



## Global Alliance for Clean Cookstoves Strategy to Drive Investment

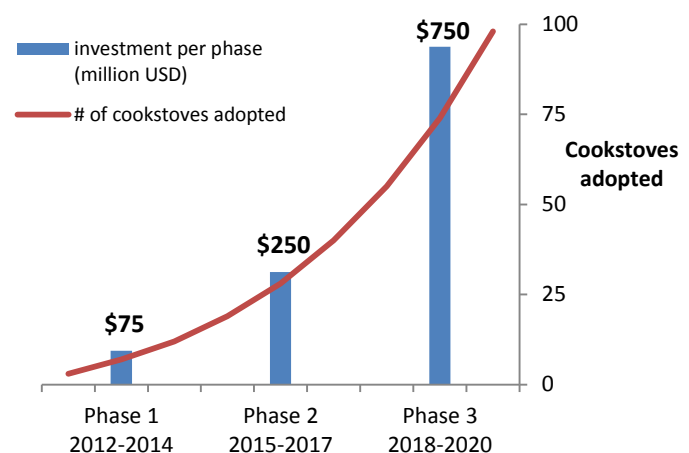
### Background

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 technologies 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 better and more efficient technologies, and providing consumer finance;
- *Strengthen supply* by attracting more finance and investment, accessing carbon finance, enhancing market intelligence; 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 stoves, promoting international standards and rigorous testing protocols and enhancing monitoring and evaluation.

Increasing investment is one of the six value propositions identified in the Alliance's ten-year strategic business plan. In order to reach its goal of 100 million homes adopting clean cooking solutions by 2020, the Alliance is looking to attract a billion dollars in investment in the sector by 2020. This investment is expected to ramp up from \$75 million between 2012 and 2014, to \$750 million from 2018 to 2020.



Funding and financing tools need to target clean cookstoves and fuels enterprises at different stages of development. This capital will range from early stage grant funding, through subsidized capital, to angel equity, and ultimately

commercial capital. Financing needs and challenges will also vary along the industry supply chain.

## Starting Point: Immature, Highly-fragmented Cookstove and Fuels Market

Despite decades of work to increase adoption of clean cooking solutions, and the engagement of hundreds of organizations active in the sector, the market remains fairly immature and fragmented.

The majority of enterprises across the cookstove and fuels value chain are small and medium enterprises (SMEs). Some of the challenges they face are similar, such as access to capital, while others are specific to their role in the value chain. For example, due to lower volumes manufacturers are unable to take advantage of economies of scale often making their processes less efficient and their products more expensive. Further down the value-chain, distribution to rural areas can be

expensive and complex, and distributors and retailers may not have sufficient working capital to stock a range of products. In many markets, consumer awareness of clean cooking solutions is low and consumers are often suspicious of new technologies designed to replace traditional cooking methods.

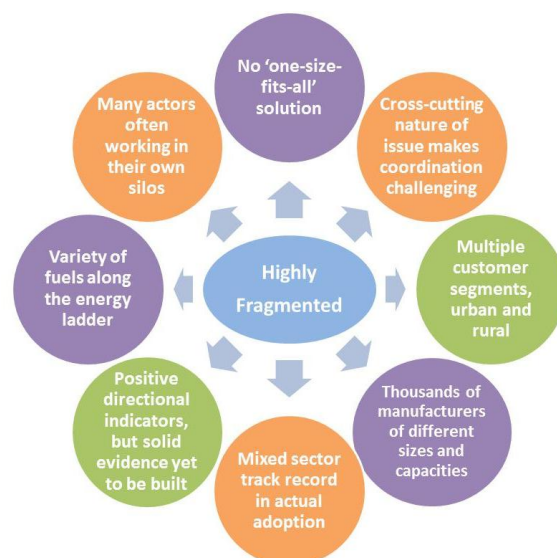
Due to the fragmented nature of the sector many players are attempting to play along the entire value chain stretching resources too thin rather than focusing in an area that leverages their strengths. Those that do try to specialize often find it difficult to locate the right organizations to partner with.

Lastly the immaturity of the market means that individual companies are often concurrently trying to build an industry and their business in a particular location or country – a very expensive proposition.

