

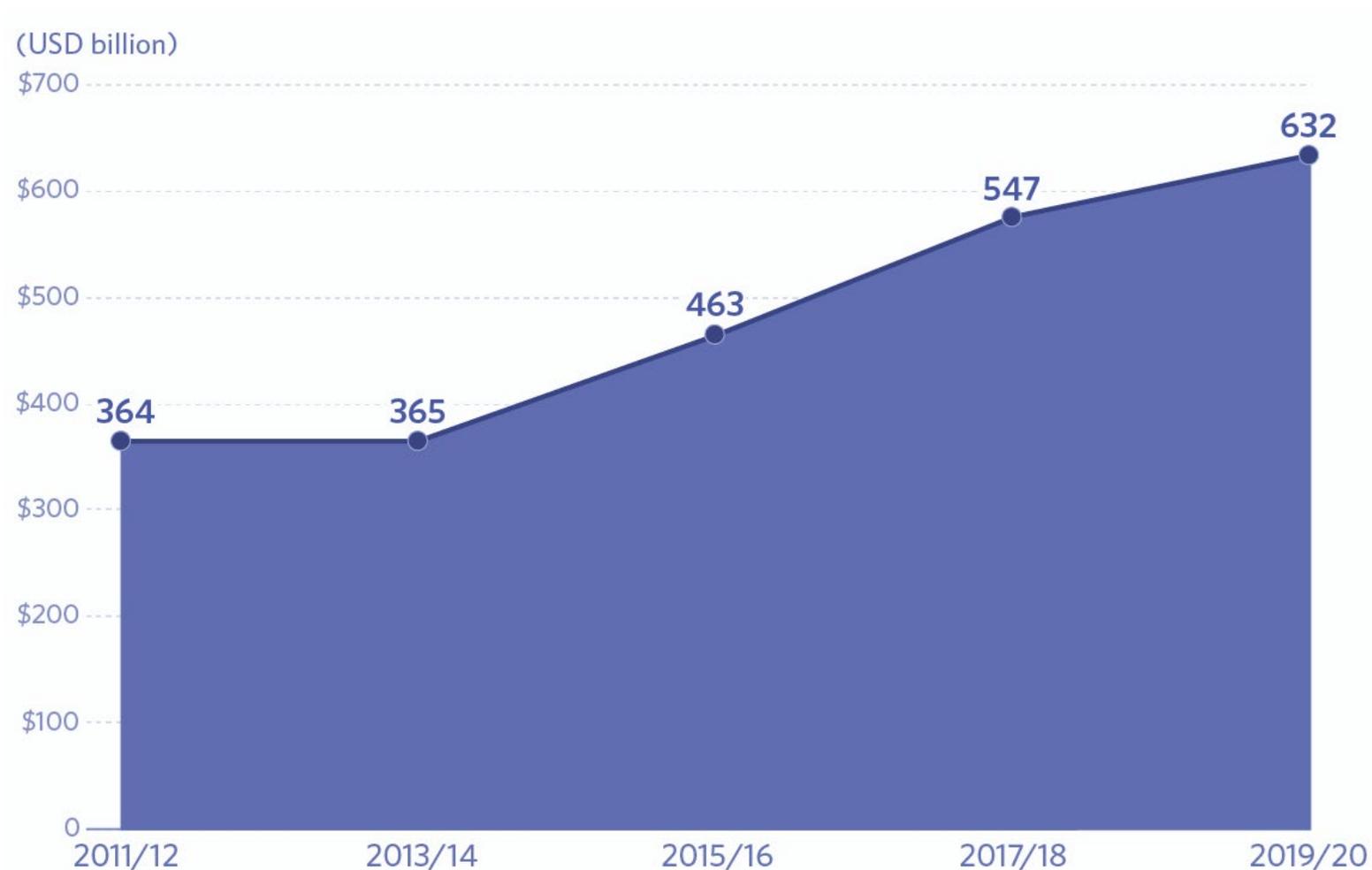


STARTING SOON

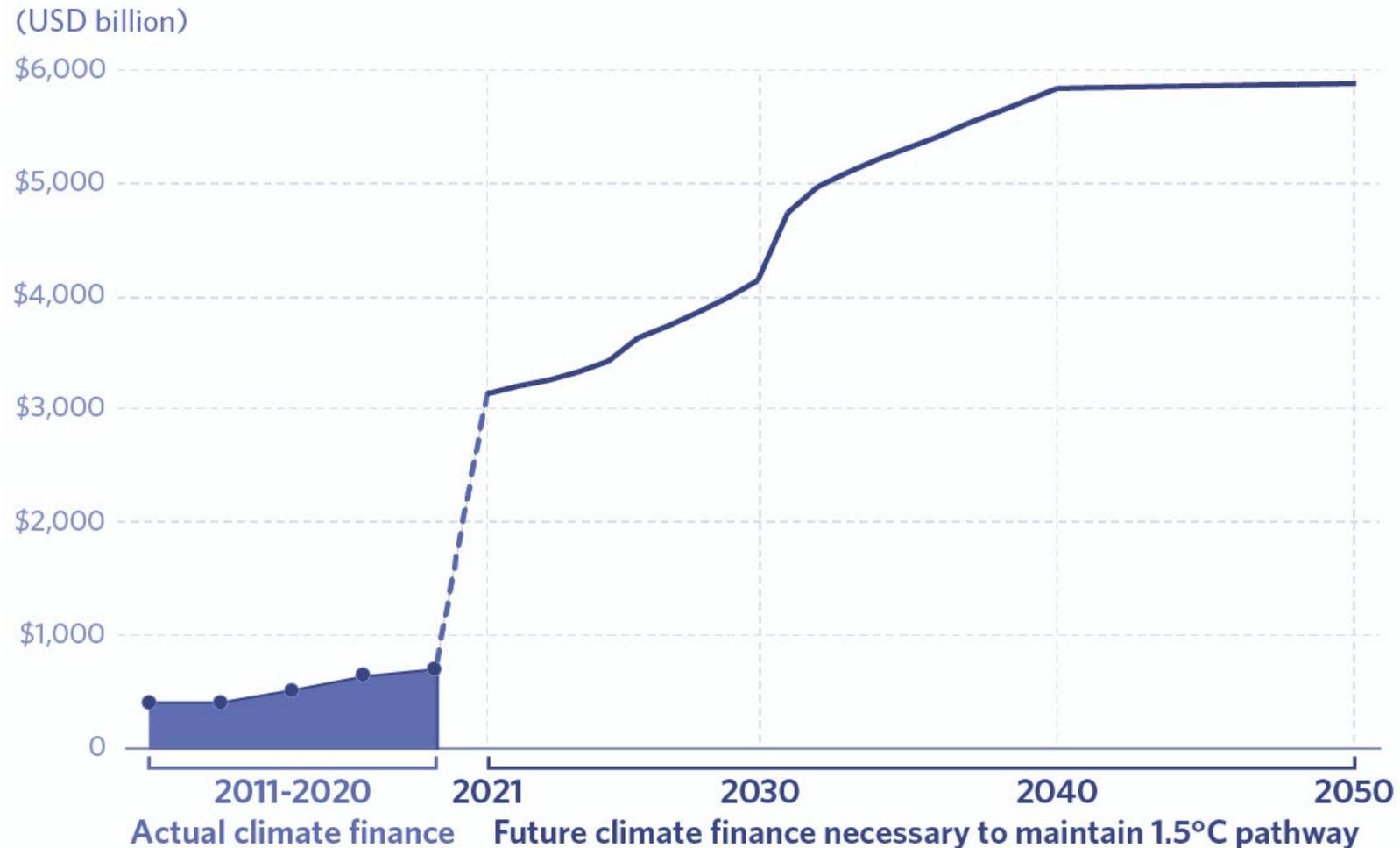
The Lab Demo Day

October 20
10:00 AM ET
4:00 PM CEST

Global climate finance flows reached USD 632 billion in 2019/2020, but with tepid growth rate



Current investment levels are nowhere near enough to limit global warming to 1.5°C





The Lab identifies, develops, and launches innovative finance instruments that can drive billions in private investment to action on climate change and sustainable development.

55 instruments launched

70+ public and private Lab Member institutions

300+ supporting experts, nearly half from developing regions

\$2.5 bn

**mobilized for climate action
in developing countries**

\$370+ mn

invested by Lab Member institutions

\$2.0+ bn

**catalyzed in
additional investment**

**Lab instruments have
mobilized**

200x

**what funders have invested
in the Lab Secretariat**

The Lab brings together over 70 institutions to address the sustainable investment gap

FUNDERS



MEMBERS



PAST FUNDERS



The Lab's three ingredients to success



Public-Private Collaboration

Builds capacity and knowledge to deploy effective climate finance solutions.



Innovation & Transformative Solutions

Financially sustainable solutions that reduce barriers to investment in sustainable development.



Mobilizing Finance

Enables piloting and implementation of transformative solutions.

2021 Lab Instruments: a wide range of climate investment opportunities



Today's impact

Investment Opportunities

USD 348.2 million

Grants

USD 19.8 million



A smiling woman with a patterned headscarf and a red top with a geometric pattern on the neckline and sleeves. She is standing in front of a wall made of mud bricks. The background shows some green plants and a clear sky.

