Local Financial Institutions: A Major Untapped Source of Financing for Energy Access in Africa

Briefing Report on the Market Assessment to Launch a new Risk Mitigation Facility

SEPTEMBER 2020

G4A Green for Access

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Summary of Survey Findings

Local FIs in Africa are willing to lend USD billions for energy access

- Local financial institutions (FIs) in Sub-Saharan Africa (SSA) represent a huge potential source of local currency funding for the off-grid space. Local FIs are increasingly showing interest in the off-grid sector and many of them are looking for new ways to create opportunities to lend
- 16 of the local FIs interviewed in G4A's target countries indicated a total projected lending volume of $954 million over the coming years[1]
- Given that the survey was limited in scope due to the pandemic, it is assumed that there is an existing appetite of up to 3 times the indicated volume - $2.86 billion in lending among local FIs just in the 15 target G4A countries.[2] We believe this would translate to at least $6 billion in lending by local FIs throughout SSA – a significant contribution to the energy access financing gap[3]

Local FIs require credit support and technical assistance for off-grid lending

- 68% of surveyed locally-owned off-grid companies identified high collateral requirements as a key barrier hindering financing
- Also, 68% of the local FIs interviewed identified collateral inadequacy as one of the key reasons for turning down off-grid energy transactions
- 63% of surveyed locally-owned off-grid companies also pointed out local FIs' lack of understanding of the off-grid sector as a key barrier, indicating the need for a well designed technical assistance intervention
- In addition, surveyed African-owned companies also identified high cost of debt and lack of long-term funds as major funding challenges

Total projected lending by local FIs in SSA **$6 Billion**

Local FIs identifying collateral inadequacy as a key barrier

1. Out of the 37 FIs expressing interest in G4A's risk mitigation products only 16 were willing or able to quantify their appetite for energy access lending
2. Our assumption is based on GreenMax's experience engaging with West African FIs during performance of the Market Assessment for the Regional Off Grid Electrification Project in 2018-19, when in-person engagement with FIs yielded data from more than 75% of those approached.
3. While of course not a linear equation to determine total lending appetite of FIs in all 46 SSA countries, we believe it would be fairly safe to assume double the level we calculate for 15 countries or roughly at least $5.73 billion

Summary of Survey Findings

First loss cash reserve will lead to increased lending and reduction in collateral requirements

- The majority of the responding FIs indicated that their projected off-grid lending volume will substantially increase if a first loss cash reserve is available; FIs suggested a 53% increase in projected lending volume on average
- Nearly all of the responding FIs confirmed that a first loss cash reserve would help in reducing collateral requirements; a first loss cash reserve will lead to 42% reduction in collateral requirements on average
- Technical assistance is critical to address FIs' lack of expertise in the off-grid sector
- A first loss facility can to some extent increase the tenor of loans; the FIs chosen for G4A pilots have each agreed to provide longer terms with the first loss cover
- However, addressing the high cost of debt requires collaboration with other mechanisms such as RBFs, capital grants etc. to effectively reduce the overall costs of financing

Locally-owned off-grid companies unable to access capital could be the main beneficiaries

- Locally-owned clean energy access companies in sub-Saharan Africa are well positioned to serve last-mile customers. However, African-owned companies have been far less successful in accessing external capital than internationally-owned companies, inhibiting their ability to grow
- There is an urgent need for local currency financing for African-owned companies; the African-owned off-grid companies surveyed indicated an actionable deal pipeline of $269 million
- Unlocking local currency lending from local commercial banks will be crucial to meet the needs of these locally-owned companies

Average reduction in FIs' collateral requirements

42%

$269 Million

African-owned companies' actionable deal pipeline

The Challenge

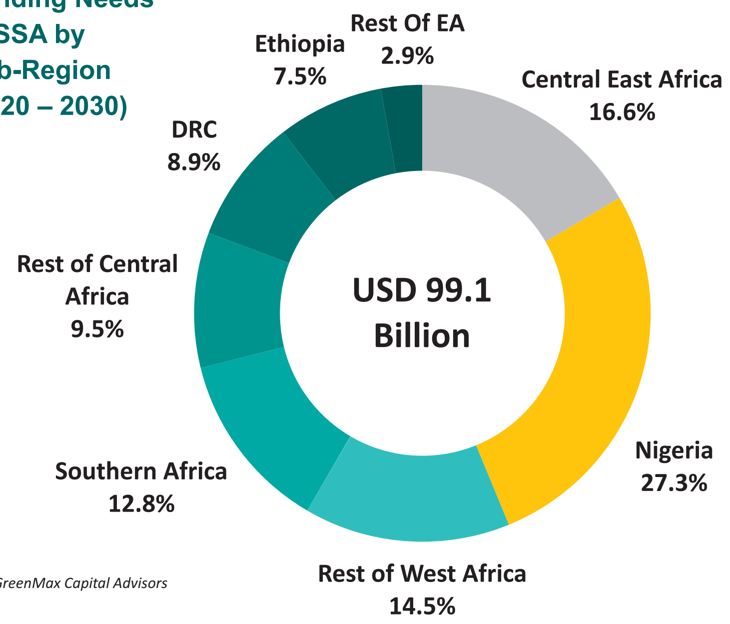
Image Credit: Rensource

Background

- As of 2018, 55% of Sub-Saharan Africa's population - close to 600 million people - live without electricity access. Based on the current pace of financing, it is estimated that there will still be 620 million people worldwide living without access to electricity in 2030 and 85% of them are projected to be concentrated in SSA.
- According to Africa Energy Outlook 2019, achieving full electricity access in SSA by 2030 and maintaining it to 2040 would require a total investment of about US$102 billion per year on average including US$18.8 billion per year for green mini-grids and standalone systems. Another study conducted by Catalyst Advisors sponsored by Shell Foundation estimated a total of US$33 billion required in mini-grid and SHS investments for universal access in SSA by 2030. In addition, a recent study by GreenMax estimated the total cumulative off-grid energy funding needed for universal access in SSA by 2030 to be US$99 billion.[1]
- However, the funding provided to the sector until now pales in comparison to the huge need. Wood Mackenzie estimates that only a cumulative total of US$1.81 billion in disclosed investments mainly provided by specialty equity investors have flowed to off-grid energy access companies in SSA as of 2019, with the rate of investment reducing by more than 20% year on year from 2018-19 and a further slowdown in 2020 forecast due to the COVID-19 pandemic.
- In addition to this, there are existing bottlenecks hindering access to donor funding. According to the 2020 AMDA Benchmarking Report, only about 13% of the US$1.6 billion funding committed by the donor community to the mini-grid sector in SSA has been disbursed due to limited capacity of recipient governments to manage procurement processes.
- While a plethora of SSA-focused specialized debt funds have emerged in recent years, GreenMax research shows that these specialized lenders only have a total of about US$ 2 billion in funds under management available to lend to the African off-grid space.[2]
- Furthermore, even though there is more equity funding available for the off-grid sector from PE funds, infrastructure funds, strategic investors etc., which is difficult to quantify, there is a dearth of equity for smaller, early-stage off-grid companies in SSA.