## Barriers to Past Investment

Although there have been investments in clean cooking enterprises to date, and interest in the sector is growing among early stage impact investors, the lack of finance flowing to the sector remains high due to:

- **Lack of maturity of the clean cooking sector:** The majority of impact investors look for market conditions that are well prepared for sustainable scaling. This includes having clear standards for assessing and benchmarking product performance, clear demand for the product and an enabling policy environment. The reality in the clean cooking sector - lack of standards, low awareness of the benefits of clean cookstoves and fuels, and high import

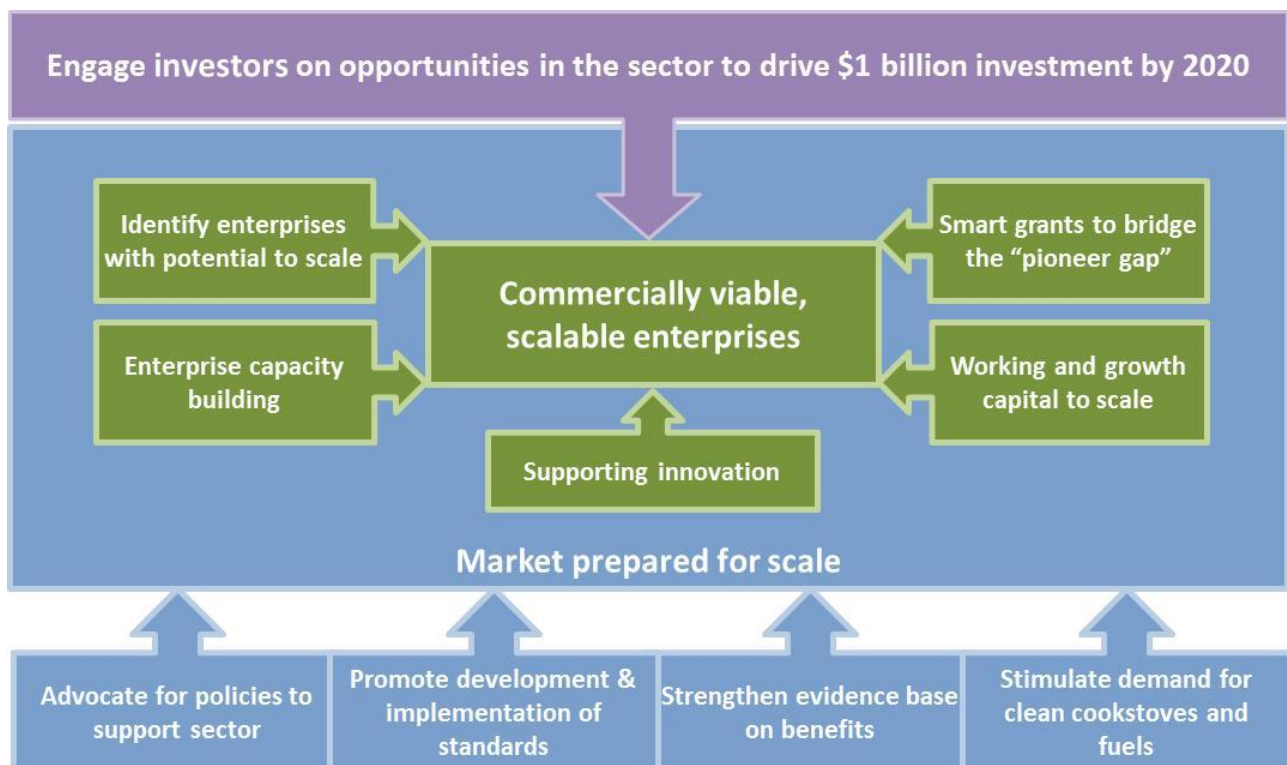


tariffs for raw materials and finished products is a higher risk and tough proposition for investors.

- **Lack of ‘investment ready’ businesses:** Most clean cooking enterprises are at an early stage of development and need patient capital as well as business development assistance. Capacity building needs depend on the enterprise and range from marketing strategy to streamlining manufacturing to budgeting and business planning. Few impact investors are prepared to provide money and technical assistance to early stage companies.
- **Lack of knowledge about the clean cooking sector:** Many investors and financial institutions, including domestic and international banks, as well as microfinance institutions, have little or no knowledge of the clean cooking sector.

### Alliance Strategy to Drive Investment

In order to increase investment to grow the clean cooking sector the Alliance is working to prepare the market for scale, support the development of commercially viable and scalable enterprises, and raise awareness in the investor community on the opportunities in the sector.

