



**NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY**  
NEMA House, Plot 17/19/21, Jinja Road, P.O Box 22255, Kampala- Uganda

**ABRIDGED NOTICE OF EXPRESSION OF INTEREST**

1. **National Environment Management Authority (NEMA)** invites sealed expression of interest from eligible consultants (firms) for:

No.	Procurement Reference Number	Subject matter of Procurement
2	NEMA/CON.SRVCS/21-22/00223	Provision of Consultancy services to conduct National hydrofluorocarbons survey covering all districts of Uganda.

2. The shortlisting shall be conducted in accordance with the shortlisting criteria, the PPDA Act, 2003 and the PPDA (Procurement of Consultancy Services) Regulations, 2014
3. Sealed Expression of Interest must be delivered to **National Environment Management Authority, Plot 17/19/21, Jinja Road, NEMA House** before **10:30a.m** on **July 26, 2022**.
4. The detailed notice of expression of interest is available at the Entity's website [www.nema.go.ug](http://www.nema.go.ug) (under Opportunities) and at [www.ppda.go.ug/tenderportal](http://www.ppda.go.ug/tenderportal).

**ACCOUNTING OFFICER**



## **TERMS OF REFERENCE FOR CONSULTANCY SERVICES TO CONDUCT NATIONAL HYDROFLUOROCARBONS SURVEY COVERING ALL DISTRICTS OF UGANDA**

**JUNE, 2022**



### **1. BRIEF BACKGROUND**

The Government of Uganda became Party to the Vienna Convention for the Protection of the Ozone Layer in June, 1988, and to the Montreal Protocol on Substances that Deplete the Ozone Layer in September, 1998.

The Convention under-scores the urgency of taking appropriate measures to protect human health and the environment from the harmful effects of Ozone Layer depletion. The said Protocol has undergone five Amendments and Uganda is Party to all the five Amendments as shown below. Each Amendment controls specific sets of substances controlled under the Protocol.

<b>Treaty</b>	<b>Category of Substances Controlled under the Amendment</b>	<b>Date of Ratification by Uganda</b>
Vienna Convention, 1985	n.a	24 <sup>th</sup> June, 1988
Montreal Protocol, 1989	All Ozone Depleting Substances	15 <sup>th</sup> September, 1998
London Amendment, 1990	Controls Chlorofluorocarbons (CFCs), Carbon tetrachloride (CTC), and Methyl Chloroform	20 <sup>th</sup> January, 1994
Copenhagen Amendment, 1992	Controls 34 Hydrochlorofluorocarbons (HCFCs), Methyl bromide, and 34 Hydrobromofluorocarbons (HBFCs)	22 <sup>nd</sup> November, 1999
Montreal Amendment, 1999	Focuses on establishment of import/export licensing systems for ODSs	23 <sup>rd</sup> November, 1999
Beijing Amendment, 1999	Controls use of Bromochloromethane (BCM)	27 <sup>th</sup> July, 2007
Kigali Amendment, 2016	Controls manufacture and use of Hydrofluorocarbons (HFCs)	21 <sup>st</sup> June, 2018

The two Implementing Agencies charged with the responsibility to assist Uganda to implement the Montreal Protocol are the United Nations Environment Programme (UNEP), and the United Nations Industrial Development Organisation (UNIDO).

## **2. SURVEY CONTEXT**

Parties to the Montreal Protocol decided at the 26<sup>th</sup> Meeting of the Parties (MOP) to provide for assessment of alternatives to ozone depleting substances (ODS) (Decision XXVI/9). Under this framework, Parties have been encouraged to continue providing the Ozone Secretariat with information on data, policies and initiatives pertaining to the promotion of ozone-friendly and climate-friendly alternatives and technologies that minimize negative impacts on human health and the environment.

The same MOP Decision permitted Executive Committee of the Multilateral Fund to provide financial support to Parties to conduct inventories or surveys on alternatives to ODSs and those that do not deplete the ozone layer but contribute to global warming. The latter comprise all the 23 HFCs now controlled under the Kigali Amendment to the Montreal Protocol.

Hence, the national survey that is going to be undertaken is focusing on the provisions under the Kigali Amendment to the Montreal Protocol, which controls production and consumption/use of a total of 23 (twenty three) HFCs that are currently on the world market, and are available in Uganda too.

