



PILOT INNOVATION FUND FOR CLEAN COOKING ENTERPRISES

OBJECTIVE Strengthen supply of clean cookstoves and fuels by using grant capital to stimulate technology and business model innovation in the sector.

Context

The Global Alliance for Clean Cookstoves is a public-private partnership with a mission to save lives, improve livelihoods, empower women, and protect the environment by creating a thriving global market for clean cookstoves and fuels, with a goal of enabling 100 million households to adopt clean and efficient cooking solutions by 2020.

Based on the input of over 350 leading experts and practitioners from across the globe, the Alliance has identified a market-based approach as the most sustainable way to achieve universal adoption of clean cooking solutions in *Igniting Change: A Strategy for Universal Adoption of Clean Cookstoves and Fuels*. Coordinated and published by the Alliance, the report outlines a three-pronged strategy for creating a strong market for clean cooking solutions including:

- *Enhance demand* by understanding and motivating potential users, developing cleaner and more efficient technologies, and providing consumer finance;
- *Strengthen supply* by attracting more finance and investment, helping enterprises to access carbon finance, enhancing market intelligence; and creating inclusive value-chains and innovative distribution models to reach remote consumers;
- *Foster an enabling environment* by engaging national and local stakeholders, building the evidence base for the benefits of clean cookstoves and fuels, promoting international standards and rigorous testing protocols; and enhancing monitoring and evaluation.

Increasing investment in the sector is one of the six value propositions identified in the Alliance's ten-year strategic business plan. Funding and financing tools need to target clean cookstoves and fuels enterprises at different stages of development. Financing needs and challenges will also vary along the industry supply chain. The diagram shows the financial products the Alliance has designed to enable enterprises at different stages of development to grow and leverage further investment.

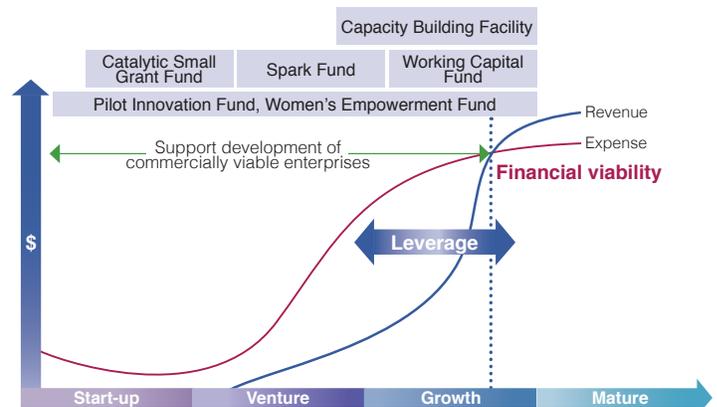
Challenge

While decades of cookstove implementation experience

and hundreds of organizations active in the sector and are a strong foundation to build on, the clean cookstove and fuel market is relatively under-developed and highly fragmented. Innovations are needed across the value chain – from product design to technology improvement to consumer finance. However, few government and philanthropic funders take risks on unproven innovations and investors do not often fund research and development without a ready-made market for the innovation. Grant investments are needed to develop better technologies and business models appropriate to the local context and improve the fragmented value chains in many markets. These types of grant investments help move the sector forward through supporting proof of concept for potentially game changing ideas and sharing lessons learned from both successful and failed innovations.

Solution

In 2012, the Alliance released the Pilot Innovation Fund (PIF) to finance the proof-of-concept of innovative approaches along the value chain in order to strengthen supply and enhance demand for clean cookstoves and fuels. In return for seed capital to finance and pilot these innovations, recipients are required to document lessons learned and share results to advance awareness of scalable solutions in the sector. Pilot grants can be awarded to enterprises at any stage of development. Successful pilot projects can go on to apply for Spark grants to scale their innovative solutions.



Overview of Pilot I Grantees

UpEnergy distributes efficient cookstoves to the energy poor in Uganda at affordable prices. UpEnergy used their Pilot funds to test distribution through Savings and Credit Cooperatives (SACCOs), providing financing to the end consumer allowing them to purchase a cookstove over a series of payments.

Potential Energy has distributed over 18,000 stoves via humanitarian efforts in Darfur since 2003. They used Pilot funds to set up revolving loan fund that allows distributors to sell their stoves at an affordable price using consumer financing.

Greenway Grameen Infra (GGI) designs & distributes efficient biomass cookstoves for rural families in India. They used their Pilot funds to develop an above-the-line marketing campaign to target retail distribution partners, develop brand recognition and educate consumers about the benefits of the stove.

Solar Sister is a social enterprise using an innovative gender inclusive business model to empower African women as engines of a clean energy revolution. They used Pilot funds to add cookstoves to their current product basket, offering customers a unique "home economics" solution with a range of modern lighting, phone charging, and improved cooking choices in Nigeria.

Sustainable Green Fuel Enterprise (SGFE) is a manufacturer and distributor of char-briquettes in Phnom Penh, Cambodia. They used the Pilot grant to test a hub and spoke distribution model for the distribution of char-briquettes and to improve production processes to match increased distribution.

Improved Cook Stoves for East Africa Ltd (ICSEA) is a fair trade carbon scheme that holds a regional Programme of Activities (PoA) for Kenya, Rwanda, Uganda, and Burundi for carbon projects. They used the Pilot grant to develop a unique database that fits the regional carbon monitoring needs of ICSEA and that can be adapted and scaled up as the ICSEA PoA grows.

Overview of Pilot II Grantees

Applied Sunshine LLC is a startup company that has developed an innovative vacuum tube solar cooker to be marketed in Guatemala. This tube structure has the capability of cooking various types of foods that other solar cooking models cannot, including local foods such as tortillas.

Prakti Design will complete a two-burner, multi-fuel stove design for Bangladesh. This stove is being developed in response to the increasing demand from consumers for multiple burner stoves and hopes to quickly achieve economies of scale through sales to more markets due to the stove's fuel versatility.

Emerging Cooking Solutions (ECS) manufactures and distributes pellets in Zambia. ECS currently sells the Phillips stove at US\$ 100 as the preferred option to burn their fuel. ECS will test the Prime stove (US\$ 35) with their pellets and work with employers to provide financing.

Rahimafrooz Renewable Energy Ltd (RRE) is a solar home product distributor in Bangladesh. RRE will expand into the clean cooking market by building on the WASHplus study recently conducted in Bangladesh and begin marketing and distributing the stove most likely to be accepted in the market.

CleanStar Ventures will use Pilot funds and lessons learned from their work in Mozambique to develop an ethanol stove with a refillable fuel cartridge, complementary household appliances that can use ethanol, and a fuel distribution process that leverages partnerships with multinational corporations.

C-Quest Capital (CQC) is a private equity and carbon finance firm providing clean and efficient household energy technologies and sustainable sources of household fuels. Through TLC Green, a Joint Venture between CQC and the Malawian NGO Total Land Care, CQC proposes to test a new business model to couple the marketing and sale of sustainable firewood with improved cookstoves.

