TERMS OF REFERENCE

Generating evidence from UK-supported energy pilots in Uganda to inform policy coherence, scale and investment for the energy transition

November 2025

1. BACKGROUND

1.1 About the Evidence Fund

The Foreign, Commonwealth & Development Office (FCDO) seeks accessible high-quality research, evaluation and evidence products which target policy, country-specific and regional priorities and are available for use by FCDO and the international development sector. FCDO's Research and Evidence Directorate (RED) has as its mission to develop and deliver new technologies and innovations that can help solve development challenges, test high potential interventions, and support the delivery of His Majesty's Government (HMG) objectives. The Evidence Fund is a co-ordinated effort to support a broad spectrum of FCDO's evidence needs to inform policy and programming decisions. The expected impact of the programme is to help develop evidence-informed policies, programmes and practices which contribute to development outcomes.

In 2022, FCDO appointed PwC and Integrity as Fund Manager (FM) to oversee and manage the Evidence Fund. The Fund Manager's primary responsibility is to manage procurement competitions for research and evaluation projects, conduct due diligence assessments on prospective sub- contracted Research Pool providers, where relevant, and manage research and evaluation contracting.

1.2 Details on the Research Context

Uganda is in a critical phase of its energy transition, balancing rapid population growth and energy demand with the need to decarbonise, reduce biomass dependence, and expand access to affordable modern energy. Electricity access remains a major barrier. Only 28% of Ugandans are connected to the national grid, and just 7% of rural residents report reliable supply[1]. While 62% live in grid-covered areas, many remain unconnected due to affordability and infrastructure gaps[2] Off-grid and decentralised energy solutions like solar home systems and mini-grids are increasingly vital for bridging this gap and supporting productive uses in agriculture, education, and health. Over 85% of households still rely on biomass for cooking, with attendant environmental and health costs.[3]

The Ministry of Energy and Mineral Development (MEMD), through its Energy Resources Department (ERD), is implementing the Energy Transition Plan (ETP, 2023), as part of the fourth National Development Plan (NDP IV 2026–2030) to accelerate renewable energy, energy efficiency, clean cooking, and e-mobility deployment[4]. Under NDP IV, Uganda aims

[1] *Uganda Bureau of Statistics (UBOS), Uganda National Household Survey 2019/20 (Government of Uganda, 2020).*

[2] *Afrobarometer, Dispatch No. 912: Electricity Access and Reliability in Uganda (2023).* https://www.afrobarometer.org

[3] *Modern Energy Cooking Services (MECS), Uganda's Cooking Energy Sector: A Review (2022).* https://mecs.org.uk

[4] *Ministry of Energy and Mineral Development (MEMD) & International Energy Agency (IEA), Uganda Energy Transition Plan (2023).*

for 50% clean cooking penetration by 2030, with 19% of households using electricity for cooking by 2040[5]. In addition, Uganda's National E-Cooking Strategy (2023) targets increasing electric cooking adoption from 1% to 20% by 2030[6]. Yet, uptake remains low, with only 3–4% of households using clean fuels as of 2024.

The UK Government has been a long-standing partner in Uganda's clean energy agenda. Most recently through central programming Transforming Energy Access (TEA) and Modern Energy Cooking Services (MECS). TEA supports early-stage innovation, investment readiness, and scale-up of clean energy enterprises. Its Transforming Humanitarian Energy Access (THEA) window focuses on energy innovation in humanitarian and displacement settings.

TEA has played a role in advancing decentralised renewable energy (DRE) in Uganda. The programme has also supported innovative enterprises such as Zembo (e-mobility), Mandulis Energy (agro-waste-to-energy), and Innovex (IoT-enabled solar asset management), alongside mini-grid pilots and humanitarian energy access in refugee settlements. These interventions span the innovation-to-scale spectrum and are helping build a more inclusive, resilient energy ecosystem. While these were implemented outside MEMD structures, they directly contribute to Uganda's broader market development and investment ecosystem.

