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PICO-SOLAR LANTERN COST DEVELOPMENT ($ PER UNIT)

Source: Bloomberg New Energy Finance, company interviews, Lighting Africa 2010 report, EERE Solid-State Lighting Program

‘low-cost LED lantern’ – 30-60 lumens, 2.5W panel

- Packaging
- LEDs
- PCB and other electronics
- Plastic casing
- Battery
- PV panel

- 2010: 19.7
- 2015: 4.4
- 2020: 3.1

5 hours of 25 lumen light
This LED may also be slightly brighter (250 vs 211 lumens/W)
OFF-GRID SOLAR MARKET SEGMENTS

From left to right: Renewit Solar Homework Light, Mobisol Famility SHS 19" TV, hybrid mini-grid in Malaysia

Photo source: Lighting Global, German Wikipedia

20 April 2016 - NREL Webinar
Note: assumes 10% repeat sales, 3% loss, repurchase after 3 years and discounts 80% of unbranded products. Livelihood figures assume 10% of customers use products for small businesses. Does not include supply chain livelihoods supported. Data for Bangladesh excludes solar products sold under the IDCOL program.

* cumulative emission reductions over the useful life period of Lighting Global quality-verified products only.

Source: Bloomberg New Energy Finance, Lighting Global, GOGLA
Note: These figures comprise branded and generic solar lanterns and small solar home systems of 10W or less.
The majority of pay-as-you-go firms offer home systems designed to power more than just a few lights and a phone charger.

Note: Pico-PV is defined as <10W.

Source: Bloomberg New Energy Finance, company websites

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EXISTING AND POTENTIAL CROSS-INDUSTRY PARTNERSHIPS

Existing and Potential Cross-Industry Partnerships

Telecom
- Safricom, MTN, Vodafone

Payments
- M-PESA

Banking and insurance

Retail businesses

Mobile connectivity

Payment

Electricity applications

Light

Mobile computing / TV

Water pumps

Cold

Health/Pharma

Beverages
- Coca Cola

Agriculture

Existing

Potential
MTN and Fenix partner to offer free Internet enabled phones on purchase of ultra-affordable ReadyPay Solar Power


SOLARKIOSK and SES Techcom Services sign agreement to bring Internet to underserved communities worldwide

Source: Solarkiosk website, http://bit.ly/1o2qRwa

M-KOPA Branches Out With Practical Products


MOBISOL TESTS SOLAR POWERED DRONE DELIVERY NETWORK


Source: Company websites
UBIQUITOUS PRODUCT MARKET

- High value, premium branding/products
- Modular products or bundled offerings
- Counterfeit enforcement
- Minimum quality and service standards
MARKETS
Renewable Energy
Energy Smart Technologies
Advanced Transport
Gas
Carbon and RECs

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Asia Pacific Service
EMEA Service
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