

Providing clean, affordable electricity for rural Cambodians

Cambodia has one of the lowest electrification rates in Asia – only 17% of households are electrified. Most areas outside of the two main metropolitan regions are not served by the national grid. Instead, what coverage there is in rural areas is provided by 290 Independent Power Producers (IPPs) each operating within a relatively small licensed area. Cambodia also has one of the highest electricity tariffs in the region (\$0.48-\$0.85 per kWh) due to its heavy reliance on expensive and dirty diesel power. These two factors create a significant opportunity for distributed generation using renewable energy sources, as the high tariffs allow renewable energy to be financially viable without government subsidies.



Sun-eee is a Cambodian renewable energy company that addresses both the social problem of low penetration of electricity in rural areas and the environmental problem of reliance on diesel fuel. Sun-eee aims to acquire a number of existing IPPs in this highly fragmented and under-served market. It will generate clean and affordable power in these license areas by converting the existing diesel generators to a combination of biomass and solar technology while also extending the transmission networks to reach additional households. This will enable Sun-eee to offer low-cost, reliable power in these under-served markets and help to improve the lives of thousands of rural Cambodians. Access to affordable power leads to a host of benefits for the community – children are

able to study after dark, hospitals are better equipped to treat patients, schools and businesses can make use of computers and other IT equipment, and families benefit from greater productivity after dark, enabling them to increase their income.

IIX INVOLVEMENT

IIX was introduced to Sun-eee in June 2012. By that point, Sun-eee had conducted a successful pilot generating electricity through a small solar farm and was ready to expand. Sun-eee required expansion capital in order to purchase IPPs and bring its renewable energy solutions to a broader market.

IIX recognized the attractiveness of Sun-eee's model and the potential it had to achieve significant social and environmental impact while also generating financial returns. With the support of the Asian Development Bank's Energy for All program, IIX was able to offer Sun-eee technical assistance in preparation for engaging with potential investors. IIX worked with Sun-eee to refine the company's financial model and investor returns analysis and to improve its investor presentation. IIX also introduced Sun-eee to partner CTI-PFAN, through which Sun-eee received additional mentorship and the opportunity to present at events and gain exposure to a wide universe of investors.

When the company was ready, IIX profiled Sun-eee on its Impact Partners platform and facilitated meetings between interested investors and Sun-eee's entrepreneurial founder, Dr. Sov Leang. These led to significant interest from a number of investors, including both angel investors and investment funds.

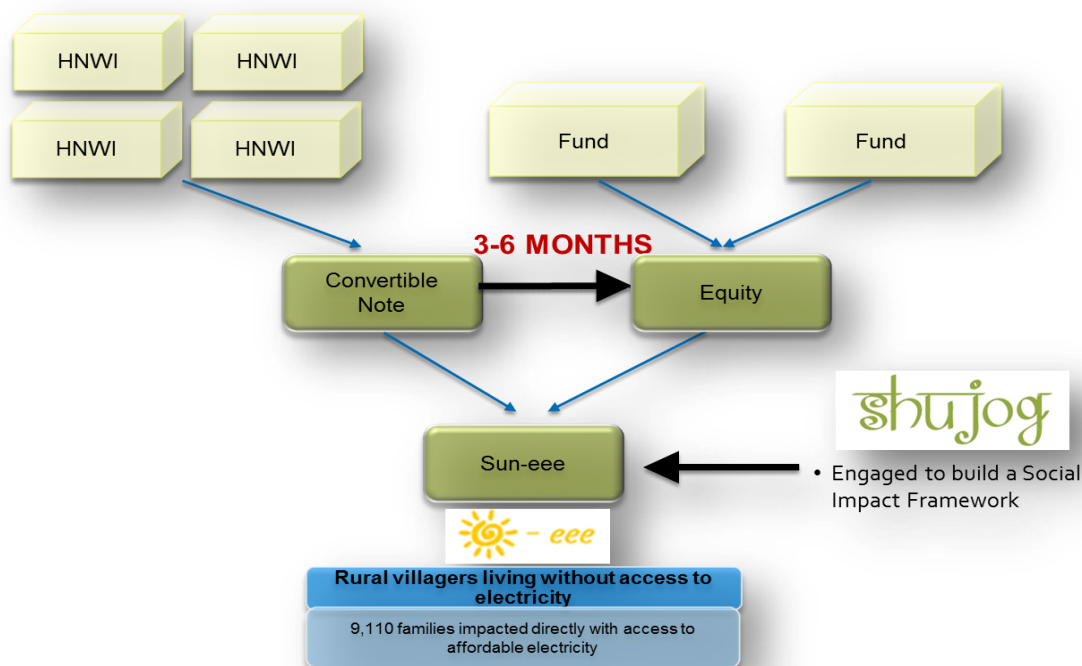
As a first step, Sun-eee closed on \$450K of funding from a group of Singaporean angel investors introduced by IIX. This capital has enabled Sun-eee to purchase its first IPP and commence commercial operations. IIX continues to work with other potential investors with the goal of raising up to another \$3m in capital for Sun-eee. If successful, this will allow Sun-eee to purchase several additional IPPs, convert them to renewable energy, and significantly expand their last-mile distribution networks.



TRANSACTION STRUCTURE

The investment by the angel investors has been structured in contemplation of a subsequent investment by one of more investment funds and with an eye to facilitating such an investment. The convertible notes issued by the company to the angel investors are designed to convert into equity on the same terms as the new investors.

Figure 1: Sun-eee investment structure.



IMPACT OF INVESTMENT

Currently, 83% of Cambodians do not have access to electricity, frequently relying on recharged car batteries for power. Sun-eee aims to electrify 15-20% of rural Cambodia and focus on expanding the “last-mile” transmission network, to bring affordable electricity to the rural poor who cannot afford the high tariffs and connection fees currently charged by IPP operators.

With this investment, Sun-eee will first switch diesel use to solar and biomass, hence producing electricity that is clean and affordable. The affordability will allow Sun-eee to hook up ~500 new households in each license area, bringing prosperity in terms of better facilities, as well as increased ability for the families to study or work past the daylight hours. Additionally, Sun-eee uses renewable energy, specifically biomass and solar, to produce electricity, hence reducing the use of diesel powered plants. This reduces the greenhouse effect and also protects existing energy resources.