Whereas baselines for CFCs and HCFCs was set in 1999 and 2012, respectively, there is now urgent need for each Party to the Protocol, to conduct HFCs surveys. The data derived from the survey, will be used to set baseline for HFCs for each country.

Given the historical events mentioned above, Uganda under the guidance of UNIDO, is now set to undertake such a survey so that the baseline for HFCs is set by the year 2023. In order to achieve this certain key objectives were identified as highlighted below.

### **3. OBJECTIVE OF THE CONSULTANCY**

The overall objective of the consultancy is to undertake a detailed country-wide survey on uses of Hydrofluorocarbons (HFCs) and HFC-dependent equipment (technologies) in the refrigeration and air-conditioning (RAC) sector of Uganda, in order to determine quantities of different kinds of HFCs consumed (used) in the country and relevant to the country’s domestic, commercial, industrial, mobile (vehicle) air-conditioning sectors, respectively.

### **4. DATA DERIVED FROM THE NATIONAL SURVEY**

The data derived from the survey will be used to determine the baseline consumption levels for Uganda, for each of the 22 (twenty two) types of HFCs controlled under the Montreal Protocol on Substances that Deplete the Ozone Layer.

Similar survey was undertaken in the past covering Chlorofluorocarbons (CFCs) and the baseline for Uganda was set at 12.8 metric tonnes in the year 1999, and for Hydro chlorofluorocarbons (HCFCs) (after conduct of the national survey in 2011) the baseline was set at 0.2MT in the year 2012.

### **5. SPECIFIC TASKS FOR THE CONSULTANT**

The terms of reference / tasks for the consultant are as outlined in the table below.

Main Tasks	Concrete/ measurable Outputs to be achieved	Expected duration	Location

1. Constitute a competent team (relevant and qualified persons) and prepare (induct) the team to undertake a comprehensive survey of national and enterprise level supply and consumption of HFCs Uganda in cooperation with NEMA and UNIDO's project manager. The work should follow the data requirement of the attached questionnaire.	HFC survey completed and submitted	7 w/m	Kampala and other cities, municipal councils, town council, trading centers – i.e., country-wide.
2. Assess data and draft report on chemical use projection and consumption trends, based on surveys and historical use data of the substances reviewed, incl. estimation of growth patterns of high-GWP HFC consumption and low-GWP alternative, by substance/ sector/ application. Submit draft report on findings.	Data assessed and draft report submitted		Kampala
3. Review institutional, regulatory and policy framework controlling ODS, GHGs and other air pollutants. Review national regulations and standards related to the import and use of HFCs.	Description of the current institutional and regulatory framework is provided		Kampala
4. Compile data on availability of low-GWP alternatives for various applications; identify challenges and opportunities for transition to low-GWP alternatives. Submit draft report on findings.	Draft report on ODS alternatives submitted		Kampala and other cities, municipal councils, town council, trading centers – i.e., country-wide.
5. Estimate potential impact of transition to low-GWP alternatives: projected CO <sub>2</sub> emissions avoided, etc. Determine feasibility and potential methodology for estimating HFC bank and emissions.	HFC bank estimated		Kampala
6. Compile all findings into one final report.	Final report submitted		Kampala
7. Field missions within Uganda for collection/verification of sectoral and enterprise HFCs data and discussions with respective stakeholders. To be organized separately.	Sectoral and enterprise level HFCs data collected		Kampala and other cities, municipal councils, town council, trading centers – i.e., country-wide.
8. Other activities related to the HFC survey to be requested by the NOU/NEMA.	Support provided		Kampala

## **6. DELIVERABLES**

- (a) An inception report detailing the concept on the tasks for the consultancy including a proposed methodology for conduct of the survey and the format for the HFCs survey report, respectively, within 7 working days from the start of survey work.
- (b) A zero draft of the HFCs survey report (4 months after the start of work).
- (c) First draft 1 of the HFCs survey report with technical input for presentation at a review meeting (5 months after the commencement of work/survey).
- (d) Second draft 2 of the HFCs survey report for final technical input from reviewers (6 months after the start of work).
- (e) Final draft of the reviewed survey report for submission to the Executive Director of NEMA, both in hard and soft copy (7 months after the start of work).

