



January 2020

## Energy Access Fellowship

OnePower is looking for enthusiastic and dedicated individuals to fill roles across the organization in support of the growth and development of OnePower Lesotho's off-grid energy portfolio.

OnePower is an energy startup based in Lesotho whose mission is to bring electricity to underserved communities across the developing world. OnePower was incubated by STG International, a non-profit based in Cambridge, MA founded by a team of graduates from the Massachusetts Institute of Technology in 2006 that has been working on energy access globally for more than 10 years with funding from a wide variety of sources including the World Bank and the United Nations Development Programme. Both STG International and OnePower have strong partnerships across sectors and governmental ministries in Lesotho specifically.

As an Energy Access Fellow you will be contributing to the successful implementation of a portfolio of rural mini-grids. Fellowship topics can have a variety of focus areas, guided by the expertise and interests of the Fellow, including:

### 1. Engineering and Technical Development *[6-12 months, stipended]*

- a. ***Minigrid Remote Hardware and Backend Software:*** We are looking for engineering students with a passion for programming and electronics to develop the next-generation design of our smart pay-as-you-go electricity meters and system monitors, to hone back-end customer database functionality, and to add features to our mini-grid development software.
- b. ***PV Tracker Design and Manufacturing:*** OnePower proudly engineers and manufactures its own PV tracking systems in Lesotho. Currently on the second major design revision, this hardware component maximizes energy we can deliver from each imported PV panel. Under this thrust we are looking for mechanical engineering students or professionals interested in design validation, improvement, and design for manufacturing.

### 2. Empowering Communities *[6 months, volunteer]*

OnePower leverages energy access to empower the communities we serve, including supporting local businesses. Our primary aim in this area is to establish supply chains for efficient appliances (LED lamps, refrigerators, etc.) so that village shops can buy these items at an affordable (e.g., wholesale) price and sell them to households in their communities. For this thrust we are looking for a volunteer that will connect with small businesses, including helping small business build a cooperative network, and help to establish global supply chains for the appliances in cooperation with partners conducting similar work in India.

### 3. Project Site Assessment and Reporting *[6 months, volunteer]*

Before a mini-grid can be designed and built a site must be identified and “developed” – a term that encompasses planning, budgeting, compliance and fact-finding preceding project financing and construction. Stakeholder engagement and surveys of the key demographic, ecological, and geotechnical aspects of unelectrified communities are key inputs into the development and compliance process. We are looking for a volunteer that can support OnePower staff in conducting surveys in accordance with company policies and procedures,

assisting with organization and logistics, capturing data using relevant tools, generating maps and reports, logging site visits and updating databases with findings, and supporting the team at various steps in the development process to secure required mini-grid licenses and permits ahead of construction and operations.

#### 4. **Media Presence** [6 months, volunteer]

For this task, we are looking for a Fellow who can convey the impact that we have on rural communities to our supporters and the public. The Fellow will have great autonomy with this project and is expected to take photos and edit them, edit our drone footage, create a newsletter, create a social media presence, create videos to demonstrate our work, create videos to explain our electricity service to communities, and/or create news items.

Regardless of topic focus all Fellows will be invited to participate in many aspects of OnePower's work in Lesotho, including:

- Collaborating with an enthusiastic team of Basotho engineers, technicians, and entrepreneurs
- Interfacing with government partners
- Improving understanding of rural energy needs through ongoing collection of energy use and climate data at health facilities and schools around Lesotho
- Identifying opportunities for expansion, brainstorming new projects, developing proposals

We are looking for creative, confident, technically-competent individuals who love to take on new challenges and enjoy the idea of working in a field that is still very much in its infancy. Fellows will be based in Maseru, Lesotho and will be expected to commit to a minimum of six months of tenure.

**These positions are available immediately, and preference will be given to candidates who are able to start between March 1 and June 1, 2020.**

#### *Eligibility Requirements:*

- Undergraduate degree in engineering, computer science, or a technically-related field
- Experience in programming, CAD, machining, and/or other technical tools required for the specified project
- Experience working or traveling overseas, an open-minded attitude toward other cultures and working environments
- Excellent communication skills (oral, written)
- Creativity and willingness to learn and take on challenges
- Ability to diplomatically manage work and interactions with individuals at many levels of experience and influence within the governmental, private, and non-profit sectors

#### *Benefits:*

- Be part of a young and enthusiastic team
- Experience working in energy access - a rapidly growing and highly important sector
- Gain a deep understanding of the challenges in energy provision from the perspectives of economics, policy, and engineering
- Work in an interesting and extremely friendly country in sub-Saharan Africa (English is one of the official languages)

- Stipend and/or housing benefits may be available for some projects and candidates at the discretion of OnePower

For an overview of our current and former Fellows and their activities at OnePower, please visit our website at [www.1pwrafrica.com](http://www.1pwrafrica.com).

To apply, please send a cover letter, resume, university transcript, desired start date, and contact information for two referees to Tamer Teker at [fellowships@1pwrafrica.com](mailto:fellowships@1pwrafrica.com). Applications will be evaluated on a rolling basis until positions are filled.