EnPower Capital

*Financing sustainable energy solutions to unleash productive capacity*

Morgan Stanley Sustainable Investing Challenge
April 17th, 2015
MSMEs drive significant growth in Africa

Provide income
Provide employment
Provide majority of goods and services

Lack of reliable electricity is one the biggest obstacles to growth of African MSMEs

85%
Rural African population not connected to the grid

45%
MSMEs identify electricity as a major constraint

2%
Annual lost GDP growth in Africa due to power outages

Addressing energy poverty: an investment opportunity

**INVESTMENT SCALE**
A total of **US$75 billion** is needed to provide electricity access to off grid communities in Africa.

**ENERGY DEMAND GROWTH**
African off-grid commercial and industrial electricity demand to **grow by 234%** by 2040.

EnPower’s starting point: Tanzania’s 2 million underpowered MSMEs

**ECONOMIC POTENTIAL**
Access to reliable energy would unlock **US$1 billion** in annual sales from SMEs.

**INVESTMENT NEEDS**
**US$10 billion** to reach Tanzania’s off grid communities.

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New energy companies provide partial solutions

**Distributed Energy Services Companies (DESCOs)**

- Provide small scale, on-site power generation solutions
- Revenue generating businesses
- Provide affordable electricity
- Use proven and clean technologies
- Residential and commercial end users
DESCOs cannot solve the problem alone

INVESTOR
- Risk / return mismatch
- Limited access to emerging market renewable energy investments
- Difficult to diversify investments
- High transaction costs
- Information gaps

DESCO
- Limited internal resources slows ability to scale
- Unmet financing needs from donors, social investors and commercial banks
- Working capital constraints due to long sales cycle
EnPower Capital addresses the barriers to investment
EnPower Capital provides benefits to all stakeholders

**INVESTOR**
- Risk-adjusted attractive returns
- Diversified energy investments
- Access to due diligence & expertise

**DESCO**
- Increased access to financing
- Improved annual returns
- Release capital locked in assets
- Economies of scale and increased market access

**END USER / MSME**
- Increased productivity
- Access to clean energy
- Affordable energy through periodic payments
EnPower in Operation: Investment Example

A DESCO offering solar charging docks for electronics to micro-entrepreneurs in rural Tanzania.

100 End Users

Monthly Revenues: **US$2.2K**

80% of assets in PGAs

Annual ROI: **19%**

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EnPower Solar Fund I

US$70K Investment in PGAs

>530 End Users

Monthly Revenues: **US$3.5K**

0% of assets in PGAs

Annual ROI: **80%**

- DESCO’s existing capital redeployed from PGAs to scale business
- EnPower Fund Gross IRR: 20%
EnPower in operation: Flow of funds

**Key Features**

- Onshore and offshore escrow accounts
- Waterfall structure
- Reserve account

When reserve account is fully funded, surplus funds go to DESCO.
EnPower in Operation: Full Fund Structure

With a fund size of US$10M, EnPower Capital can support 25 DESCOs to reach 5,000 End Users
<table>
<thead>
<tr>
<th>Investment Size</th>
<th>Required capital: US$50K – 1M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geography and Sector</td>
<td>Operating in East Africa</td>
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<tr>
<td></td>
<td>Provide solar energy solutions for SMEs</td>
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<tr>
<td></td>
<td>Focus on rural and off-grid communities</td>
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<tr>
<td>Business Model</td>
<td>Recurring fees from end users</td>
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<tr>
<td>Current operating stage</td>
<td>Proven business model &amp; existing technology</td>
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<td>Initial user base</td>
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<td></td>
<td>Sufficient potential EUs identified</td>
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<tr>
<td></td>
<td>DESCO growth stage</td>
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<tr>
<td>Management team</td>
<td>Strong track record and local knowledge</td>
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<td>Desire to operate as a long term partner</td>
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<td></td>
<td>Ethical and inclusive business practices</td>
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<tr>
<td>Fund name</td>
<td>EnPower Solar Fund I</td>
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<td>----------------------------------------------------------</td>
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<tr>
<td>Fund size</td>
<td>US$10M called over 3 years</td>
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<tr>
<td>Geography</td>
<td>East Africa (Tanzania primarily)</td>
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<tr>
<td>Target Investors</td>
<td>Impact investors - Energy &amp; SSA focus</td>
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<tr>
<td>Subscription amount per investor</td>
<td>US$ 500K to 5M</td>
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<td>Term of investment</td>
<td>7 years + 1 + 1</td>
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<tr>
<td>Payment structure</td>
<td>Quarterly coupons from year 2</td>
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<tr>
<td>Target IRR to investor</td>
<td>15-17%</td>
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<tr>
<td>Arranger Fees to EnPower Capital</td>
<td>10% of payments from End Users</td>
</tr>
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# Investment Risks & Mitigants

<table>
<thead>
<tr>
<th>Risks</th>
<th>Mitigants</th>
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| **End User Delayed Payments or Default** | • Target MSMEs as End Users  
• Waterfall payment mechanism  
• Reserve Account  
• Target diverse EUs using mobile payments and co-guarantees  
• Explore development finance institution guarantees |
| **Scalability**                      | • Different geographies and renewable technologies  
• DESCOS with strong local presence  
• Market currently underpenetrated – US$75B need |
| **Underperforming DESCOS**           | • Proven business model  
• Robust due diligence process  
• Diversification – numerous DESCOS |
| **Political**                        | • Offshore Escrow Account  
• Prioritize countries with relative political stability  
• Political risk insurance |
| **Foreign Exchange**                 | • Hedging options explored |
Potential Impact of EnPower Solar Fund I

**Economic Impact**

*Annual impact on 5,000 MSMEs reached*

- Reduced lost sales due to electric outages
  - **US$1M**
- Increased productivity from using better tools
  - **US$3.5M**
- Increased productivity from longer working hours
  - **US$1.1M**

**Social Impact**

- Unlocks new business opportunities requiring energy
- Creates jobs at DESCOs in local communities
- Increases electricity availability for households

**Environmental Impact**

- Replaces diesel generators with clean energy
- Reduces use of solid biomass
- Creates momentum for growth of clean energy businesses

Through subsequent funds EnPower Capital expects to reach a scale of US$50-100M in commitments within 10 years.
Thank you from the EnPower Team

Radhika Gupta

Former emerging markets finance professional with six years’ experience in structured finance, capital raising and syndications and transactional experience in power and infrastructure financings across Latin America and Sub Saharan Africa.

Elizabeth Swanton

Former management consultant with seven years’ experience in operational improvement, corporate due diligence and public policy in the transport sector across multiple emerging markets and in non-profit program management in southern Africa.

Juan Pablo Mejia

Former investment banking associate at Credicorp Capital, with transactional experience across the energy industry, including power generation, transmission and distribution. In 2013 joined Plan International to work as volunteer on a mobile banking project to empower rural communities in Zambia

Amrita Kundu

Researcher with prior experience with the World Bank in public policy consulting and project management in sustainable energy and climate finance in Latin America and South Asia.