Green for Access First Loss Facility (G4A)

A Risk Mitigation Product for Local Financial Institutions

UPDATED OCTOBER 2022

G4A Green for Access

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P4G Partnering for Green Growth and the Global Goals 2030

Table of Contents

Introduction to G4A

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The Challenge

- As of 2018, 55% of sub-Saharan Africa's population - close to 600 million people - live without electricity access, and the region is projected to account for 85% of the world's population that will still be without access to electricity in 2030. Yet, the level of funding currently provided to the off-grid energy access sector in sub-Saharan Africa (SSA) until now pales in comparison to the huge funding needed to bridge the gap.
- In addition, currency volatility presents a challenge for off-grid companies with a mismatch of liabilities in hard currency and revenues and assets in local currency, thereby making hedging a necessary cost. The passing on of these hedging costs to consumers marginally increases the cost of energy access, making off-grid solar uncompetitive. While 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, local currency lending is not scaling up quickly enough due to local FIs' perception of significant credit risks (consumer credit, undercapitalization of off-grid enterprises, lack of understanding of business models and risks). This is particularly true for expansion of off-grid finance outside of asset-based lending for Pay-As-You-Go (PAYG) portfolios in East Africa.
- Furthermore, the current level of on-balance sheet financing in the off-grid sector in SSA is unsustainable. Moreover, locally-owned clean energy access companies in SSA, which are well positioned to serve last-mile customers, have been far less successful in accessing external capital than internationally-owned companies, inhibiting their ability to grow.

G4A's Solution

- The funding scale-up required for the off-grid sector cannot be met without mainstreaming energy access finance such that commercial lenders - local FIs fully embrace the sector. While local FIs in SSA are increasingly showing interest in the off-grid sector, they currently require credit support and technical assistance (TA), particularly in the context of the COVID-19 crisis. However, existing pari-passu guarantees are not strong enough to incentivize these local FIs to expand lending to the sector while other past interventions such as credit lines have failed to address the problem of perceived risk.
- In line with this, the Green 4 Access "G4A" Platform is establishing a blended finance platform for first loss facilities to support off-balance sheet energy access lending. Through methodical, industry-wide data collection and analysis, G4A is offering first loss products coupled with TA that will help local lenders to perceive off-grid lending as sufficiently de-risked, while also aiming to allow the fund's investors to achieve modest returns that make the products sustainable.
- To be initially capitalized at up to $50M with first close targeted for Q3 2023 and a $5M pilot phase to be launched by the end of 2022, G4A is being established in a tiered fund structure in order to blend philanthropic and donor sources with capital from impact investors, DFIs and others.

G4A Geographical Focus

- The G4A First Loss Facility will focus on 15 key countries in SSA which were methodically selected based on consideration of the following 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 selected countries, most of which are located in West Africa due to the huge energy access deficit in this sub-region, altogether have a total of 324 million people without access to electricity and account for 66% of the total cumulative off-grid energy funding need in SSA according to GreenMax research.
- G4A intends to rollout initially in only 5 of the 15 targeted countries during its first year of operation. These are: Nigeria, Kenya, Tanzania, Uganda and Malawi, as G4A already has well established partnerships with FIs in these markets.

Mauritania
- 32% electrification rate
- 3 million without access
- 234 kwh per capita

Senegal
- 71% electrification rate
- 5 million without access
- 229 kwh per capita

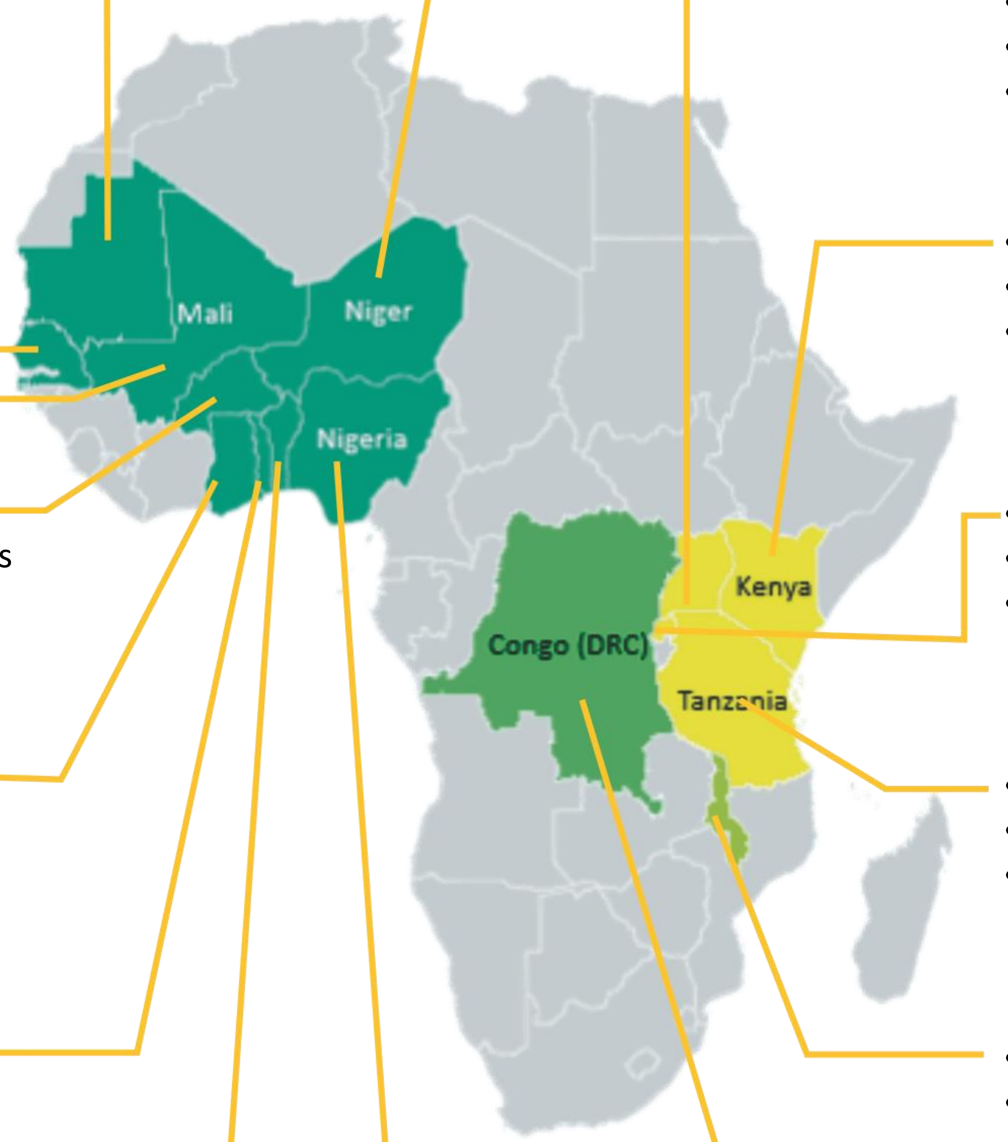
Mali
- 50% electrification rate
- 10 million without access
- 90 kwh per capita

Burkina Faso
- 22% electrification rate
- 16 million without access
- 76 kwh per capita

