

Terms of Reference: Socio-Economic Impact Research (SEIR), Off-Grid Solar – Research Contractor, Phase 3, Workstream 1a: Building on Phase 2 Data Collection

1. Background

GOGLA is a neutral, independent, not-for-profit association which acts as an industry enabler and advocate. GOGLA supports the growth and strengthens the market for clean, quality off-grid lighting and electrical systems for households, SMEs and communities in developing countries. Created to accelerate access to modern energy, in line with the [Sustainable Development Goal 7](#), GOGLA's objective is to help the industry grow quickly but sustainably by focusing efforts on access to finance, creating an enabling environment and quality assurance and consumer protection. Formed in 2012 as a public-private initiative, GOGLA was conceived out of a joint World Bank / IFC Lighting Africa and private sector effort to accelerate market development for energy access. Today GOGLA comprises 140 members from all over the world. GOGLA's vision is for the off-grid lighting and electrification sector to help deliver universal entry-level electrification well ahead of 2030.

Within its enabling environment program, GOGLA is carrying out research on the socioeconomic impact of solar household solutions. This work is funded by the UK Department of International Development (DfID) who have supported Phases 1 and 2 of the research. Phase 2 led to the report, [Powering Opportunity: The Economic Impact of Off-Grid Solar](#) based on data from 2343 off-grid solar customers of 7 companies (see Annex 2) in 5 countries: Kenya, Mozambique, Rwanda, Tanzania and Uganda.

Phase 3 of the research seeks to build on the knowledge already gathered by re-engaging these customers 12 months later to explore how impact have changed over time and to dig into key areas uncovered in Phase 2, including use of time, economic activities and job creation. The research will involve phone-based interviews with all available customers who participated in Phase 2, as well as face-to-face qualitative interviews with a limited number of customers and company sales agents to gain deeper insights.

To that end, GOGLA seeks to contract a Third-Party research team to help devise the survey questions, undertake data collection, analyse results and create a report/materials to share findings.

2. Building on Phase 2

The Phase 2 of the socioeconomic impact research found that nearly 60% of off-grid solar households reported undertaking more economic activity within the first 3 months of purchasing a solar home system, either through a household member gaining a new job, using their system directly within a business, or being able to work for longer. Yet these incredible insights also opened an array of new questions. For example:

- What are the new jobs that are being created? How do they relate to a full-time-equivalent (FTE) role? Who in the household is gaining new employment (men/women/youth)?
- After a year, do household members still have new jobs created by the system (long-term job opportunity or only short-term benefit)?
- What type of additional work is being undertaken with the expanded working day?
- What is the impact of off-grid solar on new versus existing enterprises, and how can it be maximised?
- How does this impact change over time and across economic activity types?
- Which other factors drive uptake of jobs in households using off-grid solar. How much of the impact can be attributed to owning a system?

Phase 3 of this research will build on the foundations laid in Phase 2 and use the research infrastructure created (e.g. relationships with participating companies, insights on interview questions etc) to explore these areas further (additional question areas can be found in Annex 3). The core activity will be creating, implementing and analysing the results of a second follow up survey with customers engaged with the original SEIR research. Data sets and surveys from Phase 2 will be made available and should be used to help guide research planning. Where appropriate, findings from Phase 2 should be incorporated into Phase 3 analysis and reporting.

As well as this phone-based survey, this workstream also includes a qualitative element. This has been added to inform knowledge on causality and provide insights on the household, business and social / economic dynamics that may affect impact (e.g. household size, previous business ownership, gender, age, income flows etc). Qualitative data will also allow for the creation of case studies and a fuller understanding of the perceived cost / benefit of off-grid solar by household members. The approach to gathering qualitative data should be proposed and agreed with GOGLA. An equal, if not greater, number of women should be included in qualitative research to ensure insights are gathered from both male and female off-grid solar customers and beneficiaries.

Additionally, including plans to incorporate peer-review into the analysis and reporting process within a Proposal is seen as beneficial.