The UK has also supported e-cooking pilots and demonstrators through the Modern Energy Cooking Services (MECS). These programmes have piloted e-cooking in schools and households. However, insights from these pilots remain fragmented, and there is limited synthesis of what works, why, and how to scale. The MECS Demonstrator, in contrast to TEA, has worked directly with MEMD, and is currently supporting the operationalisation of the Clean Cooking Unit (CCU) within the Energy Resources Department (ERD) (formerly the Renewable Energy Department). The CCU now coordinates Uganda's national clean cooking transition with support from the UK. Across these initiatives, significant investments have been made to demonstrate the technical, commercial, and behavioural viability of new clean energy solutions. Yet, there is no consolidated evidence base on the achievements, enabling factors, barriers, and scalability of these pilots, nor clarity on how they can inform Uganda's energy transition policy, institutional mechanisms, and future investment decisions.

This study therefore aims to generate and synthesise evidence of pathways to clean energy transition in Uganda and the role that UK programmes have played in this (e.g. MECS, TEA). The design of the study is expected to use these findings to generate recommendations for future UK work to strengthen policy coherence and inform future scale-up and investment.

2. KEY EVIDENCE GAPS

The study aims to address the following evidence gaps:

1. Fragmented evidence and documentation

- Lack of consolidated evidence on scalable clean cooking and decentralised energy models supported by UK-funded pilots.
- Fragmented documentation of achievements realised from TEA and MECS pilots across sectors (clean cooking, renewables, e-mobility, energy efficiency).

2. Limited understanding of scaling enablers

[5] *Ministry of Energy and Mineral Development (MEMD), National E-Cooking Strategy for Uganda (2023).*

[6] *National Planning Authority (NPA), Fourth National Development Plan (NDP IV 2026–2030) (Government of Uganda, 2024).*

- Limited understanding of the regulatory, financing, and behavioural enablers for scaling.
- Limited understanding of which UK supported innovations have demonstrated measurable market, policy, or social outcomes; what conditions have enabled these outcomes; and the extent to which these outcomes can be attributed UK.

3. Limited cross-learning and knowledge sharing

- Gaps in cross-learning between pilot implementers.

4. Absence of policy integration framework

- Absence of a unified framework for integrating evidence into Uganda's policy planning (NDP IV).
- Limited analysis of institutional anchoring and localisation pathways through Government.

5. Lack of structured guidance for replication

- Lack of structured guidance for scaling and investment replication across Uganda's public–private energy ecosystem.

3. OBJECTIVES AND SCOPE OF WORK

3.1. Objectives

The overarching objective of this study is to generate evidence on the achievements, enabling factors, and barriers of UK-supported TEA and MECS pilots in Uganda, to inform policy, scale-up, and investment decisions that accelerate the country's clean energy transition.

The study aims to:

1. Identify and synthesise strategic lessons from UK-supported decentralised energy and clean cooking pilots.

2. Analyse enabling conditions - policy, regulation, finance, technology, and consumer behaviour and identify key enablers and barriers that influenced (or not) successful uptake and sustainability.

3. Capture lessons on localisation, gender inclusion, and institutional leadership through MEMD's structures like the ERD and CCU and implementing partners.

4. Analyse how pilot outcomes can inform policy frameworks, investment design, and coordination and generate practical recommendations for FCDO, MEMD, and partners to translate evidence into scalable interventions aligned with Uganda's ETP and NDP IV priorities.

The study will directly benefit BHC Kampala and other UK government departments, the Government of Uganda MEMD, other partner agencies, and the private sector by generating evidence for programme design, policy influence, and investment leverage. The results will help inform BHC Kampala's prioritisation of engagement into the future, and informing the wider HMG approach in Uganda for more effective project and programme design.

The findings will also be shared externally with other relevant stakeholders mainly the development partners, the Government of Uganda, and the energy private sector to improve efficiency and coordination among the sustainable energy actors.