Ghana
- 85% electrification rate
- 5 million without access
- 351 kwh per capita

Togo
- 43% electrification rate
- 5 million without access
- 155 kwh per capita

Benin
- 33% electrification rate
- 8 million without access
- 100 kwh per capita



Nigeria
- 62% electrification rate
- 77 million without access
- 145 kwh per capita

Niger
- 14% electrification rate
- 20 million without access
- 51 kwh per capita

Uganda
- 29% electrification rate
- 32 million without access
- 215 kwh per capita

Kenya
- 85% electrification rate
- 8 million without access
- 165 kwh per capita

Rwanda
- 53% electrification rate
- 6 million without access
- 30 kwh per capita

Tanzania
- 40% electrification rate
- 35 million without access
- 104 kwh per capita

Malawi
- 13% electrification rate
- 16 million without access
- 71 kwh per capita

DRC
- 9% electrification rate
- 79 million without access
- 109 kwh per capita

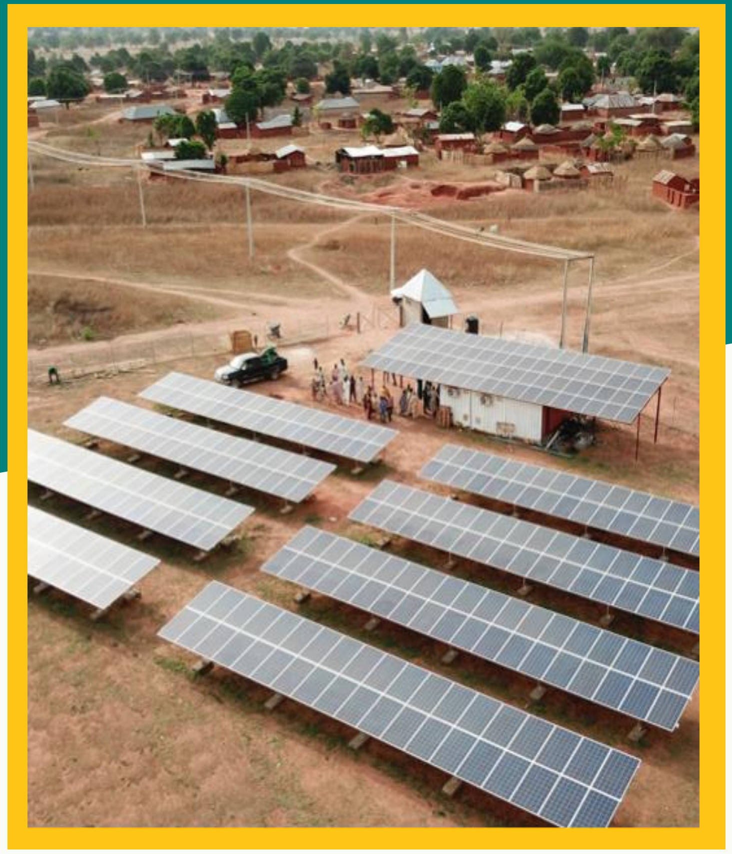
West | Central | East | Southern

Sources: IEA, World Energy Outlook-2020: https://www.iea.org/reports/sdg7-data-and-projections/access-to-electricity; World Bank Data

G4A Focus Market Sub-Segments

Solar Home Systems

Solar for Healthcare



Mini-Grids

Agric. Productive Use

- The focus of G4A will be on encouraging FI partners to **start** and/or **scale up** lending to the sectors above, expand to **new geographies** and offer **better terms without increasing portfolio risk**
- In order to ensure a **diversified portfolio** that includes **underserved segments,** the following parameters have been established for the total G4A portfolio:
    - No more than 20% should cover solar home systems (SHS) in East Africa; at least 20% should cover solar for healthcare facilities;
    - At least 30% should cover mini-grids; at least 30% should cover agricultural productive use (APU)

G4A Development Timeline

G4A expects to launch activities during the second half of 2022 and be fully operational by the second half of 2023

Q3 2019

P4G Seed Funding

Q4 2019 to Q3 2020

Feasibility Study

Facility Design

Develop Financial Model

Full Business Plan

Organize Pilot Transactions

Q4 2020 to Q1 2022

Launch full fundraising effort

Establish Legal Entity

Recruit permanent team

Q2 2022 to Q4 2022

Interim Financial Close

Permanent team in place

Pilot Portfolios Established

Q3 2023

Full Financial Close

Launch Full Operations

G4A Cash Deposit Facility

The CDF adapts a tried and true approach to risk mitigation for the realities of engaging African FIs

- G4A will be primarily focused on providing Cash Deposit Funds (CDFs) to qualified lenders including Financial Institutions (FIs) and Micro Finance Institutions (MFIs) to provide credit support in favor of the lenders' origination of a portfolio of energy access loans.
- G4A will provide a maximum cover of 20% on portfolio loans, while an overall average cover of 10% is anticipated. The exact % of coverage will be negotiated with each partner FI.
- G4A will also provide support to partner FIs in "shopping" for off-grid enterprises with quality deal pipelines and facilitating partnerships.

What is the G4A First Loss Cash Deposit Fund Product?

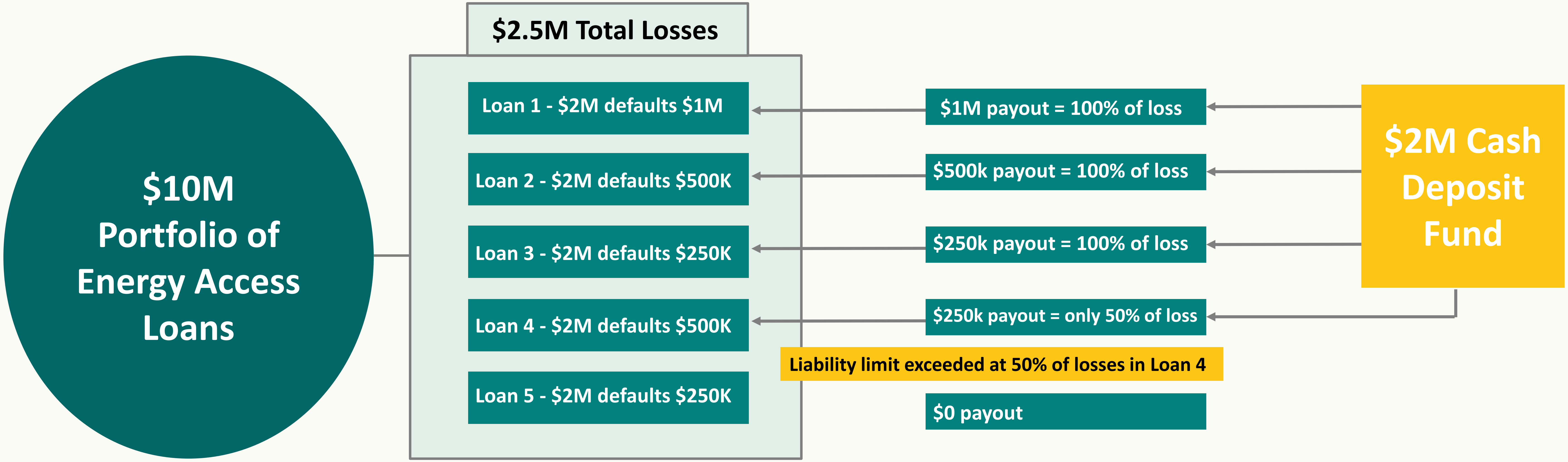
Purpose	Risk Mitigation	Cash Deposit
Provide stronger than usual credit enhancement and Technical Assistance to Financial Institutions and Micro Finance Institutions to encourage increased local currency lending to energy access enterprises and their customers.	First loss protection for up to 20% of 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.	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 portfolio losses up to the amount in the CDF.

