

Barefoot Angels Fund and Micro Supplier Credit

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Website:

<http://www.barefootpower.com>

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Project Summary

Elevator Pitch

Concise Summary: Help us pitch this solution! Provide an explanation within 3-4 short sentences.

Barefoot Power, a renewable energy company, with Oikocredit, a major Dutch microfinance investor, and the European Infrastructure Fund, have formed an innovative trade finance fund that turns micro-enterprise investments into 20-foot containers of innovative micro businesses. Investing at the top of the supply chain, impact investors fund 80% of invoices Barefoot sources from SME importers.

About Project

Solution: What is the proposed solution? Please be specific!

Microfinance typically involves lending cash from Western countries to hundreds of microfinance institutions, then to millions of micro and small enterprises MSMEs globally. \$100 borrowed from investors must result in \$100 received by the entrepreneur, and costs are covered from interest of 15-50% p.a. Business created by these loans is primarily from the local market - buying a tractor, a sewing machine, a cow. The Barefoot Angels Fund (BAF) supports delivery of innovative new products and businesses to emerging markets, reducing poverty. Starting with solar LED home lighting systems to bring pro-poor cleantech to market and displace kerosene lighting for up to 1.5 billion of the poor, BAF investors change their cash into businesses in world class, innovative factories in China via Barefoot Powers' suppliers, and ship containers to MSMEs, who extend businesses, not cash, to entrepreneurs via 3 scales of model: Company in a Container to an SME which ships Businesses in a Box to regional depots, who extend Businesses-in-a-Bag for micro entrepreneurs. However, this loan, being product, not cash, can change in value as it is extended - supply chain partners make profit from distribution, rather than interest - the \$100 from the investor may be worth \$200-300, not just \$100. This blending of supplier credit and microfinance, or micro supplier credit, has unique characteristics: a) short term of 60-180 days that limit portfolio-at-risk; b) can lend at 0% interest due to profit margins of distribution; c) perfectly fits Sharia lending in Muslim regions; d) loan limits can be increased easily as demand increases, allowing the MSMEs to scale, and most importantly, it links MSMEs to global supply.

Impact: How does it Work

Example: Walk us through a specific example(s) of how this solution makes a difference; include its primary activities.

The global poor will not escape poverty without access to electricity and modern energy services and technologies. Clean energy reduces the risk of burning property and people, fumes in eyes and nose during studying for students and women doing household chores, increases productive hours in the evening, powers information technologies like mobile phones, delivers environmental benefits via carbon emission reductions and increased belief in villagers that a brighter future is possible. Quantified benefits have already been mentioned elsewhere in this application.

About You

Organization:

Barefoot Power

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Organization Type

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The information you provide here will be used to fill in any parts of your profile that have been left blank, such as interests, organization information, and website. No contact information will be made public. Please uncheck here if you do not want this to happen..

Your solution

Country your work focuses on

If multiple countries, please list them here. If your solution targets an entire region, please select it below

Region(s) your solution focuses on:

Range of turnover in your target firms, in USD

Less than \$1 Million, \$1-5 Million.

Average turnover in USD of your target firm

\$500,000

Number of employees in your target firms

5-24.

Average number of employees of your target firm

15

Specify the size, average and range of expected loans or investments in each target firm

Loans range from \$10,000 to \$500,000, averaging \$200,000. These loans are made for 4-6 months at a time, allowing SMEs 60-90 days credit to sell innovative new microbusiness solutions designed by Barefoot Power, starting with cleantech solutions that were recently awarded for quality by the IFC's Lighting Africa. When the container has landed, the SME importer can extend the credit that we offer to micro entrepreneurs via micro supplier credit, instead of cash loans that are typical for microfinance investors that are sent via financial institutions. One container per SME can finance 100 entrepreneurs. This "Venture Debt" model allows SMEs and micro-entrepreneurs to grow from startup level and scale quickly with successful sales (we normally see 100% growth rates per 6-12 months)

What stage is your solution in?

Operating for 1-5 years

Innovation

How does your proposed innovation leverage public intervention in catalyzing private SME finance?

