

## Greenlight Planet

[www.greenlightplanet.com](http://www.greenlightplanet.com)



### Direct sales of solar lanterns in rural India

**History of organization:** Greenlight Planet is a for-profit company based in the US, started in 2005 with the objective to provide poor Indian households with solar energy, by 3 co-founders combining the necessary expertise. Patrick Walsh, the CTO, worked previously with Engineers without Borders on unelectrified areas of India, and had the initial idea. Anish Thakkar, an American of Indian descent, got involved out of interest for the business side of the project, after several years with ZS, a 2000-person global sales and marketing consulting firm. The founder of ZS believed in the venture from the start and was their first investor, also offering free consulting on their sales force organization. Finally, Mayank Sekhsaria was born in Mumbai and thus had a local understanding of the Indian context. After studying the rural needs on the ground, Greenlight designed a low-cost efficient solar lantern, the Sun King, and set up a manufacturing plant in Shenzhen, China. Commercialization started in 2009 in India, and since then the company has scaled-up quickly through multi-channel distribution in various countries. The company received a \$250k grant by Deutsche Bank Americas Foundation in 2010, the first prize in the Solar for All contest. They also got multiple awards for their products. In April 2012, Greenlight closed an investment round of \$4m with new investor Bamboo Finance, and is planning rapid expansion in the years to come.

**Product/service offering and value proposition:** Greenlight aims at offering “affordable luxury” for Indian rural households. The entry product is the Eco, a solar lamp with several levels of lighting adapted to rural people’s needs, which (1) provides up to 30 hours of light on 1 day’s charge (with an improved charging system for cloudy days), (2) is 2 times brighter than a kerosene lamp, (3) is robust (water-sealed polycarbonate) and has a longer lifespan than most of their competitors (3 years lifespan without maintenance, and up to 5 years). The Eco (including lamp, lithium-ion battery, and 5-volt solar panel) is sold for \$11, which makes it affordable through upfront payment, and enables a payback for customers within 4 months (in terms of kerosene savings). It is sold with 1 year limited warranty and after sales (within or outside of the warranty) is provided by Greenlight Planet’s distribution system, ensuring that all problems are solved within 10 days (in the process of being reduced to one week). The Sun King also exists in premium versions – the Sun King Solo, sold \$18, and the Sun King Pro, which enables mobile charging and costs \$32.

**Value chain:** Greenlight Planet employs 330 people between its R&D and distribution operations. Manufacturing is done in China. The Sun King is then distributed along 3 main channels: direct sales force in Orissa, Bihar, Uttar Pradesh and soon other parts of India, and 15 countries in Africa; via NGOs in India; and through bulk sales to distributors worldwide.

- For direct sales, Greenlight Planet employs “Team Leaders” (TL) who are in charge of recruiting, training and coaching part-time sales persons. These local salesperson – called Saathis – are chosen among “known trusted faces” in the villages; they must also be middle-income persons looking to earn extra money. They then earn commissions on sales (on average \$40/month for about 3 hours of Greenlight work per day) that supplement their main income. TLs encourage them to go beyond their own village so that they cover an area of several villages. The sales organization is pyramidal, with state level Zonal Business Managers overseeing Regional Sales Manager (RSM) in charge of District Sales Managers (DSM) who finally oversee TLs.
- NGO sales had initially been piloted in partnership with Pratham, a leading education network also in India. Greenlight minimizes subsidized sales or donations by its partners, to avoid undercutting its own market. Sales via NGOs in India represent less than 10% of total sales.
- Finally, Greenlight Planet sells its products in bulk to other distribution organizations worldwide, in particular in several African countries (LightingSA in South Africa, with expansion planned in Senegal, Kenya and other countries). Sales via foreign distributors now represent approximately 50% of Greenlight Planet volumes.

#### Results:

- *Social for clients:* Greenlight Planet reports to improve customers’ health, safety, ability to work at night, enable fuel savings, also create additional sources of income for Saathis, and reduce global CO<sub>2</sub> emissions. Customer satisfaction is proven by the (approximately 25%) clients who come back after a few months to buy a second light.

- *Social for Saathis*: Greenlight Planet provides well paid job opportunities for local people in rural areas, and offers them a sales training that will be an asset for life. As of November 2012, Greenlight had 1,400 Saathis supervised by more than 200 TLs. The sales force is growing rapidly.
- *Scale*: Greenlight Planet reached 500k customers (i.e. 100k lanterns sold) in March 2011, and 2.5m in November 2012, selling 40k to 50k units per month by then. Around 50% of these sales were through the direct channel in India, with penetration rate of up to 70-80% (on average around 30%) in villages where Greenlight Planet is active even though a Solo or Sun King Pro often represents more than one week of income for its clients. Greenlight Planet aims to reach 6m customers worldwide by 2016.
- *Economic*: Operations were profitable before Greenlight started rapid expansion and Greenlight expects to breakeven again within less than 2 years. The economics of the project should keep improving, as economies of scale should lower the lamp cost per unit while newly validated carbon credits under the CDM, should bring additional revenues.

**Exchange rate:** USD 1 = INR 50

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**Contact person for the project:** Anish Thakkar, CEO: [anish@greenlightplanet.com](mailto:anish@greenlightplanet.com)