



Dear Sir/Madam

Call for Expression of Interest for Powering Opportunities Partnership (POP) - Productive Energy Use (PEU) action research projects in sub-Saharan Africa

The Powering Opportunities Partnership (POP), a component of the UK Department for International Development (DFID)'s wider Transforming Energy Access (TEA) programme (<https://www.carbontrust.com/tea/>), is aimed at exploring how the off-grid sector can better stimulate local jobs and local value addition in sub-Saharan Africa. This POP Productive Energy Use (PEU) call is aimed at providing grant support to action research projects and partnerships that can create and drive productive electricity demand in off-grid and rural areas.

This Call for Expressions of Interest is intended for organisations (including innovative partnerships and joint ventures between organisations) that propose high potential, replicable and scalable opportunities which use clean off-grid energy to stimulate rural economic development and support sustainable returns for off-grid energy installations. Please read this Call for Expression of Interest (including Terms of Reference) attached to this document for more information. Key dates for the EoI stage are included below:

Stage	Description	Date (if applicable, time)
EoI	EoI submission period opens	10/12/2018
	EoI submission deadline	1700 (GMT) 28/02/2019
	EoI Clarification Interviews	In the week commencing 11/03/2019
	Notifications to shortlisted/unsuccessful EoI applicants	18/03/2019

Shortlisted applicants after the Expression of Interest phase will be invited to submit a Full Proposal. Should your Full Proposal be successful, an award letter, the Terms of Reference (as amended to incorporate or include your proposal) and the Conditions of Contract will establish the Contract for Research into Powering Opportunities Partnership (POP) - Productive Energy Use (PEU) (the "**Contract**") between you and the Carbon Trust. The Carbon Trust leads the Research Programme Delivery Consortium (RPDC) for TEA, under contract to DFID.

Unless informed to the contrary, please send proposals and all communications (including requests for clarifications) by email to the following email address: TEA-POP-PEU@carbontrust.com

We look forward to receiving your Expression of Interest.

Yours sincerely

Daniel Marten
TEA - POP Programme Manager

For and on behalf of
THE CARBON TRUST



Call for Expression of Interest

- FOR -

Powering Opportunities Partnership (POP)

Productive Energy Use (PEU) action and learning research projects in Sub-Saharan Africa



Contents

Expression of Interest

1	Introduction.....	4
2	Types of Projects	5
3	Scope of Call	6
4	Funding available under this competition	6
5	Eols submission guidelines	6
6	Other requirements and additional information.....	8

Terms of Reference

7	TEA programme and The Powering Opportunities Partnership	12
8	Powering Opportunities Partnerships - problem statement.....	12
9	Powering Opportunities Partnerships – programme objective.....	12
10	Project Description.....	13
10.1	Project’s geographic scope	13
10.2	Scope of Work.....	14

1 Introduction

1.1 This call for Expression of Interest (Eoi) has been prepared by the Carbon Trust and Energy 4 Impact on behalf of the UK Department for International Development (DFID) for the purpose of inviting the submission of proposals for action research projects as described in the Terms of Reference (ToR).

1.2 Selection of grantees under the programme will be a two-stage process utilising an Eoi open to any applicant, before the invitation to submit a full proposal from selected Eoi submissions.

1.3 The process will be conducted in a manner that ensures proposals are evaluated fairly, and to ascertain those that are the most responsive to the research objective and best value for money.

1.4 The documents related to this call for applications include:

1.4.1 The Expression of Interest (Eoi) document & Terms of Reference (ToR) document

1.4.2 Templates to respond to the Eoi:

- Application template

1.4.3 Background information:

- POP Theory of Change
- Transforming Energy Access gender equality and social inclusion (GESI) vision and principles

