

Procurement of Transaction Advisory Services for Project Preparation of Waterval Wastewater Treatment Works Water Reuse Public Private Partnership Project,

Issued under the Water Reuse Programme and Water Partnership Office

ANNEX D: TERMS OF REFERENCE FOR ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) OF A WATER REUSE PROJECT

This set of documents includes the following:

Terms of Reference for Transaction Advisors

Annex A: Technical Requirements and Scope of Project

Annex B: Table of Contents of the Feasibility Study

Annex C: Terms of Reference Technical Options

Annex D: Terms of Reference ESIA

Annex E: Terms of Reference for Socio-Economic Analysis

Annex F: Gender Action Plan

This document Annex D, Terms of Reference for ESIA, is a template for use by the Project Owner and the WPO when preparing the Request for Proposals documentation for Public Private Partnership Projects (PPP) for:

1. New and complete wastewater and sludge treatment plants,
2. Improvements to and/or rehabilitation of, existing wastewater and/or sludge treatment plants, and either of these combined with,
3. Reuse of treated wastewater in Direct Potable Reuse (DPR) or Reuse Treatment Plant (RTP) configurations.

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1. Tasks and Responsibilities

The tasks and responsibilities described in this Terms of Reference (ToR) are not considered as a complete and comprehensive description of the expected Transaction Advisor's (TA) Services. It is the TA's responsibility to critically review the outline ToR and propose a complete Scope of Work, detailed and thorough enough in the TA's own professional judgment to achieve the Client's objectives and to meet national and international standard requirements and associated good practice industry sector guidelines.

The TA is expected to perform all services necessary to fulfil the objectives of the Request for Proposal (RFP) (Stage 3, Activity 12.3) including any that may not be expressly stated but would be considered by an expert in the field (i.e., with the relevant level of knowledge and experience) to be a reasonable and necessary component of the overall ESIA process. This would generally include but will not be limited to carrying out the activities in accordance with the national and international applicable requirements, bank safeguard requirements (IFC, GCF and DBSA) and global good practices for such sectors including ensuring net positive environmental, gender, climate and social co-benefits as set out in the ToR. The TA must establish a compliance monitoring framework that details how adherence to South African regulatory requirements, DBSA/GCF/IFC safeguards, and international conventions will be tracked and enforced throughout project preparation and implementation.

Throughout the life of the Project, other TAs and professional advisors may be providing services to the Client and the Project and the TA shall be expected to refer the work product of these other parties where relevant. The TA while submitting the proposal agrees to cooperate and coordinate its activities with those other parties (e.g., technical, legal, financial TAs and EPC contractors involved in the Project) to provide support in case of any queries in future and not to interfere with the overall smooth progress of the Project.

2. Purpose

- (i) **Determine the Environmental and Social (E&S) baseline conditions** at the project's area of influence and ensure baselines are in place to measure targets and indicators as per the DBSA's Development Results Core Indicators and any other relevant indicators (including the TNFD and TCFD suggested indicators as relevant and following on from suggestions of any specialist studies such as topographical, geotechnical, biodiversity, water resource management baselines and assessments)
- (ii) **Provide a summary assessment of meaningful project options** in terms of for example technologies, time frames, geographic sites, taking both long term and short-term view: using methods such as full cost accounting (not just short-term engineering costs) and ensuring natural capital/ecosystem services costs are included in any economic assessment of any option. The project alternatives to explore and seek an optimal mix of ecological, green and grey infrastructure, nature-based solutions and promote sustainability

- (iii) **Assess the E&S risks and seek positive impacts** including potential positive impact opportunities that can be incorporated into the project (direct; indirect; short and long term, cumulative; including impacts on vulnerable project affected persons/groups, gender-based violence (GBV), Sexual, Exploitation, Abuse and Harassment (SEAH) risk, , climate adaptation and mitigation, biodiversity, and ecosystem degradation/restoration) resulting from the construction, operation and decommissioning of the Project, including Associated Facilities
- (iv) **Identify appropriate/effective/practicable mitigation measures, and ecological infrastructure investments for integration into the project description**, develop E&S management and monitoring programs, based on a clearly articulated mitigation hierarchy (avoid/minimize/mitigate/compensate and/or offset)
- (v) **in addition to clause iv) above and in addition to any legal requirements identify, assess and generate an EMP/EMS** for appropriate/effective/practical biodiversity/gender/climate co-benefit opportunities for inclusion into the project concept, detailed designs and develop E&S management and monitoring programmes of such co-benefit interventions to secure net environmental gains. Verify that this project or activities are not on the Exclusion List as defined in the ESMF. The ESIA must include a screening process to identify the presence of Indigenous Peoples, vulnerable or disadvantaged groups within the project's area of influence. Where present, an Indigenous Peoples Plan (IPP) and/or Vulnerable Groups Development Plan must be developed in line with DBSA safeguards, IFC Performance Standards, and GCF safeguard requirements. This includes ensuring free, prior, and informed consent (FPIC) is obtained.
- (vi) **Prepare documentation** to obtain environmental authorizations and **water use licenses** as applicable
- (vii) throughout the process, effectively identify and consult with **Project Affected Persons (PAP) and their representatives**, members of the general public, and other key stakeholders in relation to potential project benefits and negative E&S impacts and demonstrate that stakeholder views have been incorporated into the project E&S design.
- (viii) **Promote a green value chain** in the supply of services or products for project implementation
- (ix) Ensure all relevant **safeguards** and Environmental Health and Safety Industry good practice guidelines are met at key stages and provide detailed safeguard reports (clause for clause as applicable) at these key stages (EIA,EMP and EMS).
- (x) **Populate baselines of a detailed Development Results Reporting Framework**, establish targets and methodologies to report against all pre-agreed indicators and targets
- (xi) **Seek opportunities to assess and build institutional capacity** amongst key role players to ensure optimal development results
- (xii) Actively promote **opportunities for the circular economy such as through increased efficiencies** in expenditures, energy savings and promote renewable energy generation on site as far as possible, reuse of wastewater effluent, nutrient recovery, and beneficial use of biosolids (sludge treated to adequate standards), etc.
- (xiii) Provide a clear **understanding of needed institutional arrangements** to meet emerging new policies, standards and regulatory frameworks to promote investments in wastewater and resource

recovery that at the same time ensure sustainable outcomes. **Sharing lessons learnt and helping to build capacity** of key role players is important.