3. Objectives, Outputs and Outcomes

Key objectives are to:

- Expand knowledge revealed in Phase 2, particularly on the findings around time-shifting, job creation and direct use of products to generate new revenue
- Enhance insights through more detailed qualitative interviews
- Better understand the economic and demographic segmentation of customers
- Explore change in impact over time

At the end of the project, the research should produce the following outputs:

- A more detailed picture of impacts unlocked by solar home systems, including on enterprise, job creation and the relationship between time use and economic activity



- Better understanding of attribution and causality e.g. the % of new jobs that can directly be attributed to off-grid solar and understanding of the reasons off-grid solar led to this impact
- Aggregated data at different system sizes, by types of economic activity and by income-level/gender etc (sample size/data permitting)
- Additional “know your customer” (KYC) data & analysis
- Qualitative data and case studies that provide deeper insights on the impact of off-grid solar e.g. help explain causality and the effect of household dynamics / influential factors
- Data sets and content that underpin an online dashboard of shareable data visualizations
- Data points analysed and shared to support the GOGLA Impact Metrics
- High impact report, power point presentation and data for communications materials that can be used for targeted advocacy with key stakeholders

This research will help drive the following outcomes:

Robust socioeconomic impact data sets, that fill current gaps in knowledge

- Better understanding of PAYG solar is achieved due to increased knowledge on a variety of socio-economic indicators not yet fully explored e.g. time use and economic activity, with a deeper understanding of causality and attribution
- Better understanding of socio-economic impact by product size, income-levels, location and gender etc is achieved
- Better knowledge about the way(s) time affects impact is achieved
- Better knowledge is gained about the way(s) that household dynamics or influential factors increase or decrease certain impacts (as applicable)
- Credible, independently verified and analysed data is used by multiple stakeholders

Powerful data for knowledge sharing

- Robust data is used in targeted communications and advocacy around the breadth of off-grid solar impacts
- Data is integrated into GOGLA’s harmonized metrics and central data base for continued use by multiple sector stakeholders and to enable sector-estimates and scenario analysis
- Company-own insights into customer values, priorities and energy uses to allow participating companies to increase internal knowledge

4. Roles and Responsibilities

The contracted organization will work in close cooperation with the GOGLA office and participating companies. Tasks and responsibilities for each party are listed below:

Main Tasks of Research Contractor

- Coordinate the entire research project, including:
 - Participation in regular calls and exchange with the GOGLA team
 - Coordination of participating companies
 - Management of all in-country research teams
- Carry out the on the ground surveys, including:
 - Development and drafting of the question-sets (phone survey and qualitative survey) to ensure surveys uncover key insights (see Annex 3)
 - Piloting and refining the question sets
 - Translation of final question sets into local languages as advised by companies
 - Development and coding of data collection templates
 - Phone interviews with up to 2434 clients of participating companies, using experienced interviewers and appropriate data collection software
 - Qualitative face-to-face interviews with a limited number of clients and company sales agents from participating companies (efforts should be made to include women in qualitative interviews)
- Process, and aggregate the data, including:
 - Building a database to aggregate and analyse company data along defined categories (such as company, gender, location, system size, customer income etc.)
- Analyse the data, including:
 - Analysis by different categories, including where statistically significant and where data will provide less robust insights (clear distinctions between the two should be shared in any reporting)
 - Analysis with Phase 2 data sets as appropriate
 - Extrapolation of observations and conclusions
 - Contextualization of findings and developing explanations for findings where needed and appropriate
 - Review of data to explore factors that might increase or decrease impact
 - Review, analysis and provision of data points that are relevant for the [GOGLA Impact Metrics](#)
- Produce online dashboard, Power Point (PPT) and print report, including:
 - Production of company specific numbers and company-own reports
 - Development of lead report and executive summary, including case studies (word version, copy edited, and finished to a design-ready standard, charts and graphs should be shared in PPT)
 - Development of PPT to share findings and insights
 - Data prepared and shared for use in an [online dashboard](#) allowing data visualization of agreed categories (preparation should include concise accompanying text)
- Compliance with all data sharing and non-disclosure protocols

Tasks GOGLA and GOGLA members

The GOGLA office will be responsible for the following aspects:

- Overall project management and reporting to donors
- Identifying, contracting and setting up legal agreements and data sharing agreements with research partners and PAYG companies
- Facilitating communications among PAYG companies and the Research Partner(s) throughout the research process
- Providing ongoing feedback including on research questions, visualizations, and both private (company-specific) and public reporting and materials
- Building and delivering a full communications strategy for the dissemination of results

The GOGLA impact working group will be taking on the following responsibilities:

- Provide a forum for feedback and knowledge sharing to guide successful delivery of SEIR Phase 3 as necessary
- Contribute to communications and outreach planning

The GOGLA members (participating companies) will be responsible to:

- Collaborating with GOGLA to set up data sharing agreements
- Providing localized translation of question sets beyond major language groups as needed
- Piloting questions with a limited number of customers and providing feedback to the Research Partner
- Providing the Research Partner with a list of relevant customer phone numbers to enable follow-up research
- Providing system level data to the Research Partner, linked to the relevant customer by a unique customer ID (as necessary)

5. Outputs and Deliverables

The contracted Research Partner will produce the following outputs and deliverables.