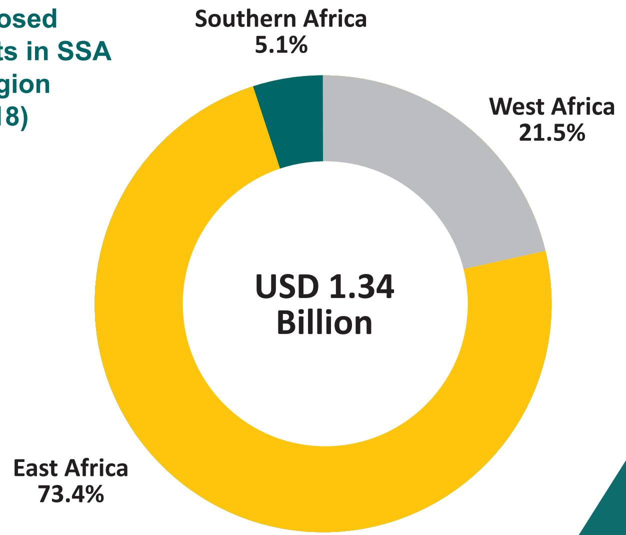
1. The complete market assessment report and calculation assumptions are available on request from GreenMax.
2. A list of these specialized debt funds and their respective reported funds under management is provided in the Appendix.

Energy Access Funding Needs in SSA by Sub-Region (2020 – 2030)



Source: GreenMax Capital Advisors

Total Disclosed Investments in SSA by Sub-Region (2010 – 2018)



Source: Wood Mackenzie, 2019

The Challenge: Local FIs Largely Untapped

- Local financial institutions represent a huge source of local currency funding well suited to meet the needs of the cadre of off-grid enterprises active in SSA to deliver a green recovery in the post-COVID-19 era

- There is significant liquidity in the commercial banking sector in sub-Saharan Africa for FIs to play a meaningful role. GreenMax research shows that local FIs just in the 15 target G4A countries have combined total customer deposits of over $195 billion, total loan portfolios of over $140 billion and total cash and cash equivalents of $41.5 billion as of December 2018, which underscores the high level of liquidity available for lending to the off-grid sector

- However, these local FIs remain a largely untapped source until now, as their lending to the off-grid energy space has been limited, due to a perception of significant credit risks including:
    - concern over the credit quality of end-use customers
    - concern over undercapitalization of off-grid enterprises
    - lack of understanding of off-grid sector business models and risks

- To add to this are local FIs' generally risk averse culture, high collateral requirements, high interest rates and short loan tenors that don't match with project payback periods

- This is particularly true for off-grid finance outside of asset-based lending for PAYG portfolios in East Africa. The few local banks outside of East Africa that have provided funding to the off-grid energy sector have often done so in collaboration with donors and Development Finance Institutions

"Although 75% of GDC members are indigenous companies, only 14% have been able to raise debt from a local bank – unlocking this source of capital could be game-changing"

- Emma Colenbrander, Head of the Global Distributors Collective (GDC)

"G4A's concept of delivering first loss risk mitigation solutions is an intriguing solution to attract risk averse local lenders into the energy access space"

- Koen Peters , Executive Director of GOGLA

"The lack of low cost debt available to the minigrid sector has meant that firms have had to try to scale on equity, which is an impossible task. Working with local banks to bring in debt will be fundamental to enabling minigrid companies access the capital they need to grow and deliver energy access to their rural customers."

- Aaron Leopold , CEO of Africa Minigrid Developers Association (AMDA)

The Challenge: Lack of Funding for Locally-Owned Companies

- Locally-owned clean energy access companies in sub-Saharan Africa are well positioned to serve last-mile customers, and are thus critical in achieving SDG 7.

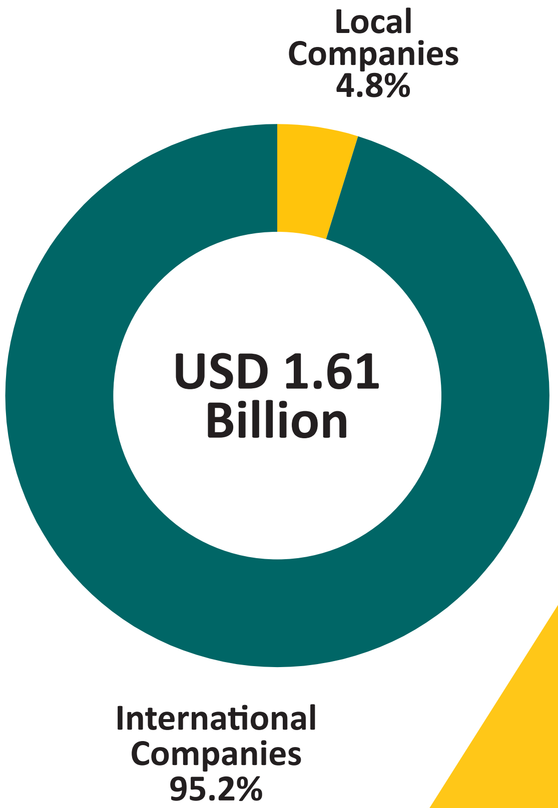
- However, the majority of these small African-owned companies have had difficulty securing external capital needed to achieve scale, as the international sources of capital (both equity and debt funds) that dominate the energy access investment ecosystem, have overwhelmingly targeted internationally-owned enterprises.

- Wood Mackenzie data shows that energy access investments are highly concentrated in relatively few internationally-owned companies. As of 2018, the top 10 solar home systems market leaders worldwide had raised about $1.1 billion, while the top 10 mini-grid developers worldwide had raised $190 million. Altogether, these 20 companies had raised 76% of the $1.7 billion total disclosed investment. However, of all the top SHS and mini-grid companies active in SSA, only one has a founder of African origin.[1]

- GreenMax research on funding raised until now by energy access companies active in SSA shows that about 95% of identifiable transactions have flowed to internationally-owned companies. It is also important to note that grants comprise a significant portion of the external funding raised by locally-owned companies.[2] Given that the research was not comprehensive and there may be funding raised by African owned companies that have not been captured, we assume that perhaps 90% of funding has flowed to internationally-owned companies. Nevertheless, it is clear that the preponderance of funding has been focused on internationally-owned companies.[3]

- World Resources Institute research in East Africa, which has been the hub of renewable energy access investment in SSA, reveals that reasons for lack of funding of African-owned companies include: the economic incentives of investing larger amounts in a relatively small number of high-risk, high-return companies rather than a large number of small investments and preference of investment managers, which tend to come from developed countries, to invest within their network. In addition, there are also concerns around corporate governance of local enterprises and quality of technical and management expertise.