- (xiv) Actively **promote climate adaptation and ecosystem positive impact** potential and alignment with the national/provincial municipality biodiversity climate change existing and emerging strategies and action plans
- (xv) Ensure the **activities promote the transformation of greening finance**. The TA is expected to work closely with technical and financial stakeholders to support sustainable finance concepts by applying green taxonomy definitions (currently being developed by National Treasury and DBSA)

3. Scope of Work

The scope of work includes the following:

- Build on and expand relevant work in the **Prefeasibility Stage**, including work on environmental and social risk and climate change assessments undertaken at Stage 1 (Task 4).
- **Undertake a comprehensive detailed Safeguard Standards Assessment** (IFC, GCF and DBSA aligned) involving detailed reviews and gap analysis and commitment plan (Environmental and Social Framework to address gaps, new identified risks and opportunities) with funder and municipality inputs and to funder/municipality satisfaction. Funder requirements include meeting DBSA/IFC safeguard standards, IFC standards and international good practice guidelines such as the Environmental and Social Industry Sector Guidelines, GCF climate adaptation and mitigation guidelines, SDG indicators, UNEP biodiversity guidelines and GCF/GEF, Gender mainstreaming guidelines. The DBSA Development Results Framework (DRF) is to be considered a key reference document.
- **Recommend, establish and subcontract a peer review team** within 2 months of the contract being signed – ensuring key relevant parties through the WPO have been provided with an opportunity to recommend specialists and or approve the TAs suggested (at least 2 specialists involved in nature solutioning, sludge reuse and safeguard assessments). The peer review team will review draft documents and provide written reviews and report directly to the Steering Committee Members at key milestone meetings (assume a maximum of 4 meetings and 4 peer review reports (at draft Scoping, ESIA, ESMP, ESMS stage and assuming not more than 6 days of time).
- The ESIA is to include the assessment requirements needed for a **Water Use License Application** (WULA). The WULA is to be submitted to the Department of Water and Sanitation (DWS) and the CWDP application to the Department of Environment Fisheries and Forestry (DEFF) as required and (should it prove to be necessary) a Coastal Waters Discharge Permit (CWDP) application. The service provider will support the municipality with the process and documentation of reiterations necessary until all authorizations and licenses are obtained as applicable.
- **Engagement is to be maintained with relevant key parties** including, for example key NGOs active in the area and local and regional authorities until all environmental related authorizations/licenses permits are issued. Engagement and presentations to funders are also a requirement particularly at key milestones involving presentations of draft reports and during the funder project appraisal, negotiation and financial closure stages/ up to conditions precedents being met. This will require the

TA to undertake a **Stakeholder Assessment and Plan**. This includes the design, carrying out, and documentation of the public/stakeholder consultations and engagement throughout the ESIA process. This will lead to preparation of: (i) the project's independent grievance redress mechanisms and channels (assist the establishment of an **independent Grievance Redress Mechanism** for the Project together with DBSA and the Municipality); and (ii) a project **Stakeholder Engagement Plan (SEP)**, annexed to the ESIA main report. Men, women, and vulnerable groups/persons should be included in the stakeholder identification and analysis. This will ensure the impacts and mitigation measures are properly consulted with affected communities and any received feedback incorporated into the design, mitigation and management measures. The SEP must include provisions for ongoing community monitoring and disclosure, including civil society involvement in monitoring water quality, biodiversity, and social commitments during operations (where applicable).

Issues related to assessing and addressing gender empowerment (including disaggregated gender metrics and any potential GBV will be given attention). The UN marker system for Gender mainstreaming will be used to promote gender equity (iii) Oversee measures to prevent GBV and SEAH, which includes undertaking a SEAH risk assessment and incorporating SEAH risk management into all documents and contracts, ensuring that grievance redress mechanisms are accessible, inclusive, survivor-centred and gender-responsive.

- Review all available existing information on **environmental and social and institutional capacity** baseline conditions and potential impacts related to the Project, and ancillary and associated facilities, and ecosystems serving the water supply to the municipality and identify gaps.
- **Review, analyse and provide the policy, legal, and administrative framework** for this Project as part of the ESIA report. The TA is expected to undertake desk top research **key strategic studies or plans** that impact the area and review these (such as documents available on national and provincial government department websites including the South African Biodiversity Institute (SANBI), Water Resource Commission (WRC) and Department of Forestry Fisheries and Environment (DFFE), Council for Scientific and Industrial Research (CSIR) and peer reviewed research work on climate change and ensure a strategic perspective on the project is provided for in the ESIA and ESMP and ESMS
- **Clearly define the project's area of impact and area of influence, including ancillary and supporting facilities** that are part of the project, and the area of influence related to Associated Facilities.
- **Design E&S relevant field-based social and environmental baseline studies** including to address metric requirements.
- **Conduct site visits**, with a team of specialized experts and provide appropriate baseline studies/metrics for impact assessments, covering the whole spectrum of analysis and modelling relevant to the construction and operation of the Project. Such studies should also include formal and informal discussions/meetings with local communities, government entities and other key stakeholders, in each project affected area/ influence area (municipality level and district level). Consultations will enable both verification of the information reviewed from existing sources about the Project's social and environmental context, an initial screening of likely environmental and social impacts and sensitivities, and for all relevant stakeholders to be informed about the Project. Any