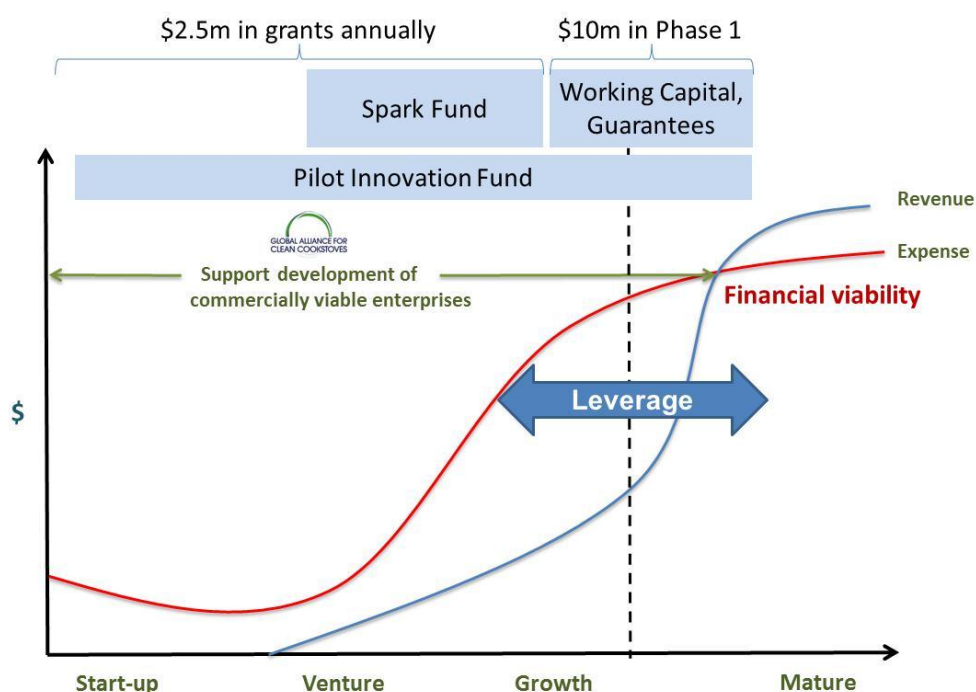


## Preparing the Market for Scale

The Alliance is engaged in a variety of activities to generate demand for clean cooking solutions and develop a market enabling environment. To promote an enabling environment the Alliance is engaging national and local government stakeholders, as well as funding research to build the evidence base for the benefits of stoves. To generate demand for clean cooking solutions the Alliance is undertaking various activities, including studies to better understand consumers and marketing and awareness campaigns. A key priority for the Alliance is the development and implementation of international standards via the International Organization for Standardization (ISO) and the development of a global network of centers for stove testing. In addition, the Alliance has fostered the development of interim standards that define tiers of performance and interim standardized reporting guidelines.

## Developing Commercially Viable, Scalable Enterprises

Most clean cooking enterprises are at an early stage of development and require business capacity building as well as patient capital. In a recent *Stanford Social Innovation Review* article, Monitor Group and Acumen Fund explore solutions for bridging the so-called ‘Pioneer Gap’ – the dearth of impact investors willing to invest in early stage businesses, preferring instead to invest once commercial viability has been established. These organizations suggest enterprise philanthropy, the use of grants to bridge the gap between startup and scale, as one possible solution. The Alliance has adopted this approach, using grants for capacity building and investment to develop commercially viable, scalable enterprises. The diagram below shows the financial products the Alliance has designed to enable enterprises at different stages of development to grow and leverage further investment.

