XXX Municipality: Invitation to Bid

**Insert Municipality Logo**

Bid No.: XXX

Appointment of a Service Provider to Assist the Municipality to Manage, and Monitor the Energy Efficiency Demand Side Management (EEDSM) Project for a Period of X Years

# Summary

Bids are hereby invited from professional service providers registered on the Central Supplier Database for planning, implementation, and monitoring energy efficiency and demand side management project for the period of three years renewable annually. Bid documents with detailed information are obtainable from XXX Municipality Offices during normal working hours, list address of Municipality Offices. OR can be downloaded from the website: Website address.

NB: This bid will be evaluated in terms of the 80/20 preference point system as prescribed in the Preferential Procurement Policy Framework Act (No 5 of 2000) and for this purpose the enclosed forms must scrutinized, completed and submitted together with your bid. Bidders are required to submit original tax clearance certificate and original valid B-BBEE Status Level Verification Certificates, sworn affidavits or certified copies thereof together with their bids, to substantiate their B-BBEE rating claims. Failure to submit the proof of B-BBEE Certificate will result in forfeiting the points

Completed bid documents in sealed envelopes endorsed “Bid number XXX: EEDSM Project" must be deposited in the Municipality's tender box located …. (state specific location of box) on or before the closing date, whereby bids will be opened in public. Bid envelopes that are not sealed and numbered will not be considered. Late bids will not be accepted. The XXX Municipality reserves the right not to award the lowest or any bid.

All technical enquiries should be directed to Name, surname, telephone number and email address of technical person. For queries regarding the bidding procedures, kindly contact Name, surname, telephone number and email address of contact person.

**Closing Date and time:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ms/Mrs/Mr XXX

MUNICIPAL MANAGER

Terms of Reference

**Insert Municipality Logo**

Request for Proposals for the appointment of a Service Provider to Assist the Municipality to Manage, and Monitor Energy Efficiency and Demand Side Management (EEDSM) project, as and when required, on behalf of XXX Municipality for a period of X years.

# Background

South Africa is facing a major energy crisis due to the country’s ever increasing demand for electricity. The best short term solution to the energy crisis lies in the management of energy demand through effective energy management and installation of energy efficiency technologies. Energy efficiency is a way of managing and restraining the growth in municipal energy consumption.

In an attempt to reduce energy consumption in municipal infrastructure, XXX Municipality has secured an EEDSM grant from the Department of Energy and National Treasury through section 5(b) of the Division of Revenue Act (DORA) to measure and quantify the current energy consumption baseline and energy savings potential of the municipality. The measurement and quantification of energy consumption baseline are to be achieved through historical electricity bills, and the installation of smart meters, whilst energy savings will be achieved by the replacement of inefficient technologies with energy efficient technologies such as Light-emitting diode (LED) for buildings, public lighting and traffic signals; efficient Heating, Ventilation, and Air-Conditioning (HVAC) system; and efficient motors and variable speed drives for water services plants.

# Technical Requirements of EEDSM Interventions

## Public Street Lighting Standards

All standards and specifications are subject to revision, and parties to agreements based on this specification are encouraged to investigate the possibility of applying the most recent editions of the documents listed below.

SANS 47512006 Luminaries for interior lighting, street lighting and floodlighting - Performance requirements.

ARP 035: 2005 Guidelines for the installation and maintenance of street lighting.

SANS 1088: 2004 Luminaries’ entries and spigots.

SANS 1250: 1991 Capacitors for use with fluorescent and other discharge lamp ballasts.

SANS 1266: 2002 Ballasts for discharge lamps (excluding tubular fluorescent lamps).

SANS 1574: 2004 Electrical cables - flexible cords and flexible cables.

SABS IEC 922:1989 Ballasts for discharge lamps (excluding tubular fluorescent lamps).

SABS IEC 60923:2001 Ballasts for discharge I Amps Performance requirements.

SABS IEC 92611995 Tarting devices: General and safety requirements.

SABS IEC 60927:2005 Tarting devices: Performance requirements.

SANS 1507: 2002 Electric cables with extruded solid dielectric insulation for fixed installations.

SANS 529: 2001 Heat-resisting wiring cables.

VC 801121999 Tip holders.

SANS 1777:2004 Electric control units for lighting (PECUs).

SABS ISO 1461:2000 Hot dip galvanized coatings on fabricated iron and steel articles - Specifications and test methods.

SANS 556-1 :2004 Low-voltage switchgear Part 1: Circuit-breakers.

BS 1490: 1988 Specification for aluminium and aluminium ingots and castings for general engineering purposes.