contact or interviews for preparation of baselines or social assessment should be planned and carried out in a culturally appropriate manner, in a language acceptable and used by the communities. Consultations shall be held in the national and/or relevant local language (or with translation) as appropriate and as per safeguard requirements. Efforts will be made to disaggregate gender statistics and to address gender mainstreaming as per international UN gender mainstreaming guidelines including managing the risks of GBV, SEAH and promoting human rights and empowerment to marginalized/disadvantaged people.

- Based on the above, **prepare an ESIA report** consistent with the applicable national and international Standards. Specialist reports will be required for several reports but must ensure to budget for and include detailed climate change assessments (adaptation and mitigation), project ecological footprint using global good practice guidelines, biodiversity/ecosystem services dependencies and impacts (Task Force on Nature Disclosure indicators and guidelines apply) and sludge re-use options, etc.) The climate change assessment will require an appropriate degree of modelling, stress testing and scenario testing to ensure project relevance in the short and long term and to ensure adaptation assessment methodologies and plans align with global cutting-edge practice which will included assessing embedded carbon / carbon footprint assessments, targets and indicators. Plans must align with GCF/IFC/WB methodologies, and SDG goals. Metrics presented must align with the Task Force on Climate Change Disclosure Guidelines and the Task Force on Nature Disclosure.
- **The ESIA should include Environmental and Social Management Plans (ESMPs) and Environmental and Management Systems (EMS) for operational years**, ensuring these are detailed rather than generic documents, and in compliance with the applicable requirements, and global good practice guidelines. The ESMP must include a Capacity Building and Institutional Strengthening Plan for the implementing municipality and contractors, covering E&S safeguard implementation, monitoring, and reporting. This should include training programs on GBV/SEAH prevention, grievance handling, climate adaptation, and environmental monitoring.

The following, non-exhaustive, list of assessments and plans are anticipated:

- Social inclusivity and Gender Assessment and Action Plan with a focus on gender equity and use of the UN Gender Marker System to ensure benefits to women are optimized where practical from the start of the activities up to a detailed Gender Action Plan and budget being recommended for approval.
- A gender-based violence assessment and sexual exploitation and abuse assessment, and action plan to address risks identified and to ensure records of all incidents are maintained.
- Holistic Strategic Ecological Infrastructure Approach (if applicable). Integrated Water Resource Management/Conservation/Minimization Use and Ecosystem and Biodiversity Assessment, design and associated Action Plans. This will include recommendations to meet mitigation and offset legal requirements, promote nature-based solutions as well as provide the details on achieving a net positive impact/co-benefit for water ecosystems and biodiversity (in part to address dependencies the project has on natural resources upstream or downstream of the project). The details of a biodiversity and water resource management value-added intervention will form part of the ESIA report and the ESMP, ESMS and the budget will be integrated into the overall project budget. Use will need to be made of

relevant natural resource economics accounting and valuation tools such as those referred to in UNEP-FI and the natural capital protocol and related guidelines as appropriate. The proposed intervention needs to be designed in sufficient detail for relevant approvals of relevant authorities as part of the project process.

- Climate Mitigation Assessment and Management Plan (carbon metrics such as carbon footprint, anticipated carbon savings per year and over project lifetime, carbon emissions per year and over project lifetime also identifying the additional costs and savings that these measures will result in.
- Climate Vulnerability Adaptation Assessment and Plan (including institutional and other technical measures to reduce vulnerability and build resilience- also identifying the additional costs and savings that these measures will result in.
- Labor Management and Working Conditions Assessment and Management Plan
- Local Recruitment and Training Assessment and Management Plan
- Occupation Health and Safety Assessment and Management Plan and Procedures
- Environmental and Social Governance Assessment (to ensure sustainability of the project investment) which will include Client Management Capacity Assessment, a Management Plan (inclusive of a Capacity Building Plan and ESHS Training Management Plan)
- Transportation Assessment and Management Plan
- Pollution Prevention and Control Assessment and Management Plan
- Hazard/Disaster Risk Assessment and Action Plan.
- Hazardous Material Management Assessment and Management Plan
- Waste Minimization and Resource Efficiency Assessment and Management Plan
- Wastewater Assessment and Management Plan
 - Sludge options Assessment and Management Plan
 - Integrated Pest Management Plan
 - Restoration and revegetation Assessment and Plan (including Topsoil Management)
 - Community Health and Safety Assessment and Management Plan
 - Influx Assessment and Management Plan
 - Security Risk Assessment and Management Plan
 - Land Acquisition, Resettlement Assessment Action Plan (RAP), or Livelihoods Restoration Plan (LRP) as applicable.
 - Cultural Heritage Protection Assessment and Management Plan as and if applicable
 - Emergency Preparedness and Response Assessment and Plan (EPRP)
 - TOR for EMS for operations phase
 - Detailed ToRs for environmental and social IEM post ESIA authorization, for greening procurement supply chain and for encouraging all contractors to refine and develop and align their own environmental management policy to sustainable good practices. E&S Contractor Management Framework and TOR for the Contractor based ESMP
 - Cumulative Impact Assessment and Management Program
 - Design and implement the Development Results Framework aligned to global good practice and in consultation with DBSA based on DBSA core indicators list. This will include a comprehensive

set of Environmental and Social Targets and baselines and a Monitoring Program for Key Performance Indicators (KPI).

