

# SIMPA ENERGY INDIA

Simpa Networks, Inc.

## MINIGRIDS: PERSPECTIVES FROM INDIA



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Rural India is burning  
**\$2.5 billion**  
of kerosene for lighting per year



**100** million  
households  
with no connection  
to the electricity grid  
or inadequate supply

**500** million  
people  
relying on kerosene  
as primary source  
of lighting

**multi-billion**  
dollar opportunity for  
solar-as-a-service  
in rural India

# WHAT'S WORKING WELL FOR MINI-GRIDS

## 1. Very large off-grid unmet need (and business opportunity)

- 350+ districts with less than 8hrs average energy availability through the grid
- Even if off-grid systems have 20% penetration, installed base 7,000MW+

## 2. Evolving needs of customers with improving prosperity

- Incomes rising fast. Basic lighting paves the way for appliances
- Mini-grids can offer a modular scalable solution

## 3. Ongoing business model innovation

- Deepening history of operations and learnings
- Interesting approaches developing to risks e.g. non-payment, re-powering

# WHAT COULD BE BETTER FOR MINI-GRIDS

## 1. Heavily subsidised kerosene makes alternatives look unattractive

- Govt. intent to de-link subsidy with kerosene, but no action on the ground yet
- Thrifty customers guilty of spending too much on consumption

## 2. Off-grid policy: Recognition of problem but no responses yet

- Central Govt: What happens when grid power arrives?
- State Govt: Still unclear whether to discourage, tolerate, promote

## 3. Financing: Availability and cost both a problem

- Long-term debt (>5 years) and banks don't sit well together
- Cost of compliance and currency hedging

# SIMPA'S VIEW: DIVERSE CUSTOMER NEEDS

	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5
INCOME	Very low (under \$1K/year)	Low, unpredictable (\$1-2K/year)	Low, unpredictable (\$1-2K/year)	Medium, usually predictable (\$2-4K/year)	High, predictable (\$4K+/year)
LIFETYLE MINDSET	No interest in change	Low frustration with status quo	Medium/high frustration, want change but can't afford	High frustration with status quo, taken steps toward change	High frustration with status quo, have taken major steps for change
ENERGY MINDSET	No interest in change	Have not sought alternatives, may buy if affordable and easy to access	Have information on alternative but can't afford them	Have invested in high quality alternatives or plan to soon	Have invested in high quality alternatives to provide energy 24 x 7

Multiple technologies (e.g. minigrids, solar home systems, lanterns) are required to provide universal energy access

# SIMPA'S BUSINESS MODEL

our customers pay for energy service,  
while also building equity in the solar home system



## INSTALL

Customers make a **small down payment** for installation



## TOP-UP

Customers buy **prepaid energy service days** from local agents



## UNLOCK

When customer is ready to buyout, the system **unlocks permanently** providing free energy