Funding Raised By International vs. Local Companies in SSA



1. Anecdotal evidence suggests little has changed on this score during 2019-2020. An informal discussion with seven off grid lenders and investors at the GOGLA conference in February 2020 revealed that only 2 out of roughly 50 investments/loans from this group collectively had been made with African-owned enterprises.
2. According the GDC, there are a number of grant funders like USADF, SEED and D-Prize who provide small grants ($10-30k) to very early-stage companies, which has helped many locally-owned companies get off the ground, but it has been difficult for these companies to then access larger-scale grant funding to help them prepare for growth and commercial capital, as the portfolios of the large grant providers are dominated by internationally-owned companies.
3. This research was based on publicly available data from various reports, press releases etc. including publications by Wood Mackenzie and Briter Bridges.

Scope and Methodology of the Study

Image Credit: African Solar Designs

Survey Scope and Methodology

- Based on this context, the Green for Access (G4A) First Loss Facility, a partnership of GreenMax Capital Advisors (GreenMax) and Energy for Impact (E4I), was conceived to provide the strong credit support needed to scale up lending to the energy access space in Sub-Saharan Africa, with main emphasis on expanding local currency lending by local FIs

- As part of the development of G4A, GreenMax and E4I conducted a survey of local FIs and off-grid enterprises in the 15 target G4A countries to determine the appetite of local FIs for energy access lending and the actionable deal flow and financing needs of off-grid companies with a particular focus on African-owned companies

- An 8-person survey team, reached out to 352 companies and 127 FIs and successfully held remote interviews and administered questionnaires with 83 companies and 37 FIs between April and July 2020, in the middle of the COVID-19 pandemic. The study also entailed a significant level of desk research[1]

Disclaimer: The study was limited in scope due to constraints imposed by the pandemic. Therefore, the results presented herein may not be fully representative of the energy access industry in SSA.

83 OFF-GRID ENERGY COMPANIES INTERVIEWED[2]

- 67% of the surveyed off-grid energy companies are locally-owned firms
- 49% of surveyed companies are Tier 1 companies, 34% Tier 2 while 17% are Tier 3 companies
- 65% of surveyed companies operate in the SHS/pico solar segment, 24% in mini-grids, 13% in Productive Use of Energy, and 8% in the C&I segment
- 77% of surveyed companies are active in West Africa, 19% in East Africa, 1% in Central Africa and 11% in Southern Africa

37 LOCAL FINANCIAL INSTITUTIONS INTERVIEWED

- FIs interviewed have combined total assets of over $117 billion, a customer base of over 113 million and over $14 billion in shareholders' funds
- 64% of interviewed FIs are currently lending to the off-grid renewable energy sector
- 70% of interviewed FIs are active in West Africa, 16% in East Africa, 3% in Central Africa and 11% in Southern Africa
- 86% of FIs interviewed are commercial banks while 14% are microfinance institutions (MFIs)

Tier Classification System[3]

TIER 1
<3 FTEs
<300 SHS Sold
<$100k Rev

TIER 2
3 -25 FTEs
300 – 30k SHS Sold
$100k – 3M Rev

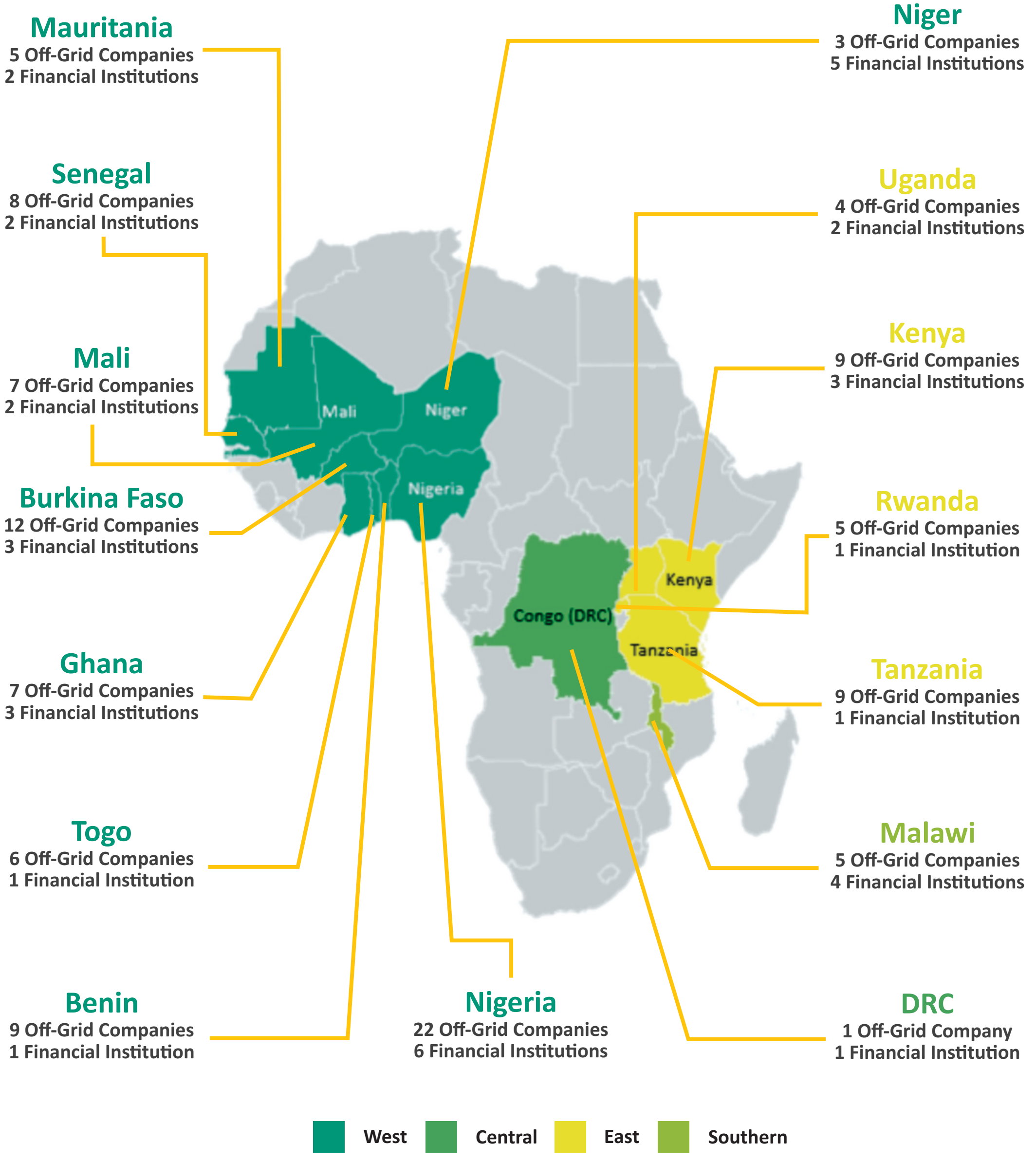
TIER 3
>25 FTEs
>30k SHS Sold
>$3M Rev

1. The complete market assessment report and datasets are available on request from GreenMax.
2. 106 of the companies contacted indicated interest in G4A's risk mitigation products, however, only 83 companies provided information sufficient to be included in the study results
3. The Tier Classification definitions developed by ECREEE and the World Bank for the Regional Off Grid Electrification Project. FTE means Full Time Employee

