TERMS OF REFERENCE

CONSULTANCY SERVICES TO UNDERTAKE AN ASSESSMENT OF THE IMPACT OF SUSTAINABLE ELECTRIFICATION OF SCHOOLS AND HEALTH CENTERS UNDER THE UGANDA ELECTRICITY ACCESS SCALE-UP PROJECT (EASP)

June, 2026

1. BACKGROUND

The Government of Uganda (GoU) with funding support from the World Bank is implementing the Electricity Access Scale-up Project (EASP). The project aims at increasing access to energy for households, commercial enterprises, industrial parks, and public institutions nationwide, including in Refugees Hosting Districts (RHDs).

Project implementation is carried out by the Ministry of Energy and Mineral Development (MEMD) and the Uganda Energy Credit Capitalization Company (UECCC) through dedicated Project Implementation Units (PIUs). Under EASP, UECCC is implementing the following programs under the Electricity Access Scale-up project (EASP) - Financial Intermediation Component.

Table 1: Structure of EASP programs

Program	Description
Credit Support Facility	Line of Credit (LoC) to Participating Financial Institutions (PFIs), direct lending and guarantees.
Results Based Financing	Results-based financing (RBF) for Solar Home Systems (SHS), Clean Cooking Solutions (CCS), and Productive Use Equipment (PUE).
Public Institutions (Solar Electrification and Clean cooking)	Solar Electrification, Clean Cooking Solutions and water pumping for Public Institutions (schools, hospitals, health centres).
Technical Assistance	Technical assistance support to Energy Service Companies (ESCOs), Partner Financial Institutions (PFIs) and other eligible beneficiaries.

The Public Institutions Program provides access to grants for off-grid solar systems and clean cooking solutions for public institutions.

Electrification of public institutions. The off-grid public institutions that will be electrified are in the health care, education, and water sectors. The Beneficiary Ministries are the Ministry of Health (MoH), Ministry of Education and Sports (MoES), and Ministry of Water and Environment (MoWE) also the Local Governments where the facilities are situated. The ministries will lead the electrification program in coordination with the Ministry of Energy and Mineral Development (MEMD) and UECCC. The Beneficiary Ministries will enter into a long-term service agreement with the Energy Service Companies (ESCOs) for the provision of electricity services via stand-alone solar systems that meet the predetermined Key Performance Indicators (KPIs) for a period of 10 years.

2. PURPOSE OF THIS CONSULTANCY

UECCC intends to engage a Consultant (Firms) to evaluate the impact of electrification on health and education service delivery in selected schools and health centers promoted by EASP. The Consultant will perform two types of impact assessments:

a) **Unelectrified Public Institutions Targeted by EASP:** The Consultant will establish a **Baseline** of the key output and outcome indicators in schools and health centers that will be electrified through EASP, conduct an **Endline** assessment and reporting on the situational change one year after installation of the solar PV systems.

b) **Electrified Public Institutions**: The Consultant will establish a **Baseline** of the key output and outcome indicators in schools and health centers that have already been electrified via the grid, diesel generators, and solar PV with limited maintenance, and perform an **Endline** assessment with schools electrified by EASP one year after installation of the solar PV systems. Facilities between the two groups will have to be comparable in terms of size, population served, and other key indicators. Criteria for comparability will be identified by the Consultant as part of its methodology.

The exercise will include, but is not limited to, documentation of the key output and outcome indicators below.

Table 2: Proposed Key Output and Outcome Indicators

1- Public Schools	
Theme	***Key Indicators***
Educational Environment & Outcomes	• **Attendance rate (absolute and % change) —** baseline vs post-electrification. • **Enrollment change (absolute and % change) —** new enrollments, dropouts. • **Teaching hours delivered vs planned —** measured weekly. • **Academic performance —** average test scores, pass rates, course completion rates. • **Access to digital learning tools —** # of classes using ICT, # hours ICT equipment in use. • **Evening study hours at school —** frequency & average # students attending. • **Community use of facilities after hours —** events, adult learning sessions per month. • **Teacher and student satisfaction index —** composite from structured survey. • **School Buildings with some form of electricity (solar/on-grid) before and after electrification**
Energy Usage & Reliability	• **Average hours of electricity/day (measured via logger or admin records).** • **Frequency and duration of outages —** logged events per month. • **Appliance utilization rate —** computers, lab equipment, lighting use hours.