3.2 Scope

The study will cover Uganda's electric cooking and energy innovations landscape, focusing on pilots funded under MECS, TEA, ESMAP and other energy/innovations. Listed in the table below:

Table 1 MECS and TEA interventions in Uganda

Prog.	Sub-Project/Theme	Areas of work/expertise	Tier 2 Partner	Tier 1 Partner
TEA	Energy Catalyst	Energy access and transition Challenge Fund supporting UK-led innovation projects (can be tailored to specific technology areas or countries/regions)	Numerous UK-international joint ventures	Innovate UK
TEA / MECS	Energy Sector Management Assistance Program (ESMAP)	Energy innovation, data, policy, and technical work informing multiple sub-sectors, Governments, and WB investments	Various	World Bank (ESMAP)
TEA	Low Energy Inclusive Appliances (LEIA)	Energy efficient appliances, productive use appliances, sustainable cooling	CLASP Energy Saving Trust	Carbon Trust
TEA	Powering Renewable Energy Opportunities (PREO)	Productive Use of Renewable Energy (PURE) innovations, local manufacturing, circular economy, creating green jobs	Various	Carbon Trust
TEA	Factor (E)	Patient capital and tech incubation for early-stage entrepreneurs to transform their innovations into market-based solutions	Factor E Ventures	Shell Foundation
TEA	Odyssey Energy Solutions	Online platform for mini-grid project development, RBF/incentives, and delivery	Odyssey	Shell Foundation
TEA	Transforming Humanitarian Energy Access	Clean energy access in humanitarian contexts, refugee/IDP camps	UNITAR	Carbon Trust
TEA	Powering Healthcare	Improving clean energy access to public health centres and clinics, working across energy and health	SEforALL	Carbon Trust
TEA	Zero-Emission Generators	Initiatives to replace fossil fuel generators with clean alternatives	Various	Carbon Trust Innovate UK

TEA	Energy Storage	Battery science, electrochemistry, and energy storage business models	Faraday Institution	Carbon Trust
MECS	Modern Energy Cooking Services (MECS)	Range of technical, policy, behavioural and other interventions to promote eCooking	Loughborough University ESMAP	Loughborough University ESMAP
TEA	TEA-Learning Partnership	Supporting southern Universities to develop and implement post-graduate energy access courses	University of Cape Town	Carbon Trust
TEA	TEA-SUNRISE	Research and innovation on locally manufacturable next generation solar PV equipment	Swansea University	Carbon Trust
TEA	ENACT	Working with local governments in Africa on energy access solutions for informal urban settlements	ICLEI	Carbon Trust
TEA	Global Distributors Collective (GDC)	Last-Mile Distribution of energy and other products	Practical Action	Carbon Trust

Activities include:

- **Desk review** of programme and project documentation published including annual reviews, TEA and MECS available reports (including TEA and MECS gender and inclusion approaches), the Ayrton Fund deep dive on Localisation and Equitable Partnerships, research publications from MECS and ESMAP on clean cooking, other partner reports, evaluations or academic literature.
- **Stakeholder interviews** with the relevant Policy and Implementing Partners - MEMD, ERA, UECCC, private sector (Equity Bank, Aptech, Zembo, Mandulis etc), and development partners (World Bank, AFD, EU, UNDP, FAO, GIZ).
- **Field visits** to a selection of TEA and MECS partners in-country as listed in the table above.
- Case studies of schools, refugee settlements, and household pilots including in informal settlements.
- Comparative analysis of financial and behavioural models (Aggregator, RBF, Media campaigns).
- Validation and dissemination of findings with BHC Kampala and implementing partners, Government of Uganda, other development partners, and relevant private sector actors.

Duration: 4 months (January 2026 – April 2026)

The study will focus on the Ugandan energy transition landscape, specifically examining pilot and demonstration activities implemented under Transforming Energy Access (TEA) – including Transforming Humanitarian Energy Access (THEA) pilots; and Modern Energy Cooking Services (MECS) – including activities linked to CCU and Energy Resources Department.

This study is not a formal evaluation and does not form part of routine monitoring of programme performance or fiduciary compliance. Its purpose is to produce an evidence synthesis that will:

- Map impact pathways and outcomes of pilot interventions.
- Analyse market and policy linkages to Uganda's energy transition agenda.
- Examine institutional and donor interfaces, including opportunities for coordination with MEMD, the World Bank, EU, AFD, UNDP, FAO, GIZ etc.