- A Project Summary and Case Study/Lessons Learnt Report once environmental authorization is achieved to illustrate how strategic environmental objectives/co-benefits were identified and addressed. The purpose of this is to inspire and assist other projects. This case study is to be 2 pages in written form for publication, 10 power point slides for webinar use and 10 high resolution info graphics/illustrations/photos to depict what is different about this approach to business-as-usual approaches. These case studies and their materials will be available as base material for re-use by the municipality, DBSA and others, on a need be basis, without the need to seek permission or provide reference to any particular consultancy when using the materials.
- Issue all disclosure documents in English for web disclosure and hard copy distribution to the public (add any detail of distribution requirements including additional local language of summary reports if required by safeguard standards).

The TA shall always comply with the relevant national and international data protection law and regulations.

4. Applicable Standards and Guidelines

National

- Applicable local and national Environmental and Social laws, regulations and standards.

International standards and guidelines

- DBSA Safeguard Standards
- IFC/World Bank Performance Standards
- World Bank General Environment, Health and Safety (EHS) Guidelines
- World Bank Sector Specific EHS guidelines: Water and Sanitation
- UN Guiding Principles on Business and Human Rights (UNGPs)
- All ILO conventions signed and ratified by the country(es), all ILO conventions covering core labor standards and all ILO conventions covering the basic terms and conditions of employment
- All relevant international agreements including Paris Agreement and including emerging Global Biodiversity Agreement related to the Convention on Biological Diversity.
- International Financial Institution (IFI) Framework for a Harmonized Approach to Greenhouse Gas Accounting

Good practice guidance

- Good International Industry Practice (GIIP)
- Good Practice Handbook on Cumulative Impact Assessment and Management: Guidance for the Private Sector in Emerging Markets
- Stakeholder Engagement: A Good Practice Handbook for Companies doing Business in Emerging Markets;

- GPN on Contractor E&S Management
- IFC's Use of Security Forces: Assessing and Managing Risks and Impacts
- UN Voluntary Principles on Security and Human Rights
- Good Practice Note: Managing Risks Associated with Modern Slavery
- UNEP – Natural Capital Protocol and related documents
- Biodiversity Protocol
- WWF Water Risk Filter
- Full cost accounting guidelines UNEP or any other to ensure all externalities are internalized
- UNEP and GEF guidelines on Gender Mainstreaming including addressing GBV and SEAH: Emerging Good Practice for the Private Sector
- Task Force on Climate Change Disclosure and Task Force for Nature Disclosure guidelines for carbon and biodiversity metrics and materiality assessments
- CSIR Green book
- King Commission

5 Tasks-Activities-Deliverables

Task 1 – Review and Augment (if needed) Prefeasibility Study Reports

Activity 1 – Review relevant Pre-feasibility Reports

Review of existing project documentation from **Stage 1**, especially the Prefeasibility report and Safeguards Assessment against DBSA Safeguard Standards/Project Sustainability Objectives/Legal Requirements/ Gap Analysis and the development of an Environmental Framework Plan to plug gaps.

Deliverables

1. Letter of appointment of Peer Review Panel.
2. Updated Prefeasibility Report (if needed).

Indicatively the following elements may be considered as appropriate:

- Summary of a desktop review of: global good practice case studies of integrated approaches to ecological infrastructure, wastewater systems and wastewater reuse; strategic environmental plans relevant to the project, including climate change studies; project specific E&S studies that are available; the Project's preliminary layout, sensitive receptors identified through satellite imagery and web searches, topographic or cadastral map if available; relevant summary of DEA/CSIR/SANBI/WRC data bases, relevant policies and guidelines (including climate and biodiversity related reports that could help direct the project); inputs from stakeholder consultations which is considered an integral part of the scoping review process and is to include people with local knowledge in ecological infrastructure such as NGOs and academic institutions or research institutions.
- Site Survey Priority List, as an output from the desk-based review.
- GIS map of the project area of direct and indirect impact and natural resource dependencies.

- The methodology to be used to assess the environmental and social impacts of the Project including the work required for submission for Town Planning approvals and for water use licenses. This document will be included into the ESIA Report as a standalone section. This report shall include the following topics:
- Detail the strategic objectives as specified in this TOR in addition to any other strategic objectives to achieve sustainability and transformation to a sustainable economy
- Analysis of alternatives on key relevant issues including promotion of nature based solutioning, green engineering and resource efficiency
- Approach to stakeholder engagement
- Approach to determining the spatial and temporal study area
- Methodology for assessment of the baseline environmental and social conditions and establishment of a development Results Template aligned with DBSA requirements
- Methodology to assess the potential environmental and social impacts of the Project (including determining significance, development of mitigation measures and application of the mitigation hierarchy, and assessment of residual effects)
- Methodology to assess strategic assessment and the assessment of Cumulative Impacts
- Approach and methodology for integrating nature based solutions and ecological infrastructure concepts into the project design and budget to ensure the project results in meeting biodiversity/ecosystem, climate adaptation and climate mitigation and water resource management strategic objectives (over and above legal EIA approval requirements) noting this may involve action plan outside of the technical engineering sites (for example working in partnership with a municipality or provincial park or national department in a wetland or watershed or priority water resource area). This will require coordination with organisations involved in biodiversity and water resource management such as SANBI (especially the GEF funded project Biodiversity for Water Security Project, WWF and others involved in catchment management)
- Approach for development of an Environmental and Social Management Plan (ESMP) and Environmental and Social Management System (ESMS)
- Approach for Operations and Decommissioning
- Approach to assure that all the above are aligned with IFC/WB/DBSA E&S Safeguard/Standard requirements and related environmental and social industry good practice guidelines, such as Climate Assessment and mitigation and adaptation guidelines and the Task Force on Climate Change Disclosure Guidelines and the Task Force for Nature Disclosure Guidelines and Ecological and Carbon Footprint metrics
- Approach to ensure environmental, technical, social institutional, governance, economic co-benefits have a baseline against which indicators and targets can be monitored, measured and reported against throughout the project life cycle. (using global good practice methodologies)
- Approach to ensure Stakeholder engagement, grievance mechanism and lessons learnt are addressed
- Approach to ensure a case study in written and in power point, together with relevant material photos in high resolution, info graphics, development results reporting is made available to the funders to funder satisfaction

