LANDSCAPE OF INVESTING IN EARLY-STAGE GREEN FIRMS IN SUB-SAHARAN AFRICA

INVESTMENT PATTERNS IN MINI-GRIDS

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Presentation Structure

1. Pattern of investment in early-stage green firms in Sub-Saharan Africa

2. Investors' views and activities in mini-grids



Investment transaction database for early-stage green firms in Sub-Saharan Africa

1.4 billion USD between 2006 and 2017 in



Includes investments in all firms that were considered as early-stage firms at any point between **2006 and 2017** even if they are now considered to be in growth stage

846 investment transactions across



25 deal variables tracked, including year, amount, financing instruments, co-investors, sector, geography, and investees.

570 rounds, involving







>**75 percent** of transactions captured completely across the five most essential variables.

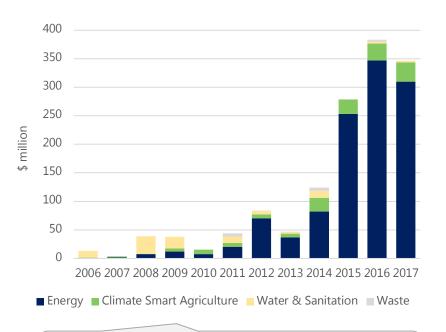
Note:

- 1. Pre-seed, seed, and series A rounds of investment are considered early-stage, and series B or later rounds are considered as growth-stage investment. The database also captured grants.
- 2. An investment round refers to the total investment provided to one company by one or more investors within the same fundraising effort. A transaction refers to an investment provided by one investor to one investee, which may be part of an investment round with multiple investors. Some of these transactions included some estimation.



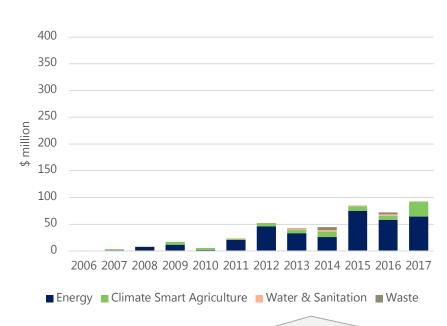
Early- and growth-stage investment in green firms grew rapidly, but growth in early-stage investment has been slower.

Total early- and growth-stage investment into green firms in SSA between 2006 and 2017 (\$ million)



Between 2006 and 2017, \$1.4 billion, including \$141 million in grants, has been raised by green firms in Sub-Saharan Africa in both early- and growth-stage financing deals.

Total early-stage investment into green firms in SSA between 2006 and 2017 (\$ million)

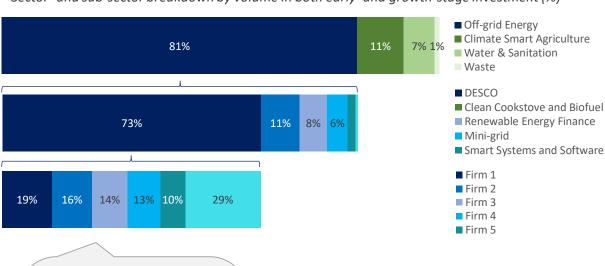


Investment in early-stage green firms in SSA stood at \$448 million (including \$90 million in grants) during the same time period. This is roughly one third of total investment in both early- and growth-stage green firms.



Investment is concentrated in off-grid energy and in East Africa.

Sector- and sub-sector breakdown by volume in both early- and growth-stage investment (%)

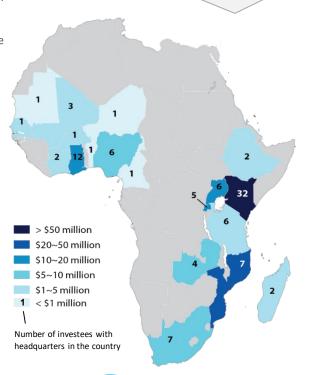


Seven Pay-as-you-go distributed energy service companies (DESCOs) — BBOXX, d.light, Greenlight Planet, M-Kopa, Mobisol, Nova Lumos, and Off Grid Electric — attracted over \$664 million in both early- and growth-stage investment, accounting for almost half of all investment into four green sectors in SSA.