# Introduction

The project will be implemented in the entire infrastructure of the XXX Municipality, and in accordance with the conditions of the Division of Revenue Act and relevant legislative framework, and guidelines from the Department of Energy. The EEDSM project shall be implemented in three phases, namely:

* 1. Technical energy audits to determine energy consumption baseline; select energy efficient technologies and/or measures; and estimate the cost of each energy efficient technology to be installed;
	2. Development of an energy efficiency project business plan with clear milestones, actual cost, and timelines for project management; implementation of energy efficiency interventions, skills development and capacity building of local technicians or artisans, and awareness campaigns; and
	3. Actual implementation, once the activities in the business plan are approved by the Department of Energy.

The potential Bidders are expected to provide a resource plan with associated cost that will be used to manage the project. The Bidders are also required to provide the professional with the required skills necessary to implement the project.

# Project Strategic Goal

The overall strategic goal of this EEDSM project is for XXX Municipality and its local municipalities to reduce the electricity consumption by introducing energy management systems and install cost effective energy efficient technologies that will provide energy savings practices. The specific objectives are to:

* Reduce the municipality’s electricity demand through the implementation of energy management systems;
* Increased awareness on energy efficiency; and
* Improve municipality’s capabilities on energy management.

# Expected Project Outputs

The project is expected to deliver the following outputs:

* Extended Baseline Report.
* Detailed Baseline Report.
* Energy Audit Report.
* Business Plan.
* Monitoring and Verification.
* Advert and Terms of Reference for the supply and installation, supply only or install of lighting technology.
* EEDSM Project implementation workplan.
* Monthly and Quarterly EEDSM Reports.
* Increased awareness of energy efficiency within municipality.
* Project Close-out report and power point presentation.
* Enhanced capability of municipality to implement energy management systems.

# Scope of Work

Bidders are expected to include in their proposals how they will implement the following:

##  Extended Baseline Report

This includes the current annual energy consumption baseline (in kWh per annum) for buildings, public lighting and water services plants and traffic signals of the Municipality. The extended baseline report should assist with identifying and shortlisting potential EEDSM projects and the potential savings to be achieved. The report should identify the number of energy inefficient technologies/facilities to be replaced with energy efficient technologies including projected and actual achieved energy savings (in kWh). This should also include the type of energy efficient technologies that will replace the conventional technologies.

## Detailed Baseline Report

This report should include the annual current energy consumption for the short-listed priority energy efficiency intervention, the specific details and number of facilities to be retrofitted, the projected energy and cost savings before the retrofit. Upon installation of new technologies, the baseline should be reviewed and the actual energy and cost savings determined.

The baseline and revised baseline calculation should be determined from all relevant information, such as operating conditions, measurements of various system equipment, log book trends, historical data, and any previous test reports on the existing operating conditions of the municipality.

## Energy Audit Report

This includes energy audits of municipal infrastructure to determine energy consumption baseline for water services plants, street lighting, traffic signals and municipal buildings. The detailed energy audit carried should also identify broad energy efficiency measures, and develop a set of energy efficiency projects to be executed during the next XX financial years, from the beginning of 20XX/XX until the end of 20XX/XX financial year.

Compile and provide an Energy Audit Report highlighting the energy efficient technologies and/or measures identified in 6.2. The energy audit report will assist the municipality to assess the energy savings and financial viability of the projects, and submit to the Department of Energy for approval.

Bidders should include the following in the final energy audit report:

* + 1. **Executive Summary**

The session should provide a brief description of the systems and facilities covered overview of the existing conditions, measures evaluated analysis methodology, results and a summary table presenting the cost and savings estimates for each recommended energy efficiency measure. It should also include a summary of the recommended measures and costs.

* + 1. **Background**

Extensive background about the municipality and project should be provided.

* + 1. **Facility Description**

Details of the existing facilities targeted within the Municipality, such as water treatment and pumping, street lighting, traffic signals, and municipal buildings.

* + 1. **Energy Scenario**

Energy consumption details of all facilities included in the audit and their energy sources.

* + 1. **Inventories**

This session should cover Inventories of all relevant systems, including water pumping, lighting, water treatment, traffic signals, and number of municipal buildings.

* + 1. **Baseline parameters and adjustments**

Methodology followed in establishing the baseline parameters and the criteria to be followed in adjusting/reviewing it. Provide all the baseline parameters and the calculation procedure in an annexure.

* + 1. **Data Collection**

List the various types of data collected and their sources. Include the data in the annex.

* + 1. **System mapping**

Describe the methodology followed for system mapping and include the maps in the annexure.

* + 1. **List of energy efficiency potential projects**

This session should list of all identified measures with estimates of the savings and payback periods on investments.