Our seed funding of \$2 million has been raised from global angel investors, foundations and microfinance/impact investors. Traditional sources of SME finance and development finance, including banks, venture capital and donors, have taken 5 years to slowly participate in this innovative model, and each \$1 invested to date by public institutions has allowed us to mobilize \$10 of angel and social capital. Similar efforts to mobilize enterprise investment such as the Enterprise Challenge Funds in Africa (DFID) and Asia-Pacific (AusAID) have only managed to stimulate \$2-3 per \$1 of grant assistance. In the USA, the New Markets Venture Capital (NMVC) Program only leveraged \$1 for each \$1 of grant. Therefore, benchmarked against other programs, we are very effectively raising private capital with a small amount of public funding.

1.5 billion people burn \$10-30 billion per year in kerosene lamps globally - 300 million households x \$1/week. Public expenditure in rural electrification is only \$0.5-1 billion / year, and the rate of electricity access is not exceeding population growth rates, meaning little real progress is being made. This expenditure must be leveraged, and hundreds of thousands of MSMEs are critical partners in delivering clean energy solutions to tens of millions of households. White LED lighting products have been designed by Barefoot to pay back in 6-12 months, and we have conclusively demonstrated in multiple markets that the poor can buy these assets and stop burning their money in lamps, triggering a boom in micro energy

similar to mobile telephony, which was a nimbler private sector response than publicly-funded copper wire, old-style phone systems.

Solar power has been subsidized for years - this can now be reduced to zero for the richer of the poor, at better targeted to the poorest of the poor. Public sector first-loss guarantees for Barefoot Angel Fund loans will trigger even more angel and impact investors - currently, Barefoot Power equity and long-term investors offer this guarantee, but no default has been made in the first 2 years.

The Barefoot Angels Fund has been presented at the Australian Association of Angel Investors, and has active support from their lead angels. Based on this success, BAF was presented at the world's first World Business Angels Association conference, and was the only representation of angel investing from Africa present (most of our business occurs in Africa, where electricity access is very low). Collectively, the angel networks at this conference represented billions of available investment, and just a small % of this "risky" in African investments would result in dramatic change, as each \$100,000 invested leads to 50,000 people gaining access each year to basic electricity. Millions are expected to gain access to electricity via solar and LED lighting in the next 3 years, while investors enjoy double digit interest returns and the option of 6-12 month exits. In the last 2 years, 80% of investors have not exited, but instead, after receiving their interest, renewed their loans to get more electricity to people.

The European Infrastructure Fund and European Investment Bank have granted EU 1 million for paying administration and entrepreneur training costs for the next 18 months, by which time we hope to scale the fund to a level when such grants are no longer required. Capital guarantees for Barefoot Power's network of SMEs are required to increase investor confidence, and result in ten-times leverage of capital.

What barriers does your proposed solution address?

Asymmetry of information, Informality, Lack of collateral, Lack of financial capacity, Lack of SME access to skills / knowledge / markets, Unavailability of financial products tailored to SME needs, Lack of institutional capacity of financial intermediaries, High transaction costs for financial intermediaries to serve SMEs, Lack of competition / incentives for financial intermediaries to serve SMEs, Underdeveloped local capital markets (term local currency funding, exit options for SME equity), General barriers to SME development related to investment climate, Lack of financing to women entrepreneurs, Specific barriers to fragile and weak states.

If you checked any of these barriers, describe how your solution addresses them

MSMEs do not have access to affordable, good quality clean energy solutions as options to kerosene lighting, disposable batteries, poor quality Chinese products, or waiting for the capital-intensive grid to arrive. Barefoot Power uses its knowledge of cleantech and energy efficient lighting and its knowledge of kerosene markets to identify and unleash micro energy markets. Free business development support helps these SMEs plan and execute, including business plan templates and access to free open-source business management software such as www.openerp.com

Our processes are low-documentation, as our first loans are often very small - \$10,000 for an importing SME, or \$100 for a micro-entrepreneur. If the MSME repays this successfully within the expected 1-4 month period, a larger sum can be lent to scale up the business. Time is not wasted in assessing business plan ideas - kerosene lighting is in all countries, so one business plan is used, adapted to local conditions, and learnings are propagated around all partners. Rapidly establishing a MSMEs to communicate well, secure first sales, place deposits and repay the loan replaces higher documentation due diligence procedures and business plan assessments - the BAF often writes the business plan for the MSME to fill out local details.