1.5 The timeframe for this competition is as follows:

Stage	Description	Date (if applicable, time)
Eoi	Eoi submission period opens	10/12/2018
	First round of Eoi questions	Last questions to be received by: 21/01/2019 Carbon Trust's response to be expected by: 23/01/2019
	Second round of Eoi questions	Last questions to be received by: 18/02/2019 Carbon Trust's response to be expected by: 20/02/2019
	Eoi submission deadline	1700 (GMT) 28/02/2019
	Eoi Clarification Interviews	In the week commencing 11/03/2019
	Notifications to successful/unsuccessful Eoi applicants	18/03/2019
Full proposal	Invitation to Tender issued to shortlisted Eoi applicants, to respond with a Full Proposal	18/03/2019
	First round of Full Proposal questions	Last questions to be received by: 03/04/2019 Carbon Trust's response to be expected by: 05/04/2019
	Second round of Main Proposal questions	Last questions to be received by: 17/04/2019 Carbon Trust's response to be expected by: 19/04/2019
	Full Proposal Deadline	1700 (GMT) 30/04/2019
	Full Proposal Clarification Interviews Commencement (if required)	In the week commencing 15/05/2019

Expression of Interest

	Award/rejection notifications to applicants	24/05/2019
--	---	------------

- 1.6** The Carbon Trust may, at its discretion, decide to extend the timelines (for both or either EoI and Full Proposal stage). Timelines will be kept up to date at (<https://www.carbontrust.com/tea/news/2018/12/tea-pop-peu>), and should be consulted regularly by applicants.

2 Types of Projects

- 2.1** The POP PEU call requires the applicant to propose an action research and learning project in sub-Saharan Africa, for Off-Grid Productive Energy Use (PEU). The project should offer a theory of change towards improved economics, increased local employment and greater local value-capture through the creation of new or improved local productive energy use opportunities in rural off-grid areas, that are served by off-grid electricity supply sources.

Projects proposed should actively involve businesses for whom the availability of off-grid electricity is an enabler for the expansion of their activities for example through:

- Local value addition in their existing operations and value chains;
- Entry into new rural value chains, including through the digital economy, that is otherwise constrained by a lack of access to electricity;
- Other business enabling / electricity-demand stimulating activities that may be created.

These businesses might be involved by being the lead for the project, being a project partner or being a direct beneficiary actively engaged by the project partners.

The project should be able to show high potential for: replicability and scalability; use of electricity in rural areas to open up business opportunities; employment creation; and unlocking greater value to investors and investments in rural electricity supply.

PEU is especially looking for projects involving organisations with a stake in developing rural economies as integral parts of their value chains and business models. Novel partnerships between such companies, together with off-grid energy suppliers, equipment and appliance suppliers, and other stakeholders in rural economies are encouraged. So too are innovative business models, project delivery models and technologies.

Credible mechanisms should be included to ensure that data and learnings from the action research are gathered, and are published more widely. Projects are expected to support the Research Programme Delivery Consortium to develop data and knowledge products and dissemination and uptake.

- 2.2** The Competition is not prescriptive in terms of timelines and milestones for the proposed projects, and applicants are invited to propose these in their work plan. However, projects should be designed to make optimal use the anticipated actively-supported period of 18 – 24 months from the commencement date. The anticipated commencement date for the Services is June 2019.
- 2.3** A minimum of 50% co-funding (either financial or in-kind) is a prerequisite for the proposal to be considered eligible for the Competition. This means if for example a company is requesting £50,000, it must be prepared to put in £50,000 of its own or from another source towards the project, making a total project size of £100,000.

Expression of Interest

3 Scope of Call

Eligible projects can be located in any Sub-Saharan African country, excluding South Africa.

4 Funding available under this competition

4.1 Under the POP PEU Competition, a total budget of at least £675,000 has been made available in this round for grants to successful applications.

4.2 This Competition seeks to fund 3 to 4 projects. Funding to be requested from TEA-POP for each project should not exceed £300,000. Smaller expressions of interest are welcome, as well as proposals with larger amounts of matched funding - as long as this matched funding is clearly linked to the action research project proposed.

5 Eol submission guidelines

5.1 Questions/clarifications about this call for Eol

5.1.1 The Carbon Trust's channel for all communications related to this call is:

TEA-POP-PEU@carbontrust.com

All questions relating to this competition must be submitted by email. Please insert "**Competition: POP - PEU Expression of Interest**" in the email title line for all communications.

5.1.2 The Carbon Trust's portal for this competition is

<https://www.carbontrust.com/tea/news/2018/12/tea-pop-peu>

5.1.3 Please register your interest in this Eol by filling in the form in the above website, which will allow you to receive notifications and updates. All answers to questions and clarifications will be posted on said website at the indicated dates

5.1.4 Questions may include queries relating to the ToR, the Conditions of Contract or if you have difficulty in providing the information requested. Questions should clearly reference the paragraph in the document to which the question relates. To the extent possible, questions should be sent in one email rather than individually in separate emails.