How Does the CDF Cover Losses?

EXAMPLE (For Illustration Only)

- A $10M loan portfolio with 5 loans of $2M each
- Maximum 20% first loss coverage; Cash Deposit Fund = $2M
- $2.5M total losses in the loan portfolio

The Cash Deposit Fund will cover 100% of all losses up to the $2M liability limit



First Loss Cash Deposit Fund vs. Pari Passu Guarantees

G4A Cash Reserve

- Covers up to 20% of first loss in a loan portfolio (i.e. 100% of the first 20% of losses)
- Physical cash deposit which sits at the Bank and can be used for provisioning
- Cash Reserve account under control of the Bank; draw-downs pursuant to adhering to loan administration and collection protocols
- Can be used to reduce owner's equity
- Draw-downs to cover up to 6 months of arrears, prior to calling loans into default
- Draw-downs for arrears and payouts on defaults can be made on local currency

Third Party Guarantee

- Guarantor and Bank share all losses equally
- Contractual obligation subject to a guarantee call and cannot be used for provisioning
- Guarantee calls must be approved and processed by third party
- Cannot be used to cover owner's equity
- Loan must be called into default to take advantage of coverage
- Some guarantors provide cover only in hard currency

G4A Supported Loan Structures

Consumer Loans

G4A will provide First-loss cover to FIs that will create new portfolios dedicated to direct consumer loans including:

- Direct loans to customers buying SHS or APU
- PAYGO or Lease-to-Own (LTO) contracts: Support Developers to roll out PAYGO or LTO contracts with the banks providing the funding
- Servicing Agreements with PAYGO/LTO companies: Support banks to fund executed PAYGO or LTO agreements

Project Finance

- Support banks to grant facilities to Developers or operators of Mini grids with full claim to shareholders assets or limited claim on assets financed.
- Encourage banks to lend using the Power Purchase Agreement, tariff structure, IPP service agreement or LTO as the underlying security with the support of the G4A Cash deposit as opposed to looking for extra collaterals.

How the CDF Supports Direct Lending to Customers

PAYG Company

- Originates PAYG contract with consumer
- Completes installation
- Provides system warranty
- Monitoring, O&M Services
- Repossession, redeploy system in event of customer default

Arrange Transaction with PAYG Co.

G4A Green for Access

Funds the CDF

CDF

- May replace owners' equity normally required by the bank
- Cover up to 6 months of arrears on each portfolio loan before it is called in default up to the CDF limit of liability
- Covering 100% of principal on each portfolio loan up to the CDF limit of liability

Bank's Portfolio of Loans to Consumers for SHS under PAYG contracts

Bank pays the PAYG Co. for installations from loan proceeds

- Manages Portfolio
- Loan Underwriting + Administration

- G4A provides TA to bank to set up and manage loan program
- Negotiate loan portfolio details + Sign CDA
- Bank pays CDF fees to G4A
- Bank fulfills reporting requirements

How Does the CDF Cover Loan Arrears Prior to Default?

Why Cover Arrears?

- G4A believes that the lower income populations and SMEs which comprise the majority of off grid consumers are inherently good payers
- Such consumers generally do not take on financial obligations beyond their means

BUT

- These borrowers are subject to very high risk of catastrophic events (e.g. adverse weather) that may impact their incomes and ability to pay.
- Providing a cushion for them to get back on their feet and bring loans in arrears back into performance makes good business sense

G4A's Solution

Cash Deposit Fund

- After any individual borrower is 30 days late
- Bank has followed collection procedures in the CDA
- Loan is still in arrears + Bank believes it is due to temporary circumstances
- Bank may draw down from the CDF to cover up to 6 months of non-payment by the borrower
- After 6 months of arrears without cure the loan should be called into default
- Loans brought back into performance should either have borrowers repay the 6 months arrears to refund the CDF or the loan may be restructured for additional 6 months

What is Covered in the Cash Deposit Agreement?

The CDA will at minimum address the following:

- ✓ Creation and Funding of the Cash Deposit Fund by G4A
- ✓ Term of availability of the CDF
- ✓ Types of Loans for which Sectors to be included in the portfolio
- ✓ Size of the portfolio and procedures for loan origination
- ✓ Size of the CDF based on percentage of first loss cover for the portfolio
- ✓ Underwriting guidelines and loan administration procedures
- ✓ Procedures for draw-downs from the CDF to cover arrears
- ✓ Collections protocol in event of arrears
- ✓ Conditions for calling a loan in default
- ✓ Procedures for a payout in event of default
- ✓ Currency Exchange
- ✓ Fees payable to G4A
- ✓ Interest earned on the CDF
- ✓ Claw Back of the CDF if the loan portfolio is not realized
- ✓ Responsibilities of each of the parties
- ✓ Conditions for opening subsequent portfolios and negotiating new terms

Protocol for Payment in Local Currencies

- In order to mitigate FX risk, the G4A cash deposit will be maintained in USD in the CDF with the partner banks as much as possible and converted to LCY only when a draw-down or payout is required. The conversion of funds at the point of arrears/default reduces the FX risk to a shorter window compared to if the funds were converted from the first day.
- In collaboration with hedging instrument providers, currency volatilities across the different target G4A countries have been identified and analyzed. The UEMOA countries using the XOF currency which is pegged to the Euro have relatively stable exchange rate and will not require hedging while countries such as DRC, Nigeria, Ghana, Malawi and Rwanda have high FX volatilities and may require hedging.
- Given that the expected level of defaults will only be a fraction of the CDF first loss coverage, it is planned that only about 20% of the G4A funds will be hedged against FX volatilities via currency futures or forward contracts from MFX/TCX. The weighted portfolio at risk will be covered within the 20% of funds hedged.
- On the other hand, discussions with potential G4A partner banks revealed that due to private sector FX shortages, there is a high appetite for USD among local FIs in SSA (particularly in Nigeria and Ghana). As a result, the banks are willing to offer higher interest rates on USD deposits than the rates obtainable in the US and Europe in order to have sufficient funds to finance their customers‘ trade imports. Based on this, it is projected that G4A will earn between 3 to 5% per annum interest income on the USD CDF deposits. This provides additional source of revenue for the Fund.

Where FX rules allow unrestricted importation and repatriation[1]

1. Determine the current exchange rate of the local currency to USD
2. Calculate the volume of USD required to meet the local funding % of guarantee cover
3. Place equivalent USD in fixed deposit as a USD deposit
4. Determine the local currency exchange rate at the point of default
5. Use the conversion rate at the date of honouring default to make the due payment
6. Outstanding sum in the CDF account will be in USD
7. Sum recovered in local currency will be converted to USD.