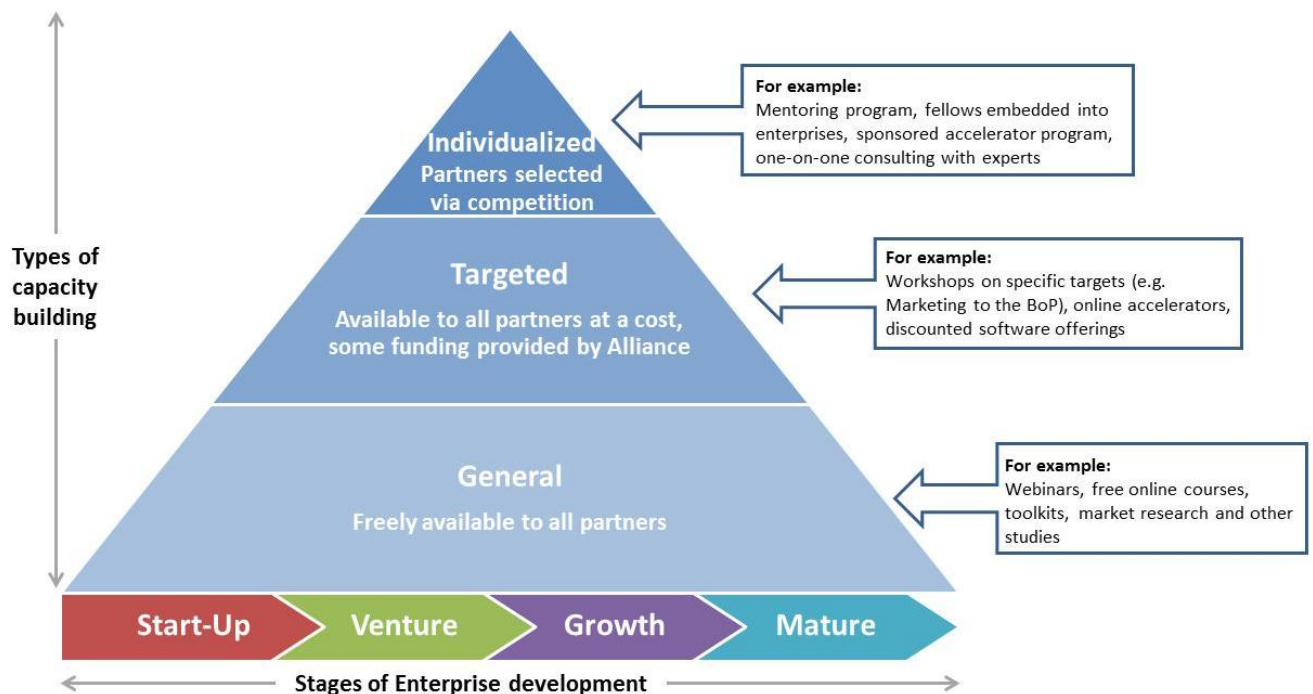


### *Identify Enterprises with the Potential to Scale*

The Alliance is tapping into its 700-member strong partner base for a pipeline of enterprises with the potential to scale. In addition the Alliance will develop partnerships with organizations that work with social enterprises, such as the Sankalp Forum and the Global Social Benefit Incubator, to continue to identify promising new clean cooking businesses.

### *Enterprise Capacity Building*

Many Alliance partners have strong businesses, but need help with strategic planning and implementing systems that allow them to manage the scaling process. Additionally, many enterprises find it difficult to access resources such as accelerators, mentoring, and help with grant and investor proposals. The Alliance is developing a range of capacity development interventions to complement its direct investments in enterprises. Capacity building opportunities will be tailored to enterprises at different stages of development<sup>1</sup> and will range from webinars and online materials available to all Alliance partners, to mentoring and one-on-one consulting with experts available to partners selected via competition.



<sup>1</sup> Please see Appendix 1 for characteristics of social enterprises through the growth stages

### *Supporting Innovation*

Innovations are needed to provide solutions to challenges across the value chain – from product design and technology improvement to consumer finance. However, few 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. Innovation grants can be instrumental in moving the sector forward by supporting proof of concept for potentially game-changing ideas and sharing lessons learned from both successful and failed innovations. In 2012, the Alliance released the Pilot Innovation Fund (PIF) to finance innovative approaches designed to strengthen supply and enhance demand for clean cookstoves and fuels. Under the PIF, grants of up to \$75K are awarded to enterprises at any stage of development. In return for seed capital to finance and pilot these innovations, recipients are required to document lessons learned and share their results to advance awareness of scalable solutions in the sector.

### *Smart Grants to Bridge the Pioneer Gap*

Few impact investors are prepared to provide money and technical assistance to early stage companies, preferring instead to invest once commercial viability has been established. Grant investments are needed to reduce the risk to investors and bridge the pioneer gap – the dearth of impact investors willing to invest in early stage businesses. In 2012 the Alliance launched the Spark Fund – a grant facility designed to help enterprises reach commercial viability and mirror early stage investment scale by funding business capacity development and growth. The Spark Fund aims to invest \$2 million in grant capital annually in enterprises with scalable approaches that have the potential to transform the sector through their success. Spark grants of up to \$500K target the specific capital and capacity development needs of enterprises across the value chain at the venture and growth stages. Grantees are expected to leverage Spark funding to attract additional capital to fully scale their enterprises.

