



## **PREQUALIFICATION FOR CONSULTANCY FOR EXPERTS TO UNDERTAKE PROCESS OPTIMIZATION AUDITS FOR KENYA ASSOCIATION OF MANUFACTURERS**

### **ANNEX I**

#### **Terms of Reference for process optimization audits to be offered as part of KAM resource audits to members**

#### **1. Background**

**1.1.** Kenya Association of Manufacturers (KAM) is the voice of Kenyan industry with a membership of about 1000 within the manufacturing and value add industries. KAM works towards the realization of the best business environment for industry in Kenya in order to improve their competitiveness. The association in collaboration with the Ministry of Energy established the Centre for Energy Efficiency and Conservation (CEEC) in 2006 that has been working to assist industry on energy efficiency and conservation. Energy efficiency campaigns, energy audits, specialized trainings, power advocacy and collaboration with institutions of higher learning are some of the functions that have been executed in line with our policy of offering firm-level support to manufacturing in Kenya.

To deepen our firm level interventions KAM has expanded scope into Centre for Green Growth and Climate Change (CGGCC). The Centre is offering process optimization services to members to ensure optimal operation of plant equipment, maximize throughput and minimize costs

The process optimization shall be sector-based and shall focus on six sectors i.e.

- Food & Beverage,
- Building Mining & Construction
- Metal & allied
- Chemical & allied
- Textile and apparel
- Agriculture/fresh produce

#### **2. Purpose of the call**

To prequalify experts to undertake process optimization audits in industries.

### **3. Objectives of the assignment**

- i. To review industrial processes and identify the current efficiency levels
- ii. To recommend optimization improvement for industries.

### **4. Purpose of the assignment**

The purpose of the assignment is to;

- i. Carry out a process audit of industries with keen focus on (but not limited to):
  - Equipment optimization
  - Operating procedures
  - Control optimization
  - Material optimization
- ii. Verify that the installed capacity of existing equipment in industry are used to their fullest advantage by examining operating data to identify any equipment bottlenecks.
- iii. Review the plant equipment design efficiency, match with the load and recommend areas of improvement.
- iv. Checking the impact of human behavior on running of the equipment
- v. Verify that the control loops that maintain parameters such as temperature, flow or level are well designed and tuned for optimal running
- vi. Review the maintenance procedures in industry and recommend best practices such as preventive and predictive maintenance
- vii. Identify and recommend areas of process improvement
- viii. Inject new ideas into existing facilities to improve on their current operations
- ix. Review existing procedures such as KAIZEN, ISO 9001, and assess their implementation.

### **5. Terms of Reference**

- i. To conduct a process audit in industries
- ii. To conduct an in-depth analyses of industry process to identify areas of inefficiencies and wastage and to recommend areas for optimization
- iii. To review the material flow from raw material to final product, evaluate the process and determine recoverable resource.
- iv. To review existing operation procedures and systems, assess their execution and recommend areas of improvement focusing on automation.
- v. Identify and quantify the benefits versus costs of the recommendations given

### **6. Expected output**

The expected outputs of the services are:

- i. A comprehensive technical report on areas of process improvement
- ii. A list of recoverable material
- iii. A business case for each recommendations

The same shall also be summarized in a power point format for presentation.

## **7. Submission**

Draft reports of the assignment shall be submitted within 30 working days for large industries and 20 days for small industries from the start of each assignment and final reports to be submitted a week after getting feedback from KAM

## **8. Confidentiality**

The consultant will be bound by the terms of this study to strictly protect confidentiality of any information shared by KAM and its members

## **9. Qualifications of Consultant**

The consulting firm must have experts versed in industrial engineering, process engineering and energy management. The lead consultant shall have not less than ten years demonstrable industry experience in industrial/process engineering.

The consultant should clearly state the sector that they are most suited to carry out the process optimization.

*Training on circular economy concept will be an added advantage*

## **10. Contacts**

Kenya Association of Manufacturers (KAM),

P.O. Box 30225 - 00100 Nairobi,

Tel: 3746021/2; 3746005/7; 3744886,

Fax: 3746028/30,

E-mail: [ceecteam@kam.co.ke](mailto:ceecteam@kam.co.ke)

## **ANNEX II**

### **1. Manner of submission**

- a) Your proposal shall be prepared in the English Language.
- b) Your proposal shall comprise the following documents:
  - i. Technical component and
  - ii. Financial component.
- c) Each copy will be on a separate envelope clearly marked and indicating the name of the firm and the title of the engagement
- d) 2 copies of proposals shall be submitted and marked "Original" on one and the second one "Copy".
- e) Please attach a copy of your PIN certificate, Certificate of Incorporation, Tax compliance and ETR registration.

### **2. Content of Proposal**

- i. Technical Component
  - a) Firm/individual strength in executing the task including reference of the same
  - b) Letter of commitment in case of a consortium from each party
- ii. Description of the firm and the firm's qualifications;
  - a) Detailed proposed approach and methodology.
  - b) The sector (Food & beverage, Building Mining & Construction and Metal & allied, Chemical & Allied, Textile & Apparel, Agriculture/fresh produce) the consultant is most capable to carry out the process optimization.
  - c) Proposed team structure; showing detailed profiles of proposed project team members, minimum qualifications.

Note that inclusion of such profiles constitutes a commitment to use those members and substitution in the event that the contract is awarded will lead to cancellation of the contract.

#### **iii. Financial (Price Component)**

The price component shall have a cover letter wherein your firm/institution's authorized representative affirms the following:

- a) A summary of the price;
- b) The period of its validity;

In addition, the price component must cover all the services to be provided and must itemize the following:

- a) Unit and total fees per person for each team member to be assigned to the mission in the field and a rate for his/her work at the office, if any.
- b) Other costs if any (indicating nature and breakdown).
- c) Summary of total cost for the services proposed.

d) Taxes.

Note: Quote should be in Kenya Shillings.

### **3. Payment terms (provisions)**

The policy of KAM is to pay for contractual services based on performance of contractual services rendered.

Payment will be paid upon completion and acceptance of the report.

Payment of consultancy fee will be subject to local taxes.

### **4. Evaluation of proposals**

A two stage procedure will be utilized in evaluating the proposals, with evaluation of the technical component being completed prior to financial component. Scores will be awarded for the technical proposal.

### **5. Mandatory Documents:**

- a) Up to date tax compliance
- b) KRA PIN Certificate
- c) Company registration certificate
- d) VAT Certificate
- e) Registration by Environment Institute of Kenya (EIK) or equivalent for international consultants.

#### **f) Deadline & Submission**

All interested bidders will be required to pay a non-refundable fee of Kshs. 2,500 to the bank and provide original banking slip on top of the bid documents. The payment shall be made to: Kenya Association of Manufacturer

**KAM Collection A/C**  
**A/C NO: 0948598736.**  
**Branch: Queensway House**

All proposal duly completed should be submitted in plain sealed envelopes bearing appropriate category and the name of the tender. This should be addressed to:

**KAM House,**  
**15 Mwazi Road, Westlands,**  
**P.O. Box 30225-00100, Nairobi,**

To reach them by close of business **24<sup>th</sup> September 2020 at 3:00pm**

Late submissions will not be opened.