Geographical Scope of the Study

- The focus countries for the G4A First Loss Facility were methodically selected during the market assessment based on consideration of these factors:
  - energy access deficit and market potential across the different market sub-segments
  - macro-economic environment
  - enabling regulatory framework and market environment for energy access
  - countries where potential partner off-grid enterprises are most active and show actionable deal flow
  - location of interested local financial institutions
  - focus on emerging off-grid energy markets, keeping some modicum of regional balance, diversification of investments into other sub-regions outside of the well-developed East African market

- The survey team started off with the intention of selecting only up to 7-8 countries. However, unexpectedly, the survey gathered significant interest from local FIs in frontier markets such as Mauritania, Niger and Burkina Faso etc. ready to partner with G4A. In total, 15 focus countries were selected, mostly in West Africa due to the huge energy access deficit in this sub-region



The survey also covered the following countries which were not eventually selected: Zambia, Lesotho, Zimbabwe, Mozambique, Cote D'Ivoire and Guinea

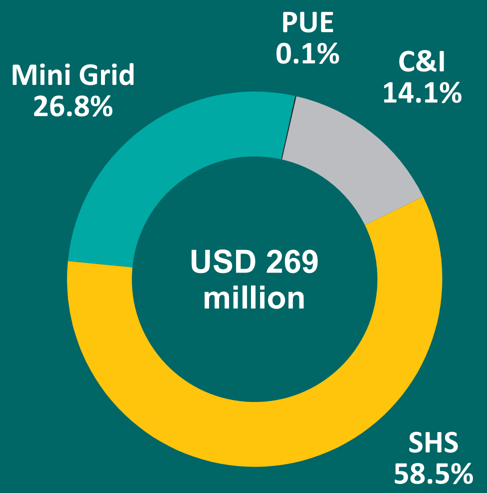
Key Findings

Image Credit: PEG Africa

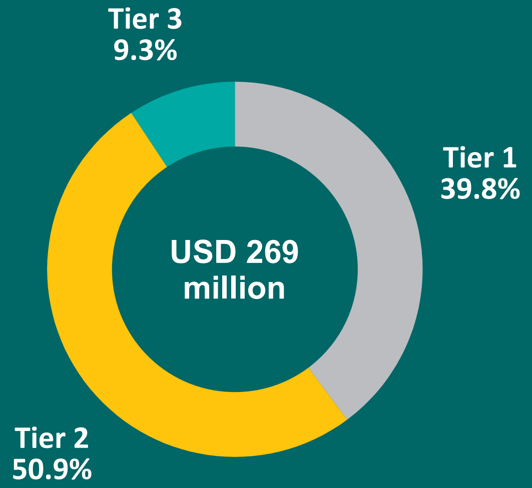
Deal Pipeline of African-Owned Companies

- Although data was collected from both international and African-owned companies, the most significant findings relate to the quantity of perceived quality deal flow and financing needs of African-owned companies
- The locally-owned off-grid companies surveyed indicated an actionable deal pipeline of $269 million within the next 18 months, which they are having difficulty to finance
- This indicative figure is based on responses obtained from just 56 African owned companies out of over 200 contacted. Therefore, it is clear that there is a significant immediate financing opportunity much higher than a quarter of a billion USD among locally-owned off-grid companies in SSA
- West Africa accounts for 88% of the indicated locally-owned firms' deal pipeline[1]
- While the SHS sub-segment accounts for 58.5% of the indicated African-owned firms' deal pipeline, 76% of these companies plan on launching new business models or product lines, with increasing focus on productive use of energy (PUE) applications.[2] In addition, 65% are looking to expand to new geographical markets
- All except three[3] of the surveyed locally-owned companies are Tier 1 (66%) and Tier 2 (29%) companies, based on the Tier Classification system presented on page 9.[4] Tier 2 – early stage companies account for 50.9% of the deal pipeline reported by all surveyed locally-owned off-grid companies, while Tier 1 – startup companies account for 39.8%

Deal Pipeline of African-owned Companies By Sub-Segment



Deal Pipeline of African-owned Companies By Tier



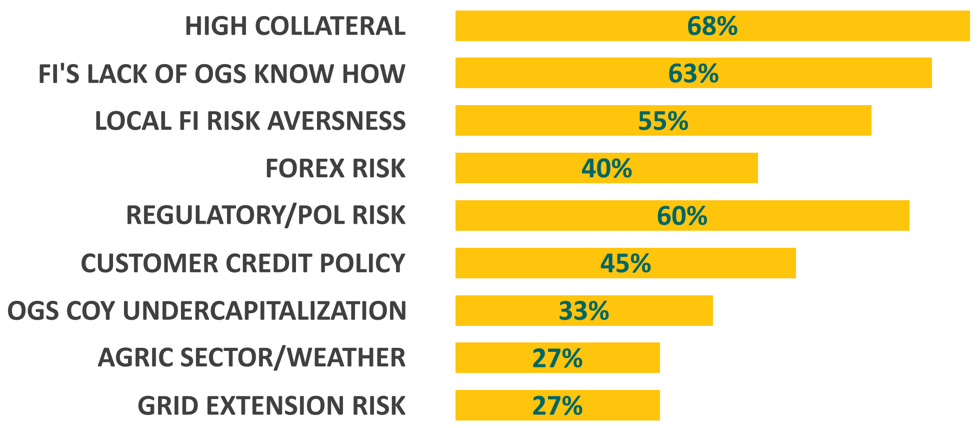
1. While this is partly due to the fact that the survey focused heavily on West Africa, it is worth noting that off-grid activity in East and Southern Africa is largely dominated by internationally-owned companies. For a variety of reasons, there is more balance between international and African-owned energy access enterprises in West Africa.
2. According to the GDC, only a few local distributors have been able to effectively procure and sell PUE products to date.
3. The tier 3 companies interviewed are: Rensource, Blue Camel Energy and ARESS.
4. According to the GDC, access to finance is the major barrier preventing these companies from becoming Tier 3 companies