## **7. DURATION OF THE CONSULTANCY**

The task should be accomplished within 7 months as follows from the date of commencement of the contract; and for which 5 months shall be for information collection, data review meetings, and preparation of the initial draft of the survey report. The last two months shall be used for conducting review meetings (review of draft survey report) and refining the final report for submission to UNIDO through the NOU/NEMA.

## **8. QUALIFICATIONS AND COMPETENCIES**

### **8.1 Educational Qualifications:**

The Consultant must have the following qualifications:

- must have a diploma in Refrigeration and Air Conditioning, Mechanical or Electrical Engineering from a recognized and reputable Institution;
- Must be a Certified Refrigeration and Air Conditioning Practitioner, certified nationally or internationally by a recognized and reputable Certification Body/ Institution.

### **8.2 Technical and Functional Experience / Expertise:**

A minimum of 20 years practical experience in training practitioners in the RAC sector, conducting surveys and transfer of knowledge in the field of RAC sector and Montreal Protocol requirements.

The Consultant must have a thorough understanding of issues pertaining to the Vienna Convention on Protection of the Ozone Layer, the Montreal Protocol on Substances on Substances that Deplete the Ozone Layer and its five Amendments.

Overall, the Consultant must also have a proven track record in undertaking work related to the Montreal Protocol, conducting surveys covering the RAC and medical sectors of Uganda, imparting skills on personnel under the RAC sector regarding identification and uses of substances and related equipment controlled under the Montreal Protocol.

In addition, the Consultant should possess requisite qualities and core values that include integrity and accountability, professionalism, respect for team-work, and excellent skill in data analysis and report writing; as well as being result oriented, planning capabilities, and organizational skills while being innovative, ability to manage people and their performance, and able to make effective decisions and manage conflict resolution to enable the survey team work efficiently and effectively.

### **8.3 Tools / Equipment**

The consultant must have the following equipment / toolkits:

- a refrigeration and air conditioning toolkit – for use by the survey team; and,
- a refrigerant gas detector/ analyser for determining the nature of refrigerants in installed refrigeration and air conditioning equipment.

### **8.4 Qualifications of the Team Members**

The Team Members should have the following Qualifications

- Diploma in Refrigeration and Air Conditioning, Power and Automotive
- Electrical Engineering or Mechanical Engineering.
- Diploma in Refrigeration and Air Conditioning
- Ordinary or Advanced Certificate in Refrigeration and Air Conditioning □ Training in Refrigeration and Air Conditioning

### **8.5 Experience of the Team Members**

- The Core Team Members should have not less than 8 years of working experience in refrigeration and air conditioning.
- Support Team Members should have not less than 3 years of working experience in refrigeration and air conditioning.

## **9. REPORTING**

The Consultant will work closely with the Ozone Project Coordinator, NEMA, who will in turn report to the Executive Director, NEMA. The final HFCs survey report will be submitted to

UNIDO Project Manager based in Vienna/Austria, through the Office of the Executive Director, NEMA.

10. Preference schemes shall apply when evaluating Request for Proposals from the shortlisted consultants.

11. Interested eligible consultants may obtain further information at the address given below (8) from 8:30am to 5:00pm on working days.

13. Sealed Expressions of Interest must be delivered to the address below at or before 10:30a.m on Tuesday, July 26, 2022. Late submissions shall be rejected

**The Head, Procurement & Disposal Unit  
National Environment Management Authority  
NEMA House, Plot 17/19/21, Jinja Road, Room 208,  
P.O. Box 22255 Kampala, Uganda  
Tel: 256-414-251064/5/8**

14. The notice of expression of interest is available at the Entity's website at [www.nemaug.org](http://www.nemaug.org) and at [www.pdda.go.ug](http://www.pdda.go.ug)

15. The planned Procurement schedule (Subject to changes) is as follows:

<b>Activity</b>	<b>Date</b>
a. Publication of Notice of Expression of Interest	July 7,2022
b. Closing date for receipt of Expression of Interest	July 26,2022
c. Evaluation of Expressions of Interest	From 26 <sup>th</sup> July to 28 July 2022.
d. Display of shortlist	August 4, 2022

***EXECUTIVE DIRECTOR***