5.1.5 There will be two periods in which we welcome interested applicants to submit questions during the Eol phase. Please refer to the question/answer timeline below:

Stage	Description	Date (if applicable, time)
Eol	Eol submission period opens	10/12/2018
	First round of Eol questions	Last questions to be received by: 21/01/2019 Carbon Trust's response to be expected by: 23/01/2019
	Second round of Eol questions	Last questions to be received by: 18/02/2019 Carbon Trust's response to be expected by: 20/02/2019
	Eol submission deadline	1700 (GMT) 28/02/2019
	Eol Clarification Interviews	In the week commencing 11/03/2019
	Notifications to successful/unsuccessful Eol applicants	18/03/2019

Expression of Interest

5.2 Clarifications made or required by the Carbon Trust

- 5.2.1 In addition to answering questions from applicants, the Carbon Trust may also, at its discretion, issue further clarifications at any time if it considers this to be appropriate.
- 5.2.2 The Carbon Trust may also (at its absolute discretion) request clarification during the evaluation phase of any aspect of an applicant's proposal. Applicants are asked to respond to such requests promptly. Vague or ambiguous answers are likely to score poorly.

5.3 Structure of EoI submission

- 5.3.1 Your application template must explain how you envision to meet the POP PEU requirements as described in the ToR on the application template provided on the website (<https://www.carbontrust.com/tea/news/2018/12/tea-pop-peu>). Applications that do not follow this format will not be considered.
- 5.3.2 Your EoI should contain the following:
- 5.3.3 Completed narrative EoI template (no more than 5 pages), which requests:
- Overview of applicant (including implementing organisations, partner organisations and all key capabilities).
 - Brief project description, action research approach and implementation strategy (including project title, project status, project location, project vision, project description, basic delivery plan and outline of outcomes and impacts – including estimated KPIs for reporting, and expected learning/publications).
 - Project finance (total project budget, budget requested from this Competition, budget provided by co-funders).
 - Identified project beneficiaries.
 - High-level description of project risks.
- 5.3.4 Additional documentation (not included in the application template):
- Brief CVs of staff involved

5.4 Evaluation of EoI

- 5.4.1 Your EoI will be evaluated taking into consideration factors such as:
- Responsiveness to problem statement (refer to the ToR);
 - Availability of co-funding;
 - Engagement with and involvement of local partners, development partners and financing partners;
 - Potential scalability/replicability of project;
 - Potential for action learning outcomes that can be analysed and reported.

5.5 Scoring Matrix for evaluation of EoI

- 5.5.1 EoIs will be scored for each of the factors outlined in 8.1 (each equally weighted) according to the following matrix:

Score	Explanation
0	Failed to address the criteria/question/issue. Totally non-compliant.
1	Inadequate response/answer/solution - inadequate or poor evidence of skill/experience/resource sought; high risk that relevant skills/resource will not be available.
2	Limited response/answer/solution - lacks convincing evidence of skill/experience/resource sought; lack of real understanding of requirement or evidence of ability to deliver; medium

Expression of Interest

	risk that relevant skills/resource will not be available.
3	Acceptable response/answer/solution – Meets the required skill/experience/resource, but fails in some areas; provides acceptable level of detail, accuracy and ability/resources required to meet deliverables.
4	Good response/answer/solution - demonstrates real understanding of requirement and evidence of ability/resource required to meet it (based on good experience of providing the services to other organisations with similar profiles).
5	Excellent – response/answer/solution gives real confidence (based on outstanding experience of providing the services to other organisations with similar profiles) that the supplier will add real value in managing the project and fielding a team with excellent skills and a deep understanding of The Carbon Trusts’ ethos and service needs.

5.6 Instructions for Return of EoIs

- 5.6.1 You must submit your Eoi in PDF format to TEA-POP-PEU@carbontrust.com. Eois must be received by the Carbon Trust by no later than 1700 (GMT) on 28/02/2019. It is your responsibility to ensure that your Eoi is delivered no later than the appointed time.
- 5.6.2 Late Eois will not be considered unless the Carbon Trust, in its sole discretion, decides to do so and is satisfied that the delay was caused by reasons outside of your control.