1. FX rules in the 15 G4A target countries do not require conversion of USD to LCY

CDF Fee Structure[1]

- Annual facility fee in the range 1-2% charged on the full amount of the CDF payable in advance
- The CDF will be placed in an interest yielding USD account with an expected avg. annual yield of 3%
- Interest income on uncommitted CDF funds expected at 3-5% per annum on USD basis
- Interest on draw-downs for arrears [2]: 1% per mo. charged monthly on LCY basis on outstanding arrears for draw-downs repaid within 6 months
- Payout fee[3]: One time fee of 10% (TBD) charged only on payouts on LCY basis once a loan has been called into default
- Revenue on arrears repaid at maturity[4]: 50% of the interest charged on regular draw-downs is charged on the arrears till repayment or 50% of payout fee

1. The Fee Structure may be much lower for the pilot portfolios based on the amount of grant funding that is secured for each pilot
2. Draw-downs refer to funds withdrawn from the CDF to cover arrears of up to 6 months
3. Payouts refer to funds paid out of the CDF to the bank to satisfy guarantee calls
4. Refers to draw-downs that are repaid into the CDF at the maturity of a restructured loan due to the inability of the borrower to pay back arrears within the initial 6 months

Process for Establishing a CDF

1 — EOI
Bank indicates interest to open an energy access loan portfolio backed by G4A

2 — MOU
MOU signed between Bank and G4A covering set-up period, responsibilities of the parties, confidentiality etc.

3 — Plan
G4A + the FI develop together a business plan, pipeline and loan product details. In many cases, G4A will bring the off grid company partners

4 — Terms
G4A and Bank negotiates and sign term sheet incl. pricing, % of first loss cover, portfolio size and composition

5 — Review
G4A reviews Bank's credit policy and risk management system; due diligence. G4A may suggest enhancements

Program Launch

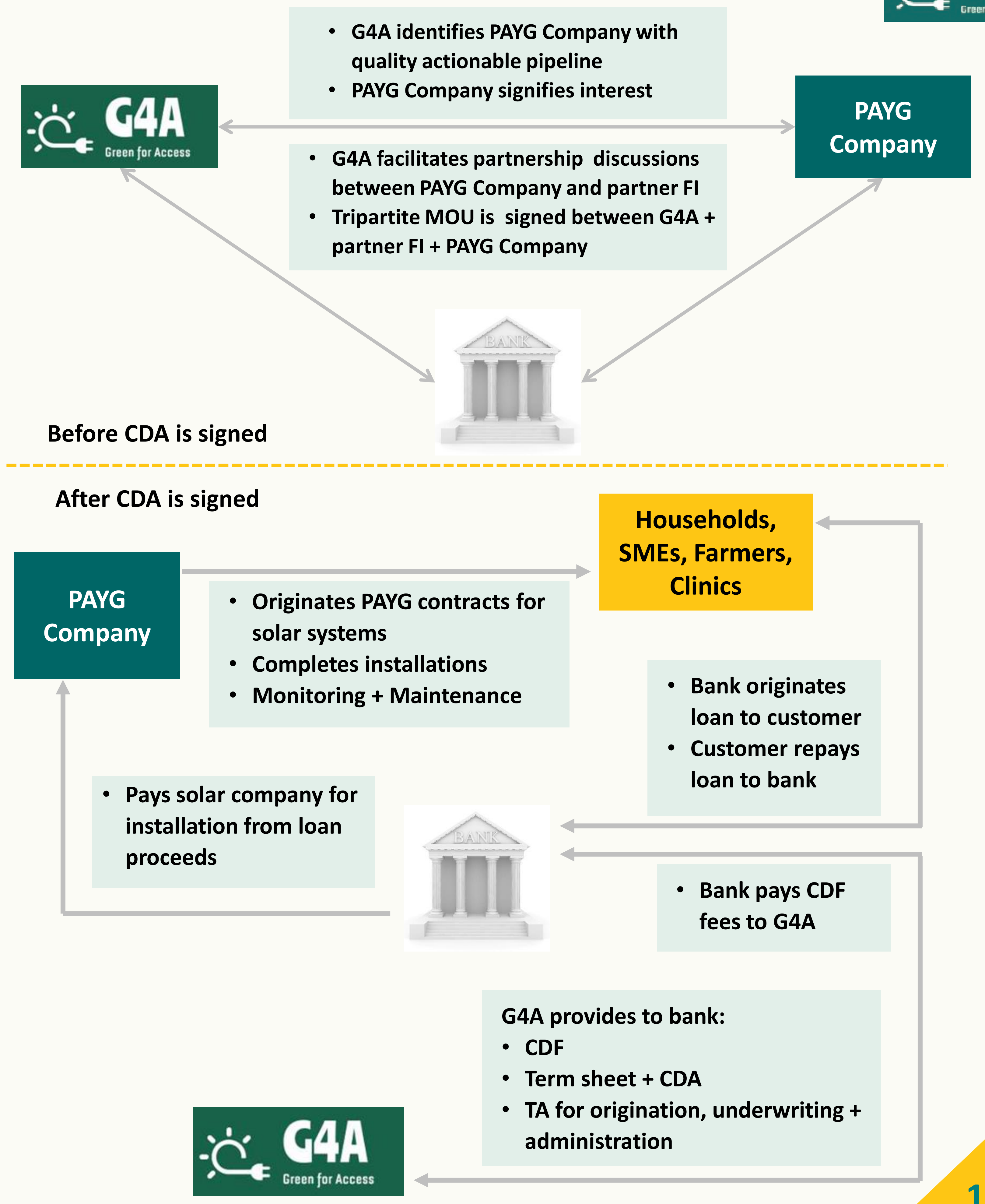
6 — Tailored TA Plan to meet Bank needs in rolling out the portfolio

7 — G4A and Bank sign Cash Deposit Agreement ("CDA") + TA Agreement

How G4A Organizes Direct Lending

- The FIs utilizing G4A First-Loss Reserve Facility will each create a new portfolio dedicated to at least one of four sub-sectors, namely; solar home systems; solar for healthcare, agri-productive use and mini-grids.[1] G4A will provide the necessary technical assistance and the needed risk mitigation tool to cover their first-losses (5-20%).
- For the pilot portfolios, G4A has received commitments of new portfolios ranging from $2-10M to be created and dedicated to direct consumer lending for SHS and agri-productive-use solar assets.
- G4A will support direct lending to consumers by bringing together PAYG/PUE solar providers and lenders/FIs under new partnership arrangements. FIs are unfamiliar with the off-grid sector and energy access companies have had little success approaching FIs for financing.
- G4A will provide the TA to structure these relationships. Each new portfolio will be initiated with one off-grid company meeting G4A's due diligence/product quality criteria, and subsequently opened up to other companies meeting the same criteria.
- In these partnerships, off grid companies and the FIs will play the following roles:
  - Off-grid companies will originate the loans and sign an installation contract with the consumers. The companies will also offer warranty, install the assets and provide after-sale services. In case of defaults they will be responsible for system repossession and resale.
  - Off-grid customers will be able to access financing from partner FIs which will underwrite the loans to the customers. FIs will also manage the administered loans.
  - The FI will pay the off-grid company for each installation from loan proceeds, withholding a negotiated amount to secure the company's ongoing engagement until the loan is repaid.