- Detailed Safeguard Review
- Development Results Framework

Peer Review Report

The TA is also expected to provide a peer review, to be presented at Draft Report stage to a Report Back Meeting the Client's Project team and WPO held in video-conference call or in person.

At least attend a maximum of 4 meetings (digital or physical) and conduct 4 reviews of the following draft reports: Scoping; ESIA, ESMP/ESMS and Feasibility Report Review.

Task 2 – ESIA Preparation

Activity 1 – Regulatory Review

Deliverable

The TA will deliver the Policy, Legal, and Administrative Assessment and Potential Partnership Plan to achieve a net positive biodiversity impact. This document will be included into the ESIA Report as a standalone section. As a minimum it will comprise of:

- Detailed review of the environment, health, safety and social regulatory framework that governs the development of the Project from concept to operations including the identification of the relevant listed activities contained in the South African EIA Regulations (2014 as amended) that would be triggered by the project.
- Detailed review of laws, regulations, national guidelines, standards, international treaties and conventions and emerging international agreements related to environment, climate, biodiversity and water resource management, of which South Africa is a signatory to and or may become one, which is relevant to the Project directly or indirectly. A clear requirement from the Project must be enumerated for each relevant piece of legislation.
- Detailed review of the relevant country regulations, environmental permit process and relevant institutional set-up (entities involved in environmental management in country)
- Detailed review of the IFC's and DBSA's E&S requirements as identified in scoping process including the ones that would be triggered for the Project and necessary requirements that must be taken care of during Project development.
- A Detailed review of Partner Initiatives the project could link with to achieve environmental and climate strategic objectives and attain net positive environmental and climate co-benefits.

Activity 2 – Project Description

Deliverable

The TA will produce a Project description report which, as a minimum:

- Describes the proposed project and its geographic, ecological, social, health and temporal context, including any ancillary infrastructure which would be considered as a project component and any Associated Facilities. This refers to on-site and off-site infrastructure and utilities that will be required (e.g. transmission lines, sub-station(s), access road networks, contractor facilities, storage areas, quarries, among others); It will describe how the mitigation hierarchy will apply and environmental offsets and compensation measures will apply with regard to existing South African policy and how the project will conceptually achieve net positive environmental (biodiversity, ecosystem services, climate adaptation, climate mitigation and water resource management) strategic objectives and secure net positive results
- Encompasses facilities and activities by third parties that could impact or be impacted by the project or which effects could accumulate to those from the project (e.g., synergies or antagonistic effects). Includes administrative setup, land use and planned developments within the vicinity of the Project Location, detailed maps / photos showing the project site and area of influence
- Summary of likely activities to take place during the project phases; planning and construction; operation and decommissioning
- Expected timelines for execution of main project development phases
- Summary of workforce management and accommodation strategy
- Obtaining 13 authorization and licensing as per environmental regulatory requirements.

Activity 3 – Analysis of Alternatives

Deliverable

The TA will deliver the Analysis of Alternatives/Options report. This document will be included into the ESIA Report as a standalone section (noting options have been addressed quite extensively to date). The TA will compare reasonable alternatives in terms of their technical, economical as well as a social, environmental and health and safety positive and negative impacts related to use of resources (i.e., water source options and impacts), provisional transmission line route/corridor, etc.

This alternatives assessment can be qualitative or semi-quantitative including assigning relevant “weights” to various environmental and social aspects based on their sensitivity to the project context (from the Scoping Report) and to clearly promote short- and long-term sustainable development goals by using clear Sustainable Development Criteria. The TA will provide justifications as to why the final revised proposed Project design which includes the ecological and green infrastructure components is the most optimal solution (or not), considering the following:

- Project site
- Project technology
- Project and contextual E&S risks
- Minimalization of social and environmental short- and long-term costs and minimalization of externalities and promotion of environmental and social SDGs
- Project design and layout and impact on natural resources

- Impact on climate
- Project interface with Associated Facilities
- No Project alternative (what happens if the Project is not developed).

Activity 4 – Environment and Social Baseline Conditions

Deliverable

The TA will deliver the Environment and Social Baseline Conditions, in compliance with the objectives set out above. This document will be included into the ESIA Report as a standalone section. The report will:

- Identify and assess the constraints related to the preferred Project site and the Associated Facilities, which can be addressed during the Project's design process, execution/construction and operations.
- Establish detailed baselines against which address a wide range of key indicators and against which progress can be measured including for institutional, social, economic biodiversity, natural habitat restoration/ecosystem services, climate adaptation, mitigation, water resource management -noting the project aims to achieve net positive co-benefits in all these fields (aligned to DBSA Development Results Template and other Indicator frameworks such as GEF or GCF).
- Baseline studies must include an assessment of human rights risks related to labour and working conditions, including risks of forced labour, child labour, and modern slavery within the project value chain. This should align with IFC/ILO conventions and the ESMF requirements.
- Geotechnical studies and topographical surveys (if these are not provided elsewhere)
- The analysis will explicitly consider the mitigation measures that are considered necessary, including the effect of these measures on the operation of the Project and most importantly the environmental net ecosystem contribution benefits/ ecological infrastructure and ecosystem services as well as a detailed assessment on climate change adaptation and mitigation. Social inclusivity will be dealt with in detail seeking opportunities for gender inclusivity and providing disaggregated metrics for targets setting and monitoring indicators
- Environmental and Social Governance Institutional Assessment and capacity gap analysis