The product in the container acts as the collateral - as its value increases, separate bank accounts are established, and BAF staff are embedded as "policemen" into the importers to help sales and keep an eye on financial controls and enhance financial capacity (our open source accounting software, rolled out for free, will also help)

With our hybrid structure of both a supplier/identifier of innovative technologies that can reduce poverty, and a debt investor in MSMEs, BAF makes its profit from distributing containers of product to market, enabling us to charge nothing to investors for fund management, nor to MSMEs who we train in micro-energy business. As other businesses are found that are highly replicable, brainchilds of social entrepreneurs like us, we can add on non-energy businesses to this Trade Finance Fund. As investors get braver and extend their loan terms to BAF's MSMEs from 6-12 months to 1-3 years, longer term investments can be made in villages, opening up more possibilities.

Bank and microfinance loans are often of fixed amounts for 1-2 years. Our experience of selling solar and LED lights has shown without doubt that first sales can be tiny, but soar quickly, and exhaust existing working capital. Banks and microfinance loans are suited for established, stable businesses that grow slowly - they are highly unsuitable for high growth rates of 50-200% per year that typify our experiences. Our micro supplier credit / Venture Debt model is tailored to meet the increasing capital needs of the MSME.

Financial intermediaries are unable to link MSMEs to appropriate finance, and their business development services are often relatively expensive, so we provide these services, for free, from our own staff, embedded in major partners, and visiting regularly to minor partners. This competition will decrease the price of such services as other replicate our model.

SME importers can extend the credit they receive as local currency micro supplier credit to micro enterprises. The period of the loan for the SME is only 1-2 months because their customers can sell our products for cash, so currency risk is very limited. Investors' funds are repaid in USD. Local investors will start to replace BAF credit, and women can be targeted.

Impact

Provide empirical evidence of your proposed solution's success/impact at present. If your project is in the idea phase, please provide evidence that speaks to its potential impact

\$2 million of investing capital has already been mobilized, and 500,000 people have gained access to electricity in the last 3 years of our activities, with current growth rate of around 400% per year, and supply gaps indicating that demand from villagers and importers far exceeds supply of capital we currently have at hand. Angel investors worldwide, who invest funds of the appropriate size for emerging market SMEs, are increasing contacting us, as are formal angel investor groups, and after 5.5 years of activity, donors and development agencies are also starting to get involved. 500 entrepreneurs have been trained globally to date, mostly in East Africa and Asia, and 2000 more will be trained during 2010-11, with up to 10,000 likely to be reached by 2015. We expect that 1 million people will have access to electricity by the end of 2010, a goal we set in 2005, indicating very sound knowledge and benchmarking of our model to reality. We predict that 5 million people will gain access to electricity by 2012 and BAF will begin making some non-energy loans, while by 2015, over 10 million people will gain access to electricity. Investors have enjoyed an average of 11.4% returns on capital lent, and not a single dollar of fund capital has been lost, benefiting from the Barefoot Australia Guarantee via equity investors, which we hope will be replicated by public finance in the coming years.

How many firms do you expect to reach?

Approximately 10 firms are involved in the Barefoot Angels Fund to date, including two subsidiaries of Barefoot Power in Uganda and Kenya, to test out new ideas and models in an "in house" environment. These 10 firms onlend to hundreds of micro-enterprises. We have a pipeline of over 100 firms globally interested in this fund and already selling pro-poor cleantech, who in turn can reach thousands.

What is the volume of private SME finance you aim to catalyze?

\$2 million has been mobilized so far. We aim to grow this to \$10-20 million of angel and social/impact financing using \$1-2 million of public sector support. As 100% credit is not offered, these loans will also leverage a similar amount from SMEs, giving a total of \$20-40 million of activated working capital.

What time frame will be required to reach these targets?