* + 1. **Review of current operation & maintenance practices**

Provide detailed description of current operation and maintenance (O&M) practices within the Municipal infrastructure facilities. This should include discussion with operators, engineers and other staff, observing the day to day O&M and reviewing the log sheet during the field study. The Bidder has to identify areas for improvement and suggest the strategy and methodology for implementing it.

* + 1. **Location of Works**

List the areas where the EEDSM projects will be executed.

## Business Plan

A business plan will have to be prepared based on the Audit Report, this will be submitted to the DoE.

## Monitoring and Evaluation (M&E)

The DoE has an existing panel of M&E teams. Monitoring and Evaluation on the project site should occur once the business plan is approved and when the installation is complete.

## Procurement / Tendering

This involves the assisting the Municipality with drafting the Advert and Terms of Reference for the supply and installation, supply only or install of lighting technology.

## Monthly and Quarterly Reporting

The DoE requires that the Municipality submit monthly and quarterly reports on the implementation progress of the project.

## Managing the Installation Process

Once the services of a supplier and installer have been procured, the Municipality needs to develop an EEDSM workplan for the retrofit. The municipality is also required to complete site inspection reports and submit all documentation such as invoices and contractors reports to the DoE.

## Energy Efficiency Awareness

This includes creating an energy efficiency drive for the Municipality as part of the EEDSM requirements. Energy efficiency awareness initiatives should be identified and implemented.

## Project Close-out

The Municipality is required to submit a close-out report, crushing certificate and project documentation once the project is completed. The Municipality will also be required to present on the project to the DoE.

# Guarantee

The installation and fittings carried out and supplied under the EEDSM project, shall be handed over in full working order and the best of their respective kinds, and shall be guaranteed for a period of six (6) months from the date of completion of the main contract and any faults or defects in materials or workmanship shall be made good free or charge during such period.

# Bidder’s Company and Team Experience

##  Bidder’s Company Requirements

* The Bidder’s experience or track record in energy auditing, and implementation of energy projects must be supported by 5 reference signed letters for relevant projects with contact details of the clients as proof of the projects executed.
* A company profile of the service provider(s) must be provided and if more than 5 company is involved with the proposal, profiles for all those companies must be submitted.
* Details of any joint venture (JV) if there is any should be provided including attaching the JV Agreement between the parties.
* Proposals should also indicate available or allocated human resources per project activities.
* Bidders must also provide an original letter of financial support from a registered bank or financial institution indicating the facility amount allocated to implement the EEDSM project.

##  Bidder’s Team Experience

The successful bidder shall provide Professional Consultants, whose experience and qualification should include but not limited to the following:

* Team leader must be a qualified and registered with South African Institute of Electrical Engineers (SAIEE) and 10 years’ experience in implementing energy related projects. S/he should have led 3 projects that developed and implemented an energy project. Contact details for reference checks in line with the 3 projects should be provided.
* At least one of the individual Team members should be Certified Energy Auditors/Measurement & Verification Professional with at least 5 years ‘experience in the measurement and verification of energy savings. Copies of certified Certificates should be attached.
* At least one of the individual Team Members Certificate or diploma in Project Management with at least 5 years’ experience in managing energy related projects. Copies of certificate/s should be attached.
* At least one of the individual Team Members Certificate or diploma in Project Management with at least 5 years’ experience in managing energy related projects. Copies of certificate/s should be attached.
* At least one individual team member must be a certified electrician with a Wireman's licence.
* Both team leader and team member(s) must be familiar with South African energy policy including the energy efficiency and carbon emissions reporting and monitoring processes.
* Brief CVs of the proposed project team leader and member(s) describing their relevant skills and experience, and roles in the proposed projects must be included in the proposal failure to attach, bidders will forfeit points. Each CV must not exceed 4 pages.

# EVALUATION CRITERIA

The proposals will be evaluated in two phases:

**Phase 1:** Bidders will be evaluated based on functionality. The minimum threshold for functionality evaluation is 70 out of 100 points. Bidders who fail to meet the minimum threshold will not be further evaluated.

**Phase 2:** Bids will be evaluated on 80/20 preference point system as outlined in the Preferential Procurement Policy Framework Act (Act No. 5 of 2000) of 2000 and its regulations.

