catered for using float
3. Use a scheduling tool that is agreed upon with the Client for its scheduling and shall ensure all programmes and schedules developed for the Project are compatible with the Client's scheduling software (Primavera etc.).

(2) **Project Risk Monitoring and Management** including but not limited to:

1. Proactive management of risk reduction and support, in line with the Eskom's Integrated Risk Management Framework
2. Development and management of an integrated engineering risk register and management plan as per Eskom Requirements.
3. Conduct risk reviews as part of scheduled workshops or progress review meetings, to review risk status and mitigation progress. As a minimum, a risk review must be scheduled to coincide with the end of a design phase review.

(3) **Quality Management and Assurance** including but not limited to:

1. Compliance with the requirements listed in the Client's standard document, 'Contract Quality Requirements', document identifier – QM 58, for all the Clients Quality requirements.

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2. Development and submission of a Project Quality Management System and Plan (PQMP) for this contract, describing project quality requirements and requirement for continued compliance to the requirement of ISO 9001.
3. Development and maintenance of a complete quality control schedule, showing the anticipated inspections as per quality intervention points, as shown on the manufacturer's inspection test plans.

5.1.1 Reports and Programmes

5.1.1.1 List of Reports

(1) Within 20 working days of the signing of the contract, the Consultant shall submit an Inception Report giving a detailed work plan and assignments for each individual in the team.

(2) The Consultant shall submit Progress Reports (Interim Reports) on a monthly basis, within one week after the end of each calendar month. The progress report, using the activity schedule as a basis, covers the following issues and Engineering Controls:
   1. Cost, Schedule, and Technical Performance to date.
   2. Estimated Cost, Schedule, and technical accomplishment at contract completion.
   3. Highlights.
   4. Progress on planned earned and actual man-hours.
   5. Full-time equivalent of man plan for the project.
   6. Level 1, 2 and 3 integrated schedules with engineering float.
   7. A loaded project plan on Primavera or MS Projects.
   8. Problem areas and Corrective Actions.
   9. Risk Progress Report, describing progress with mitigating actions and changing risk status

(3) The Progress Reports are discussed during scheduled Progress Review Meetings. The Consultant proposes to the Client a schedule for the Progress Review Meetings. The Progress Review Meetings are held within one week after receipt of the progress report. The Client keeps minutes of these meetings.

5.1.1.2 Schedule of Deliveries

(1) The Consultant shall submit a Programme for all reports and deliverables listed in this document for acceptance by the Client within 4 weeks after contract award. The Client's target delivery dates for Deliverables and review meetings shall be discussed and agreed to with the Consultant prior to execution of any of the project activities. The Consultant uses the agreed to-and-signed off target delivery dates, as an input to develop the programme and activity schedule.

(2) The Consultant shall confirm the method for Review and Acceptance of Deliverables with the Client four weeks after contract award. Deliverables generally follow the process outlined in the Table 5-1.

Table 5-1: Deliverables Review Process

Ref*	Task	Responsibility
A	Prepare document	Consultant
B	Internal Review	Consultant
C	Approve for Client Review (e.g. Rev. a)	Consultant
D	Submit for Review	Consultant
E	Forward review comments	Client
F	Review Meeting (if required)	Consultant and Client
G	Review minutes distribution	Consultant
H	Update document	Consultant

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I	Approve (e.g. Rev. 1)	Consultant
J	Submit for Acceptance	Consultant
K	Accept deliverables	Client
L	Written approval of deliverables	Client
	*Refer to paragraphs below	

(3) In the event that the Consultant, after consultation with the Client, does not agree with some of the Client's review comments, the Consultant lists these comments to motivate the disagreement and submits this list to the Client.

(4) The Schedule and the Scope of planned Review Meetings is developed by the Consultant and accepted by Eskom. The objective of review meetings is to discuss issues that relate to the design of Structures, Systems and Components (SSC) or the review of Deliverables.

1. The Consultant ensures that all follow-up actions are carried out within the time stipulated.
2. The Client may, in addition to the scheduled review meetings indicated, request additional reviews.
3. The Client may involve independent third parties in any of the review meetings.
4. Minutes of meetings will not form any basis of variations or amendments to the contract. The Client communicates contract variations or amendments formally to the Consultant in terms of the provisions in the Contract.