	• **Willingness to pay for electricity or maintain solar systems for purposes of sustainability.**
Institutional Productivity & Staff Welfare	• **Admin process completion rate —** timeliness of recordkeeping, printing, reporting. • **Staff retention & absenteeism rates —** annualized**.** • **Evening programs/events —** frequency & attendance.
Financial & Opportunity Costs	• **Monthly energy expenses —** by source (fuel, maintenance, grid). • **Downtime cost estimation —** lost teaching hours × average cost per hour. • **Energy budget gap —** energy cost vs allocated budget.
Gender, Community & Health Impacts	• **Safety perception index —** students & staff, by gender**.** • **Impact on girls' education —** attendance & participation rates. • **Incidence of hazardous lighting use —** kerosene/candles**.** • **Student engagement in evening study** — by gender**.** • **Toilet hygiene:** Increment in washrooms by gender that got electrified to support use in the night
2- Public Health Centers	
Theme	***Key Outcome Indicators***
Health Service Delivery	• **Patient volume/day & month (absolute and % change) —** outpatient, inpatient. • **Operating hours/day —** actual vs planned. • **Night-time emergency procedures —** # and type. • **Functionality of essential equipment —** % uptime for refrigerators, diagnostic tools, sterilizers. • **New services enabled —** lab tests, deliveries, procedures possible only with electricity. • **Volume of lab tests/month —** plus % postponed due to outages. • **Health worker task time —** minutes saved via powered equipment. • **Digitization rate of patient records —** % of visits recorded digitally. • **Staff and patient satisfaction index —** composite from structured survey.
Energy Access & Reliability	• **Average hours of electricity/day (measured via logger or admin records).**

	• **Frequency and duration of outages —** logged events per month. • **Appliance utilization rate —** medical equipment, lighting use hours.
Medical Outcomes & Public Health	• **Cold chain reliability —** % of vaccine storage hours within required temp (when connected to the main system). • **Maternal & neonatal outcomes —** births at night with adequate lighting, maternal/neonatal mortality rates. • **Surgical backlog —** # delayed or canceled due to power • Quality of hygiene conditions, • Quality of health education/awareness raising • Mortality rate (prior and post electrification)
Staff Efficiency & Working Conditions	• **Staff retention** • **Workload management —** % time on manual vs automated tasks. • **Training uptake —** # of staff completing digital/online training.
Financial & Opportunity Costs	• **Monthly energy expenses —** by source (fuel, maintenance, grid). • **Downtime cost estimation —** hours of disrupted care × average cost/hour. • **Energy budget gap —** energy cost vs allocated budget.
Gender, Community Access & Perception	• **Night facility utilization** — emergency cases, admissions. • **Impact on women & girls' health access** — antenatal visits, night deliveries. • **Security incidents linked to poor lighting** — # reported.

The updates on the above will support the programme by providing stakeholders from public institutions, government, donors, and civil society with an authoritative, insightful, and up to date overview of the available situation within the institutions before installation of off-grid solar electrification, and the key trends after electrification.

3. SCOPE OF WORK

The description of the scope of work below outlines the tasks, sub-tasks and working packages to be performed by the Consultant. The consultancy will be carried out over a period of 10 weeks (2 months & 2 weeks) for the Baseline and additional 10 weeks (2 months) for Endline Assessment.

The Consultant is required to work in close consultation with staff from UECCC, the respective Public Institutions, Energy Service Companies (ESCOs), Government MDAs, local governments and others that may be deemed as relevant to accomplishment of the task.

Specifically, the Consultant will propose a complete methodology, which will include proposed key output and outcome indicators – including, but not limited to, those proposed in Table 2 -, facility sampling size and criteria, categories of respondents, and any other element required to perform the assessment.

