ACUMEN ENERGY INVESTMENTS: OVERVIEW AND LEARNINGS

ESEF 2018 | CCAC SIDE EVENT
November 2018
We are a non-profit that raises charitable donations to invest in companies, leaders, and ideas that are changing the way the world tackles poverty.
SINCE 2001

$115M INVESTED
113 COMPANIES
270M LIVES REACHED
PATIENT CAPITAL FOR LONG-TERM SOCIAL IMPACT

TRADITIONAL VENTURE CAPITAL
Maximize financial return

PATIENT CAPITAL
Blending social and financial returns for long-term impact

TRADITIONAL PHILANTHROPY
Maximize social impact
TEN YEARS AGO, WE BEGAN USING PATIENT CAPITAL TO INVEST IN ENERGY COMPANIES FOR THE POOR

It was a new market, and we had never invested in energy.

But we believed we could find and support path-breaking entrepreneurs who could tackle energy access in ways that worked for the low-income communities.
SINCE 2007, ACUMEN HAS INVESTED

$22.1M IN

20 POWER, LIGHTING, AND COOKSTOVE COMPANIES, WITH

81L LIVES IMPACTED

$1 invested

RESULTS IN

4 lives impacted
WE NOW HAVE ONE OF THE MOST SUCCESSFUL OFF-GRID ENERGY PORTFOLIOS SERVING THE POOR

Lighting and Power Company
Cookstove Company

* Indicates exited investment
** d.light distributes its product in more than 60 countries

Map Source: United Nations
- = Chinese Line
- = Indian Line
1. Solar Home Systems in New Markets

2. Solar & Hybrid Mini-Grids

3. Innovations for Energy Use
WE KNOW OUR ENERGY PORTFOLIO IS REACHING TENS OF MILLIONS OF PEOPLE

WHAT ELSE ARE WE LEARNING ABOUT SOCIAL IMPACT?
SOLAR LANTERNS HAVE THE LARGEST REACH

But with nearly 1M sold, cookstoves and solar home systems are growing the fastest

Solar Lanterns:
17.2M 🕯️
d.light, Frontier Markets

Cookstoves:
500k 🍲
BioLite, BURN Manufacturing, Frontier Markets, Green Energy Biofuels, Greenway Grameen

Solar Home Systems:
520k 🏠
d.light, Frontier Markets, Nizam Energy, Orb Energy, SolarNow

Mini-Grid Connections:
77k 🌐
Devergy, Husk Power Systems
THE OVERALL ENVIRONMENTAL IMPACT OF OUR PORTFOLIO IS SIGNIFICANT

To date, our investments have resulted in....

...which has helped lead to...

...which is equivalent to more than:

18 million
CO₂ and black carbon emitting kerosene lamps no longer in use

6.4 million
Tons of CO₂ and black carbon emissions averted

1 million
Passenger vehicles driven for one year
OUR IMPACT FRAMEWORK HAS THREE DIMENSIONS

- Poverty Focus
- Breadth
- Depth

Acumen’s Target
**USING LEAN DATA**, WE TALK DIRECTLY TO CUSTOMERS TO FIND OUT WHETHER COMPANIES ARE MEANINGFULLY IMPACTING THEIR LIVES

### WHAT IS LEAN DATA?

<table>
<thead>
<tr>
<th><strong>Business and Social Performance Insights</strong></th>
<th><strong>Impact Performance Benchmarks</strong></th>
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- **Mobile / technology-based**
- **Results in 2-8 weeks**

### SINCE 2014

<table>
<thead>
<tr>
<th><strong>Customer Interviews</strong></th>
<th><strong>Lean Data Projects Completed</strong></th>
<th><strong>Firms, Funds and Foundations Using Lean Data</strong></th>
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<tbody>
<tr>
<td>[Image of a phone] 55k Customer interviews in 15+ countries</td>
<td>[Image of a calendar] 150+ Lean Data projects completed</td>
<td>[Image of a checkmark] 80+ Firms, funds and foundations using Lean Data</td>
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73% of Energy Customers are low-income

"A poor person just like me can easily buy this system because it's on instalments and also on guarantee. It works very well…"

- Khuda Bux, Pakistan, Nizam Bijili
LIGHTING AND POWER CUSTOMERS SAY THEIR LIVES ARE IMPROVING SIGNIFICANTLY

74% of customers say their lives have “improved significantly.”