5.1.2 Competency and Experience Requirements of the Consultant

- The Consultant must demonstrate a proven track record in transaction advisory, project development, feasibility studies, commercial structuring, and investment case preparation for large industrial, infrastructure, energy, or manufacturing projects.
- The Consultant may be a single firm or a consortium, but must collectively demonstrate expertise in manufacturing, engineering, project finance, financial modelling, legal structuring, supply chain analysis, localisation strategy, mineral beneficiation assessment, industrial development, environmental and social compliance, and transaction preparation.
- The Consultant must demonstrate previous experience in at least one comparable assignment involving industrial project feasibility, manufacturing project development, or large-scale energy / infrastructure commercial structuring.
- Experience engaging with OEMs, technology licensors, industrial partners, investors, public sector institutions, and local manufacturers will be advantageous.
- The TA itself must remain independent and shall not be appointed as the OEM, technology licensor, EPC Consultant, or implementing entity for the Project under this appointment.
- The Consultant to ensure that all technical designs are signed off by an ECSA Professionally registered Engineer.

5.1.2.1 Key Expertise Required

At minimum, the key staff should compromise of the following:

- Transaction / Commercial Lead
- Financial Modelling and Project Finance Lead
- PV Manufacturing Technical Lead
- Site and Infrastructure Assessment Lead
- Legal / Regulatory / Contracting Specialist
- Localisation and Industrial Development Specialist
- Supply Chain and Market Specialist

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- Mineral Beneficiation / Industrial Processing Specialist
- Environmental / Social / Permitting Specialist
- Strategic Partnership / JV Structuring Specialist
- Skills Development and Economic Development Specialist
- Relevant professionally registered (ECSA) engineering leads

The actual number, expertise, and level of effort (expert-months) offered by the Consultant shall be based on the methodology and approach provided in the technical proposal of the consultant during preparation of the technical proposals offered.

1. The Consultant shall submit CVs and Statements of Exclusivity and Availability for the key experts. Key Experts' CVs should clearly indicate the start date and the end date (month and year) of each assignment. Each assignment in the CV should be numbered, and the same number should be written on the respective signed supporting document.
2. Any qualifications, skills and experience stated in the respective CV of an expert must be substantiated by supporting documents (with accurate translation into English if required) such as copies of degrees or diplomas, professional registration and employers' certificates and marked with appropriate reference number
3. The Consultant shall submit CVs for experts other than the key experts in the tender and the tenderer will have to demonstrate in their offer that they have access to experts with the required profiles. All experts must be independent and free from conflicts of interest in the responsibilities they take. The Consultant shall allow for the number of expert months each expert is likely to be used in Table 1 below. The actual duration will be agreed between the Client and Consultant
4. The Consultant shall submit resumes of each support staff member of the site engineering team to Eskom for approval with the response to RFP and any change from the original team shall be done on like-for-like basis and after approval from Eskom. In case Eskom feels Consultant team needs to be strengthened based on activity at site, Consultant shall depute all such additional manpower to site after discussion with Eskom. The Support staff shall be guided by a designated Key Expert.

5.1.3 Personnel and Data To Be Provided By Client

5.1.3.1 Data

- All relevant supporting documentation that the Client has referenced in this SOW will be made available to the Consultant when the contract commences, or during contract negotiations as required by the Consultant.
- Any additional cost resulting from Compliance with new procedures (not stated below) issued by the Client will be compensated.

5.1.3.2 Client's Policies and Procedures

The Consultant shall as a minimum comply with the procedures furnished below and new procedures issued by the Client throughout the execution of the Services:

- Health and Safety Specifications - 32-757
- The Eskom Code of Ethics - Standard 32-527
- COVID-19 related Standard & Guidelines - 240-155326818
- COVID Health and Safety - Government Regulation No 11128
- Generation Project Life Cycle Model - 240-82737649

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- Project Engineering Change Management Procedure - 240-53114002
- Design Review Procedure - 240-53113685
- Contract Quality Requirements - QM 58

5.1.3.3 Personnel

- Eskom shall appoint a Project Team responsible for determining project scope and end state following completion of works. The Team shall have an Engineering Design Work Lead (EDWL) to take full responsibility for managing the Consultant's work and for ensuring delivery on the project. A Project Engineering Manager shall serve as Project Manager and to establish a Project Team to engage regularly with the Consultant for efficiently completing the various delivery items.
- The project team will meet at least monthly, and the Consultant will report progress at these meetings, as instructed by the Project Engineering Manager. The Project Engineering Manager will confirm that the Consultant has satisfactorily completed each deliverable before invoices can be submitted to Eskom for payment.