The Consultant should aim to assess:

a) The baseline value of key output and outcome indicators of a selected number of facilities before electrification pursued under EASP, and then assess the impact of the electrification of these same facilities as part of the Endline assessment.
b) The baseline value for key output and outcome indicators in rural schools and health centers electrified by other means, such as the electricity grid, diesel generators, and off-grid solar with limited maintenance, and compare such data with the impact of sustainable electrification pursued through EASP.

For assessment a), the Consultant will monitor and document any external factor intervened between baseline and endline that may affect the indicators without relating to electrification. For assessment b), the Consultant will ensure to proposed comparable facilities.

The assessments are expected to be conducted nationwide across regions with selected public institutions. The EASP target includes 45 schools under the Ministry of Education and Sports (MoES) and 129 health facilities under the Ministry of Health (MoH). The final sample size will be determined by the Consultant as part of the assessment, with valid statistical justifications provided.

3.1. Roles and responsibilities:

The Consultant is expected to:

a. Prepare draft task reports for each task, which will be reviewed by UECCC before preparing the final reports.
b. Perform literature review of any useful/comparable analysis performed by beneficiary ministries or other stakeholders.
c. Develop the required digital data collection questionnaires and interview guides.
d. Collect PV system data through data loggers and remote monitoring platforms.
e. Train all the enumerators on the data collection tools for quality assurance purposes before they are sent to the field and in line with the digitalized data collection.
f. Provide tablets/smartphones for conducting structured interviews.
g. Facilitate knowledge transfer and capacity building for UECCC staff through workshops, training sessions, and ongoing technical support throughout the assignment.

h. Organize and deliver at least one capacity building workshops for UECCC and relevant stakeholders, focusing on survey methodology, data collection tools, and analysis techniques.
i. Engage UECCC staff in key stages of the assignment (e.g., survey design, data analysis, report drafting) to promote skills development and institutional learning.

UECCC will:

a. Provide the relevant documentation related to the study;
b. Coordinate with the relevant stakeholders and partners in preparation for this study

3.2. Task 1: Inception

The Inception study will be aimed at collecting information that will form the basis for the assignment. The services under this Task shall be based, but not be restricted to the following documentation and information:

a) Review of the state of electrification of public institutions in Uganda, with a focus on the impact of previous projects implemented by various partners.

b) Review the following and other relevant documents to gain a full understanding of the EASP Project, Electrification of Public Institutions Programme and the roles and responsibilities of the different stakeholders implementing the programme. The consultant will be in contact with UECCC staff who will share key project documents. The consultant is also expected to use other national or international official documents to generate secondary data for further analysis.
    - UECCC Strategic Plan
    - Public Institutions Project Operation Manuals
    - EASP Appraisal Documents,
    - EASP Financing agreements

c) Review of other necessary background information and documentation, in order to support the assignment.
d) Provide detailed research methodology for both assessments, including sampling method, sample size, data collection methods, data collection tools, and data analysis plan. Additionally, it will outline the key outcome indicators to be measured in the assessment. These will include, but not be limited to, the key indicators presented in Table 2.
e) Organize a workshop to present and discuss the proposed methodology and tools with UECCC staff.

The Inception Report will demonstrate a clear and complete understanding of the objectives of the assignment, scope and tasks, a comprehensive theory of change, and the methodology to be utilized. It will be discussed with UECCC and agreed upon prior to undertaking the subsequent tasks.

Key Deliverables for Task 1

i. *Inception Report showing a clear understanding of the assignment, the proposed methodology, proposed key output and outcome indicators, survey tools, key respondents, staffing and deployment, a detailed work schedule, stakeholder mapping with roles and responsibilities, sample sizing and distribution, and any other key elements required to perform the assessment. and a draft outline of the Final Report.*

3.3. Task 2. Conduct Baseline Documentation

This Task will be aimed at establishing baseline values for the key output and outcome indicators in selected facilities. The Task shall include but not be limited to the following.

a) Review and assess the current values (quantitative and qualitative data) of key outcome indicators for unelectrified facilities targeted by EASP in the health and education sector using appropriate baseline data collection tools (review any previous similar studies conducted in these institutions),
b) Review and assess the current values, using both quantitative and qualitative data, of key outcome indicators for selected comparable rural schools and health centers electrified through the electricity grid, diesel generators, and off-grid solar systems with limited maintenance. Additional comparable criteria should include HC IIs versus HC IIIs or IVs, catchment population size, distance from district headquarters, and region. Where possible, these facilities should also include schools and health centers targeted under the ERT-II and ERT-III projects.
c) Conduct literature review and stakeholder interviews to close gaps from secondary research, identify stakeholder challenges and current interventions. Examples of stakeholder groups to consult include but are not limited to off-grid Energy Service Companies (ESCOs) and other implementing agencies.

