



## **PREQUALIFICATION FOR CONSULTANCY TO UNDERTAKE CIRCULAR ECONOMY AUDITS FOR KENYA ASSOCIATION OF MANUFACTURERS**

### **ANNEX I**

#### **Terms of Reference for circular economy audits to be offered as part of KAM resource audits to members**

##### **1. Background**

**1.1.** Kenya Association of Manufacturers (KAM) is a Business Membership Organization in for Value-Add Manufacturers in Kenya with a membership of over 1000. 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 focusing on Green Growth and Climate Change. The Centre for Green Growth and Climate Change (CGGCC) is offering Circular Economy Audit services to members to help identify, quantify and unlock the hidden value in waste management to business.

The Circular Economy Audit shall be sector-based and shall focus on five sectors i.e

- Food & Beverage,
- Building Mining & Construction
- Metal & Allied
- Paper and Paper Board
- Horticulture and Agro-Processing

##### **2. Objective and Motivation**

- a. KAM in its strategy to promote Green Growth and Climate Change mitigation initiatives across the manufacturing sector has decided to fully explore the role out of Circular Economy concepts in the context of green manufacturing and consumption in Kenya for its members.
- b. KAM would like to focus on how Circular Economy and green growth can be mainstreamed through strengthened value chains and circular economy (CE) approaches, specifically among various industries and achieve outcomes that promote improved value chain efficiency, enhanced waste management, and reduction in importation of primary raw materials.
- c. Circular economy emphasizes both the physical and chemical processes of production and consumption and how they can be altered by changing design, management and/or practices in order to reduce waste, the negative impacts on the environment, strengthen re-generative processes and create industrial symbiosis loops in industrial and other production processes.
- d. Currently, most industrial and other economic production processes are more linear in terms of emissions and resource use. Natural resources and processed materials are typically being produced, used and wasted in a linear fashion, with consequences such as hazardous pollution, unsustainable natural resource depletion and generation of waste. Economically this represents inefficiencies, externalities, foregone value and depreciation of natural capital. Closing the physical and chemical loops by minimizing resource waste and pollution arguably offers positive potentials economically, financially as well as environmentally.
- e. Conducting circular economy approaches (or business models) can be achieved at different stages of manufacturing processes.– Sourcing, Internal Processes and Distribution to End-User.
- f. Resource candidates for circular economy can be used within single plants or across plants, among small-scale firms as well as large enterprises. We see circular economy as Cross-Cutting concept that will identify resources from one sector to be used in a totally different sector of manufacturing with attendant value to the source facility.
- g. Embracing Circular economy will promote harnessing of synergies among micro-small-medium-large sized enterprises; strengthen value chains and improve environmental status by identifying and promoting circular economy approaches in different sectors.

**3. The purposes of the assignment is to:**

- 3.1. Conduct a study in specific manufacturing facilities to identify the existence and generation of physical, mechanical, electrical and electronic and chemical resources which will qualify as candidates for circular economy.
- 3.2. Determine suitable and appropriate approaches that may be used to reduce or fully prevent the generation of the resources at firm level and – by identifying alternative technical and economic approaches – suggest changed and new practices that can promote use of the resources at the facility, reduce the waste and enhance environmental circular economy system consumption of these resources.
- 3.3. Identify and propose specific areas of action and interventions where circular economy approaches can be applied and tested. The identified areas may be relevant to - and be operationalized within the specific facility.
- 3.4. Define any other economical use of the identified resource that may not be used at the specific manufacturing facility.

**4. Proposed specific areas of study and action are:**

- 4.1. The Circular Economy Audit will focus on the Four Building Blocks of Circular Economy concepts namely; Circular Design and Procurement, Production and Distribution, Closing of the Material Flow Cycles, Business models for Circular Economy and Enabling favorable Systems.
- 4.2. Industrial manufacturing and waste: Industrial manufacturing and generation of waste are intrinsically linked; production can be extensive, resource inefficient and yield harmful pollution and waste. This audit shall focus on mechanism of closing materials cycles and make production relatively better where production yields lower emissions, or is more efficient in natural resource use with closed physical and chemical loops in the industrial process including packaging materials, with the aim of reducing/minimizing industrial waste by creating value for re-use and/or recycling.
- 4.3. The specific areas of study for this have to be identified within the specific manufacturing facility. The study to focus in the areas of raw materials and finished products, industrial processes waste, electronics waste and manufacturing and integrated management of its waste (e g repair, re-use, re-manufacturing, refurbishing, and recycling of manufactured hardware products including decommissioned plant and machinery.
- 4.4. Identify Quantify the available circular economy resource candidate that the specific facility is not in a position to re-use and re-cycle.

**4. Purpose of the assignment**

The purpose of the assignment is to;

- i. Carry out Resources audit of industries with keen focus on (but not limited to):

- Industrial Processes Waste-Water, Energy, Raw Materials
  - Supporting Services Waste – Electronic and Electrical, Mechanical and metallic,
  - Packaging and paper waste
  - Chemical and liquid waste
  - Re-Use and Re-circulation
- ii. Recommend with justification, appropriate means of introducing circular economy within the specific facility.
  - iii. Quantify the market value (at current market rates) for the ‘Candidate Resource’ that will not be used by the specific facility.
  - iv. Inject new ideas into existing facilities to improve on their waste management strategies

## **5. Terms of Reference**

- I. To carry out Circular Economy audit in Specific industries
- II. Carry out in-depth analyses of industry process waste to identify candidates resources for circular economy
- III. Determine ALL the costs related to waste management and disposal.
- IV. Establish Cost-benefit for Circular economy for the specific manufacturing facility.

## **6. Expected output**

The expected outputs of the services are:

- i. A comprehensive report on areas of available resources as candidates for circular economy
- ii. A business case for each resource candidate for circular economy
- iii. PowerPoint Summary of recommendations

## **7. Submission**

Draft reports of the assignment shall be submitted within 20 working days 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, Chemical and process engineering, Environmental Sciences and Energy Management. The lead consultant shall have

not less than ten years demonstrable industry experience in industrial/process manufacturing. The consultant should clearly state the sector that they are most suited to carry out the Circular economy audits.

**Training and practice in implementation of Circular Economy Concepts 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
- ii. Description of the firm and the firm's qualifications;
  - a) Detailed proposed approach and methodology.
  - b) Timing of activities and reports in a Gantt Chart.
  - c) The sector (Food & beverage, Building Mining & Construction and Metal & allied) the consultant is most capable to carry out the process optimization.
  - d) Proposed team structure; showing detailed profiles of proposed project team members, minimum qualifications.
  - e) Curriculum Vitae of the proposed Key staff to be engaged during the audit

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 (minimum of 90 days);

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) Tax compliance
- b) VAT Certificate
- c) Registration by Environment Institute of Kenya (EIK) or equivalent for international consultants.
- d) CEM

## 6. 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

**Barclays Bank**  
**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 **25<sup>th</sup> September 2020 at 3:00pm**  
Late submissions will not be opened.