

Greenlight Planet <> MCPI Overview

About Greenlight Planet

We're on a mission to deliver energy everyone can afford

Greenlight Planet was founded by Patrick Walsh who spent years working with development organizations to bring energy to rural communities. He saw that villagers, users of ubiquitous kerosene lamps, were not charity cases. Rather, they were savvy consumers demanding a better product. He designed and sold the first solar-lantern prototypes in 2006 in India: brighter and healthier than kerosene lamps, but affordable enough so people could purchase without subsidies.

With over 400 employees today, Greenlight Planet is a for profit social business that develops and manufactures honest, reliable solar products designed to help people living off the electric grid. We listen closely to our customers and to each other everyday to improve both our products and our service.



Greenlight Planet in numbers

- Available in 54 countries
- 5.5 million units sold till date
- 2000 Sun King micro-entrepreneurs
- 400 full time employees
- 400 distribution partners

- 20 million beneficiaries
- \$315 million in household savings
- 25% increase in household income
- 75% increase children's daily study time
- 315 million Ltrs. of Kerosene offset

Sun King™ portfolio

Lanterns & home systems ranging from PHP 549 to PHP 7499



Sun King™ Pico

Sun King™ Pro AN

Sun King™ Pro 2

Sun King™ Home 60

Sun King™ Home 120

	Sun King™ Pico	Sun King™ Pro AN	Sun King™ Pro 2	Sun King™ Home 60	Sun King™ Home 120
Brightness	25 lumens	120 lumens	160 lumens	100 lumens x 3 lamps	200 lumens x 3 lamps
Kerosene lamp comparison	3X brighter	12X brighter	16X brighter	30X brighter	60X brighter
Run-time	6 – 72 hours	8 – 45 hours	6 – 36 hours	5 – 24 hours	5 – 24 hours
Mobile charging	-	USB mobile charger	Dual USB mobile charger	USB mobile charger	USB mobile charger
Solar Power	350 mW	2.7 Watt	3.3 Watt	6 Watt	12 Watt
Battery lifetime	5 Year LFP battery	5 Year LFP battery	5 Year LFP battery	5 Year LFP battery	5 Year LFP battery
Warranty	2 Year	2 Year	2 Year	2 Year	2 Year
Retail Price	PHP 549	PHP 2,499	PHP 2,849	PHP 5,649	PHP 7,499

Families using Sun King report a 15% increase in savings, due to lower spends on kerosene, candles and poor-quality lamps

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EVERYONE
CAN AFFORD



Typical Sun King™ customers save \$4 or \$5 per month on lighting expenses, meaning Sun King pays for itself within six to nine months.

Sun King users report 25% increase in income, thanks to extended working hours

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For many off-grid families around the world, the work day stops when the sun goes down. With Sun King™, small businesses are able to stay open longer, increasing their monthly income.



Photo credit Luciérnaga

Families report a 75% increase in daily study time after purchasing a Sun King

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Kerosene lamps are dim and expensive to operate, meaning studying at night in under-electrified areas is often too expensive for families to bear. This often means there aren't enough hours in the day for school, study and play.

With Sun King's bright, safe and abundant light, families get back 3 hours of productive time each night—room for children to study, play and grow.



Greenlight Planet works with 40 Banks and MFIs in 11 countries today



Increased client affinity

- 1 Solar financing programs allow banks and MFIs to deliver additional value for clients by making innovative, quality-vetted solar products available. After purchasing a Sun King™ clients save significant money each week on kerosene or batteries, increase their earnings and see witness increased child study time. High client satisfaction with Sun King engenders good will with the organization

Enhanced profitability & return on capital

- 2 In addition to earning 6 to 12 months of interest income on the loan increment, banks and MFIs typically earn upto 15% of the product value upfront as a marketing commission. In total, this delivers 2 to 3X higher income on debt capital deployed compared to core loans, while providing a valuable social service with minimal or no extra operations cost.

Increased loan officer income

- 3 While loan officers typically spend only 5 to 10% of their time marketing solar products, cross sell programs create opportunities to increase loan officer income through sales incentive programs. Greenlight works with MFIs to create and administer effective cross sell incentive programs which reward loan officers for results while balancing organizational objectives and values.