Consultant should take into account assessment carried out by beneficiary ministries or other relevant stakeholders.

Key Deliverables for Task 2

i. *A Baseline Report of key outputs and outcome indicators in health and education service delivery in selected unelectrified public institutions to be targeted by EASP, and in selected public institutions currently electrified via the grid, diesel generation, or off-grid solar systems with limited maintenance.*

3.4. Task 3. Conduct an Endline Assessment Exercise to document the outcomes of solar electrification in the selected public institutions and provide selected communication material.

The services under this Task shall include but not be restricted to the following.

a) Review and assess key output and outcome indicators of the selected public institutions electrified under EASP using appropriate monitoring tools in comparison with the Baseline information. The Endline will be assessed 12 months after electrification.
b) Compile and document lessons learnt, challenges and success stories after electrification of the public institutions, including by comparing the performance of energy-as-a-service and other business models.
c) Develop recommendations to various eco-system stakeholders to close the gaps and challenges faced to develop priority interventions

Activities under Task 3 will be undertaken 12 months after electrification under EASP.

Key Deliverables for Task 3

i. *An Endline Assessment Report documenting the impact of electrification on health and education service delivery in the selected public institution, with summary slides and recommendations.*
ii. *The report shall include a minimum of 2-3 deep dive case studies, including photos.*
iii. A 3–5-minute video documentary
iv. Final Capacity Building Workshop

4. REQUIRED QUALIFICATIONS AND EXPERTISE

The Consultant (Firms) must demonstrate the following qualifications and experience to be considered for this assignment:

4.1. Firm Experience

- Minimum of 5 years' experience conducting baseline surveys in Uganda, preferably within the health or education sectors.
- Successful completion of at least one similar assignment in the past 5 years, covering either health or education sectors.
- Proven track record of work on donor-funded projects in Uganda, with a portfolio of relevant assignments.
- In-depth knowledge of renewable energy technologies, trends, and market dynamics.
- Understanding of the structure and governance of public schools and health centers in Uganda.
- Expertise in both quantitative and qualitative data analysis, with the ability to synthesize information into graphs, charts, and infographics.
- Ability to design and implement surveys, interviews, and focus groups for data collection.
- Ability to interpret survey results, baseline reports, and financial data.
- Excellent communication skills for presenting findings to clients, investors, and stakeholders.
- Outstanding writing skills to produce concise and engaging reports.

4.2. Key Personnel Qualifications

Lead Consultant

- Master's degree in Statistics, Demography, Population Studies, Social Sciences, Development Studies, Engineering, Economics, or a related field from a recognized institution.
- At least 7 years of relevant experience in designing and/or analyzing development initiatives, with a focus on baseline surveys, mid-term reviews, and project evaluations in Uganda.
- Proficiency in quantitative and qualitative research methods, including data collection, analysis, modeling, interviews, and focus groups.
- Experience working with data loggers and electronic data collection tools.
- Strong understanding of Uganda's geography and public institutional structures.
- Prior delivery of similar assignments in the Renewable Energy sector is an advantage.
- Previous experience with World Bank, government, or NGO surveys is an advantage.
- Excellent verbal and written communication skills in English, including report writing and presentation.
- Demonstrated project management skills and ability to manage client relationships.
- Experience developing and publishing flagship reports with engaging language and visualizations.
- Commitment to team diversity, particularly gender balance.

Research Assistants (2–4)

- Bachelor's degree in Statistics, Social Sciences, or a related field.
- 2–3 years of experience in data collection, processing, and analysis.
- Proficiency with electronic data collection tools (e.g., ODK, SurveyCTO).
- Skills in data cleaning, digitalization, and report writing.
- Experience in fieldwork in rural Uganda.
- Language proficiency in English and relevant local languages.
- Prior experience with World Bank, government, or NGO surveys is an advantage.