Key Financing Barriers Faced By African-Owned Companies

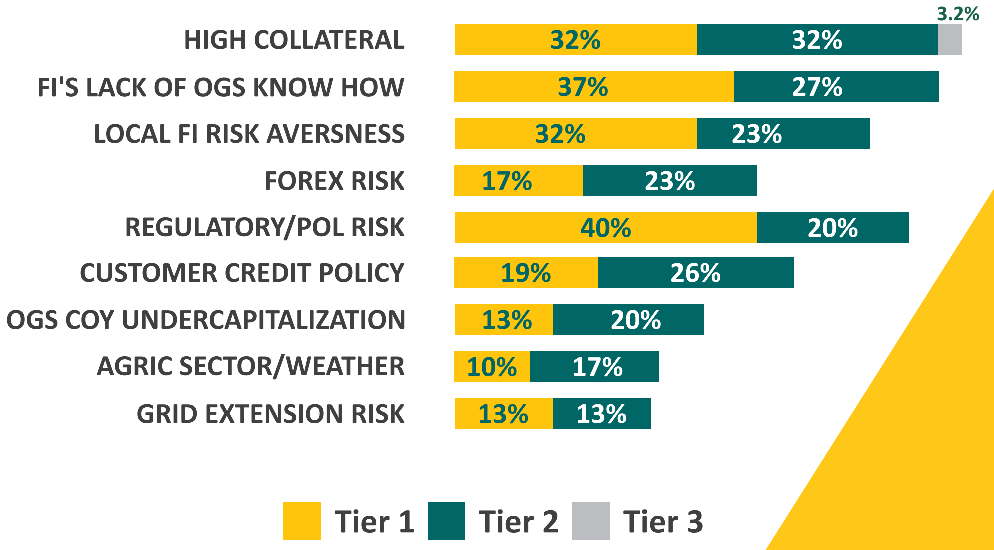
- 68% of surveyed African-owned off-grid companies identified high collateral requirements as a key barrier hindering financing
- 63% of surveyed African-owned off-grid companies also pointed out local FIs' lack of understanding of the off-grid sector as a barrier, indicating the need for a well designed technical assistance intervention
- Other major funding challenges identified by surveyed African-owned companies are: high cost of debt and lack of long-term funds[1]
- Nearly all of the surveyed companies confirmed the need for catalytic first loss capital and indicated interest in the G4A first loss facility; 69% of all surveyed companies and 71% of African-owned companies specifically indicated interest in the G4A cash deposit product for increased access to local currency debt

1. While it was beyond the scope of this study to carry out a comprehensive mapping of sources of capital which have been utilized by locally-owned companies, according to GDC research, while some debt has been procured by Last Mile Distributors (LMDs), the main sources have not been able to provide loans of sufficient size or tenor to meet LMD's working capital needs

Key Financing Barriers Faced By African-Owned Companies



Key Financing Barriers Faced By African-Owned Companies by Tier



List of Surveyed African-Owned Off-Grid Companies

VOLTAFRICA
Tradeworks
Great Lakes Power Ltd.
TOPSTEP
Celfre Energy – Harnessing Nature's Gift
ACOB Lighting technology limited

TMSU international
Techno Systems – Energie - Hydraulique - VRD
Tech Power Services
Sunhut Limited
Solynta – Powering Nigeria with the sun
Terra
Sirea group
rensource
A4&T Power Solutions

SAO Energy
ECA GAZ
SALPHA
MKM Electric
Oretronics Technology Limited
Africa Energy Solaire – Le soleil, l'eau, la vie.
Leaf Energy Senegal
Greenage Technologies
Blue Camel Energy
Primis Group

Entric
Ste Jesuton Sarl Energy Company
Aspire Power Solutions
Kumudzi Kuwale Limited
iMafoR Engineering
ESEE
Enerec Sarl
Darway Coast
Wavelength
Bisonic Energy Solutions – Sales . Design . Installation . Consultancy

Ismast Energy Sarl
Energa Afrique
Semetech
Fenou Burotech
Solafreeca
ICE Commercial Power
SOLMAT
AirCom
SEB

Consistent Energy
Germark Holdings Limited
EcoSolar International Limited
Tout Electrique
ARESS
Somimand
AGR Group

Case Studies of African-Owned Companies

Darway Coast

Nigeria

Darway Coast is a Nigerian renewable energy provider, specializing in the development of scalable mini-grids and micro-grids for off-grid and underserved areas. Since commencing operations in 2017, Darway has deployed 2 rural mini-grids and a commercial urban distributed generation facility in Rivers and Lagos State in Nigeria, with an aggregate capacity of 87kW, with support from the USADF/All-On off-grid Challenge and the IEEE Smart Village Empowering Off-grid Grant. Darway is currently constructing a 99kW mini-grid and developing a portfolio of interconnected mini-grids with aggregated capacity of 750kW in collaboration with the Port Harcourt Electricity Distribution Company in Nigeria. Darway intends to develop and construct 100 rural mini grids and 15 commercial and Industrial mini-grids in Nigeria over the next 3-4 years. In this regard, the company has so far signed agreements with 40 off-grid communities, 5 C&I customers, and 4 Distribution Companies. Darway Coast is seeking to raise US$10-15M within the next 12-18 months toward the implementation of some of these projects.

ARESS

Benin

Africa Renewable Energy Systems & Solutions (ARESS) is a fast growing Benin-based off-grid energy company specializing in the installation and distribution of solar home systems (from pico systems to larger systems with more than 4 kWp capacity), C&I solar solutions and solar water pumping solutions. ARESS currently operates in Benin, Togo, Burkina Faso and Senegal. Since 2012, ARESS has distributed thousands of pico solar and SHS products, and installed 53 mini-grids, 7,000 solar street lights and 50 solar water pumping systems with an aggregate capacity of about 2MW. The company also provides training and consulting services and has trained over 200 solar specialists. ARESS was the first company in francophone West Africa to introduce PAYG solutions with different payment plans enabling users to pay daily, monthly or at other arranged intervals. The company has raised just over US$1 million in debt, mostly in foreign currency, and plans to raise an additional $3-5 million over the next 3 years to support its expansion plans.

Volt Africa

Tanzania

Volt Africa Limited is a Tanzanian company which develops and operates off-grid power generation assets and distribution networks. Since 2013, the company has sold and installed 2,250 SHS with an aggregate capacity of about 100 kW in the Rukwa, Mbeya and Songea regions of Tanzania. In 2016, Volt launched its solar-powered mobile phone charging station product and has since deployed 15 of these stations to 7 villages in the Mbeya region, under lease agreements with micro-business owners. Volt is currently distributing 225 solar refrigerators to commercial and retail enterprises including hotels, fish chilling SACCOs, bars and shops in off-grid areas under a lease-to-own framework with RBF-Grant support from CLASP. Volt was recently pre-qualified under the second round of the Tanzania Rural Energy Agency's RBF Grants program for the development of 7 mini-grids providing 4,500 connections, with an expected CAPEX of US$4.5M. The company intends to grow its business in Tanzania and expand to DRC, Burundi, Malawi and Uganda in the future. Volt currently has a pipeline of 20+ projects including mini-grids and C&I off-grid projects.