5.7 Unsuccessful Eoi Applicants

- 5.7.1 After submission of the Eoi, applicants will be informed if they have been unsuccessful following a decision to shortlist for Full Proposal.

6 Other requirements and additional information

6.1 Learning & Dissemination requirements

Throughout the duration of the project, the project partner will be expected to provide inputs to various learning and dissemination actions required by TEA POP. The project partner Applicants will be required to allow sharing and receiving of knowledge from other TEA project components (as relevant, on an ad-hoc basis). Projects will be required to provide regular technical and socio-economic data, as well as periodic performance updates according to the monitoring and evaluation plan and logframe, and to support the development of case studies and other intermediate research/learning/insight products throughout the project duration.

6.2 Intellectual property

- 6.2.1 Intellectual property in all material (including, but not limited to, reports, data and designs, whether electronically stored or not) produced by the project partner or its personnel, members or representatives in the course of this project (“the Material”) will be the property of the project partner. All outputs listed within the deliverables shall be made publicly available for use (in cases such as models or tools) as per the requirements of the scope of work.
- 6.2.2 In signing the Contract, the project partner grants to DFID a worldwide, non-exclusive irrevocable and royalty-free licence to use all the Material, where “use” shall mean, without limitation, the reproduction, publication and sub-licence of all the Material and the intellectual property therein, including the reproduction and sale of the Material and products incorporating the same, for use by any person or for sale or other dealing anywhere in the world.

6.3 Anti-Bribery

Expression of Interest

- 6.3.1 The Carbon Trust requires full compliance with the Bribery Act 2010. All applicants must make themselves familiar with the Carbon Trust's Anti- Bribery Code of Conduct <http://www.carbontrust.com/terms>.

6.4 Conflicts of Interest

- 6.4.1 Applicants are required to declare in their Eol submissions any conflict or potential conflict of interest and provide clear details of their plan for managing this. It is possible that there may be circumstances where the Carbon Trust (in its absolute discretion) considers that such a conflict or potential conflict of interest would not be manageable or acceptable. In which case, the Carbon Trust may reject the Eol.

6.5 Interviews

- 6.5.1 Following the evaluation of submitted EOI's, applicants may be invited to an interview for clarifications.

6.6 Cessation of Procurement or Alteration of Process

- 6.6.1 The Carbon Trust reserves the right to terminate this procurement or to change any aspect of the Competition process at any time.
- 6.6.2 The Carbon Trust is not bound in any way to accept the lowest or any application. Unless any Applicant makes a formal statement in its proposal to the contrary, the Carbon Trust reserves the right to accept a proposal either in whole or in part. The Carbon Trust reserves the right to accept more than one proposal.
- 6.6.3 Applicants will not be entitled to claim from the Carbon Trust any costs or expenses which may incur in preparation of the proposal or in respect of the Competition process. This applies whether or not the proposal is successful and regardless of whether or not the Competition process is changed, the procurement is terminated, or a contract is awarded.
- 6.6.4 Nothing in this Eol or any other communication made between the Carbon Trust and/or its representatives and any person shall constitute an agreement, contract or representation (except for a formal award of contract made in writing by the Carbon Trust). Receipt by the applicant of this Eol does not imply the existence of a contract or commitment by or with the Carbon Trust for any purpose and applicants should note that this Competition may not result in the award of any contract.

6.7 Applicants Should Note

- 6.7.1 The information contained in this Call for Expressions of Interest and the supporting documents, and in any related written or oral communication, is believed to be correct at the time of issue or making but the Carbon Trust will not accept any liability for its accuracy, adequacy or completeness and no warranty is given as such. The information given by the Carbon Trust does not purport to be all inclusive or to include all the information that an applicant may require.
- 6.7.2 Applicants should note that, in the event an Eol is considered to be fundamentally unacceptable on a key issue, regardless of its other merits, that Eol may be rejected.
- 6.7.3 Applicants are required to confirm in their Eol that they unequivocally agree to the Carbon Trust's Conditions of Contract. The Carbon Trust may in its discretion exclude Eols that specify an intention to negotiate the Conditions of Contract. Notwithstanding this, any proposed amendments must be submitted in your Eol submission.

