

Urban Informal Settlements

This project aims to conduct market scoping on e-cooking opportunities in informal urban settlements, to inform a market development intervention aimed at promoting access to and usage of eCooking appliances to households and (food) businesses in informal settlements.

Programme Background

This project responds to a direct request from the Government of Kenya, through the Energy Transition Council, for support to accelerate the transition to electric cooking and develop a National eCooking Study and Strategy for Kenya. The National eCooking Study and Strategy will feed into the overarching National Clean Cooking Strategy 2022-2028 and will focus on how energy-efficient eCooking technologies can be scaled-up in Kenya with the intended impacts of minimizing the drudgery and health risks associated with the use of solid fuels for cooking; improving environmental sustainability; and stimulating growth in demand for electricity.

The project will deliver against three objectives:

- (1) to produce a major study highlighting the potential for electric cooking in Kenya and how uptake might best be accelerated;
- (2) to support innovative new ventures within the Kenyan electric cooking sector that can help deliver the above with a particular emphasis upon supply chain development, carbon finance, utility-enabled finance and other forms of innovative consumer financing and profile-raising public awareness activity. These two objectives will contribute to the final objective;
- (3) to support the Kenyan government in the production of an integrated and comprehensive new national clean cooking strategy that is sensitive to Kenya's climate as well as energy access ambitions.

This project, as part of a package of studies for eCAP (ecooking capacity building and market development), will run in parallel to the development of the eCooking Strategy. The findings of the projects carried out under eCAP will be able to feed into the baseline study and the strategy and vice versa (i.e. issues identified during the baseline study can be explored and proposed actions from the strategy can be piloted in relevant eCAP projects).

Project Background and Scope of Work

To date, the Pika na Power programme has focussed on high to middle income households as the innovators and early adopters of eCooking in Kenya. However, the social impact of eCooking is likely to be substantially greater for low-income households living in informal urban settlements, where the use of polluting, inefficient and unsafe fuels such as charcoal and kerosene is prevalent. In addition, KPLC has been connecting low-income households in the Last Mile Connectivity Programme, but faces low consumption and misuse of meters. As a result, there could be substantial economic, health and safety benefits for low-income households and businesses adopting eCooking while at the same time stimulate (legal) electricity demand. Nevertheless, the high upfront cost and limited awareness of energy-efficient eCooking appliances for cooking, informal electricity

connections, shared meters and poor-quality household wiring pose significant challenges. Therefore, an in-depth scoping study is required to inform a market development intervention aimed at promoting access and usage of eCooking appliances to households and (food) businesses in informal urban settings.

The following activities should be undertaken as part of this work:

1. **Scoping studies:** Research cooking practices and costs of people in various informal settlements, their current level of (reliable) electricity access, usage and costs and income levels, mapping of appropriate distribution channels including finance mechanisms and awareness and marketing channels, using a combination of key informant interviews, focus groups, and surveys. Please note, all data must be disaggregated by sex.
2. **Testing:** Testing of eCooking appliances with selected households and (food) businesses in urban informal settlements to understand end user experience, household/business food consumption behaviours, training needs and continuous data collection on cooking practices and electricity consumption. We would anticipate at least 5 businesses to be part of the study.
3. **Report writing:** Synthesising findings and provide recommendations for scope and design of market development programme in identified informal urban settlement(s) and wider learning for the Kenya eCooking

Deliverables, budget, and duration

The total budget is a maximum of £14,197 (ex VAT where applicable). The duration of the work is anticipated to be no more than 6 months.

The closing date for submission to this ToR is Thursday **17th November 2022**.

All contracting will be completed prior to 15th December 2022. The research is expected to commence no later than **9th January 2023**. All deliverables must be completed and delivered no later than **15th July 2023**. These dates are non-negotiable.

The consultant should demonstrate in their response to these ToRs how the work can be completed within the time available. Payment is contingent on successful completion of all deliverables.

Date	Deliverable	Payment Value
December 2022	Contract Signing	25%
15 th March 2023	Interim progress report	50%
15 th July 2023	Approved final report on key learnings	25%
Total		100%

Communication and Reporting

The contractual requirements will be managed by Jane Spencer, Project Manager at Loughborough University. All communications and reporting should be sent to j.e.spencer@lboro.ac.uk.

The consultant/organisation is expected to communicate regularly throughout the project via four-weekly update meetings or phone calls, and emails, on:

- Research progress and milestones achieved;

- Anticipated challenges or changes to research plans, activities and timelines;
- Upcoming activities and next steps; and
- Delays or concerns on reporting.

All meetings and appointments to discuss the overall progress of the project against the contract will be agreed and arranged in advance at mutually convenient times. Any significant changes to the approved research plan and timelines must be discussed and approved in advance. Loughborough University reserves the right to request the consultant/organisation to make revisions to the deliverables if they do not meet the required quality. The consultant/organisation will be required to make these revisions at no additional costs to Loughborough University.

Responding to these ToRs

Each submission will be evaluated based on the following combination of price and quality;

Quality	Score
Appreciation and understanding of the task.	5%
Quality of proposal and methodology	50%
Skills, expertise and experience of consultant/organisation team members including evidence of similar work completed	10%
Proposed management of the activities including Gantt chart	5%
Price and costs	30%
Total	100%

The University will accept the quotation which is the best value for money i.e. a balance between cost and quality. Shortlisted organisations may be invited to an interview (online) to finalise selection.

Responses should be a maximum of 12 pages (plus up to 3 CVs, 2 pages each).

Please send all responses to steer@mailbox.lboro.ac.uk with the subject 'Urban Informal Settlements' by midnight (GMT) on **Thursday 17th November 2022**.

Ethical considerations

All research must be in line with the [Code of Practice for research, Promoting good practice and preventing misconduct](#) (UK Research Integrity Office, 2009).

The UK Research Integrity Office (UKRIO) is an independent charity, offering support to the public, researchers and organisations to further good practice in academic, scientific and medical research. Its confidential advice service is available to free of charge to individuals (members of the public, research participants, patients, researchers and students) and subscribing organisations. Their advice service can be [accessed here](#).

At a minimum, participants must not be subjected to physical, social, legal or psychological harm. Due consideration and ethical steps must be taken into safeguarding all participants, especially the vulnerable. A detailed Participation Information Sheet explaining the full scope of the study, what confidentiality entails, and

that no participants will be forced into participating, must be provided at recruitment. Participants are to be made aware that participation is fully voluntary and there are no repercussions if they choose to no longer participate in the study at any point in time. Participants should, ideally, sign a consent form which includes consent for the use of photographs and videos.

Confidentiality must be maintained at all times. With regards to confidentiality and privacy of participation, participants must be informed that their anonymity will be maintained in any outputs and that all identifiable markers will be removed from any data sets that are published. Additionally, due consideration must be made to ensure that participants are safeguarded during the research process in line with the local government issued guidelines around COVID-19.

The consultant will be responsible for securing any research or ethical permissions needed from local authorities in each of the field work locations. There may be additional ethical, or research clearance needed for this kind of user centric design research in the chosen country.