1. The direct lending model will work for all but mini-grids, for which financing would need to be on a corporate finance basis to the mini grid developer or as project finance to an SPV.

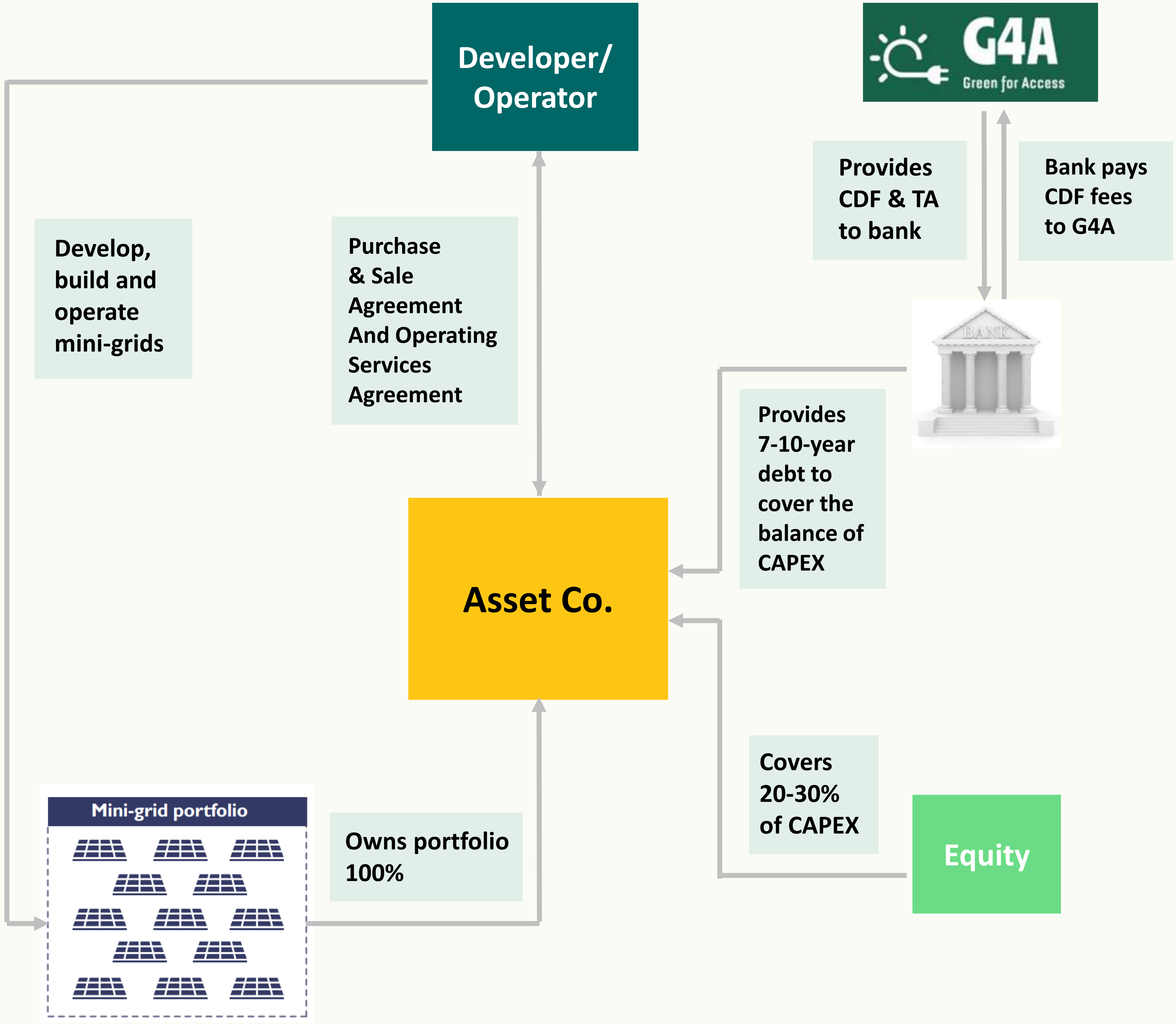


How G4A Supports Lending to Mini-Grid Portfolios

G4A will support lending to mini-grids following the project finance approach as described below:[1]

- Mini-grid developers seeking funding from G4A-backed FIs will be required to aggregate their mini-grids into portfolios. The portfolio of mini-grid assets will be ring-fenced by transferring them from the developer's balance sheet to a company created specifically to hold the assets – an Asset Company (the AssetCo).
- The AssetCo will enter into agreements with the Developer/Operator to build and operate/maintain the mini-grids. All contracts, permits, and equipment associated with the mini-grids and the customer revenues will be owned by the AssetCo.
- The agreements will be designed such that project risks and costs are allocated in a way that incentivizes the developers to develop sites and acquire customers that perform well over the long-term and to systematically drive increases in consumption and revenue by customers with demand stimulation activities.
- The local FI will then provide 7–10-year loans to the AssetCo for the construction of the mini-grids. The FI will also manage the administered loans.
- G4A will provide the necessary technical assistance and the needed first-loss coverage to the FIs on the loans made to the AssetCo. G4A will not underwrite individual one-off mini-grids.

1. Based on the financing model developed by CrossBoundary Energy Access. See - https://www.crossboundary.com/energy-access/open-source/