Expression of Interest

- 6.7.4 It is the responsibility of applicants to obtain at their own expense all additional information necessary for the preparation of their EoI. No claims of insufficient knowledge will be accepted.

Terms of Reference

- FOR -

Powering Opportunities Partnership (POP)

**Productive Energy Use (PEU) action and learning research
projects in Sub-Saharan Africa**

7 TEA programme and The Powering Opportunities Partnership (POP)

Access to modern forms of energy is a key step in improving human livelihoods and promoting economic growth. The Transforming Energy Access (TEA) programme is a UK Department for International Development (DFID) funded initiative of which energy provision is a core theme.

TEA is a programme from the UK Government's Department for International Development (DFID), designed to have a transformative impact on the deployment of renewable energy solutions in developing countries to support the progress of clean energy access. Up to £69 million will be invested over 5 years. This programme is designed to identify regional issues and solutions relating to energy access in developing nations in Sub-Saharan Africa and South Asia.

The Powering Opportunities Partnerships (POP) is a Partnership under the TEA programme. POP aims to demonstrate how the off-grid energy (OGE) sector can stimulate local jobs and local value addition in Sub-Saharan Africa, via a challenge fund supporting proposals that demonstrate innovation, partnerships and the potential for scalability and impact.

The first competition window under POP, which this Terms of Reference (ToR) describes, is a call for active research and learning projects related to Productive Energy Use (PEU), explained in more detail below.

8 Powering Opportunities Partnerships - problem statement

Notwithstanding the development sector's high levels of interest in, and support for, both SDG7 in general and rural electrification in particular, our experience shows that the growth in small business activity which follows new electricity supply to a rural area, is frequently disappointing. This of course impacts the financial attractiveness, and hence scalability, of any investments to provide rural areas with levels of power supply that are consistent with "business-levels" of consumption. This challenge is well-known and underlies the significant growth in interest amongst development actors in productive uses.

Currently PEU initiatives are commonly led by energy access practitioners, not by parties focussed on wider rural economic development, such as (but not exclusively) from within the agribusiness sector. They are thus often "supply-push" rather than "demand-pull" initiatives. One feature of POP and this Competition is the aim to seek ways of balancing this situation by inviting innovative applications from stakeholders who are primarily motivated by developing the rural economy, or specific power-consuming value chains within it in replicable and scalable ways that also impact positively upon the economics and commercial returns of rural off-grid electrification. Applicants from outside the OGE sector, and novel partnerships (for example between the OGE sector and organisations outside of the OGE sector) are particularly encouraged.

9 Powering Opportunities Partnerships – programme objective

The objectives of the programme are strongly aligned with strategic objectives in Sub-Saharan Africa expressed by many donors, development agencies, NGOs and other organisations working to address development and energy challenges in developing economies. These challenges include the desire to accelerate access to clean energy services through a more dynamic power sector, focusing on the positive impacts to local economic activity and jobs.

Terms of Reference

To achieve these objectives, governments, private sector and investors need to come together and collaborate to support off-grid businesses and technologies; encourage stronger collaboration on off-grid energy access, energy efficiency, and renewable energy solutions; and achieve more rapid deployment of demonstrated, effective and self-scaling/auto-replicating PEU interventions and partnerships. This will only happen once significant local value creation in, associated with and because of the off-grid sector, can be demonstrated.

POP has four structural objectives:

- 1) Experiment with different business and/or models which propose high potential, replicable and scalable opportunities which use off-grid electricity to enable growth in their business value chains in rural areas.
- 2) Document and quantify the impact of the innovations on the economics of PEU development, on the value created in the community and on the value capture by the businesses or OGE companies
- 3) Estimate the impact of different alternative innovations if deployed at scale;
- 4) Disseminate insights and information gained both to the off-grid community and to other stakeholders with an economic interest in developing rural economies.

POP's ultimate objective is to yield examples of sustainable local development, value/incomes and job creation, resulting from the collaboration between these actors.

POP will use the data, results and insights gained from these demonstration projects to raise awareness and encourage uptake by other actors, thereby creating a platform for new and/or unconventional partnerships to emerge and providing a strong contribution to increased quality energy access and poverty alleviation, especially in rural communities.