Projected Off-Grid Energy Lending by Local FIs

- While local FIs remain a largely untapped source of energy access funding until now, these FIs are increasingly showing interest in the off-grid sector and many of them are looking for new ways to create opportunities to lend

- As evidence of this, 16 of the local FIs interviewed indicated a total projected lending volume of $624 million over the next 5 years

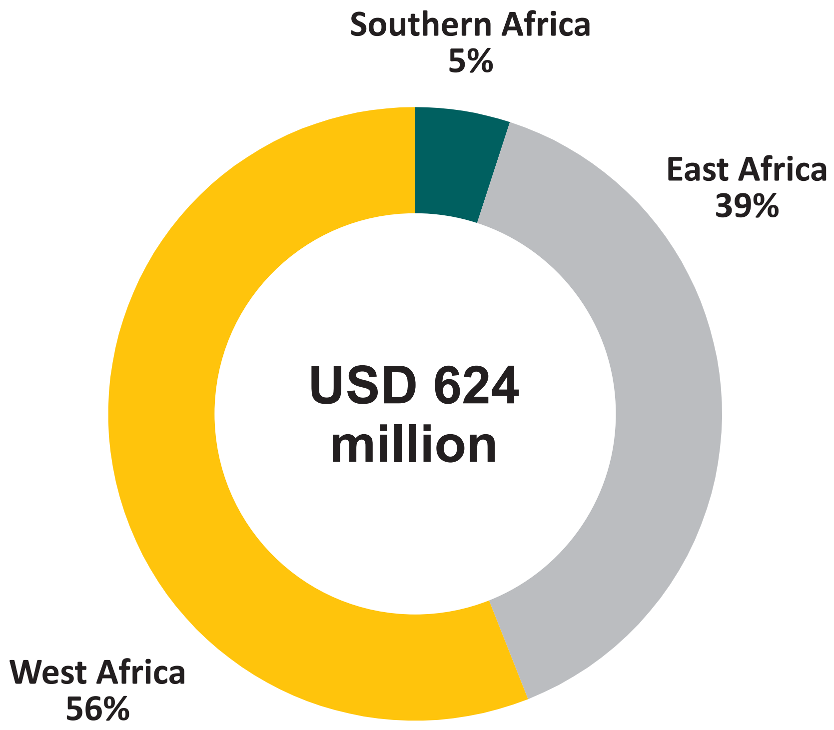
- In addition, the majority of responding FIs confirmed that their projected off-grid energy lending volume will increase if a first loss cash reserve such as the G4A cash deposit facility is available. FI responses showed that a first loss cash reserve will lead to 53% increase in projected lending volume on average. This would translate to $954 million in local currency lending by the surveyed FIs

- Given the limitations of conducting the survey in the midst of the COVID-19 pandemic, it is assumed that there is an existing appetite of up to 3 times the indicated lending volume - $2.86 billion among local FIs in the 15 target G4A countries

- We believe this would translate to at least $6 billion in lending by local FIs throughout SSA – a significant contribution to the energy access financing gap[1]

1. While of course not a linear equation to determine total lending appetite of FIs in all 46 SSA countries, we believe it would be fairly safe to assume double the level we calculate for 15 countries or roughly at least $5.73 billion.

Projected Off-Grid Energy Lending by Surveyed Local FIs



Note: The survey was heavily focused on West Africa. Hence, the results presented above do not imply that local FIs in West Africa have a greater appetite for energy access lending than local FIs in other SSA sub-regions.

Key Lending Constraints Identified by Local FIs

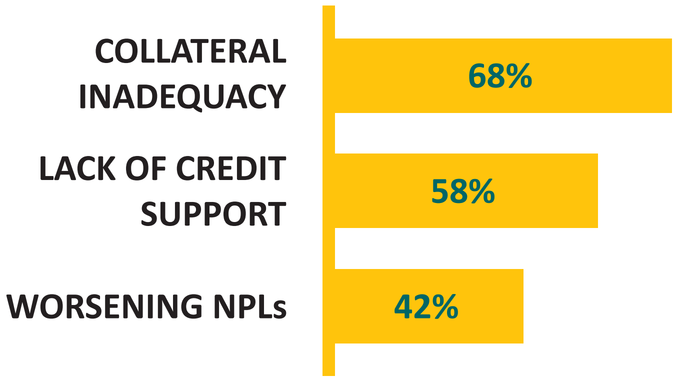
- 68% of the local FIs interviewed identified collateral inadequacy as one of the key reasons for turning down off-grid loans[1]
- Collateral coverage requirements of interviewed banks range from 100% to 250%
- The majority of the interviewed banks require security in the form of physical assets mainly real estate as well as personal guarantee
- Nearly all of responding FIs confirmed that a first loss cash reserve such as the G4A cash deposit facility would result in reduced collateral requirements
- FI responses showed that a first loss cash reserve will lead to 42% reduction in collateral requirements on average
- Technical assistance is critical to address FIs' limited understanding of off-grid business models
- A first loss facility can to some extent increase the tenor of loans; the FIs chosen for G4A pilots have each agreed to provide longer terms with the first loss cover
- However, addressing other major existing funding barriers, particularly the high cost of debt requires collaboration with other mechanisms such as RBFs, capital grants etc. to effectively reduce the overall costs of financing

"A key, if not the key barrier to creating new investment vehicles in this sector is the lack of first loss or highly subordinated investment tranches."

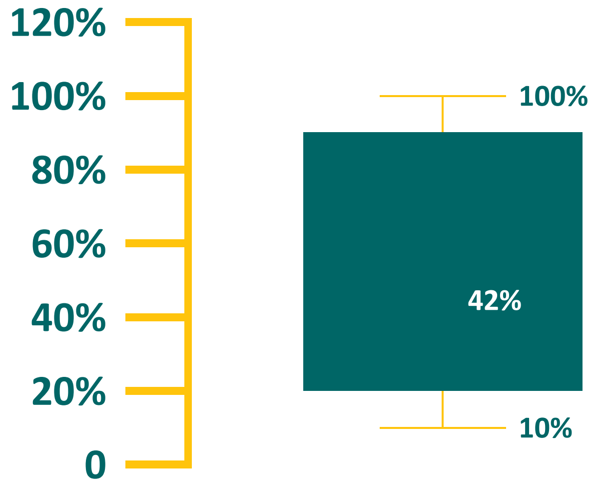
- Gareth Zahir-Bill, Shell Foundation

1. While the study team did interview several MFIs, the survey did not directly target MFIs. Hence, the survey results presented herein do not reflect their very different situation. MFIs already have much lower collateral requirements than FIs and introduction of the CDF would not necessarily allow them to reduce those requirements further. However, the greatest challenge faced by non-deposit taking or non-profit MFIs is often securing new capital for on-lending and the first loss cover may help them to attract capital from DFIs for specific energy access loan portfolios.