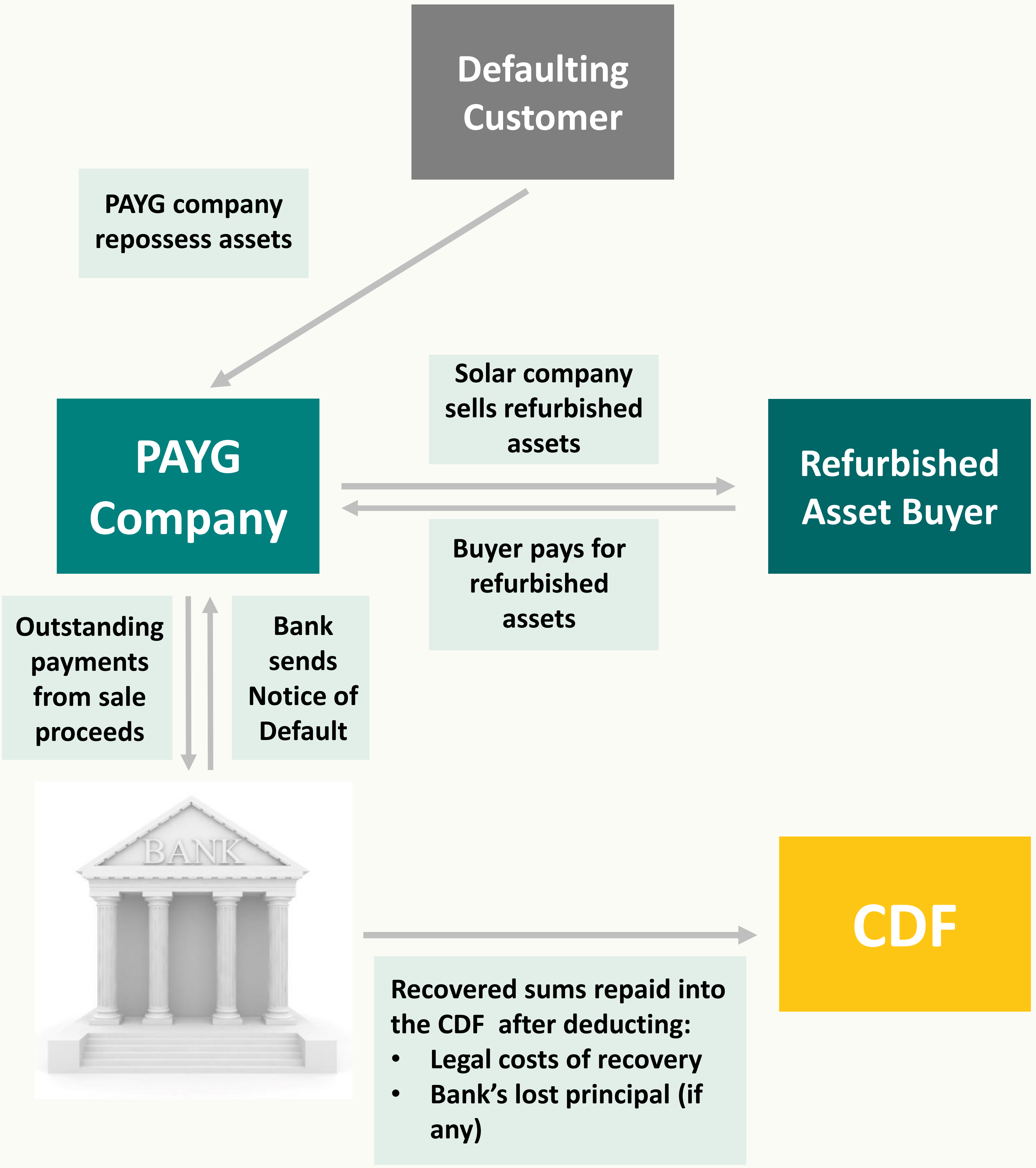
Risk Management

G4A Loan Recovery Process

- Where a loan has been delinquent for a maximum of 6 months or 6 instalments (or for lower numbers based on the portfolio health report of the FI and reviewed and accented to by the TA program), such loan will be called into default.
- The G4A loan recovery process will vary based on the lending structure utilized. Where the bank lends directly to the consumers for SHS or for agricultural productive use systems, recovery will be as follows:
  - The bank will issue a Notice of Default to the PAYG company;
  - The PAYG company will repossess the assets within 45 days of default;
  - The repossessed equipment is refurbished and resold by the PAYG company. It is estimated that the refurbished items will be resold at about 65% of the original sales price. This assumption is based on data obtained from a G4A PAYG partner which successfully refurbished and resold all systems repossessed from its defaulting customers (average default rate of 7%) at up to 80% of the initial cost.
  - If the resale proceeds do not fully cover the outstanding principal, the 1% retainage (of the overall loan portfolio value) withheld by the bank from the PAYG company at inception will be drawn upon
- For corporate loans, assets of the company, including the financed goods will be repossessed by the bank to defray the outstanding sum. For asset-backed financing, the financed assets will be repossessed and resold by the bank. Where the default is on a mini-grid, if possible the energy being generated by the system may be sold to a grid company, otherwise, the assets will be decoupled and can be redeployed to standalone solar customers.
- Sums recovered will be applied in the following order: Legal costs of recovery; Bank's lost principal (if any); Repayment of payouts from the CDF
- Based on this framework and a conservative assumption that only 50-75% of outstanding default amounts will be recovered[1], the post-recovery net loss on G4A's end-user financing portfolio and corporate/asset-backed/project finance portfolio is projected to be 0.56% and 4.13% respectively per loan cycle.

1. The assumed recovery of 50-75% of outstanding principal is much less than the possible amount of 80% of original loan value suggested by actual data obtained from a G4A PAYG partner.

G4A Direct Consumer Loan Recovery Process



Post-Recovery Net Losses

The expected level of post-recovery losses to be borne by G4A is illustrated below using two $5 million PAYG and mini-grid portfolios as examples

Post-Recovery Net Losses on Direct PAYG Consumer Loans

% of Defaulting Customers	8% $400,000	30% $120,000	Average % of Principal repaid by defaulting customers prior to default
Total % of Portfolio Losses Pre-recovery	5.6% $280,000		
% of Outstanding Principal Recovered Upon Resale	75% $210,000	1% $50,000	% Retained from PAYG Company (to be drawn upon if resale proceeds do not cover outstanding principal)
Effective Recovery Rate (% of Out-standing)	92.9% $260,000	3% $7,800	Legal Costs (% of Recovery)
Total % Portfolio Net Losses Post-recovery	0.56% $27,800		

Post-Recovery Net Losses on Mini-Grid Loans

% of Defaulting Sub-Loans	10% $500,000	25% $125,000	Average % of Principal repaid on defaulting sub-loans prior to default
Total % of Portfolio Losses Pre-recovery	7.5% $375,000		
% of Outstanding Principal Recovered Upon Resale[1]	50% $187,500		
Effective Recovery Rate (% of Out-standing)	50% $187,500	10% $18,750	Legal Costs (% of Recovery)
Total % Portfolio Net Losses Post-recovery	4.13% $206,250		

1. Estimate on loan recovery for mini-grids is less than PAYG given that the portion of the CAPEX of mini-grids (i.e. mainly panels) that can be recovered upon resale is less

G4A Risk Management Plan

To ensure that the risks of lending to the energy access sector and providing a cash cover is properly managed, G4A has developed a risk management plan covering the following areas :[1]

Selection of Partner Banks	On-boarding of Solar Companies	Customer on-boarding by Partner FIs	Loan Origination	Loan Monitoring
• Rigorous due diligence • Review of the bank's credit policy and credit approval, monitoring, collections and risk management system • Institutionalization of credit predictors • Put in place a credit scoring system for loan approval • Ensure detailed accounts collection and accounts management system. • Put in place accounts management analytics to detect sub-optimal performance	• Solar company must have a direct relationship with an OEM • Products must have a warranty of minimum of industry standard • Must originate PAYG contracts with consumers • The company must provide remote monitoring devices, and must have a good maintenance and service culture • Solar companies must submit detailed plan on product support, real time online monitoring, recall of products, refurbishment and resale of recalled products	• Check for FIs' adherence to the approved guidelines on customer acquisition • Ensure loan origination and credit underwriting is done in line with approved credit policy of the partner FI • Ensure compliance with all key KYC requirements • Ensure clear repayment sources • Customers must execute offer letter that clearly specifies system recall clause on loan default • Customer to provide peer guarantors	• Loans to be originated by Bank officers or the TA team • Clear guidelines on loan origination with partner FIs • Training of staff on off-grid loan origination and energy credit structuring • Customer to execute all required documentation on facilities	• Detailed documentation on loan monitoring • Monitor assets utilization rate, churn rate, system failure rate for each solar company/developer • Daily, weekly and monthly exception reports on the portfolio • Documentation of all credits in the credit bureau with the appropriate segment code. Where unavailable, detailed compilation of records serve this purpose

