
The Global Off-Grid Lighting Association (GOGLA) is undertaking initial scoping work to establish the feasibility of a study into the socioeconomic impact of solar lighting and home systems.

The research will increase understanding of the benefits of off-grid solar on households and small businesses to underpin policy and finance advocacy work, and provide participating organisations with important customer insights. The research project will lead to the creation of secure, sustainable data collection infrastructure so that that socioeconomic benefits of off-grid solar can be tracked over time, with minimal time commitment from participating organisations. Sample research questions can be found overleaf.

About the Study

To explore the socioeconomic impact of solar lighting and electrification, the research aims to utilise data from Pay-As-You-Go (PAYG) solar companies—which is pre-existing and/or to be collected, e.g. via mobile enabled SMS surveys. Use of data from initial customer credit assessments is proposed to provide a baseline for analysis. The sensitive handling and privacy of data is a prerequisite.

The work will be split into two phases. The initial phase will take 4-5 months, while the second phase will take 15 months.

- **Phase 1:** Initial scoping, feasibility & project design
- **Phase 2:** Data collection, implementation, visualisation & communication

Key Stakeholders

**Governance and Management:** The research programme is being funded by the UK Department for International Development and managed by GOGLA. GOGLA will also be responsible for the initial engagement of participating companies, as well as the communication of outcomes. The GOGLA social impact working group will act as a Steering Committee.

**Research Institute:** An independent data consultancy partner will undertake core research activities, including, project scoping, feasibility and design, the creation and implementation of ‘plug-in’ and mobile enabled data collection tools, and data visualisation via an online dashboard.

**Participating PAYG companies:** The participation of a broad set of PAYG solar companies is critical to the success of the research programme. GOGLA will be providing in-person, phone and online opportunities for its Members to learn more and discuss the project.
Sample Research Questions

The following examples provide a starting point from which key stakeholders and PAYG solar companies will consider and discuss the research questions to be explored within the study. The final list of research questions will be agreed following consultation and feasibility analysis.

**Demographic and economic segmentation**
- Which income segments opt for which solar system size? (income classes as per World Bank definitions)
- Which member of the household decided to buy the solar system? (gender relation, age range)

**Energy usage patterns**
- Which appliances are used?
- How many hours/at what time of the day are appliances used?

**Socioeconomic impact segmented by system size**
- How many customers are using the solar system for business purposes/What is the share of B2B customers out of total customers?
- Which business do customers pursue? (e.g. phone charging, barber shop, etc.)
- What is the percentage of new businesses created (as opposed to businesses ‘only’ switching from diesel/kerosene to solar)?
- Do solar systems create new jobs among users/customers? (including gender relations)
- Is there a change in income generation after monthly payment for the system?
- If additional income is available, what is the extra income spent on?
- Which member of the household decides on how to spend the additional income, if any?

**Customer loyalty**
- How satisfied is the customer with the system?
- What makes them stay loyal towards the brand?
- Would the customer recommend the product to family, friends, etc.?
- Is the household planning to upgrade to a higher system in the future, and which additional appliances would it want?

**More Details**

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