Activity 5 – Development of E&S Constraints (Red Flags) Mapping and identification of opportunities for net positive ecological infrastructure investments and climate investments

Deliverable

The TA will deliver the E&S Constraints and Opportunities Report. This document will be included into the ESIA Report as a standalone section. Based on the outcomes of the scoping and baseline studies above, constraint analysis mapping should be undertaken, and which will need to be taken into account by the Client and third parties during the design phase of the Project (including in the refinement of the Alternatives Analysis). This constraint analysis could include for example, archaeology and cultural heritage sites within the Project site to be avoided, sensitive receptors which need to be avoided, or require buffer zones, etc. The report must also identify and outline detailed concepts to achieve net positive environmental

benefits (climate adaptation, mitigation, biodiversity, ecosystem services, gender empowerment etc.). TA to present draft report to WPO and Client Team meeting.

Activity 6 – Assessment of E&S Impacts

Deliverables

The TA will deliver the draft of the ESIA Report.

The TA will also deliver the first Draft Documentation prepared for WULA and related water licenses and approvals including all response documentation to any queries etc.

The TA is also expected to attend a follow-up meeting with the Project Client team and WPO to be held in physical and/or held through a video-conference call) in which the draft of the ESIA Report will be presented and the key findings, impacts and mitigation strategies, and opportunities, highlighted.

The potential impacts of the Project and the Associated Facilities activities during the planning, design, construction, operation and de-commissioning phase on the environment (including biodiversity, ecosystem services, ecosystem dependencies, water quality objectives, water resource management), institutional and governance, social and health and safety aspects of the receptors will be identified. This impact assessment will consider the sensitivity of parameters, nature, magnitude, effect, duration, reversibility, significance, etc., and follow good industry practice and methodologies for the assessment of impacts and significance ratings. It should also consider any legacy environmental and social risks and impacts which the Project may generate (e.g., closure of other Client facilities).

The impacts of climate change on the project as well as the climate adaptation and mitigation impact of the project must be assessed using qualified climate specialists, who can make extensive use of existing available resources (so as not to waste costs of duplicating existing information and models and using their skills to compile a coherent and detailed document and plug essential specific details if and where the need arises). This work must align with global good practice assessments so as to afford the project an opportunity to achieve climate finance benefits and or green or blue bond where possible. The Climate assessment must link to the engineering designs to ensure the project is climate sensitive and climate positive.

The key areas of potential impacts which may be considered are as, but not be limited to, the following:

- Landscape and visual
- Integrated water resource management and biodiversity and livelihoods
- Communal Lands, communal resources and access to resources
- Biodiversity and Ecosystem services (Ecological Infrastructure)
- Estuary and marine ecosystem
- Land use

- Waste management
- Flood risks (if applicable)
- Air quality
- Noise
- Water quality
- Archaeology and cultural heritage
- Occupational health and safety
- Community health and safety
- Infrastructure and utilities
- Socio-economics aspects including
 - Land acquisition
 - Economic displacement
 - Aspects of project-induced migration (cost of living, pressure in social services, crime, etc.)
 - Socio-economic development opportunities (jobs, capacity development, etc.)
- Gender Mainstreaming and social inclusivity (with disaggregated metrics as per UN Guidelines)
- Environmental Management Institutional capacity
- Climate change adaptation and resilience
- Climate change mitigation
- Green Climate Finance Taxonomy classification and budget disaggregation.

ESIA must include the assessment of all the Project's potential impacts on E&S topics identified in Activity 4. This should include those arising from Associated Facilities, and Cumulative Impacts.

Activity 7 – Environmental, Social, Health and Safety Management Plans /Systems for Construction and for Operations and Decommissioning

Deliverables

The TA will develop detailed Environmental, Social, Health and Safety Management Plans ("ESMP" or "ESHS MP") and Management Systems (for operational years) that identify for each impact the mitigation, monitoring and management measures to be taken during the various phases of the project (construction, operations, decommissioning) to avoid, reduce, mitigate, or compensate for adverse environmental, social, and health and safety impacts. For each identified impact the TA will establish:

- A set of mitigation measures that will include feasible measures to prevent significant adverse impacts or reduce them to acceptable levels. Such measures will involve technical requirements, guidelines or procedures and practices to be implemented during design, construction, operation and decommissioning phase of the Project
- Clear concept and detailed design and action plan and costing for the offset and compensation plan as required by legal systems
- Clear concept and detailed design and action plan and costing as required for ensuring net biodiversity, ecosystem and climate (adaptation and mitigation) benefits