Key Lending Constraints Identified by Local FIs



Potential Reduction in Collateral Coverage Requirements with CDF



List of Surveyed Local FIs

EQUITY Bank
Sterling
CBAO
Bank of Industry ...transforming Nigeria's industrial sector
FirstBank Since 1894
bmci
FCMB
SEM
TMB Trust Merchant Bank S.A.
Bank of Kigali Financially transforming lives
KCB
APFI
FDH Bank
FDEA Microfinance
I&M Bank PLC
Ecobank The Pan African Bank
CDH Investment Bank
FNB
Coris Bank International
UNCECD
Standard Bank
access
Banque Atlantique
BAGRI Banque Agricole du Niger
Societe Generale Cote d'Ivoire
PostBank Empowering You
Stanbic Bank
CUMO
Bank of Africa Groupe Bank of Africa
Orabank un partenaire à votre écoute
Centenary Bank

Introduction to Green 4 Access

Image Credit: Energy 4 Impact

Overview of the Green 4 Access Facility

- The Green 4 Access (G4A) First Loss Facility partnership is establishing a common, blended finance platform for First Loss Facilities to support Energy Access lending. Through methodical, industry-wide data collection and analysis, the partnership is designing and offering first loss products that help local lenders to perceive off grid lending as sufficiently de-risked, while also aiming to allow the fund's investors to achieve commensurate returns that make the products sustainable.
- To be initially capitalized at up to US$50 million, with an accompanying $5M Technical Assistance Facility, G4A is seeking to create a tiered fund structure in order to blend existing philanthropic and donor sources with capital from impact investors, DFIs and others.
- Focus Market Sub-Segments: Solar Home Systems – all tiers, Mini-Grids, Solar for Healthcare, Agricultural Productive Use and Commercial & Industrial.
- G4A is still under development and expects to be ready to commit funds to Cash Deposit Facilities during Q4 2021. Several pilot transactions are currently being arranged for Q1 2021.

Cash Deposit Facility for FIs

G4A will be primarily focused on providing Cash Deposit Facilities to qualified lenders to provide credit support in favor of the lenders' origination of a portfolio of energy access loans.

Purpose

Provide stronger than usual credit enhancement and Technical Assistance to FIs to encourage increased local currency lending to energy access enterprises and their customers.

Risk Mitigation

First Loss protection for up to 20% of losses in a portfolio of loans to the energy access sector. G4A assumes the obligation to bear the repayment of 100% of the first 5 - 20% of losses in the loan portfolio.

Cash Deposit

G4A will deposit up to 20% of the projected loan portfolio in a specialised account ("Cash Deposit Fund or "CDF") domiciled at the partner FI that will be available to draw on to cover up to 6 months of arrears on each portfolio loan before it is called in default up to the amount in the CDF.

Pilot CDF Portfolios

GreenMax acting as the fund manager for G4A has entered into preliminary arrangements with two FIs and one MFI. With Sterling Bank in Nigeria and Equity Bank in Tanzania G4A will organize pilot portfolios based on a model where the banks lend directly to consumers on solar contracts originated by ZOLA Electric. Each pilot portfolio will be a minimum of $5M and a maximum of $10M in USD equivalent value. Loans will be made to consumers in local currency. With CUMO MFI in Malawi a pilot with a similar structure is being established with Vitalite on a targeted $2M portfolio. Drawdowns and Pay-outs from the CDF to cover arrears and losses will be converted to local currency. The individual portfolio loans in Nigeria and Tanzania will be made primarily to households and SMEs in each country. However, to respond to the current global crisis, at least 25% of each portfolio will be dedicated to financing solar installations for health centers. ZOLA has developed a system configuration which is well suited for this purpose. In Malawi, the portfolio will be targeted 100% for solar irrigation pumps for local farmers. Three additional pilot portfolios are also under discussion: for a Mini Grid portfolio in Kenya, for a solar water pump portfolio in Uganda and for a solar cold storage in Nigeria.

Sponsoring Partners

GreenMax Capital Advisors ("GreenMax") is part of the GreenMax Capital Group, a group of international clean energy investment advisory and management consulting firms established in 1994. GreenMax supports project developers, investors, financial institutions, donors and governments in the analysis, preparation and implementation of a broad range of clean energy investments, policies and regulations. GreenMax has assisted many of the most recognized private investors to establish and execute their sustainable energy investment strategies, including market assessments, strategic planning and mergers/acquisitions. Our recent assignments include completing the market assessment for the Regional Electrification Program (ROGEP) being launched by the World Bank and ECREEE in 19 countries of West Africa. Much of the impetus for the G4A comes from intelligence gained through this work. GreenMax presently has operational offices throughout Africa: in Lagos, Kigali, Nairobi, and Lusaka.

GreenMax has also supported regional commercial lenders to develop and roll out new lending products targeting renewable energy and energy efficiency investments and has helped many development financial institutions ("DFIs") plan and launch market-transforming sustainable energy finance initiatives. GreenMax's DFI clients include the World Bank, IFC, IADB, EBRD, EIB, UNDP, USTDA, US OPIC, AfDB, and USAID. During the 2000s GreenMax was at the forefront of developing risk mitigation mechanisms and loan programs which helped create a market for commercial lending for energy efficiency improvements to blockhouse housing cooperatives in Eastern Europe. GreenMax designed and launched loan guarantee programs for IFC and managed a First Loss Facility established with funding from the Dutch International Guarantees on Housing (DIGH) in Hungary and Romania.

Energy 4 Impact ("E4I") is a non-profit organization that improves quality of life and alleviates poverty through access to energy. Established in 2007, we work with energy access businesses, including solar home system companies, mini-grid developers, clean cooking companies and productive use of energy companies. Supported by a small head office in London, most of our 80 staff are based out of our offices in Kenya, Rwanda, Tanzania, Senegal and Benin.

Over the last 13 years, we have supported over 5,500 enterprises and helped them to raise over $150 million. The growth of these businesses has resulted in improved energy access for 18 million people, the creation of 12,000 jobs and 13 million tons of avoided CO_2 emissions. Our goal is to have a positive impact on the communities we support by improving livelihoods, supporting smallholder farmers, improving health, increasing access to education and helping women empowerment.

Our services include: (1) entrepreneurship and advisory services to energy access businesses which includes micro-enterprise development, and advice for SMEs and project developers; (2) access to finance: matching energy entrepreneurs with investors, which includes transaction advice and investor introductions, risk loss mitigation and grant support; and (3) innovation and research, which includes supporting start-ups, running new technology and business pilots, creating new markets, organizing energy competitions and experimenting with innovative financing and market approaches.