Competition

- Sun King competes with kerosene lanterns, candles, unbranded solar/battery torches at retail counters and customer homes.
- Sun King outperforms all alternatives in quality, performance and suitability.

	Kerosene lantern	Candle	Unbranded solar/battery torches	Sun King
Brightness	10 lumens	20 lumens	20-200 lumens	30-160 lumens
Battery technology / life	NA	NA	Lead acid 1-6 months life	Lithium Ferro Phosphate 5 years life
Warranty	NA	NA	No	2 years
Cost	\$2 per month (for kerosene)	\$3 per month	\$5-50	\$8-79
Water Resistance	NA	NA	No	Yes
Unbreakable	NA	NA	No	Yes
Product Failure Rate	NA	NA	65%	1.8%
Price for Entry-level lantern (30 lumens)	NA	NA	\$5	\$8
Price for Mobile-charging lantern (120 lumens)	NA	NA	\$18	\$29
Price for Entry-level Home System (3x100 lumens)	NA	NA	\$50	\$79

MIT's CITE evaluation of solar lanterns rates Sun King above all other brands



Figure 2-1: Solar Lantern Comparative Rating Chart

CITE SOLAR LANTERN EVALUATION: SUITABILITY

product information				product attributes								features	
make/model	overall score	cost (usd)	type (handheld/desktop)	runtime on high setting		charge time		brightness	task lighting	ambient lighting	luminous range		water resistance
				hours	score	hours	score	score	score	score	score		score
SunKing Pro	85	\$39.95	H/D	13.1	●	8.7	●	●	●	●	○	●	● ● ● ● ●
WakaWaka Power	85	\$79.99	H/D	21.2	●	17.7	○	●	●	●	○	○	● ● ● ● ●
d.light S300	77	\$49.95	H	6.1	○	13.3	●	●	●	●	●	○	● ● ● ● ●
SunKing Solo	67	\$29.95	H/D	22.1	●	13.4	●	●	●	●	○	●	● ● ● ● ●
WakaWaka Light	59	\$39.99	H/D	18.1	●	19.6	○	●	●	●	○	●	● ● ● ● ●
Firefly Mobile Lamp	58	\$36.99	D	7.5	○	8.7	●	●	●	○	●	●	● ● ● ● ●
SunKing Eco	50	\$19.95	H/D	18.1	●	8.2	●	○	○	○	○	●	● ● ● ● ●
ASE Solar	50	\$60.00	H	12.5	●	19.0	○	●	●	●	○	○	● ● ● ● ●
d.light S2	43	\$14.17	D	12.0	●	13.7	●	●	○	●	●	●	● ● ● ● ●
d.light S20	42	\$17.55	H/D	11.8	●	9.8	●	○	○	○	○	●	● ● ● ● ●
UniteToLight	29	\$20.00	D	10.4	●	17.9	○	○	○	○	○	○	● ● ● ● ●

features

- battery charge indicator: Device notifies user that the battery is receiving a charge.
- end of charge indicator: Device notifies user that the battery has completed charging.
- device charges from ac: Device not only charges from the sun but also from AC power.
- mobile phone charger: Device includes the ability to charge mobile phones.

attribute definitions

- run time on high setting: Length of time which a fully charged device can emit usable light when switched on to its highest setting.
- charge time: Time to fully charge a completely discharged device using ambient sunlight.
- brightness: Light intensity from a standard distance, in lux.
- task lighting: Ability of the device to illuminate a tabletop workspace at or above a reference lighting standard.
- ambient lighting: A light's capacity to illuminate a room.
- luminous range: The ratio of a device's brightness on its lowest setting to its brightness on its highest setting.
- water resistance: The ability of a device to resist damage from water.

legend

OUTSTANDING	●	BATTERY CHARGE INDICATOR	🔋
VERY GOOD	●	END OF CHARGE INDICATOR	🔋
AVERAGE	●	DEVICE CHARGES FROM AC	🔌
MARGINAL	●	MOBILE PHONE CHARGER	📱
POOR	○		

notes

- The "Overall Score" shown in this ratings is applicable for Uganda, Africa. For use in other countries, it is suggested that individual attribute scores be a guide to decision making.
- This evaluation may not include all the portable solar lighting devices available in Uganda. Rather, the ratings show a representative sample of products available on the market during the summer of 2013, along with several other models designed for use in the developing world that may be applicable in Uganda.