- Clear detailed concept and detailed design and costing for investment in net positive climate and environmental impacts/co-benefits (these could be in the form of standalone projects alongside the engineering investment provided)
- A set of monitoring requirements that ensure that the identified mitigation measures are taken into account, implemented properly and are sufficient measures for protecting the environment and environment resources, local communities, and workers. The monitoring requirements will need to meet DBSA Development Results Framework standards which comprises of a list of about 30 core indicators covering climate, environment, social, economic, and institutional governance, technical and related financial statistics that require to be reported against every 6 months or as applicable (includes carbon emissions, biodiversity impacts through hectares restored, or Environmental DNA sampling or other means, water quality and quantity metrics etc.).
- In addition, as part of the ESMP, the TA shall also identify the proposed ESMS structure, as applicable, that will be followed for the project. The ESMS requirements will be included in detail for all the parties involved, including, the Sponsor, EPC and O&M contractor.
- This ESMS shall be aligned with DBSA/IFC requirements and guidelines as well as the principles of ISO 14001 and OSHAS 18001/ISO 45001 and include the necessary Elements, Programs and Management Plans and Procedures to manage the identified Project risks. As part of the ESMS, management plans will be developed in line with the applicable requirements for the key aspects identified in the ESIA such as, but not limited to,: pollution prevention (noise, dust, fuels, hazardous materials), solid and liquid waste, biodiversity and ecosystem services risk management and net positive impact investments, water quality and quantity and water resource management, community health and safety, gender equality, climate adaptation, climate mitigation, occupational health and safety, influx, land compensation and resettlement (if applicable), transportation management, security management, emergency response, labour and supply chain management, and vulnerable people.
- The TA will develop an outline management structure which will ensure the implementation of all the required mitigation and/or monitoring activities is achievable. This will include recommended training activities, and any additional management tools, etc.
- The TA will develop a Mitigation Impact (tCO₂e) plan - The level to which the project contributes to the reduction of Greenhouse Gases emissions based on submitted information, and that will be required from all submissions. This is part of the Global Climate Change Fund criteria that need to be addressed.
- The TA will perform a mitigation impact through beneficiation. The level to which the project will contribute to the mitigation of impacts through sludge beneficiation, based on submitted information required from all submissions. This is part of the Global Climate Change Fund criteria that need to be addressed.

The Management Plan framework will comply with best practice guidelines, including as applicable, the following:

- Environmental and Social Management System (ESMS) Framework

- Environmental and Social Monitoring Program and KPIs, aligned to DBSA Development Results Framework of about 30 environmental social and economic indicators complete with details on how and when the metrics will be reported to achieve 6 monthly updates to funders
- Labour Management and Working Conditions
- GBV and SEAH Risk Management Training and Report, including training exclusively aligned to GBV and SEAH risk management and awareness, to be provided to staff, contractors and partners. This training provides psychosocial, medical, and legal support for survivors, including referral pathways and confidentiality safeguards aligned with the grievance mechanism.
- Local Recruitment and Training Plan
- Occupation Health and Safety Management Plan and Procedures
- ESHS Training Management Plan
- ESG capacity building programme for key stakeholders to ensure parties can manage risks (specify organizational structure, policy, personal, or training)
- Traffic and Transportation Management Plan
- Pollution Prevention and Control Management Plan
- Integrated Pest Management Plan
- Hazardous Material Management Plan
- Waste Minimization and Resource Efficiency and Conservation Management Plan
- Water Conservation / Minimization Plan
- Wastewater Management Plan,
- Restoration and Vegetation Plan
- Community Health and Safety Management Plan,
- Labour health and safety plan
- Influx Management Plan
- Security Risk Assessment and Management Plan (including Gender, GBV and SEAH),
- Land Acquisition, Involuntary Resettlement, and Livelihoods Restoration Action Plan,
- Ecosystem and Biodiversity Management Plan
- Climate Mitigation Plan
- Climate Adaptation Plan
- Water resource Management Plan
- Vulnerable people or community Development Program,
- Cultural Heritage Protection and Management Program,
- Emergency Preparedness and Management Program,
- Contractor E&S Management Plan (including Gender and GBV), and
- Cumulative and Strategic Impact Management.

A detailed and thorough Safeguards Report must indicate how the ESIA and ESMP have met all DBSA /IFC Safeguard requirements – any gaps need to be identified and addressed – where they cannot be addressed these need to be noted and a commitment plan (Environmental and Social Framework Plan) needs to be detailed on how these gaps will be closed.

A peer review report needs to be provided and attached.

Activity 8 – Stakeholder Engagement Plan

Deliverables

The TA will submit the Stakeholder Engagement Plan, along with the Grievance Mechanism in compliance with the applicable requirements. This is a reiterative process, and the Stakeholder Engagement Plan needs to be prepared as early as possible into the process.

The TA will undertake a detailed stakeholder assessment as early in the process as possible and develop a Stakeholder Engagement Plan ("SEP") as a standalone document in line with the IFC's, GCF DBSA's requirements. The SEP should recognize that stakeholder engagement is an ongoing process that involves stakeholder analysis & planning, disclosure and dissemination of information, consultation & participation, grievance mechanism and on-going reporting to affected communities. In line with the requirements of IFC and DBSA), the SEP must be developed and scaled to the Project risks and impacts and opportunities for net environmental and climate co-benefits and be tailored to the characteristics and interests of the Affected Communities and key stakeholders.