Enumerators

- Minimum of a tertiary education diploma; or ongoing university studies preferred.
- Experience in household or community survey data collection, preferably in Uganda.
- Proficiency in using electronic data collection tools (e.g., tablets, ODK, SurveyCTO) is highly desirable.
- Fluency in English and at least one relevant local language spoken in the survey areas.
- Strong interpersonal and communication skills; ability to interact respectfully and professionally with diverse respondents.
- Basic digital literacy (ability to operate tablets, smartphones, and data entry applications).
- Prior experience with World Bank, government, or NGO surveys is an advantage.

4.3. Other Requirements

- Research Assistants and Enumerators must be based in Uganda and serve as field supervisors.

- The evaluation committee will consider the proposed team's diversity, particularly with respect to gender, in support of the World Bank's commitments on equality.

5. SELECTION

The selection of the Consultant will follow the ***Consultant Qualification Selection*** process, in accordance with World Bank guidelines. The best evaluated Expression of Interest (EOI) will be invited to submit a full technical proposal along with financials.

6. DELIVERABLES

The Consultant shall prepare and submit the following reports (all in English) to UECCC. The reports shall be delivered in digital format. Timelines indicated include review time by the client.

Table 3: List of Deliverables and Estimated Time Costs

Year	Deliverable	Timing (Weeks)-From contract effectiveness	Content	Payment Schedule
Year 1	Inception Report	2	*Inception Report showing:* • *a clear understanding of the assignment, the proposed methodology, survey tools and sampling design, key outcome indicators, staffing and deployment, a detailed work schedule, stakeholder mapping with roles and responsibilities, and a draft outline of the Final Report.*	10%
Year 1	Baseline Report (draft)	8	*A Baseline Report on the status of health and education service delivery in selected unelectrified public institutions.* • *Draft Baseline Report and Data for review.*	-
Year 1	Stakeholder Validation Workshop	9	*Workshop summary, feedback, changes to baseline report*	-
Year 1	Baseline Report (Final)	10	*Final detailed Baseline Report (after UECCC comments and Validation by stakeholders).*	50%

Year 2	Endline Assessment/Outcome Report and Final Capacity Building Workshop	12 months after systems installation. 10 weeks' expected delivery time.	*An Endline Assessment Report documenting the impact of electrification on health and education service delivery in the selected public institutions. The Report will include 2-3 deep dive case studies.* • *Draft report* • *Final report* • *Summary slides* • *Short video* • *Final Capacity Building Workshop*	40%
TOTAL				**100%**

The Consultant shall make UECCC a 2-hour presentation of each deliverable using power point to elaborate its submission. The Client will provide comments on each report and the consultant will incorporate the Clients Comments into the final report(s), embedded within the timeframes allocated above.

7. DATA OWNERSHIP AND MANAGEMENT

All data, reports, and materials collected or produced under this assignment shall be the property of UECCC and the Government of Uganda.

- The Consultant shall ensure that all data (including raw datasets, cleaned datasets, survey instruments, interview transcripts, photos, and videos) are securely stored and transferred to UECCC in digital format upon completion of each phase.
- The Consultant shall not share, publish, or disclose any data or findings from this assignment to third parties without the prior written consent of UECCC.
- Data must be managed in accordance with applicable Ugandan laws and World Bank standards for data protection, confidentiality, and ethical research.
- UECCC reserves the right to use, publish, and disseminate the data and findings for programmatic, policy, and research purposes.
- The Consultant is responsible for ensuring that all data collection and management processes comply with ethical standards, including informed consent and protection of respondent privacy.

8. REPORTING

The successful Consultant will report to the Senior Monitoring & Evaluation Specialist and Programme Manager – Public Institutions on a day-to-day basis and the Managing Director formally by way of report submission to the address below:

The Managing Director,

Uganda Energy Credit Capitalisation Company

Amber House, Plot 29/33 Kampala Road, 3rd Floor, Block E

P.O Box 29725

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