### *Working Capital*

A key challenge for many cookstoves and fuels businesses is limited access to working capital. Many traditional sources of capital, such as loans or lines of credit from large domestic and international banks, are out of reach for early stage or smaller entrepreneurs who lack sufficient collateral or financial history for a loan. Even if these enterprises are able to secure a commercial loan, interest rates are prohibitively high and therefore restrictive to the organization's growth. A Working Capital Facility is currently being structured with Deutsche Bank's Community Development Finance Group that will deploy working capital loans and loan guarantees to enterprises that are not able to access more traditional forms of debt financing. This facility will make available flexible financing at a concessional yet sustainable interest rate to cover the ongoing operating costs and credit losses of the facility. The Alliance will also partner with local lending institutions, providing guarantees to unlock working capital financing to the clean cooking sector.

## Engaging Investors to Broker Investment

The Alliance is engaging with the investment community to raise awareness of the opportunities in the sector and broker as many deals as possible. This engagement includes attending selected impact investor fora and showcasing profitable investments in the clean cooking sector. In addition the Alliance has created a searchable database of impact investors interested in energy and the environment in order to connect our private sector partners with investors.

Appendix 1:

## Characteristics of Social Enterprises Through the Growth Stages

Start Up	Venture	Growth	Mature
<ul style="list-style-type: none"><li>•Sales are minimal or may not have occurred yet</li><li>•Core technologies or service offerings are still in development</li><li>•Consumer needs are still being assessed</li><li>•Customer sales trials</li></ul>	<ul style="list-style-type: none"><li>•Sales begin but do not sustain the organization's operations</li><li>•The business model and plan are still being developed and adjusted based on realities of the market</li><li>•Cost, value and pricing are still in flux</li><li>•Educating the consumer- below the line marketing activities</li></ul>	<ul style="list-style-type: none"><li>•Sales sustain initial operations but not growth</li><li>•Business model is functioning and focus is on expansion into new geographies or product/ service offerings</li><li>•Organization has implemented some systems to build organizational capacity to scale</li><li>•Company has built up consumer demand</li></ul>	<ul style="list-style-type: none"><li>•Company is profitable</li><li>•Brand is developed and recognizable</li><li>•Systems, assets and talent are in place or company continues to invest in these areas</li><li>•Company expands new geographies or product/ service offerings to capitalize on opportunities</li><li>•Strategic planning is embedded in the business activities</li></ul>



## Appendix 2: 2012-13 Enterprise support

The Pilot Innovation Fund - In March 2013 the Alliance provide six grants of approximately \$50K each to the following enterprises:

**UpEnergy-** UpEnergy works with technology manufacturers and local distributors to deliver high-quality energy-efficient cookstoves to the energy poor at affordable prices. UpEnergy specializes in creating effective carbon-financed distribution channels that deliver life-altering technologies to the developing world. In just over a year, UpEnergy has distributed over 20,000 stoves in Uganda, making them the largest distributor of wood cookstoves in the country. UpEnergy will use their Pilot funds to test distribution of cookstoves through Savings and Credit Cooperatives (SACCos). Specifically, funds will be used to provide financing through the SACCos to the end consumer, who can then purchase a clean, efficient stove over a series of payments.

**Potential Energy** - Potential Energy has distributed over 18,000 stoves via humanitarian efforts in Darfur since 2003. They plan to use Pilot funds to convert their successful distribution model into a social enterprise, selling the stoves at an affordable price using consumer financing. During their recent transition to a market- based distribution approach, Potential Energy determined an unfulfilled demand and willingness on the part of consumers to pay for stoves if they could pay over time. Potential Energy's revolving loan fund will address this need, allowing distributors to provide financing to consumers.

**Greenway Grameen Infra (GGI)** - GGI is a manufacturer and distributor of cookstoves in India. They will use their Pilot funds to develop and implement a creative marketing campaign to complement their current marketing strategy. Over the course of the year, GGI plans to add 80 dealers to their network as a result of the marketing campaign. The marketing strategy will target retail distribution partners, developing brand recognition and educating consumers about the benefits of the cookstove.