In Africa, GreenMax and E4I have been collaborating on several GreenMax client off-grid enterprises which have qualified for assistance delivered by E4I through the Green Mini Grids Help Desk, which E4I manages for AFDB and SEFA.

Funding Partner

G4A was selected as a 2019 Start-Up Partnership by the Partnership for Green Growth (P4G).

P4G is a new initiative, commenced in 2018, with the ambition of becoming the world's leading forum for developing concrete public-private partnerships at scale to deliver on the Sustainable Development Goals (SDGs) and the Paris Climate Agreement. With initial funding by the government of Denmark, P4G is a network of leaders from government, business and civil society working to accelerate green growth in many of the 150 developing countries across the world. They are working in partnership with leaders in 9 countries – Chile, Colombia, Denmark, Ethiopia, Kenya, Mexico, The Netherlands, South Korea and Vietnam – who see public-private partnerships as key to meeting their Sustainable Development Goals. P4G also benefits from the active support of partner organizations, including C40, IFC, Global Green Growth Institute, UN Global Compact, World Economic Forum and World Resources Institute, which also hosts P4G's Global Hub in Washington, DC.

P4G's focus is on five key SDG areas: Food and Agriculture, Water, Energy, Cities, Circular Economy

Most importantly, P4G serves as an innovation hub for partnerships, providing facilitation, funding and recognition to innovative start-up and scale-up projects and companies. Through these levels of support, it incubates and accelerates the best ideas for sustainable growth in developing nations.

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Appendices

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Specialized Off-Grid Debt Funds

	Specialized Debt Facility	Comments
1	**SunFunder**	Second fund of $80M now active; seeking more opportunities in the C&I and MG space. Have closed a $2.1M debt facility for MG developer PowerGen. Recently closed four new loans to M-KOPA, PEG Africa, MCI, CREI in Q1 2020.
2	**CDC Off Grid Local Currency Facility**	Not a fund per se, business plan to deliver up to $150M in local currency debt available across next 3 years; inherently taking first loss risk themselves. Intention is to finance one or more MG portfolios, although to date they have only focused on SHS and are finding the MG sector “problematic”. Provided $12.5M local currency debt to PEG Africa in 2019.
3	**Sima Funds**	Second $80M fund now active, focused on receivables lending to SHS companies. Say that they may consider MGs in future.
4	**SIMA Angaza Distributor Finance Fund**	Data-driven investment fund launched in November 2019 to provide access to debt capital for last-mile distributors. DFF will invest in distribution companies working to provide clean energy access in emerging markets. Fund size undisclosed.
5	**Lion’s Head Off Grid Electricity Fund**	Final close of $95M in November 2019, expects to raise further debt towards its $130M target by 2021, focused mainly on receivables lending to SHS companies but will also consider working capital. OGEF announced a $10M debt investment in d.light in February 2020.
6	**Neot**	First close at $20M active, $100M expected. Focused on receivables lending to SHS companies. Launched a receivables securitization program with Zola Electricity Côte d’Ivoire to finance a portfolio of off-grid energy projects worth EUR 40M in March 2020. Say that they may consider MGs in future.
7	**Lion’s Head Facility for Energy Inclusion**	Targeted $400 million fund to improve energy access across Africa through small-scale renewable energy and mini-grid projects, spearheaded by the AfDB. First close of $160M reached in December 2019. $100M earmarked for off-grid projects.
8	**Solar Frontier**	Expected to have $100M under management, focused on receivables lending to SHS companies. May consider lending to MGs in future. Set up a $65M local currency receivable financing facility for d.light Kenya in June 2020 with $20M from US DFC.
9	**DWS Universal Green Energy Access Programme (UGEAP)**	$80M first loss capital committed by GCF, expect to have $500M under management by 2020, focused on all off grid segments. However, they are finding the MG segment “difficult” and will likely only provide credit lines to local FIs who may include MGs in a diverse portfolio of off grid assets.
10	**Lendable**	Not focused only on off-grid but it is a good share of their portfolio. Stated that they have roughly $60M available. Focused on receivables lending to SHS firms.
11	**responsAbility Energy Access Fund**	First fund of $30M fully committed. $151M first close of second fund announced in Q1 2020, could grow to $200M. Focused on all off grid segments. Yet to find the way to be comfortable lending to MGs.

Specialized Off-Grid Debt Funds

	Specialized Debt Facility	Comments
12	Triple Jump Energy Entrepreneurs Fund	$120M fund with first close of $45M, focused on Mezz financing to off-grid enterprises including MGs.
13	Energise Africa	Although a crowdfunding platform, have a tranche of DFID funds to deploy in first loss position; focused on low priced, mid-term debt up to $2M for all off grid segments. Since its launch in 2017, Energise Africa has raised over £14M in debt to support energy access.
14	Bettervest	Also a crowdfunding platform, however already with a history of placing medium term debt, reasonably priced with MG developers in Nigeria – GVE Projects Ltd. (a Nigerian MG Developer) raised EUR 250k in 2017.
15	TRINE	Also a crowdfunding platform. In March 2019, BBOXX had raised a total of EUR 6.8M via TRINE – still the largest crowd-funded debt raise in the history of solar energy in Africa. Reportedly passed the $50M mark in lending during 2019.
16	Nithio	Provides financing through receivables purchases and corporate loans backed by receivables and inventory. Initial target markets : Nigeria, Kenya, and Uganda. Three-year partnership with USADF announced in September 2019 to fund up to 15 off-grid solar energy operators in Kenya providing between $400k to 1M to each company. Recently provided debt facility to Winock Solar, Nigeria in February 2020.
17	CrossBoundary Energy	Active $25M fund financing PPAs for the C&I space. Entered a 15-year PPA with Nigerian Breweries in October 2019 for a 650kW rooftop solar system. ARCH Emerging Markets Partners' Africa Renewable Power Fund provided CrossBoundary Energy with up to US$16.5M in additional equity in February 2020 to finance new C&I solar assets.
18	CrossBoundary Energy Access	First close in January 2019 of $16M for long term debt to mini grids. First fund of its type to specifically target the MG segment. Provided $5.5M to PowerGen for 60 mini-grids in Tanzania in July 2019.
19	Catalyst – Venture Builder Fund	Now active with initial $10M available as early stage convertible debt for off grid entrepreneurs. Recently provided equity and enterprise development services to Energy+, a Malian-owned off-grid solar company in a $1M+ funding round in August 2020.
20	Blue Orchard	Existing SME debt facility with more than $200M under management seeking off grid lending opportunities. Uncertain policy still on MGs.
21	COVID-19 Energy Access Relief Fund	The target for the relief fund, which is still under development, is to raise USD 100 million to enable energy access companies in Sub-Saharan Africa and Asia to both maintain their customers' existing energy services and retain staff required to deliver future services to these customers. The first close is now foreseen at USD 50 million.