3.3 Research/Evaluation Questions

Main question:

What strategic lessons from UK-supported clean cooking and decentralised energy pilots in Uganda can inform national policy, investment, and scale-up?

Sub-questions:

1. What measurable achievements have TEA and MECS pilots realised in Uganda's clean energy landscape? To what extent can these achievements be attributed to UK support especially for innovations/pilots with multiple funders?

2. What enabling factors and barriers (policy, regulatory, financial, institutional, behavioural) have contributed to or limited their success?

3. Which interventions (evidence to policy mechanisms) have shown the highest potential for uptake, replication, scaling and sustainability?

4. How can the evidence from these pilots inform stakeholder strategy, national policy frameworks, and investment planning?

5. How can FCDO leverage these findings to guide UK future programming in Uganda's energy sector?

6. How can localisation, gender equity, and inclusion be strengthened?

3.3 Research/Evaluation Methodology

The study should adopt a mixed-methods approach, combining both qualitative and quantitative research techniques to provide a comprehensive understanding of the lessons generated from the UK-supported energy pilots in Uganda. A detailed methodological approach will be proposed by the Supplier and will outline specific details on the data collection methods to be employed (for data analysis, the key informant interviews and case studies). The proposed research methods and approach should be appropriate to the research questions. The findings must be clear, rigorous, accurate, and packaged in a way that is accessible and relevant to target audiences.

An indicative mixed-methods approach could include:

- Desk-based review of pilot documentation, impact assessments, and market data from TEA and MECS.
- Interviews and consultations with implementing partners, MEMD, donors, development partners, energy researchers and private-sector actors.
- Comparative analysis of pilot impacts across sectors (clean cooking, renewables, e-mobility).
- Case studies showcasing high-impact models with scale-up potential.
- Validation workshops to test findings with BHC Kampala and implementing partners, Government of Uganda, other development partners, and relevant private sector actors.

The methods will be confirmed during the inception phase, ensuring alignment with FCDO ethical research standards.

3.4 Theory of Change

The study operates on the premise that robust, synthesised evidence on what works will strengthen government and donor coordination, attract private investment, and inform policy frameworks that accelerate Uganda's clean energy transition.

3.5 Required Skills

The Supplier must demonstrate:

- Expertise in energy access, electrification & innovation, renewables and clean cooking in sub-Saharan Africa, ideally Uganda/East Africa.
- Strong skills in applied policy research, evidence synthesis, and stakeholder engagement.
- Experience in stakeholder consultation and policy translation
- A proven record in behavioural research, and climate-energy policy.
- A multidisciplinary team combining technical, social, and economic expertise.
- Applied impact evaluation and research synthesis.
- Institutional and policy analysis.

Familiarity with TEA and MECS programmes (added advantage).

4. PROJECT MANAGEMENT ARRANGEMENTS

The Supplier will manage day-to-day implementation, field coordination, and deliverables. RED and BHC Kampala will provide strategic oversight, review outputs, and facilitate access to stakeholders. The Ministry of Energy and Mineral Development (Energy Resources Department and Clean Cooking Unit) will serve as the Policy counterparts.

The Supplier will lead the research design, data collection, analysis, and reporting. The East Africa Research and Innovation Hub, together with British High Commission Kampala Leads and FCDO UK Research and Evidence Directorate Energy Advisers will provide oversight and strategic guidance. Regular (monthly) coordination meetings will be held to ensure alignment.

The Supplier will be responsible for:

- Designing and delivering all research activities and products.
- Producing interim and final outputs for review by FCDO. Updating these based on feedback.
- Facilitation and participation in validation workshops and dissemination events.

The FCDO will:

- Constitute a study steering committee (with MEMD) which will review and sign off all deliverables. Deliverables must be shared a minimum of five working days in advance of comments. Deliverables will not be considered final until FCDO confirm all comments have been addressed.
- Hold monthly update meetings to review progress against the agreed workplan. Additional meetings will be held to discuss ad hoc matters or milestone deliverables.