- Two robust question-sets to meet research needs
 - main research survey (phone based), and
 - question-sets for 10-15 customer and 7-10 sales agent interviews
- Final question sets translated into languages of relevance to the research
- Successful implementation of data collection
- Final data set with analysis and graphs illustrating findings for all identified categories
- Final qualitative data sets and insights
- Company-own reports (including presentation to participating companies)



- Data sets and content designed to underpin an online dashboard of shareable data visualizations
- Data points that support the GOGLA Impact Metrics
- Final lead report (including qualitative case studies)
- Power point slides and data for communications materials

6. Timeline

The following timeline is envisaged for the project.

Activity / Month	2019												
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Planning & Preparation	X	X											
Follow up data collection			X	X	X								
Strategic Planning for Launch			X	X	X								
Analysis & Iteration				X	X	X	X						
Content & Design							X	X	X	X			
Report Launch and Media Outreach										X	X		
Oureach to Key Stakeholders										X	X	X	X

7. Needed Skill Set

- Track record of successfully carrying out research projects similar in scope and complexity
- Experience in developing and implementing research designs for and with the private sector
- Proven capacities and capabilities to collect, process, and analyse customer data while protecting their privacy
- Solid understanding of the off-grid lighting and electrification sector, including knowledge of the pay as you go business models
- Ability to present scientific data in a compelling yet accurate way through appealing printed reports, power point presentations and online dashboards

8. Assessment of Proposals

To participate in this tender, please submit your proposals by **Tuesday 13th November** to Susie Wheeldon at s.wheeldon@gogla.org.

Submissions must include a technical and financial proposal to be considered.

The technical proposal should detail suggested approach and work plan to carry out the project. It should further include CVs of key staff of the research team.

The financial proposal should provide a break-down of daily rates and any additional third-party costs. All taxes and charges should be included.

Annex 1: Phase 3 Work Plan, Workstream 1a

Please find additional information in the PDF document ‘The Socio-Economic Impact of Solar Systems – Phase 3, Workstream 1a’

Annex 2: Participating Companies & Countries

- BBOX, Rwanda
- d.light, Kenya
- Fenix International, Uganda
- M-KOPA, Kenya
- Mobisol, Tanzania
- Solar Works!, Mozambique
- Zola Electric, Tanzania

Annex 3: Draft Question Areas

We seek to answer questions such as those outlined below:

Economic activity and income

- What is the current economic status of the household (income segmentation)
- How many, and what are, the new jobs that are being created by a household? How does the time spent in these jobs relate to a full-time-equivalent (FTE) role?
- Has this new job(s) led to an increase in income? If so, how much?
- Has this new job(s) enhanced the life of the customer in any other way? (differences between men/women/youth)?
- Who has been able to get a new job (male/female/youth)?
- After a year, do household members still have new jobs created by the system (long-term job opportunity or only short-term benefit)?
- What type of additional work is being undertaken with the expanded working day? And how much extra time is being unlocked?
- Has this additional work led to an increase in income? If so, how much? (per person)
- Who has been able to spend more time at work (male/female/youth)?
- Has this extra work time enhanced the life of the household in any other way? (differences between men/women/youth)?
- How has the new job of a household member, or more time for work, had an impact on agricultural households?
- Which other factors drive uptake of jobs/working hours/economic activity in households using off-grid solar. How much of the impact can be attributed to owning a system?
- Do impacts differ between urban, rural and peri-urban locations
- What is the impact of off-grid solar on new versus existing enterprises, and how can it be maximised?
- What is the impact of off-grid solar on MSMEs
- Has this led to an increase in income? If so how much? If so, how?
- How has access to appliances impacted economic activity and income generation?



- How does this impact change over time, and across economic activity types?
- What is the impact of technology size/type, location, gender, age or income-level on these effects? (as possible)

Causality and Attribution

Efforts must be made to ensure that:

- any impacts uncovered can be attributed to off-grid solar,
- the cause of any change is understood, and
- an understanding of how household dynamics and influential factors might increase or decrease any impact uncovered is pursued.