The TA should build the SEP based on a preliminary scan and then detail the findings based on the environmental and social impact assessment outcomes taking into account local settings. The SEP should be developed to include the following as appropriate to this application:

- Identify all Project related stakeholders influenced by the Project to include central governmental entities, local governmental entities, NGOs, local communities and CBOs; academic and research institutions; private sector companies; media organizations; and most important any vulnerable groups if applicable
- Evaluate Project related stakeholders to understand their priorities and relevance to the Project
- Define the Project's approach to stakeholder engagement (post ESIA study, during construction and operations). Priority should be given to identification of engagement mechanisms that are: (i) culturally appropriate, (ii) scaled to the project risks and impacts, (iii) tailored to the characteristics and interests of the stakeholder groups language preferences, and decision-making process
- Identify the objective of undertaking such consultation activities for each stakeholder group
- Identify the phase of involvement of stakeholders. This will include: (i) summary of stakeholder consultations and engagement undertaken as part of the ESIA (scoping process, baseline, impact assessment, mitigation, etc.) and (ii) future engagement post-ESIA phase to be implemented through the project duration to include distinct phases – planning, construction, operation, and decommissioning Knowledge Sharing Plan: document stakeholder engagement process, outcomes and lessons learned. Note: Reference: GCF Funded Activity Agreement (FAA): Provide the GCF with a report outlining the activities under Knowledge Sharing Action Plan undertaken by the Accredited Entity with various stakeholders in the country, including but not limited to project developers, financiers, off takers, government agencies, regulatory bodies and communities, which reporting shall be submitted alongside the interim and final independent evaluation reports.

- A detailed grievance/project complaints mechanism that is responsive and facilitates establishing and facilitating the resolution of stakeholders' concerns and grievances.
- Provide for the subcontracting of an independent peer reviewer to provide inputs to all draft reports and documents and to attend key meetings such as WPO meetings

This SEP should describe the process undertaken for disclosing project information, consulting key stakeholders and, where appropriate, incorporating responses into project design and mitigation. It should also list all key issues raised to date, who raised them (unless anonymous/confidential), and responses provided, as well as the dates and times of meetings held, details of how meetings were advertised, methods of info dissemination etc. (e.g., radio, TV, newspaper adverts, public meetings, small meetings / focus groups, key informant discussions). It should establish a Grievance Mechanism to record, evaluate, and address complaints or issues raised by stakeholders and to provide feedback to ESMS.

Activity 9 – Non-Technical Summary

Deliverables

The TA will submit the Non-Technical Summary. The NTS will be provided in English and if safeguards require in isiZulu. Considerations should be given to translating the Non-Technical Summary to the local language. The NTS must be prepared in accessible formats, including braille, large print, or audio-visual formats, to ensure accessibility for persons with disabilities and other vulnerable groups, as determined.

The TA shall prepare a Non-Technical Summary ("NTS") report, which concisely discusses meaningful information on the project, its environmental and social footprint and impacts, significant findings and recommended actions in easily understandable (non-technical) language. The section will include a summary of the ESIA undertaken (project description, baselines, impact analysis and mitigation measures for the environmental, social and health and safety negative and positive impacts) and a summary of the stakeholder engagement process.

The Executive Summary will include a DRT summary report and a clear summary of how the project proposed designs met the project objectives.

Task 3 – Final ESIA/WULA Documentation Prepared

Activity 10 – preparation of final documentation

Deliverables

Documentation prepared for WULA and related water licenses and approvals including all response documentation to any queries.

The TA will submit the ESIA Report in line with the above requirements. The ESIA Report will be submitted in English.

The TA will assist the Client to have the final revised and approved document publicly disclosed.

Non-Technical Summary in English and appropriate local language is to be presented as separate reports. The Non-Technical Summary will need to be distributed in the Project affected areas in a manner in keeping with the local situation and ensuring access to vulnerable groups and suitable language.

A case study material (including power point presentation, photos and infographics of high quality for publishing and public presentations) spelling out lessons learnt.

A financial summary of finance/budget (as a % and as an actual amount in Rands) of the total project cost to the following as per National Treasury available taxonomy

- Conventional standard engineering construction costs
 - Alternative green engineering solutions as opposed to standard business as usual approaches (this will require to be explained using clear baselines and clear assumptions made)
 - Nature based solutions, such as investment in ecosystems upstream or downstream to secure more water in the catchment
 - Climate Adaptation
 - Climate Mitigation
 - Biodiversity/ Ecosystem offsets and compensation measures
 - Biodiversity/Ecosystem co-benefits over and above the offsets and compensation measures
- The Peer Reviewers are expected to attend a meeting with the Client team and WPO to present comments. A comprehensive process of quality control and document review shall be carried out.
 - Peer review report should be attached.

The ESIA report shall be organized according to IFC/GCF/DBSA Safeguard Standard guidelines and include as a minimum the outline below:

- Executive Summary (with maps and photos as needed)
- Description of the proposed Project
- Policy, legal and institutional framework for the ESIA
- Analysis of alternatives approaches for environment and social impacts, including the no Project scenario
- Baseline of the environment and social conditions including Geotech and topographical survey
- Identification and evaluation of environmental and social impacts
- Cumulative and Strategic Impacts
- Environmental and Social Management Plan (ESMP), including in tabular form outlining the impacts, mitigation, implementing agent, monitoring, and implementation schedule, and proposed team

structure and capacity – specific attention will be given to articulating the offsets and compensation measures for social and for environmental losses (internalizing any externalities into project costs and design and actions) as well as any measures to secure and ensure the project will result in net environmental benefits (over and above those required by law). Also paying attention to capacity of relevant parties to ensure risk mitigation and to promote positive impacts and possibly citizen engagement during operations.

- Stakeholder Assessment and Engagement Plan (SEP), in which the public consultation and participation process on ESIA scope, findings and recommendations will be described in detail, including grievance mechanism (for example paying attention to potential role of citizen groups and citizen science in monitoring water quality of river system in operational years)
- List of References
- Appendices
- Records and evidence of Public Consultation, including training and awareness of GBV and SEAH risk management
- Data and Unpublished Reference Documents

Task 4 – Responses as required and follow ups with authorities

Activity 10 – Submit all ESIA/WULA/ Town Planning Documentation to the relevant authorities

Activity 11 - Responses as required and follow ups with authorities to obtain relevant licences and authorisations as relevant under water use and environmental legislation

END