5. ADMINISTRATIVE ARRANGEMENTS

The study would be supported through The Evidence Fund, an FCDO programme intended to support a broad spectrum of FCDO's evidence needs to inform policy and programming decisions. The expected impact of the programme is to help develop evidence-informed policies, programmes and practices which contribute to development outcomes.

In 2023, FCDO appointed PwC and Integrity as Fund Manager (FM) to oversee and manage the Evidence Fund. The Fund Manager's primary responsibility is to manage procurement competitions f or research and evaluation projects and conduct due diligence assessments on prospective sub – contracted Research Pool providers, where relevant.

The Foreign, Commonwealth & Development Of f ice (FCDO) is the sole contracting authority for all projects funded through the Evidence Fund. The FCDO holds full responsibility for issuing contracts and managing all contract and project management activities throughout the lifecycle of each project. The Fund Manager's role is limited to pre-contracting activities and does not extend to contract execution or post-award management

6. TIMEFRAME, EXPECTED DELIVERABLES, AND OVERALL BUDGET

The total budget for the study should not exceed **£100,000** excluding any applicable taxes. The study should be completed within **four** months from the date of the contract award (December 2025).

Expenses related to travel, workshops and other modes of data collection related to the study should be explicitly built into the budget. The first two weeks is envisaged as an inception phase, to finalise the methodology and confirm the scope of work. The remaining time is to be used in delivering the study, inclusive of time for review and revisions. Monthly meetings are to be scheduled to update on the progress.

The deliverables and timelines/milestones expected of the Supplier are to follow the schedule below:

Milestone	Description	Milestone Payments (% of Overall Budget Amount)	Expected delivery by
1.	**Kick-Off & Inception Meeting**	**0%**	
2.	**Inception Report** (10 pages) – Methodology and Approach, stakeholder plan, work schedule.	30%	Mid-January 2026
3.	**Preliminary Evidence Summary –** Summarising findings from the desk review and early findings		Mid-February 2026
4.	**Draft Analytical Report and Mapping** (20 pages) Pilot impact analysis and case studies.	30%	Late February 2026
5.	**Validation Workshop –** presentation of findings with MEMD and partners		Late March 2026
6.	**Final Report** (20 pages), **Policy brief** (4 pages) and **Slide Pack** with actionable recommendations	40%	Mid-April 2026

7. QUALITY ASSURANCE MECHANISMS

Peer review/Quality Assurance Required	
Peer review/ quality assurance completed in-house by FCDO	Yes
Peer review/ quality assurance arranged by the research provider as part of their contract	Yes
Independent peer review independently carried out, through a contract with the Fund Manager	No
Further EqUALS review for all evaluation products	No

8. COMPETENCIES

In accordance with the required skills listed under section 3 it is also expected that the core team delivering this work will have the requisite technical and contextual experience in the collation, interpretation, synthesis, and communication of the research findings and recommendations.

- Lead researcher (10+ years in clean energy or impact research).
- Local sector specialist(s) with Uganda experience.
- Policy and communication experts for uptake materials.

9. SUBMISSIONS

The Supplier is required to submit all outputs in accordance with the expectations and page limits set out in sections 3 and 5 above.

10. MANAGEMENT ARRANGEMENTS

1. The Supplier will design and manage this research study, including drawing together the findings for reporting.
2. This project will be administered by a FDCO EARIH lead adviser.
3. The Supplier will quality-assure all outputs before submission to the EARIH lead adviser. The Supplier will be required to comply with FCDO reporting requirements. The Supplier will be responsible for alerting the EARIH lead adviser as early as possible of any emerging issues and risks, to ensure that the project is staying on track.
4. All deliverables will need to be reviewed and approved by the FCDO technical steering group; however, the Supplier is encouraged to embed their own internal mechanisms for quality assurance.
5. The Supplier will be required to review and outline how they plan to manage any potential conflicts of interest identified during proposal development.
6. The Supplier will be required to attend several meetings during all phases of the work, comprising largely of virtual meetings.