71% have access to modern energy for the first time.

67% say they feel safer.

1.2 extra hours of light used per day.

One extra hour of study time per day.

31% of customers use their product or service to generate income.
One-third of customers have stopped using traditional stoves.

Customers say they save 7 minutes when cooking the main meal of the day.

64% say they are saving money thanks to their cookstove.

COOKSTOVE CUSTOMERS REPORT LESS DRAMATIC IMPROVEMENTS

49% of customers say their lives have “improved significantly.”

69% say they own an improved stove for the first time.

15% say they feel safer.
CAPITAL FLOWS TO OFF-GRID RENEWABLE SOLUTIONS ARE ON THE INCREASE
THE ENERGY ACCESS SECTOR HAS GROWN OVER THE LAST TEN YEARS...

$300M
Invested in 2017, compared to $50 million in 2012
6x the capital invested in equity and debt into off-grid companies.

800 MILLION LIVES
Have gained energy access in the last decade.

45%
Of 800 million have gained access because of path-breaking startups.
OUR $22.1M HAS BEEN LEVERAGED 5X
Our companies have raised $104.5M from other investors, with activity picking up significantly in the last six months

- Sunfunder Leads $6M syndicated receivables financing facility for SolarNow
  October 23, 2017

- PEG raises US$13.5 million for off-grid home solar in West Africa
  October 26, 2017

- SolarNow Raises $9M from Novastar and Shell
  December 15, 2017

- Orb Energy Raises more than $15 Million USD for Rooftop Solar, with Investments from FMO and OPIC
  January 10, 2018

- Husk Power Systems receives $20 million investment from Shell, Swedfund, ENGIE Rassembleurs d’Energies to scale renewable mini-grid business in Africa and Asia
  January 16, 2018
THUS, WE ASKED: DOES THE PIONEER GAP STILL EXIST?
TO FIND OUT, **OUR METHODOLOGY INCLUDED:**

1. Interviews with 15 Acumen Energy CEOs
2. Over 1,000 data points from our Portfolio
3. Peer reviewed market research
WHAT DID WE FIND?

1. There is still a Pioneer Gap, especially for early-stage equity.

2. The need for capital varies by company stage and sub-sector.

3. Investors and the broader sector can do more to facilitate exits and thus build the market.
WE OBSERVED A PERSISTENT PIONEER GAP

Despite an average Portfolio growth rate of 36%, access to finance remains a challenge for companies at all stages.

When we interviewed the CEOs across our portfolio, 93 percent of whom are operating in the pioneer gap, they unanimously agreed that access to finance is the paramount challenge facing their businesses.
THE OFF-GRID ENERGY ACCESS MARKET FACES A TOTAL **EARLY-STAGE EQUITY GAP**

We need **$11.4 billion** annually of **ALL** types of capital to achieve SDG7.

We need **$4.2 billion** annually of **EQUITY** to achieve SDG7.

We need **$210 million** annually of **EARLY-STAGE EQUITY** to achieve SDG7.

Yet, **less than $16.5 million** has been deployed annually over the last five years.
For example, 67 percent of equity investments—or $518 million of $733 million total equity invested in the solar home system sub-sector since 2012—has been invested in just four companies.
TOTAL EQUITY NEEDS DIFFER BY SUB-SECTOR:
COOKSTOVES AND MINI-GRIDS REQUIRE MOST CAPITAL
WHAT’S NEXT?

1. Continue to build thought leadership, host and participate in convenings, and drive capital to the sector.

2. Develop a data culture in the sector and use data to drive both efficient high impact social enterprises and investments.

3. Strengthen the linkages across the entire finance value chain to enable appropriate de-risking and facilitate exits.
THANK YOU AND Q&A
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