

A photograph of three children sitting on the floor in a dimly lit room, illuminated by a single kerosene lantern. They are all focused on writing or drawing in notebooks. The child on the left is a boy in a dark shirt, the child in the middle is a girl in an orange shirt, and the child on the right is a boy in a green and white plaid shirt. The scene conveys a sense of dedication and learning in a resource-poor environment.

**Light in every home**

**Empowering community for self-reliant  
energy by creating a marketplace to trade  
energy peer to peer**

PHOTO CREDIT: SIMON DE TREY-WHITE — FOR THE WASHINGTON POST

# The problem



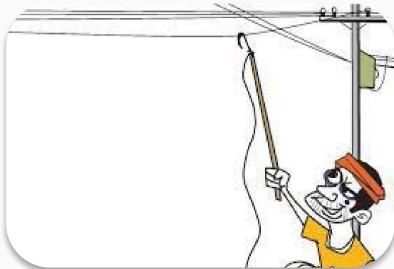
No Light



Transmission loss/Grid Reliability



Transaction Data/Security/Privacy



Theft/Malpractices



DERs' Integration/Cost

# The Solution: Bovlabs Marketplace

## ENABLES:

- Real time marketplace to trade energy and Distributed Energy Resources (DERs) peer to peer
- Local revenue to generate clean energy where it is needed

## RESOLVES:



No Light



DER's Integration/Cost



Transmission loss/Grid Reliability

# The Solution: Bovlabs Platform

## ENABLES:

- Real time visualisations of energy usage and transactions
- Evolve strategies for demand response, energy efficiency and reliability using AI/ML
- Consensus mechanism to negate malpractices

## RESOLVES:



Transmission loss/Grid Reliability



Theft/Malpractices



Transaction Data/Security/Privacy

# Charity through energy sharing

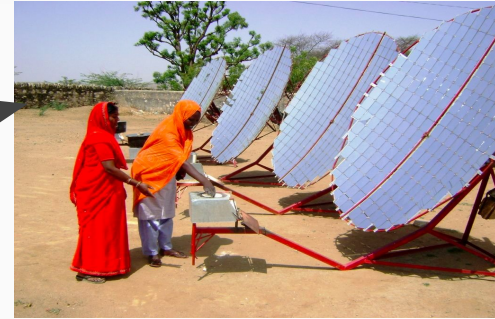


# Eco-system for energy share



Person in US/EU

Contribute / Micro invest  
without third party using energy tokens



Village in India



Village in Africa



# The Technology

Private Blockchain

Smart contract on Ethereum

Real time visualization of energy usage and transactions

# Milestones

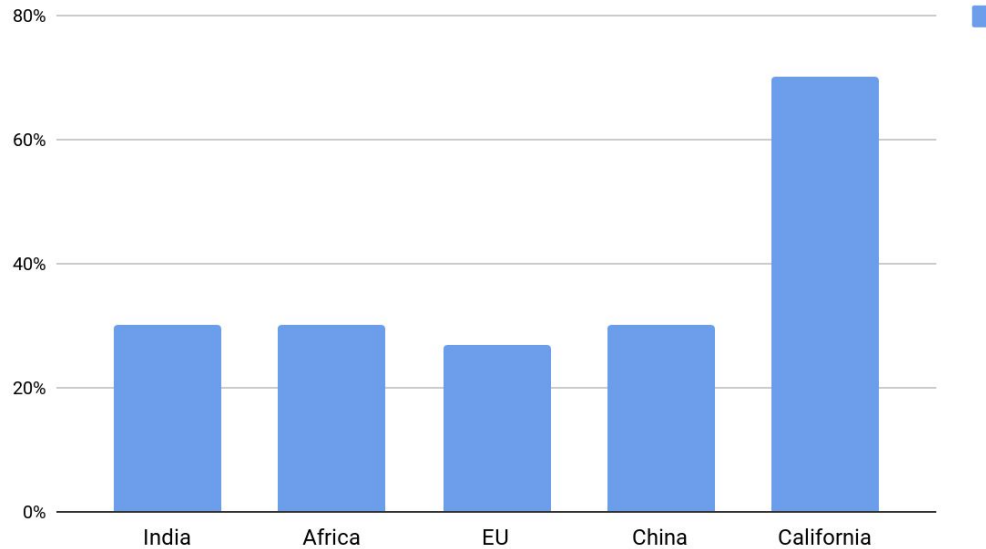


\*Note: NDA signed with Microgrid Developer



# Market Size

Renewable Energy Targets for 2030



# Market Size

## DERs

- Cumulative \$1.9 trillion over 10 years
  - Estimated 100 million EVs by 2030
  - Energy storage growth to \$3.6 billion by 2025
  - Demand Response growth CAGR of 16% by 2021

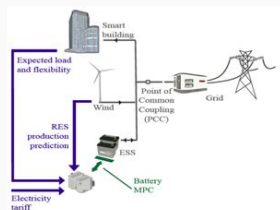
## Microgrids

- Microgrid capacity is expected to reach 7.6 GW by 2024

# Community Energy Revenue Model

## Community Energy Ecosystem

### Microgrids



### DERs



Enables Community P2P trade

Pays transaction fee

## Bovlabs Blockchain

52.579513	INFO	Height	146000	of	36
54.889623	INFO	Height	147000	of	36
56.619026	INFO	Height	148000	of	36
59.119771	INFO	Height	149000	of	36
60.984086	INFO	Height	150000	of	36
63.490697	INFO	Height	151000	of	36
65.212279	INFO	Height	152000	of	36
66.447010	INFO	Height	153000	of	36
67.880196	INFO	Height	154000	of	36
69.373995	INFO	Height	155000	of	36
70.132626	INFO	Height	156000	of	36
71.674327	INFO	Height	157000	of	36
73.852458	INFO	Height	158000	of	36
75.132626	INFO	Height	159000	of	36
76.674327	INFO	Height	160000	of	36
78.852458	INFO	Height	161000	of	36
80.132626	INFO	Height	162000	of	36

# Revenue Model - Rural India



Household

Annual Savings:  
Bovlabs Revenue:

\$50  
\$0.5



Village

\$15k  
\$53

Four Village Pilot

\$62k  
\$200



India (640k villages)

\$10 B  
\$34 M

1% of Market

Annual Savings:  
Bovlabs Revenue:

\$100 M  
\$340 k

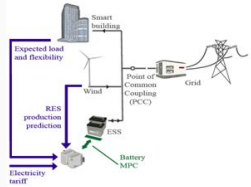
Note: Average village has 325 households with 4 persons per household



# Partnership Ecosystem Revenue Model

## Community Energy Ecosystem

### Microgrids



### DERs



Provides Safe and Reliable Energy

Generates and Consumes Energy; Originates Payment Transactions

## Partnership Ecosystem

- Energy Markets and Participants
- Microgrid Developers
- DER Developers

Creates Real-Time Marketplace

Pays annual licensing and transaction fees

## Bovlabs Blockchain

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72.852458	INFO	Height	158000	of	36

# Financial Plan

Self funded \$50K for PoC/pilot in Texas

Seed round of \$200-250K for pilot expansion to Andhra Pradesh in India, California, Africa

Series A in 2018

# Risks and Mitigations

## **RISKS**

Regulations

Utility Relationships

Investment and support

## **MITIGATIONS**

Local partnerships with DER / Microgrid developers and wholesale markets

System and Technology agnostic solution

Cost efficient solution

Revenue incentive for DER systems investment and support

**Make a difference to our  
Next Generation**