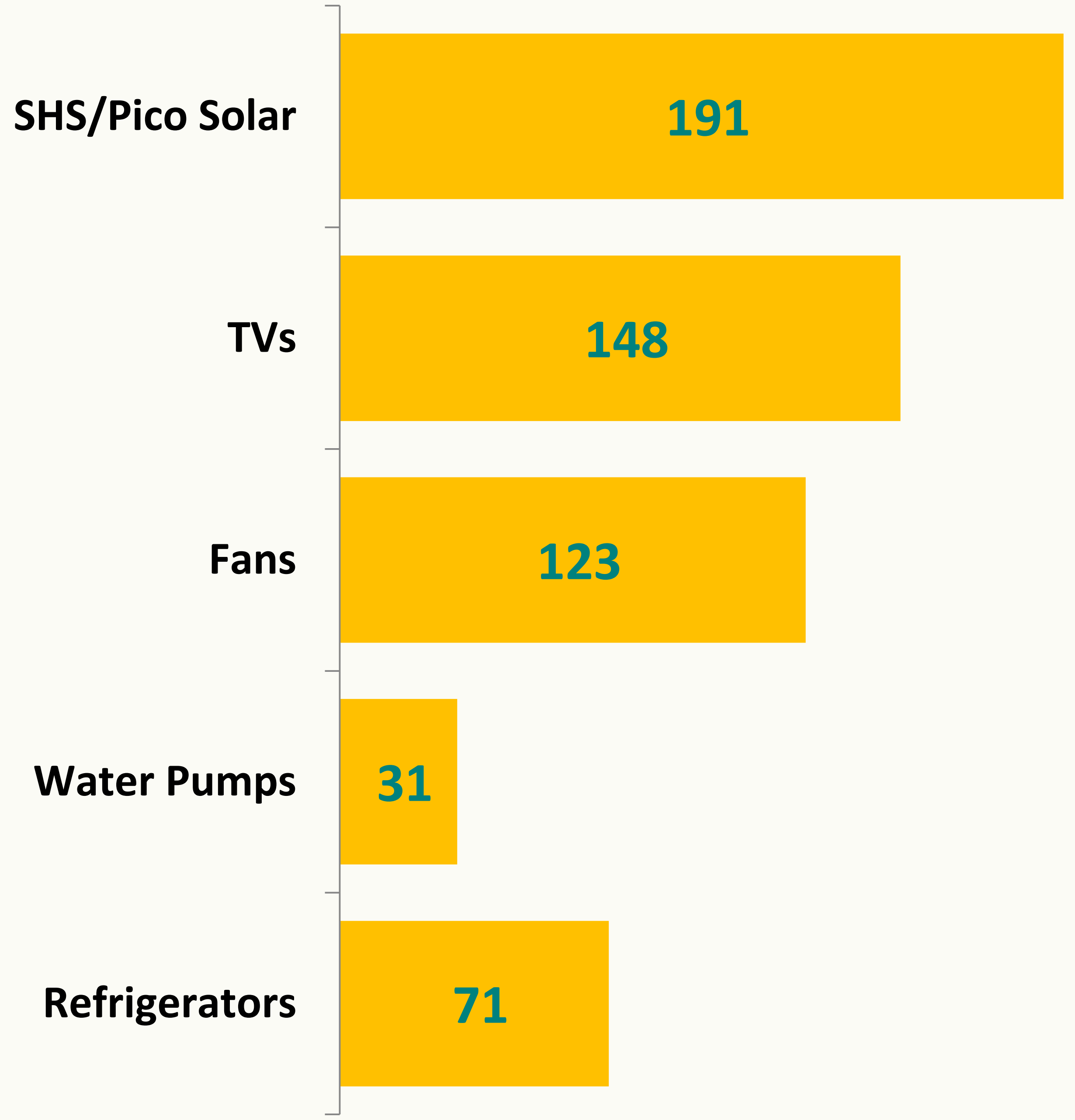
Detailed due diligence will be conducted on potential partner FIs to ensure good standing with the banking regulations of the respective countries, compliance with BASEL III/IFRS 9 and adherence to the Equator Principles.[2] The due diligence will also entail a review of the banks compliance with key performance ratios expressed as CAMEL (Capital adequacy, Assets quality, Management, Earnings and Liquidity ratio) as well as review of reports of rating agencies.

1. The full G4A risk management plan is available on request from GreenMax.
2. A checklist of regulatory compliance documentation to be provided by potential partner banks during the due diligence process is provided in the G4A risk management plan

Product Quality Control

- Loan portfolios that will benefit from the G4A First Loss Facility will be composed of have at least 70% of loans for SHS kits and Pico solar products. In order to mitigate technology risks relating to quality and reliability of hardware, the G4A credit underwriting and loan administration process will rely on product certification provided by Verasol and will seek to only support products that meet IEC TS 62257-9-8:2020.[1]
- Lighting Global (now acting through the Verasol platform) developed the 5 main Quality Standards for SHS and Pico solar products with power ratings less than or equal to 350 W that meet IEC's latest specifications namely:[2]
  - Truth in Advertising: Advertising and marketing materials accurately reflect tested product performance.
  - Durability: Product is appropriately protected from water exposure and physical ingress, has durable switches and connectors and, if portable, survives being dropped.
  - System Quality: Product passes a visual wiring and assembly inspection.
  - Lumen Maintenance: Product maintains consistent light output after 2,000 hours of operation.
  - Warranty: A consumer-facing warranty is available; the required duration varies by product type.
- In addition, Verasol has referenced other testing specifications that cover other related products, specifically: TVs, Fans, Solar Water Pumps, Refrigerators and freezers. As of October 2020, VeraSol has tested and certified 564 brands. G4A will work only with PAYG companies retailing these certified brands.
- G4A will use the framework developed by Efficiency for Access and CLASP on solar mills. Mini-grids quality specifications are not standardized and G4A will rely on USAID's mini-grid operational tool kit and framework.[3] G4A will also require its partner solar companies to follow Basel Convention Guidelines in the disposal of used batteries.

VeraSol Verified Products & Brands



1. The full G4A Product Quality Control Plan is available on request from GreenMax
2. VeraSol is a non-profit quality assurance agency managed by CLASP, an expert in appliance energy performance and quality and supported by the World Bank, IKEA Foundation, UKAid, among others. It provides the much-needed quality assurance services for the growing off-grid energy sector and has developed new or adopted different testing methods to determine or establish a common language for making claims about product performance
3. https://www.usaid.gov/energy/mini-grids

Fund Management and Partnerships

The Fund Manager: GreenMax Capital Group

- 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.

Experience with First Loss Facilities

- 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.
- With technical assistance provided by GreenMax, some of the partner banks on the loan guarantee program learned enough about underwriting energy efficiency loans to blockhouses that they eventually required no credit support at all to continue making loans.

