

## **Research Energy Analyst Roles Available: - Energy Access for Refugee Camps and Energy Access National Finance Planning**

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### **Note to applicants - Either:**

**2 part-time posts available or 1 full time post available: Applicants should indicate whether they are interested in combining the roles for full time work, or which of the two roles they are interested in.**

**Applicants should apply by submitting a CV and their daily fee rates to  
Sarah.Lester@PracticalAction.org.uk**

### **Role 1: Research Analyst - [Moving Energy Initiative Phase 2](#) (45 days)**

Practical Action Consulting (PAC) has, as part of a consortium, secured funding for the second phase of a project exploring ‘How can innovation in policy and practice within the humanitarian sector improve access to sustainable energy among displaced populations and camp operators?’

The Moving Energy Initiative is a ground-breaking international partnership which focuses on how to deploy and implement appropriate sustainable energy solutions for heating, cooking, lighting, water & sanitation, communication and other purposes in refugee camps. Its aim is improved access to sustainable energy for displaced persons, for their own domestic and commercial purposes, and safe, reliable, secure and more efficient energy solutions for the administrative and public service facilities. The research will inform and influence the sustainable energy policies, priorities and operations of donors, host governments, national and international organisations.

The project is focused on:

- Gathering systematic information on energy access/management in camps in three countries
- Developing plans, innovative approaches and models for achieving sustainable, modern, energy access in the selected camps. (At least three “dimensions” of innovation will be explored: technology, institutional arrangements, and the “commercial model”, i.e. the mode of private sector engagement).

Part of the programme is to use data from surveys collected in camps in Kenya and Burkina Faso to develop integrated energy access plans for how the energy access needs (including for household lighting, cooking and appliances, productive uses and community services) of those living in the camps can best be met, using (and improving) modelling tools previously developed by Practical Action for demand estimation and least-cost energy planning under the PPEO.

**This role will take 45 days of time between August 2016 and January 2017.** The consultant will work together with the Project Manager, Principal Consultant and UK Energy team to support on the following key activities:

- Reviewing, amending and improving data analysis tools to make them fit-for-purpose for this task
- Reviewing data gathering tools to ensure that information required for planning is derived
- Undertaking economic analysis of energy access technologies to determine price-points for willingness-to-pay element of surveys
- Analysing data gathered in the two camps to establish levels of demand for various energy access solutions
- Combining demand and economic analysis to arrive at combinations of solutions which best meet energy access goals

## Role 2: Research Analyst – Poor People’s Energy Outlook – Energy Finance (100 days)

Over the last 4-5 years, Practical Action has significantly increased its profile and scale of activities in the international arena on issues of energy access for the poor. One of the pillars of this has been the production and promotion of the Poor People’s Energy Outlook. This is a flagship publication for the organisation, looking at issues of energy access from a practitioner and poor people’s perspective. It has been the place where we have put forward new concepts which have had significant traction internationally such as a set of Minimum Standards for energy access, and the Energy Access Ecosystem Health Index.

Version 6 of the PPEO will focus on energy finance and funding at the national level in 3 countries: Kenya, Togo and Bangladesh.

**This role will take 100 days of time between July 2016 and December 2017.** The consultant will work together with the Project Manager, Senior Energy Adviser and UK Energy team to support on the following key activities:

- Preparation for PPEO national level financing and analysis of data needs.
- Bringing together community energy access planning information from 2015 and nationwide data to develop a national-level picture of the solutions needed to meet poor people’s energy access priorities.
- Designing a set data and inputs for of 3+ national level programme concepts through which the proposed decentralized solutions could be delivered.
- Costing and outlining an investment prospectus (setting out funding requirements and investment case) for each of these programmes
- Examining the various potential sources for the required funding (eg international donors, national governments, international/national development banks, commercial banks, private sector equity investors, end users etc) and outlining the mix of funding required to achieve these decentralized elements of TEA and hence the roles of the private (market) and public sectors in providing these different forms of energy access.
- Bringing together the costs, funding and financing estimates for the programmes to arrive at an overall picture of funding needs and probable sources of this funding for off-grid Total Energy Access to be achieved at national level.
- Consultation with financial stakeholders on the conditions required for providing the needed funding and the steps which might be taken, nationally and internationally.

## Contractual Arrangements for Roles

The consultant will work as a technical expert within PAC’s project team to support the delivery of one or both of the projects, and will be contracted on a consultancy basis (not as a Practical Action Consulting member of staff) to work:

- **Either:** full time (20 days per month) for 7.5 months, starting from July 2015. Total 145 days.
- **Or:** Part time for Role 1 on MEI (up to 10 days per month for 6 months, starting from August 2015. Total 45 days.
- **Or:** Part time for Role 2 on PPEO v6 (14 days per month for 7.5 months, starting from July 2015. Total: 100 days.

If undertaking both roles, the consultant will be expected to participate in consortium and project meetings in the UK and work from Practical Action’s UK office up to 3 days/week (1 day/week for Role 1 on MEI and 2 days/ week for Role 2 on PPEO) and from home for the balance of the time. The balance between office and home-based working may be expected to vary depending on level of project activity, and is negotiable depending on which of the roles the candidate would like to take on.

A consultancy daily fee will be paid per month (or pro-rata if part time), depending on the consultant's level of experience. Travel and other expenses associated with the assignment will be reimbursed.

## **Required Skills and Experience (for both roles)**

### **General Skills**

- A Masters' degree in engineering, economics or other technical discipline  
At least 4 years of relevant experience, including experience in developing countries, and in a professional environment delivering results to clients.
- Strong analytical skills and the knowledge of economic modelling and energy access technologies to be able to take these tools and use them to analyse data from surveys.
- Analytical and numerical skills, familiarity with the data collection and research process and the ability to synthesize data, present results and draw meaningful conclusions.
- Confident in dealing with survey data from socio and economic research in developing countries, including working with incomplete data sets.
- Proven high proficiency in Microsoft Excel and data analysis techniques.
- Excellent communication skills, including proven technical writing and presentation/communication skills.
- Fluency in written and spoken English essential.
- If interested in combining the roles for full time work, consultants should be resident in the UK and able to travel to Practical Action's offices near Rugby for at least two days a week.

### **Technical Skills and Experience**

- Key focus area on: Energy access data analysis, Energy economic analysis and least-cost energy, access planning. (Knowledge of energy markets, enterprise models and bottom-of-the-pyramid delivery, value chain analysis and energy markets systems would be an advantage.)
- Understanding of: decentralised energy solutions and energy access issues. (Knowledge of small business development in developing countries, pilot and scale up of energy enterprises, energy customers and private sector investment, the range of financial solutions required for inclusive markets to grow, and the types of new models required to unlock private and public capital, flexible debt finance for potential energy enterprises would be an advantage.)
- Knowledge of off-grid energy access technologies such as:
  - Solar PV, solar home systems and solar lanterns
  - Rural electrification and mini-grid distribution systems
  - Wind, hydro, solar or biomass generation
  - Improved cookstoves and bioenergy (including biogas)

Interested applicants may send their CV, their daily fee rate in GBP, and their preference for one or combining the roles to: [Sarah.Lester@PracticalAction.org.uk](mailto:Sarah.Lester@PracticalAction.org.uk) by Friday 15<sup>th</sup> July 2016.