11. BIDDING PROCESS

Technical and financial proposals should be sent as two separate files to ke_evidencefundeastafrica@pwc.com by **16 January 2026 (23:59 EAT)**. Since these will be assessed independently of each other, they should, in no case, be combined or cross-referenced.

The instructions for submitting the tender and details on scoring methodology and evaluation criteria are detailed in ITT Volume 1. The application forms f or submitting the technical proposal (sent as a clearly titled PDF file) are detailed in ITT Volume 3 and ITT Volume 4 provides the Pro Formas f or the commercial proposal.

12. DUTY OF CARE ARRANGEMENTS

The Supplier should set out duty of care arrangements for Uganda country visit and related field-based activities.

13. ETHICAL CONSIDERATIONS, DATA PROTECTION, AND SAFEGUARDING

The Supplier Code of Conduct will be included in the terms and conditions of the Contract. New compliance checking mechanisms are now in place to review supplier documentation, their approaches to legal compliance and demonstration of good practice in meeting international principles on labour and ethical employment and to provide assurance that whistleblowing systems are accessible across delivery chains. The FCDO will monitor risk, and mitigation plans throughout the project cycle. The commitments made by all organisations in receipt of FCDO funding need to provide spending teams with concrete assurance that the new enhanced safeguarding standards are being applied. The approach will help to promote the adoption of new standards for all organisations in the aid sector.

It is expected that the Supplier will put forward any considerations for ethical approvals required in adherence to the principles outlined in DFID Ethical Guidance for Research, Evaluation and Monitoring Activities and includes safeguarding guidelines.

14. GENERAL DATA PROTECTION REGULATIONS (GDPR)

Please refer to the details of the GDPR relationship status and personal data (where applicable) for this project as detailed in Section 15: Interpretation, the clause on Data Protection Laws in Volume 6: Pro Forma Contract of the ITT Application Pack.4

15. RISK MANAGEMENT

The Supplier will be expected to set out their understanding of the most important anticipated risks in the proposal, with an explanation of their mitigating strategies in a risk matrix. But key to note that the period of delivery is a campaign and elective politics season with national elections due on 9 January, Suppliers should therefore build in contextual risks and mitigation in their plan to execute work within the set timelines.

16. FCDO RESEARCH GUIDANCE DOCUMENTS

Annex 1: Guidance on Communication and Research Uptake Strategy

Stakeholder Mapping and Research Uptake Strategy	
	Key communications and research uptake considerations
Audience mapping	Which organisations are the main intended audiences for the research? Who are the key decision-makers in the policy area and are they involved and aware of the research (and how are they involved in the research design and intent)? Are there other actors who may use findings or are involved in this policy area? Within FCDO – which teams and departments are involved?
Knowledge requirements of stakeholders	What are the evidence gaps that actors are interested in? Are there key statistics or data that can define the research? What new evidence does the research offer to both strategic planning and informing programming?
Decisions to be influenced	What are the key programming decisions that the research will influence – both for FCDO policy teams and country offices? Will the research support decision-making among other actors? E.g., multilateral, and bilateral donors, non-government organisations, regional governments? What decisions are those?
What are the outputs?	Largely defined by the ToR, but what outputs will be produced? I.e., will there be supporting infographics, summary briefs, or single case studies in order to land the research more effectively/efficiently with particular audiences? How do these map to particular stakeholders?
How will outputs be communicated?	How will various audiences be kept abreast or informed about the research? Will different audiences require different communications? What will be the balance of different dissemination techniques: i.e., seminars, emails, social media, meetings, slide decks, use of the internet or published documentation?
Relevance of research products	The communications plan (and research products) should be iterative and reflect research needs from all stakeholders. Considering responses to the points outlined above, how will the research be designed, produced, and disseminated to meet these needs?
How will research impact be measured?	What methods and indicators can be used to measure or assess how useful the research is? I.e., to what extent has it been used and by which audiences, what are the outcomes of the research, and what impact has it had on policy making and programming?