Partnership with CLASP

- The Collaborative Labeling and Appliance Standards Program (CLASP) serves at the epicenter of collaborative, ambitious efforts to mitigate climate change and expand access to clean energy, through appliance energy performance and quality. CLASP's mission is to improve the energy and environmental performance of the appliances and equipment we use every day, accelerating our transition to a more sustainable world. CLASP works hand-in-hand with governments, experts, industry, consumers, donor organizations, and others to propel policies and markets toward the highest-quality, lowest resource-intensive appliances possible. CLASP has worked in more than 100 countries since its inception in 1999. CLASP has offices in Washington, DC (USA), Nairobi (Kenya), and New Delhi (India) as well as teams in Europe, China, and Indonesia.
- CLASP's Clean Energy Access (CEA) program supports ambitious efforts to increase global access to clean energy through appliance and equipment energy efficiency. CLASP's CEA team works in partnership with key stakeholders in South Asia, East and West Africa, China — with support from a diverse group of funders. CLASP helps build healthy markets for off-grid solar products by driving innovation and sales in early-stage product markets, surfacing data and research on product performance, market trends, and consumer preferences, establishing technical foundations for consumer protection, and aligning sector stakeholders across the value chain. From advancing the off-grid solar technologies, bringing power to energy-impoverished people, to building the climate resilience of underserved communities, CLASP's CEA programs increase uptake of affordable, low-impact, high-quality appliances. CLASP's energy access initiatives include the Efficiency for Access Coalition, the Clean Lighting Coalition, the Global LEAP Awards, and VeraSol Quality Assurance.
- CLASP's roles in its partnership with G4A are as follows: 1) NGO conduit for private foundation funding 2) M&E and Knowledge Sharing partner 3) Technical Assistance on PUE for G4A partner lenders.

Sam Grant, Senior Director of Clean Energy Access – CLASP

- Sam has over 12 years of experience in clean cooking, energy efficiency, and off-grid energy markets. He currently leads CLASP's efforts to promote high performing appliances that enable access to clean energy for the world's poorest people, boosting incomes, reducing carbon emissions, and improving quality of life. In addition to leading the expansion of CLASP's core programmatic impact in sub-Saharan Africa, he has helped launch new work around electric cooking, off-grid cold chain technology, and electronic waste.
- Sam previously held leadership roles at the Equity Group Foundation and MicroEnergy Credits. He has extensive experience working in East Africa, as well as Papua New Guinea, and Mongolia—where he launched the home energy efficiency financing unit at XacBank.

Pilot Portfolios

- Due to the lengthy amount of time it takes to reach first financial close for a fund entity such as G4A, and in order to serve the existing pipeline of deals identified during the market assessment, GreenMax is establishing six pilot CDFs with five FIs and one MFI to support new energy access loan portfolios totaling $21.25 million.
- These pilots are intended to serve as pre-G4A fundraise close proof of concept and are being organized as individual standalone CDFs apart from the G4A structure, which will be rolled up into G4A at the full first close of the G4A Fund.
- G4A has secured a grant funding of $1M from IKEA Foundation to be used as the anchor first loss tranche for the pilot CDFs and is seeking an additional $4M in debt funding to launch the pilots.

	Nigeria Pilot (1)	Nigeria Pilot (2)	Tanzania Pilot	Uganda Pilot	Malawi Pilot	Kenya Pilot
Country:						
Banking Partner:	Sterling	FCMB	EQUITY Bank	EQUITY Bank	CUMO	EQUITY Bank
PAYGO Partner:	ZOLA ELECTRIC	KOOLBOKS	ZOLA ELECTRIC	Tulima Solar	VITALITE	DIFFER COMMUNITY POWER
Portfolio Size:	$5 M USD Equivalent	$3M USD Equivalent	$5 M USD Equivalent	$2.5 M USD Equivalent	$1.75 M USD Equivalent	$4 M USD Equivalent
CDF Size:	$1M ($200k grants, $800k debt)	$600k ($120k grants, $480k debt)	$1M ($200k grants, $800k debt)	$500k ($100k grants, $400k debt)	$350k ($70k grants, $280k debt)	$800k ($160k grants, $640k debt)
Portfolio Compo-sition:	75% SHS for Households and SMEs; 25% SHS for private health clinics	100% Household and SME cold storage units	75% SHS for Households and SMEs; 25% SHS for private health clinics	100% Solar water pumps; Installed at smallholder farms	100% Solar water pumps; Installed at smallholder farms	100% SHS for Tunza network private health clinics
Install-ations:	12,500 SHS for HHs; 3,750 SHS for SMEs; 4,000 SHS for clinics	3,000 solar refrigerators	12,500 SHS for HHs; 3,750 SHS for SMEs; 4,000 SHS for clinics	2,000 solar water pumps	4,375 solar water pumps	100 healthcare solar systems

Note: The total funding required for these pilot CDFs as shown above sums up to $850k in grants and $3.4M in debt, totaling $4.25M. The remaining $750k from the $5M interim close, comprised of $150k IKEA grant and $600k in debt funding will be reserved for an additional pilot CDF or to expand the existing pilot CDFs.

Grant Funding Partners

IKEA Foundation

IKEA Foundation: In July 2022, the IKEA Foundation approved a Euro 1.5M grant for the pilot phase of G4A. The funding covers G4A's first 12 months operating expense, TA and M&E support from CLASP, and $1M contribution to the grant portion of the fund's capital stack. The IKEA Foundation (Stichting IKEA Foundation) is the philanthropic arm of INGKA Foundation, the owner of the IKEA Group of companies. IKEA Foundation aims to improve the lives of vulnerable children by enabling their families to create sustainable livelihoods, and fight and cope with climate change. Through philanthropy and grantmaking, IKEA Foundation is focused on tackling some of the root causes of inequality: poverty, the consequences of climate change, and lack of resources such as clean air, energy and fertile land.

Keeling Curve Prize: G4A was selected as a 2022 winner of the prestigious Keeling Curve Prize by the Global Warming Mitigation Project (GWMP). Each year, the Keeling Curve Prize awards $25,000 to 10 projects and programs across the globe with demonstrated success in reducing, eliminating, avoiding, or drawing down greenhouse gasses out of the atmosphere. The Keeling Curve is focused on five key areas: Carbon Sinks, Energy, Finance, Social & Cultural Pathways and Transport & Mobility. The 2022 prize attracted nearly 400 applications, and after passing through a rigorous screening process, G4A was awarded as one of the two winners in the finance category. The prize is a program of the GWMP, a nonprofit that is identifying, activating, and accelerating projects and programs worldwide that are reducing greenhouse gas emissions and increasing carbon uptake.

Partnering for Green Growth (P4G): G4A was selected as a 2019 Start-Up Partnership and awarded a seed funding of $99,800 by Partnering for Green Growth and the Global Goals 2030 (P4G). P4G is a new global 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 12 partner countries, 5 organizational partners, and more than 240 corporate and civil society partners working to accelerate green growth in many of the 150 developing countries across the world, with a focus on five key SDG areas: Food and Agriculture, Water, Energy, Cities, Circular Economy. 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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