55 investees have headquarters outside of Sub-Saharan Africa:

U.S.: 29 investees, \$169 million;
U.K.: 10 investees, \$ 43 million;
Germany: 6 investees, \$26 million;
Netherlands: 5 investees, \$19 million;
Sweden: 1 investee, \$7 million;
Mexico: 1 investee, \$2 million;
Australia: 1 investee, \$1 million;
India: 1 investee, \$1 million; and
Switzerland: 1 investee, \$0.1 million

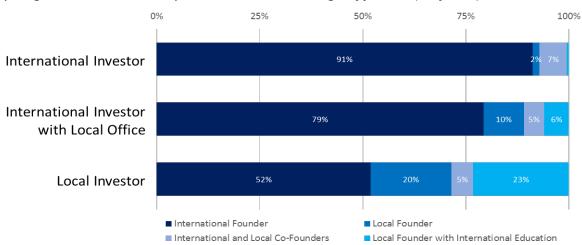
Green firms operating exclusively in East Africa raised over 50 percent of all early-stage investment. Including those operating in East Africa and elsewhere in SSA, the investment volume goes up to nearly 90 percent.





Investment is mainly among international investors and founders.

Early-stage investment volume by investor location and origin of founder (% of total)



Green firms with international founders raised 83 percent of total early-stage investment, while firms with local founders accounted for 7 percent.

International investors were more likely to have invested in international founders. In comparison, local investors were six times more likely to invest in local founders compared to international investors.

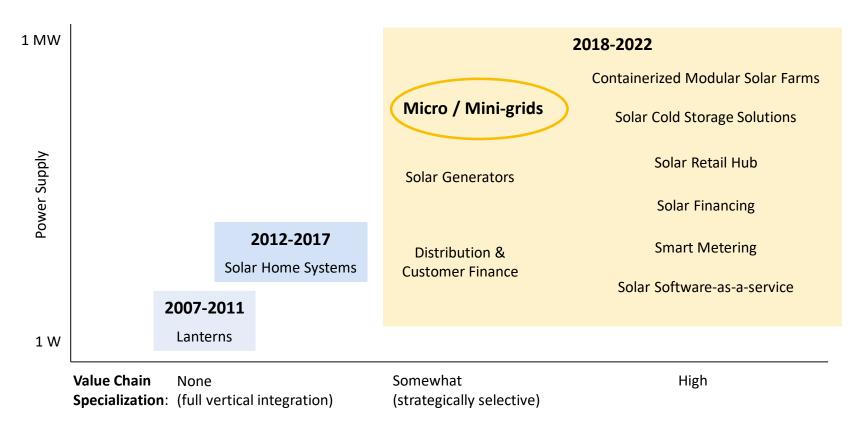


A significant room for expansion and growth still exists in the offgrid energy sector in Sub-Saharan Africa.

Specialization across the value chain in the off-grid solar sector

Rural households

Customers:



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Industry, mines, agri-processing

Investors are largely cautious, but strategic investors have begun to fund mini-grid companies.

Devergy
PowerGen
AUSAR Energy
Powerhive
Virunga Power
KMR Infrastructure
Standard Microgrid
Village Industrial Power
Energicity
Beacon Power Services
Husk Power Systems

Interested ... but

Lack of enabling regulatory environment

Pre-commercial market needs including infrastructure requirements

Set up costs are too high

Low profitability

Lack of standardization of mini-grid technology and distribution systems across different markets

No clear winner among mini-grid companies

Widely different financing needs of companies

Grants from foundations and DFIs



Large-size equity investment from strategic investors, mainly VCs and corporations

Catepillar ENGIE
Enel E.ON
Total Siemens



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TTL of the forthcoming report on the Early-Stage Financing in Green Sectors in Sub-Saharan Africa

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