5.2 FEASIBILITY STUDY AND CONCEPTUAL ENGINEERING DESIGN PHASE ACTIVITIES

5.2.1 Market and Technical Analysis

The Consultant shall:

- Conduct a comprehensive assessment of global, regional, and South African PV market trends, including supply/demand dynamics, pricing trends, product positioning, and demand forecasts.
- Quantify the domestic and export market size, segmentation, and customer demand for PV modules and components.
- Provide a detailed competitor benchmarking analysis, identifying main market players, technology, cost positions, and product roadmaps.
- Evaluate and compare all relevant PV manufacturing technologies (including, but not limited to, PERC, TOPCon, HJT, and next-generation technologies), with recommendations based on cost, scalability, efficiency, and bankability. Recommend the optimal products and pricing structures to ensure market competitiveness.
- Assess the availability, security, and sustainability of raw material supplies and all critical supply chain elements.
- Map logistics, transport corridors, and import/export regulatory barriers for materials and finished products.

5.2.2 Site Selection and Infrastructure Assessment

The Consultant shall:

- Assess Camden Power Station as the main reference site for the Project.
- Conduct a detailed feasibility assessment of Camden in respect of land availability, infrastructure, utilities, electrical infrastructure, water availability, logistics access, brownfield re-use potential, permitting constraints, workforce availability, implementation readiness, scalability, and overall suitability.
- Perform an independent comparative assessment of alternative Eskom sites and recommend the most optimum Eskom site for the facility.
- Prepare a site selection methodology, shortlist, weighted evaluation matrix, comparative assessment, sensitivity analysis, and final preferred site recommendation.

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- Clearly indicate whether Camden should remain the preferred site, be retained as a fallback site, or be classified as non-preferred, together with the implications thereof.

5.2.3 Intellectual Property (IP) Management and Licensing

The Consultant shall:

- Provide a clear and detailed statement of ownership and status of all relevant PV manufacturing intellectual property proposed for use in the facility, including background and anticipated foreground IP.
- Assess applicable IP licensing and technology transfer models, including exclusive license, non-exclusive license, sole license, and assignment.
- For each model, assess benefits, risks, competition implications, foreground and background IP ownership, commercial implications, legal considerations, and strategic partnership implications.
- Recommend a preferred IP and technology transfer structure for Eskom, including the implications for funding, equity, and long-term control.
- Present proposed legal and contractual frameworks for IP protection, licensing, and technology transfer.

5.2.4 Financial Feasibility and Cost-Benefit Analysis

The Consultant shall:

- Develop a modular, scenario-based financial model in Excel covering the solar PV manufacturing value chain on both a stand-alone stream basis and an integrated full value chain basis. Each major stream shall be assessed individually and then as part of the fully integrated case.
- At minimum, assess: mineral input / beneficiation, MG-Si, polysilicon, ingot, wafer, cell, module, and key component opportunities.
- Provide CAPEX and OPEX breakdowns per production stage, with labour, utility, logistics, environmental, and compliance cost components.
- Model facility scalability, phased rollout, and technology sensitivity cases.
- Deliver investment appraisals including IRR, NPV, EBITDA, payback, break-even, ROI, and full sensitivity analyses.
- Recommend product and pricing structures to ensure competitiveness.
- Propose a go-to-market strategy including sales channels, partnerships, and distribution logic.
- Assess domestic demand, export opportunities, incentives, local content rules, taxes, and relevant policy frameworks.
- Identify and structure investment requirements, funding options, and incentive gaps.
- Undertake valuation of Eskom-contributed assets where relevant to any potential JV or structured partnership case.

5.2.5 Regulatory and Compliance Analysis

The Consultant shall:

- Review and summarise South African and relevant SADC regulatory requirements affecting PV manufacturing, beneficiation, industrial production, permitting, licensing, environmental compliance, social compliance, trade, and industrial incentives.

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- Provide an initial overview of environmental and social requirements for the selected site(s).
- Identify and map applicable incentives and policy instruments, including REIPPPP-linked localisation drivers, JET-linked frameworks, SEZ benefits where relevant, and other industrial support measures.
- Recommend policy, regulatory, or structuring interventions necessary to improve feasibility, competitiveness, and bankability.

5.2.6 Full PV Value Chain, Mineral Beneficiation and Localisation Potential

The Consultant shall undertake a comprehensive assessment of the full solar PV manufacturing value chain and advise Eskom on the most appropriate and strategic point of entry. For each segment of the value chain, the Consultant shall evaluate capital requirements, technology maturity, complexity, market competitiveness, localisation potential, industrial development potential, and opportunities for value creation within the South African context.

