

PROTOTYPE - FACT SHEET

NAME: JAY PATEL
WORKING GROUP: 2 – RENEWABLE ENERGY
ORGANIZATION: BUSINESS DEVELOPMENT
VILLAGE ENERGY, UGANDA

TITLE:

Village Energy Academy: Developing Local Skills & Expertise for the Rural Solar Sector in East Africa

Mission statement

Providing the technical, entrepreneurship, business operations and sales skills for rural men and women to participate in the rural solar industry in East Africa.

Briefly describe your prototype idea

We see the opportunity to providing courses in technical, business management, sales, and other soft skills will allow rural youth to participate in the solar industry. By leveraging innovative new curriculums and mobile training equipment, we can not only increase access, affordability and efficacy of the trainings, but connect the graduates with jobs within our network or elsewhere.

The benefits:

- 1. Ties education directly to jobs, income-generation opportunities and micro-business financing**, a key missing ingredient with most education initiatives in developing countries.
- 2. Restores trust in solar** through installations done right and fast servicing of products and installations in field, thus laying the groundwork for more sustainable adoption of solar. The switch from kerosene will have many well-documented health, safety, environmental and financial benefits for rural households.
- 3. Strengthens rural communities** by enabling entrepreneurship and high-skilled work, thus reducing the brain drain to the cities.

4. **Breaks down gender barriers** by allowing girls and women to join the energy sector in mass numbers for the first time since the dawn of the industrial revolution (as they are excluded from oil and coal mining jobs).

5. **Inspires younger generations of rural youth in general and girls in particular** by showing them role models in their community engaging in entrepreneurship and technical work.

6. The development of a model that can be **easily replicated and scaled** throughout Africa.

Each team would consist of several trainers who are equipped with the proper training, classroom curriculum with the necessary materials and equipment (laptop, projector), and VOCTEC-supplied mobile solar training toolkits, each of which can deliver hands-on group training for up to 4 people in the field. Anthro Power has developed an interactive classroom curriculum for teaching solar fundamentals, and there are many organizations that have developed entrepreneurship and sales curriculums for developing countries, including the ILO's Youth Entrepreneurship Facility. By merging together the best practices of each curriculum, we can create a holistic training experience to quickly ramp up the trainees for each role.

When the training team goes into a community, a marketing drive to recruit candidates for the available slots. A nominal fee helps secure buy-in from the trainees, but can be lowered/waived for women and girls to encourage their participation. Depending on the role, the trainings would last for varying lengths of time, the longest being one month. After the training is over, the trainer team moves on to another district.

While the training is happening, a separate VE team is busy identifying and setting up locations for shops and micro-entrepreneurs, to be completed by the time the trainings are finished. The best candidates thus immediately secure job or entrepreneurship opportunities, and the rest walk away with valuable, marketable skills

The Academy would have the following components:

1. Courses in hard and soft skills, adapted to each role:

Field agents: Sales and basic technical knowledge to be able to not just blindly sell, but advise clients on the best solution for them.

Micro-entrepreneurs: Sales and entrepreneurship knowledge to use their solar system to start a business, beginning with phone charging but also including other products and services such as mobile airtime, cold drinks from solar fridges, and sanitary pads.

Shop/District managers: Sales, entrepreneurship, and business operations skills to manage operations and sales within their sub-county or district.

District Technicians: Along with the technical skills to install/service larger installations and fix small products, the sales and soft skills needed to deal with clients in an effective manner that inspires trust.

2. Conducting the Trainings in Local Communities: Moving from district to district on a monthly basis allows us to bring the trainings directly to rural areas, which has many advantages:

- a. Increases access and affordability for trainees, thus increasing participation by girls and women, many of whom would otherwise be unwilling or unable to travel away from home even if their expenses were paid for.
- b. Forgoing fixed buildings in urban areas allows for lower overhead and thus lower fees.
- c. Ability to adapt training to local context and test trainee skills through field exercises in their own communities.
- d. Consumer education initiatives and brand awareness by trainees and staff will lay the groundwork in the community for solar sales to take off quickly.
- e. Opportunities to engage with local leaders and educational institutes to get community buy-in to sustain the initiative once the training is over.
- f. Creates scalability through the easy setup of multiple teams to run simultaneous trainings.

3. Skill Tracking System: Cloud database to track candidate's details, skills level and progress over time (towards role requirements/certification), enabling proper M&E.

4. Certification: All candidates who pass the courses will receive a certification (third-party if possible, VE if not) which they can put on their CV.

5. Candidate Selection & Network Setup: Candidates meeting the minimum skills for each role go through the selection process to become a Village Energy field agent, micro-entrepreneur, shop manager or technician. Thus upon graduation they are able to start earning income almost immediately.

6. Ongoing Career Development, Mentorship, Training, and Support: Everyone in the network gets ongoing mentorship and training to continue their skill development. Thus a field agent or micro-entrepreneur can one day become a shop manager. In addition, we have been looking at various additional income streams that the girl micro-entrepreneurs can take on to boost income. One strong potential partner is Afripads, who has given us samples of their reusable pads to distribute to each girl to try out for themselves and demo for others. If successful, each girl could become a last-mile distributor for these transformative sanitary pads.

Target group

1. Rural men/women/youth: gain access to education and employment opportunities.
2. Consumers: Access to solar products sold by better-trained sales agents, along with trusted after-sales services directly in their communities.
3. Larger businesses/micro-grid operators: Trained technical staff to properly install and maintain larger installations using a supply chain of high quality parts and components.
4. Solar Manufacturers & Distributors: A more extensive and reliable last-mile distribution and servicing channel.
5. Rural Communities: Reduction in the brain drain of educated/ambitious young people to urban areas, along with the well-documented benefits from increased solar adoption.

Potential partner(s) for implementation

Curriculum, equipment and testing/certification: [CREEC](#), [VOCTEC](#), [Anthro Power](#), [ILO Youth Entrepreneurship Facility](#), [Barefoot College](#).

Recruitment: [Educate!](#), [Mvule Trust](#), local educational institutes.

Inventory supply, product/sales training, marketing support: [D.Light](#), [Greenlight Planet](#), [Fenix](#), [Eternum Energy](#).

Consumer financing and working capital: [UECCC](#), banks, micro-finance institutions, SACCOs (Savings and Credit Cooperatives).

Key challenges and opportunities

Challenges:

1. Determining the right fee that people willing to pay to attend the training.
2. Achieving gender balance through recruitment efforts and fee discounts.
3. Managing the selection and intake process into the network to maintain network quality, while still showing that the training will have tangible benefits for those who do not make it into the network.

Opportunities:

1. Building stronger ties between the education and for-profit sectors.
2. Expanding into non-solar sectors (such as water and sanitation), particularly if the academy can be self-sustaining from a combination of trainee fees and partnership deals with other companies looking to develop last-mile distribution or service channels.

5

Next steps

In early May we will be testing the market with a “minimum viable product”: a week-long technical training at our regional office for 12 people, for which we will charge \$15. The training will be conducted using existing equipment and curriculum/testing/certification from CREEC. The graduates will have the opportunity to become commission-based field agents to source installations and larger sales. We help them close any deals they source as well as work with them to do the installation and servicing work, for which they get a commission and valuable work experience. Based on how that goes, we will decide how to proceed with building out a larger academy.