Given current invested capital of \$1 million and available \$2 million likely to be activated by late 2010, we aim to raise \$5-10 million of capital by mid-2011 based on the EU grant support already secured, then a further \$5-10 million in 2012-13 to keep up with expected 100-200% p.a. growth rates (current growth rate is around 300-400%). Full capital deployment of \$20-40 million will occur by 2013-15, and will be able to demonstrate savings accumulated by the poor of over \$100 million in this time, due to the 6 month payback of the \$10-20 solar lamp systems, and long life of these assets. In addition, CO2 emission savings will rise from 20,000 tonnes/year now to 50,000 tonnes/year in 2011 worth over \$0.5 million, 100,000-200,000 tonnes in 2012, and up to 500k t/yr by 2015 worth \$5 million

Does your solution seek to have an impact on public policy?

Yes

What would prevent your solution from being a success?

High default rates by SMEs on the credit extended to SMEs would definitely damage the program. Barefoot Power staff work hard on the ground to ensure this does not happen, and have far more daily influence over partners than usual financial models due to our higher profits per transaction in our role as supplier and marketer as well as financial debt provider.

Angel investors and social/impact investors may not invest as expected. However, with our high quality partners like Oikocredit, the European Investment Bank and DOEN Foundation, all experienced microfinance and/or cleantech investors, we believe institutional and individual investors will be confident we have access to the experience required to limit risk. In fact, many of our SME deals (though not all) pass through the very same Credit Committee of Oikocredit that all their other debt and/or equity transactions pass through. This brings decades of experience to the scrutinization of the deal, but Oikocredit is second-to-none in assessing many \$100,000-\$1 million deals - some other microfinance investors have \$ portfolios as large as Oikocredit, but none have the massive network of 700 partners that they do, making the specialists in managing many more, smaller investments, perfect for rapid SME loan assessment.

Sustainability

List all the funding sources that are required for the sustainability of this solution

\$0.5-1 million of public grant funding plus \$2-5 million of first loss guarantees to continue our raising of capital from angel investors and social/impact investors worldwide, which will reach \$5 million in 2011, \$10 million by 2012 and \$20 million by 2015. At this stage, we believe all need for public funding will be relaxed as default rates will demonstrably low, IT infrastructure will be fully operational and tested, and staff costs can be covered from the volume of investments made.

Demonstrate how your proposed solution has the capacity to graduate from dependence on public finance. What is the time frame?

Fund managers typically survive on 2-4% margins, requiring \$50-500 million for minimum size of funds. As part of the supply chain of a single business plan of pro-poor cleantech replicated globally, Barefoot Power is able to generate a 15-25% gross profit in a totally unsaturated market of 300 million households using kerosene lighting, of which we will serve 2-5% by 2015. Our projected staff numbers are around 30 to run the program, of which half are already actively employed already, and running costs for this labour of \$1.5-2 million / year will be account for 7-10% of the gross margin. This implies \$20 million of loans and containers need to reach the market. Capital turnover is twice per year due to the 6 month loan period, so a \$10 million fund is of sufficient size to reach cashflow positive volume, without any additional support. We expect this goal to be reached by 2012.

Demonstrate how your proposed solution will survive a potential loss of its largest private funding source

Our largest private funding source so far is \$250,000, from a total of \$2 million. By "crowd-sourcing" our capital from angel and social investors, we should be able to keep to this 10-15% limit on our biggest investors. Given growth rates of 100-200% per year, a loss of 10-20% of funds will only delay scale-up of the project by 1-2 quarters.

Please tell us what kind of partnerships, if any, could be critical to the greater success and sustainability of your innovation

Strong support from the social capital and angel investor networks will be required, and are already bearing fruit.

Are there non-financial issues that could threaten the sustainability of your proposed solution?

Our major challenge after raising capital to keep up with demand is the human resources to run the project, and IT systems to keep up with the thousands of transactions. Both of these will be firmly addressed with the first EU 1 million grant during 2011.

Please tell us if your proposed solution aims to scale up through a high growth sector, expand immediately to multiple sectors, and/or scale up geographically

We plan to scale up in the high growth sector of clean tech and mobile phone power solutions, expanding geographically from our seed based of 30-40 countries reached already. After 2-3 years and attaining profitable scale, we will start to branch out into non-energy sectors, running first pilots in 2012 and launching formally in 2013.