The assessment shall include, at minimum:

Upstream

- Extraction, beneficiation, and refining of raw materials relevant to PV manufacturing, including quartz / silica for silicon, aluminium, silver, copper, glass inputs, and other relevant materials.
- Assessment of mineral resource availability, beneficiation routes, industrial processing requirements, and logistics.

Midstream

- Production of metallurgical-grade silicon and solar-grade materials, including polysilicon.
- Ingot casting and wafer manufacturing.
- Solar cell manufacturing.
- Manufacturing key PV components such as glass, encapsulants, backsheets, frames, junction boxes, and related items.

Downstream

- Module assembly using locally manufactured or imported cells.
- Integration into utility-scale, commercial, and residential applications.
- Sales, distribution, installation, and after-sales support.

End-of-Life and Production Waste Management

The Transactional advisor to establish what impact the Extended Producer Scheme (EPR) would have on the PV manufacturing plant for Eskom. Identify Reuse, repowering, recycling, and circularity opportunities for PV modules and materials.

Mineral Beneficiation and Localistion Potential

The Consultant shall also:

- Assess South Africa’s readiness for mineral beneficiation relevant to the PV value chain.
- Undertake a local industry development and mineral beneficiation techno-economic study covering existing and potential suppliers, industrial participants, supply-chain gaps, and industrial clustering opportunities.
- Map and analyse the local and regional supply chain.

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- Identify localisation and industrial cluster opportunities, including risks associated with import dependence.
- Develop a supplier engagement and development plan.
- Recommend the most appropriate entry point and phased localisation pathway for Eskom.

5.2.7 Workforce and Skills Development

The Consultant shall:

- Forecast direct and indirect employment, by skill level and function, for each stage of the value chain.
- Conduct a skills gap analysis and provide a training / capacity-building framework.
- Recommend partnerships with TVET colleges, Universities of Technology, academic institutions, and industry bodies.
- Propose apprenticeship, internship, learnership, and knowledge-transfer frameworks.
- Quantify the budgetary implications of the proposed skills strategy and integrate them into the financial model.
- Support knowledge transfer and capacity building for Eskom teams during the study.

5.2.8 Strategic Localisation, Partnerships and Commercial Structuring

The Consultant shall:

- Map all relevant stakeholders (public, private, academic, and community).
- Identify and assess technology, R&D, industrial, operating, investor, and strategic partnership opportunities.
- Develop and compare multiple partnership models, including non-JV, JV, strategic OEM partnership, tolling, contract manufacturing, SPV, and hybrid public-private models.
- Identify potential players and recommend potential future optimum partners and partner configurations for Eskom.
- Develop ownership, partnership, funding, and commercial structuring options, including options for OEM participation, local manufacturer participation, technology licensing, strategic partnerships, and equity participation pathways.
- Undertake valuation of Eskom-contributed assets relevant to any possible JV or structured partnership and explain how that value could be used in contribution mechanics, equity structuring, or negotiations.

5.2.9 Risk Assessment and Management

The Consultant shall:

- Identify and document all risks related but not limited to; technical, financial, commercial, regulatory, environmental, and social risks.
- Undertake a comprehensive risk analysis (qualitative and quantitative), with a risk register and mitigation plans.
- Develop explicit and actionable risk mitigation strategies.

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5.2.10 Conceptual design and engineering

The Consultant shall:

- Provide a complete conceptual design for a vertically integrated PV manufacturing facility (quartz to module), including layout, PFDs, mass and energy balances, and architectural plans.
- Preliminary design (Concept Level) for each site in the campaign including identification of necessary specialised studies, deemed fatal flaws and constraints as well as recommendations regarding modifications to design baselines and recommendations for additional scope. The objective of the preliminary design is to verify and validate the technology choice for the site, develop and define requirements and reduce the project risk on the site prior procurement and implementation. The preliminary design must therefore baseline for the preferred site.
- Quantify all utility requirements (electricity, water, gas, HVAC), propose grid/back-up solutions, and outline major equipment and bill of materials.
- Recommend optimal facility scale, product types, and business models.
- Recommend energy consumption off set via the use of renewable energy (i.e., on-site PV plant).

5.2.11 Works Information for EPC Contractor Appointment

The TA shall prepare the Works Information and associated technical, functional, interface, and performance requirements necessary for Eskom's future EPC contractor appointment, on a procurement-neutral and implementation-ready basis.

