



**This little stove is making a big difference.**



### PARTNER PROFILE

- **Stoves are designed by scientists at Lawrence Berkeley National Laboratory, a cutting-edge energy lab with world class testing facilities.**
- **Distributed by local Community organizations**
- **Assembled in local workshops.**
- **Feedback received from local women.**
- **Improved Design by Potential Energy**
- **Tested by Berkeley Labs**

Potential Energy (formerly the Darfur Stoves Project) is a non-governmental organization (NGO) and social enterprise dedicated to bringing fuel efficient cookstoves to the most vulnerable populations in the developing world. Potential Energy was initially founded to improve the safety and livelihoods of women in Darfur who were routinely exposed to violence during firewood collection. By providing women with fuel-efficient stoves, Potential Energy seeks to significantly reduce exposure to gender-based violence and provide safe access to the primary means of livelihood for women and their families in Sudan.

Potential Energy's Clean Cook Stoves are based on a human-centered design that meets the needs and standards of its intended users. The cookstoves are tested extensively by users. Potential Energy's research and development team then incorporates user feedback into subsequent cookstove designs. Cookstoves are assembled in local workshops and distributed by local community organizations.

With the goal of adapting and scaling clean cooking technologies in a rapidly growing market, Potential Energy is poised to help millions of people adopt clean cooking and improve quality of life in terms of health and livelihood.

### THE PILOT INNOVATION GRANT

In February 2013, the Global Alliance for Clean Cookstoves at the UN Foundation awarded Potential Energy, Inc. a Pilot Innovation Grant of \$43,382. The grant supported the launch of a Revolving Loan Fund (RLF) Initiative in North Darfur that offered 2,500 clean cookstoves on credit to resettled populations in the region. The Alliance's Pilot Innovation grant also provided support to Potential Energy's on-the-ground Sudanese partner, the Sustainable Action Group (SAG), which served as a conduit and administrator of funds to stove purchasers in Darfur, Sudan.

SAG, in collaboration with the Women's Development Association Networks and Community Based Organizations, in Sudan managed the distribution of small-dollar loans to their members, which enabled families to purchase cookstoves and repay the loan from wood cost-savings over a period of four months. The Revolving Loan Fund not only laid the groundwork for expert distribution and fiscal management of Alliance funds, but also for financial training for local women who gradually paid off their loans and accrued household savings.

### CREATING SUSTAINABLE PARTNERSHIPS

Potential Energy initiated its partnership with the Sustainable Action Group (SAG) in May of 2013. SAG collaborated with a network of 17 community-based organizations in the Northern Region of Sudan that were selected based on their size, reputation, and track record in terms of stove sales and repayment of funds.

This multi-stakeholder collaboration began with a preliminary training for CBO administrators and collection staff. Led by micro-lending experts from the Sudanese Ministry of Finance. Community-Based Organizations, training sessions introduced micro-lending practices and basic reporting procedures. Bank accounts were then established for the distribution of RLF funds. Members of each CBO also received communication skills training and attended strategy sessions on how to troubleshoot collection issues with clients. To further nurture the collaboration among stakeholders, SAG successfully convened a steering committee comprised of the heads of each Community-Based Organization and representatives from Potential Energy. Together, Potential Energy, the Sustainable Action Group, and the Community-Based Organizations created working groups who took responsibility for overseeing the RLF programs, defining lending criteria, setting up, and implementation of tracking and repayment systems.

With the SAG's expert coordination and management of resources, Potential Energy distributed over 2,400 clean cookstoves. The Pilot Innovation Funds allowed SAG and its community-based partners to not only provide administration and staffing, but to also develop the financial and operational procedures integral to a successful consumer finance programs.

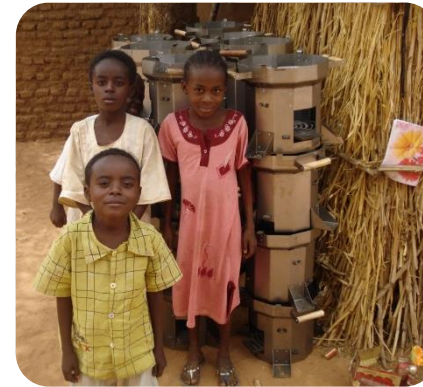


## STOVE DISTRIBUTION: A HUMAN-CENTERED APPROACH

Revolving Loan Fund (RLF) Cookstove distributions began in December 2013. Of the 5,000 stoves assembled, Potential Energy distributed over 2,000 cookstoves for free to flood and disaster victims, widows, the disabled, the chronically-ill, single parent and child-headed households.

By February 2014, another 2,750 cookstoves were distributed through micro-financing initiatives. Stoves were disbursed through a network of 17 community-based organizations within the large geographic region of Northern Darfur. The region encompasses the rural areas of El Fashir, Om Kadida, Saraf Omra, Dar El Salam, Koma, Mellit, and El Sereif. Potential Energy's best practices included the distribution of clean cook stoves in rural areas that met one of the following criteria:

- where SAG and CBOs have built trust with community members.
- which have been deeply affected by drought and desertification.
- where the security of disbursement staff can be guaranteed.
- with poor/marginalized populations where the full commercial viability of the stoves could be tested.
- villages with a small number of families where stove disbursement can cover the maximum number of households.



## LESSONS LEARNED

As part of the Pilot Innovation Fund Program, Potential Energy has evaluated its distribution strategy and microfinance initiatives for Phase 1 of the Revolving Loan Fund Program. Lessons learned include:

- There continues to be a high demand for clean cookstoves, as expressed directly by customers and CBO representatives. Although there is a willingness to repay loans, collections often prove to be a very real challenge.
- There are significant variances from region-to-region in terms of collection and repayment. Collection failures are sometimes caused by external factors, including transport closures, direct conflict, client inability or unwillingness to make payments.
- Overall, repayment rates remain low. Despite this, the Sustainable Action Group continues to follow up with CBO heads and collection staff. Potential Energy and the Sustainable Action Group project repayment rates to exceed 50% in the next phase.
- There is a limit to the ability of the CBOs to make customers pay, given their current situation of extreme poverty.
- In essence, the Revolving Loan Fund is not yet revolving. The 45 SDG (cost of each stove) is the principal amount needed by SAG to recover the cost of the cookstove. Therefore, no portion of it can be repurposed to purchase additional stoves. To both recover assembly, manufacturing and overhead costs *and* redirect profits to additional stove assembly, Potential Energy and SAG must increase the price per unit.