**Solar Sister:** Solar Sister is an award winning social enterprise using an innovative gender-inclusive and market- based business model to empower African women as engines of a clean energy revolution. They combine the breakthrough potential of clean energy technologies with a women-driven direct sales network to bring energy to off-grid communities in Africa. Solar Sister will use Pilot funds to add clean cookstoves to their current product basket, offering customers a unique "home economics" solution through a range of modern lighting, phone charging, and improved cooking choices in Nigeria. Specifically, funds will be used for the purchase of stoves for distribution and training of women micro-entrepreneurs in Nigeria.

**Sustainable Green Fuel Enterprise (SGFE):** SGFE is a manufacturer and distributor of char briquettes in Phnom Penh, Cambodia. They will use the Pilot grant to test a hub and spoke distribution model for the distribution and franchising of char-briquettes. Specifically, funds will be used to create a distribution center in Sihanoukville, create a more accessible distribution center in Phnom Penh, and improve production processes in order to serve multiple distribution

points. SGFE seeks to create entrepreneurs with their revised distribution model and increase availability of char briquettes in Cambodia.

**Improved Cook Stoves for East Africa Ltd (ICSEA):** ICSEA is a fair trade carbon scheme that holds the first of its kind regional Programme of Activities (PoA) for Kenya, Rwanda, Uganda, and Burundi under the CDM Gold Standard certification scheme for carbon credits. In order to manage the large number of component project activities (CPA) registered under the PoA umbrella, ICSEA will use Pilot funds to create a robust electronic platform that can be adapted and scaled up as the ICSEA PoA grows. Specifically, the funds will be used to develop a unique database that fits the regional carbon monitoring needs of ICSEA under the Gold Standard.

**The Spark Fund** - At the beginning of June 2013 the Alliance awarded \$2 million in grants to five enterprises:

**Burn Manufacturing Co. (BMC) in Kenya:**

BMC has developed a facility in Nairobi to assemble cookstove kits produced in China. In 2013, BMC will start the development of a complete manufacturing facility in Kenya and will transition, over a 12 month period, to full local production. BMC will also utilize Spark funds to purchase manufacturing equipment, and leverage up to \$4 million in loans from General Electric and the Overseas Private Investment Corporation (OPIC) with a production target of 237,000 cookstoves. <http://burnmanufacturing.com/>

**EzyLife in Kenya:**

The Spark grant will help EzyLife supply 40,000 cookstoves to the Kenyan market in 2013, and significantly reduce EzyLife's financing costs, thus making clean cookstoves more affordable and enabling the company to leverage additional investments to sell another 70,000 cookstoves within 12 months. The grant will also be used to recruit and train distribution channel partners, and leverage EzyLife's existing marketing activities. <http://www.ezylife.com/>

**Global Village Energy Partnership (GVEP) in Kenya:**

With the Spark Fund, GVEP will provide capacity building to cookstove entrepreneurs to improve their technical, business and marketing skills, and establish a seed fund for producers to invest in expansion activities. The Spark Fund will help GVEP leverage \$800,000 of Swedish International Development Cooperation Agency (Sida) funding focused on supporting improved cookstoves in Kenya; increase the impact of the Capital Access for Renewable Energy Enterprises (CARE2) project; and provide vital support for technical capacity building, better product design and manufacturing practices, and evaluation of potential of carbon finance. <http://www.gvepinternational.org/en>

**Impact Carbon in Uganda:**

With the Spark Fund, Impact Carbon will establish and support a national network of distribution and retail partners that will help drive a thriving cookstove market in Uganda. Impact Carbon will partner with BioLite to implement a full-scale product launch of BioLite's HomeStove, a new fan stove that reduces household air pollution while enabling phone and light charging.

Impact Carbon will launch innovative marketing campaigns to establish product awareness and consumer finance programs to drive adoption and long term usage. Impact Carbon's goal is to leverage initial support from the Spark Fund to achieve commercial viability after year two of the program. <http://impactcarbon.org/>

**Relief International—Gyapa Enterprises in Ghana:**

Gyapa Enterprises will use the Spark Fund investment to expand the Ghanaian clean cookstove sector by leveraging its brand and proven platform to produce, distribute, and market fuel-efficient stoves at scale. Gyapa Enterprises is developing a new charcoal stove model with improvements in both fuel efficiency and emission reductions that will be trademarked by Gyapa Enterprises. Once the stove is developed and tested, Gyapa Enterprises will use its platform to scale localized production, distribution and sales of the new cookstove. <http://www.gyapa.com/>