5.2.12 Business Case

The TA shall prepare a Business Case / Investment Case that consolidates the outcomes of all workstreams into a clear, decision-grade recommendation.
The Business Case / Investment Case shall include:

- Strategic rationale and alignment
- Market case
- Technical case
- Site case
- Value-chain / beneficiation / local-industry-development case
- Commercial and partnership case
- Financial and funding case
- Regulatory and legal case
- Socio-economic and localisation case
- Risk case
- Implementation roadmap
- Procurement and transaction strategy
- Final recommendation on whether Eskom should proceed, under what conditions, with which site, with which value-chain entry point, and under which commercial structure.

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5.2.13 EPC Phase Consultation/Advisory Role

The TA shall structure its work and outputs so that Eskom may, if it so elects and subject to applicable procurement and contracting arrangements, use the TA during the future EPC phase of the Project on a consultation / advisory basis.

Such advisory support may include:

- Support during EPC packaging and negotiation.
- Consistency checks against the approved business case.
- Review of changes affecting cost, schedule, scope, or commercial assumption.
- Support on bid clarification and evaluation.
- Interface support between transaction structuring and implementation.
- Support on transition from feasibility into implementation.

6. TA DOCUMENT DELIVERABLES

The TA shall provide, at minimum, the following document deliverables:

6.1 PROJECT PLANNING AND GOVERNANCE DELIVERABLES

- Inception Report
- Detailed Work Plan and Programme
- Stakeholder Engagement Plan
- Monthly Progress Reports
- Risk Register and Risk Management Plan
- Issue, Action, and Decision Logs

6.2 FEASIBILITY AND TECHNICAL DELIVERABLES

- Market Assessment and Demand Forecast Report
- Competitive Landscape and Benchmarking Report
- Technical Feasibility and Technology Selection Report
- Raw Material and Supply Chain Assessment
- Camden Reference Site Assessment Report
- Independent Eskom Site Selection Report
- Utility Demand and Infrastructure Gap Assessment Report
- Conceptual Design Report
- Process Flow Diagrams and Concept Layouts
- Utility Demand and Infrastructure Requirements Report
- Bill of Materials and Equipment List

6.3 VALUE CHAIN, BENEFICIATION, AND INDUSTRIAL DEVELOPMENT DELIVERABLES

- Full PV Value Chain Techno-Economic Study Report
- Mineral Beneficiation Techno-Economic Study Report
- Local Industry Development Techno-Economic Study Report
- Supply Chain and Localisation Potential Report
- Supplier Development and Cluster Strategy

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6.4 COMMERCIAL, LEGAL, AND STRUCTURING DELIVERABLES

- IP Ownership and Licensing Assessment Report
- Technology Transfer and Licensing Options Report
- Stakeholder Engagement and Communications Plan
- Partnership Models and Commercial Structuring Options Report
- Strategic Partnerships and Localisation Report
- Eskom Asset Valuation Report
- Regulatory Compliance Matrix and Roadmap
- Environmental and Social Scoping Report
- Policy Incentives and Compliance Report

6.5 FINANCIAL AND INVESTMENT DELIVERABLES

- Modular Financial Feasibility and Economic Model
- Stream-by-Stream Financial Viability Assessment
- Integrated Value Chain Financial Feasibility Report
- Investment Appraisal and Sensitivity Analysis Report
- Funding and Capital Structure Options Report
- Eskom Asset Valuation Report

6.6 23.6 HUMAN CAPITAL DELIVERABLES

- Workforce and Skills Development Report
- Knowledge Transfer and Capacity Building Plan

6.7 23.7 BUSINESS CASE AND PRE-PROCUREMENT DELIVERABLES

- Business Case / Investment Case Report
- Executive Approval Support Pack
- Implementation Roadmap and Decision-Gate Plan
- Procurement and Transaction Strategy Report
- Pre-Procurement Documentation Inputs
- EPC / EPCM Advisory Readiness Memorandum
- EPC-Phase Consultation / Advisory Transition Memorandum
- Division of Responsibilities and Interface Schedule for EPC Procurement
- Technical and Functional Requirements Package for EPC Tendering
- Development of Bid Technical Evaluations

6.8 23.8 FINAL DELIVERABLES

- Final Consolidated Feasibility Study Report
- Final Consolidated Recommendations Report

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7. AUTHORISATION

This document has been seen and accepted by:

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8. REVISIONS

Date	Rev.	Compiler	Remarks
April 2026	0.1	K Sokhulu	New document (draft for review)
April 2026	1	K Sokhulu	Approved Final Document

9. DEVELOPMENT TEAM

The following people were involved in the development of this document:

- Lesego Moumakoe-Leshika
- Kgaugelo Sokhulu

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