##  Phase 1: Functionality Evaluation I

0= responsive; 1= poor; 2 = below satisfactory; 3 = satisfactory; 4 = good; 5 = excellent

| **No** | **Criteria Including Scale** | **Weight** | **Score** |
| --- | --- | --- | --- |
| 1 | **Company Experience:** The Bidder’s experience or track record in energy auditing, and implementation of energy projects must be supported by 5 reference signed letters for relevant projects with contact details of the clients as proof of the projects executed.**Note:** If more than one of the listed relevant projects were undertaken for the same client, one letter from the client listing all the projects will suffice. For example, if one client lists 3 relevant projects then the letter will be scored as 3 projects instead of 1 project if all 3 projects are relevant.**IT SHOULD BE NOTED THAT PROPOSAL THAT ARE UNCLEAR" AND NOT ADHERING TO THESE INSTRUCTIONS WILL FORFEIT POINTS.** | 10 | * None responsive = 0
* 1 reference letter = 1
* 2 reference letters = 2
* 3 reference letters = 3
* 4 reference letters = 4
* ≥5 reference letters = 5
 |
| 2 | **Team leader:*** Team leader must have a 5 years’ experience in implementing energy related projects. S/he should have led 3 projects that developed and implemented an energy project. Contact details for reference checks in line with the 3 projects should be provided.
* At least one of the individual Team members should have 3 years’ experience in the measurement and verification of energy savings.
* At least one of the individual Team members should have 3 years’ experience in measurement and verification of energy savings.

**NB: Copies of brief CVs of the proposed project team leader and member(s) describing their relevant skills and experience, and roles in the proposed projects must be included in the proposal failure to attach, bidders will forfeit points. Each CV must not exceed 4 pages.** | **20**(10)(5)(5) | * < 5 years = 0
* 5 years’ experience = 3
* 6-7years’ experience = 4
* >7 years’ experience = 5
* < 3 years = 0
* 3 years’ experience = 3
* 4-5years’ experience = 4
* >5years’ experience = 5
* < 3 years = 0
* 3 years’ experience = 3
* 4-5years’ experience = 4
* >5years’ experience = 5
 |
| 3 | **Qualifications for Team Leader and Member(s):*** Team leader must have been a qualified and registered Professional Electrical Engineer with at least an honours degree in electrical engineering. Certified copies of certificate should be attached.
* At least one of the individual Team members should have a certificate as a Certified Energy Auditors/Measurement & Verification Professional. Copies of certified Certificates should be attached.
* At least one of the individual Team members should have a Certificate or diploma in Project Management. Copies of certificate should be attached.
* At least one individual team member must have a B Degree in electrical engineering. Copies of certified certificates for both team leader and team member(s) must be attached to the proposal as proof, failure to attach, bidders will forfeit points.
* At least one individual team member should be a certified electrician with a Wireman’s licence. Copies of certified certificates must be attached to the proposal as proof, failure to attach, bidders will forfeit points.
 | **(30)**10(5)(5)(5)(5) | * Below the required qualifications = 0
* Honours Degree = 3
* Master’s degree = 4
* PhD degree = 5
* Below the required qualifications = 0
* Energy Auditors/M &V Certificate = 3
* No Certificate = 0
* Energy project management = 3
* Below the required qualifications = 0
* Diploma = 2
* B Degree = 3
* Honours degree = 4
* PhD degree = 5
* No Certificate = 0
* Wireman’s license = 3
 |
| 4 | **Project Methodology & Plan:****•** A clear methodology with milestones per financial year must be indicated in the proposal. The methodology must outline how the planned work will be carried out showing clearly how each taskwill logically lead to specific deliverables. * Detailed work plans, including timetable for each deliverable.
* The stakeholder's management plan should be included identify alt key stakeholders and how they will be engaged on the project (i.e. communication strategy and plan) should be part of the project plan.

**NOTE: IT SHOULD BE NOTED THAT PROPOSAL THAT ARE UNCLEAR AND NOT ADHERING TO THESE INSTRUCTIONS WILL FORFEIT POINTS.** | **(40)** | * Not meeting the

criteria: (missing any of the elements) = 0* Project plan with all

criteria: (Project Methodology & Plan) within XX months = 3* Project plan with all criteria: (Project

Methodology & Plan) within XX months = 4* Project plan with all

criteria: (ProjectMethodology & Plan) within XX months = 5 |
| **Total** |  | **100** |  |

# Price

This tender will be evaluated using 80/20 evaluation, bidders must state the value of their fees as follows:

* Value in percentage of the total grant allocation the bidder will charge for his professional fees, this fee should cover the Design, Audit, Compiling Business plan, Project Monitoring, attending meetings and travelling.
* A mark-up value in a percentage which the tender will charge for the supply of material during project implementation.

The bidder must ensure that both these percentages are inserted on the MDB 1 document. It must be noted that Amajuba District Municipality reserves the right not to award the lowest or any bid.

**TERMS OF REFERENCE APPROVED/NOT APPROVED**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ms/Mrs/MR Name and Surname

Municipal Manager

Day/Month/Year