The following are likely co-benefits and ultimate impacts for POP, that the competition proposals should support (directly or indirectly):

- Increased access to shared community services in rural areas due to flow of profit back to rural communities through employed staff to family members, and potentially through retention of qualified staff in rural communities.
- Better retention of qualified staff (reduced 'brain drain') due to greater domestic employment opportunities and possibly greater lifetime earnings by qualified staff as local demand for specific skills increases.
- Increased community action and activism around access to off-grid energy services due to greater visibility of its benefits.
- Increased demand for tertiary and other education opportunities concerning energy and off-grid technologies due to increased employment opportunities in the sector.
- Local expertise and capacity overflow from the OGE sector to related sectors (i.e. other industrial sectors, other services requiring installation of electrical equipment), also resulting in increased local value retention.
- Increased political support for off-grid energy, increasing government support and streamlining project development processes for energy sector companies (i.e. less local and national government resistance or bureaucracy around project development activities).

10 Project Description

10.1 Project's geographic scope

Terms of Reference

The countries in scope for intervention can be located in any Sub-Saharan African country, excluding South Africa.

10.2 Scope of Work

This Competition is looking to support concretely defined action research and learning projects, which propose novel, viable, replicable and scalable productive use interventions to drive productive energy demand.

The proposed solutions should aim at:

- Unlocking greater value to an investor(s), be it organisation and/or community, than it costs. This should enable impacts beyond those achieved under current, mostly value non-recovering interventions, which remain reliant on philanthropic funds.
- Employing a partnership model, bringing together local development actors, OGE sector actors, communities and potentially also funders/sponsors/financial institutions. These partners should each bring a distinctive and synergistic contribution to the proposal that supports the ultimate objectives.
- Generating robust and insightful quantitative technical (specifically unit economics amongst others) and socio-economic data, as well as qualitative insights. The data and insights should support POP in its ambition to better understand the business modalities, interventions and costs of viable options in local 'productive use'. Baseline data, progressive performance data and ultimate resulting data will be required.
- Supporting the development of case studies for application in awareness raising and research uptake objectives. The project design should allow for the capturing of project results and any associated lessons, guidance and insights.

The program would like to support partnerships in this field. Some examples include:

- Projects which propose partnering with existing local developing agencies (NGOs or other institutions focused on rural economic development). Instead of creating stand-alone programmes, the competition seeks to work with existing ones where possible, and create even more benefit, by linking them with productive use opportunities, in order to improve scales of economy and replication.
- Projects that propose engagement with a larger company or corporate with a stake in some aspect of improving the rural economy in areas of interest to them. Examples might include:
 - A large retail supplier of both domestic and export markets sees the opportunity for increasing quality/reducing wastage by introducing local primary processing capacity, facilitated through the new electricity supply. The retailer forms a partnership with equipment providers and finance institutions to pilot ways to support its network of small-holder farmers and aggregators to access and use the equipment needed.
 - A Solar Home System (SHS) provider (or microgrid developer) partners with an internet service provider and a manufacturer of low-cost computers to provide affordable rural internet access for on- and off-line educational content for off-grid schools (including capturing the spin-off opportunities of rural internet access.)
- Projects that propose investment by OGE sector players (and their partners) in vertical (downstream) integration. Examples might include (but are not limited to):
 - Businesses integrating (narrowly) down the value chain in order to capture the value opportunities in PEU businesses that can now be operated with newly available power.
 - OGE companies with franchise-type "business in the box" models that create and realise value downstream from them.

Terms of Reference

A minimum of 50% co-funding (either financial or in-kind) is a prerequisite for proposal consideration. The partnership model should therefore extend to also include financial partnership to support the delivery of the proposed project. The company must provide matching funds on a 1:1 basis. This means if a company is requesting £50,000, it must be prepared to put in £50,000 of its own or from another source towards the project, making a total project size of £100,000.

Due to the action research and learning objectives, the proposed project should manifest as physical activity on-the-ground, preferably in rural communities in the geographic scope. The proposed project should entail demand-led productive energy use with responding OGE applications and might include one or more of the following (but is not limited to):

- Demonstrating a new business model and/or partnership.
- Demonstrating a new technology or working on solutions which improve unit economic whilst still creating local opportunities.
- Scaling a successful model within or into a new market or integrating a model to a broader base of productive uses.

-----end-----