Smallholder Resilience Fund (SRF)

ONE ACRE FUND

Appollinarie Nyiratabaro, Bugesera District, Rwanda



Marie Usabiyumva,
Gatsibo District, Rwanda

Farmer Challenge:

Low prices

+

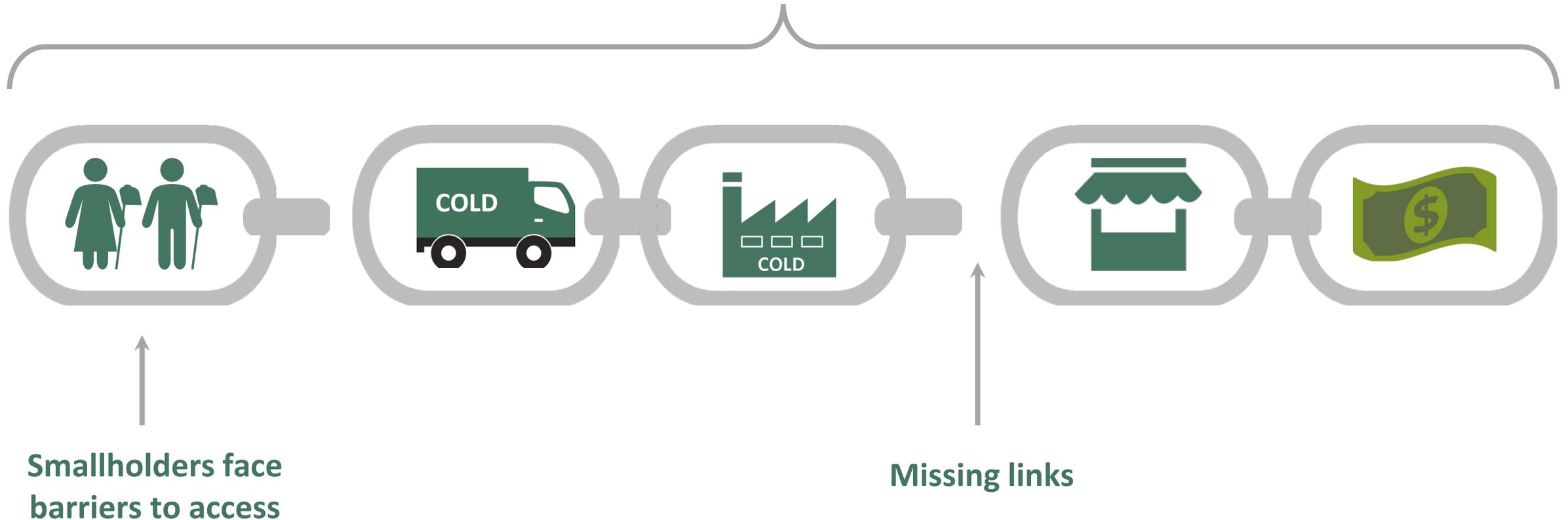
Insufficient markets

Market Failure – Value Chain Shortfalls



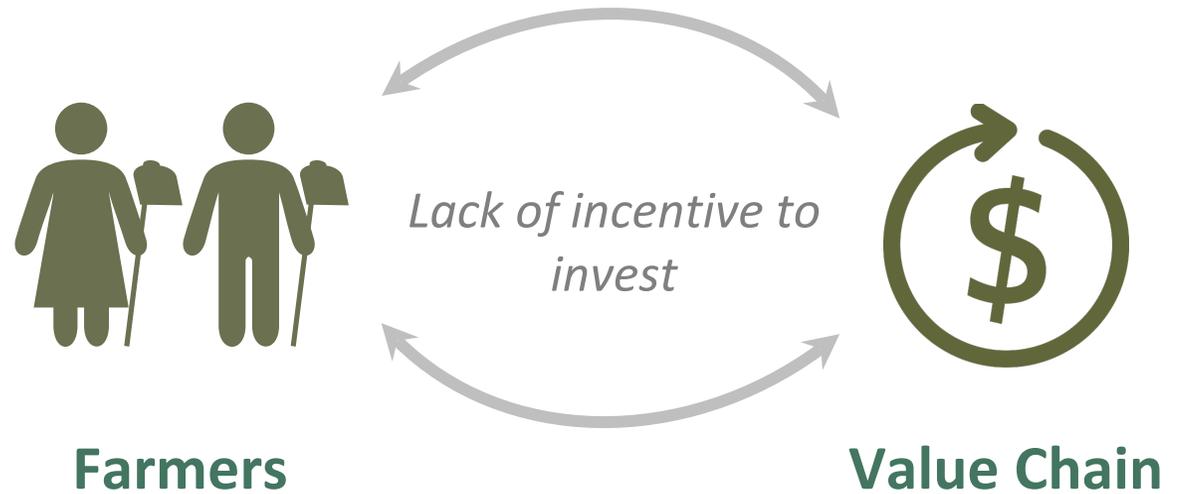
Crop value chains are only as strong as their weakest link and do not work for farmers

**Lack of commercial financing into
value chains**





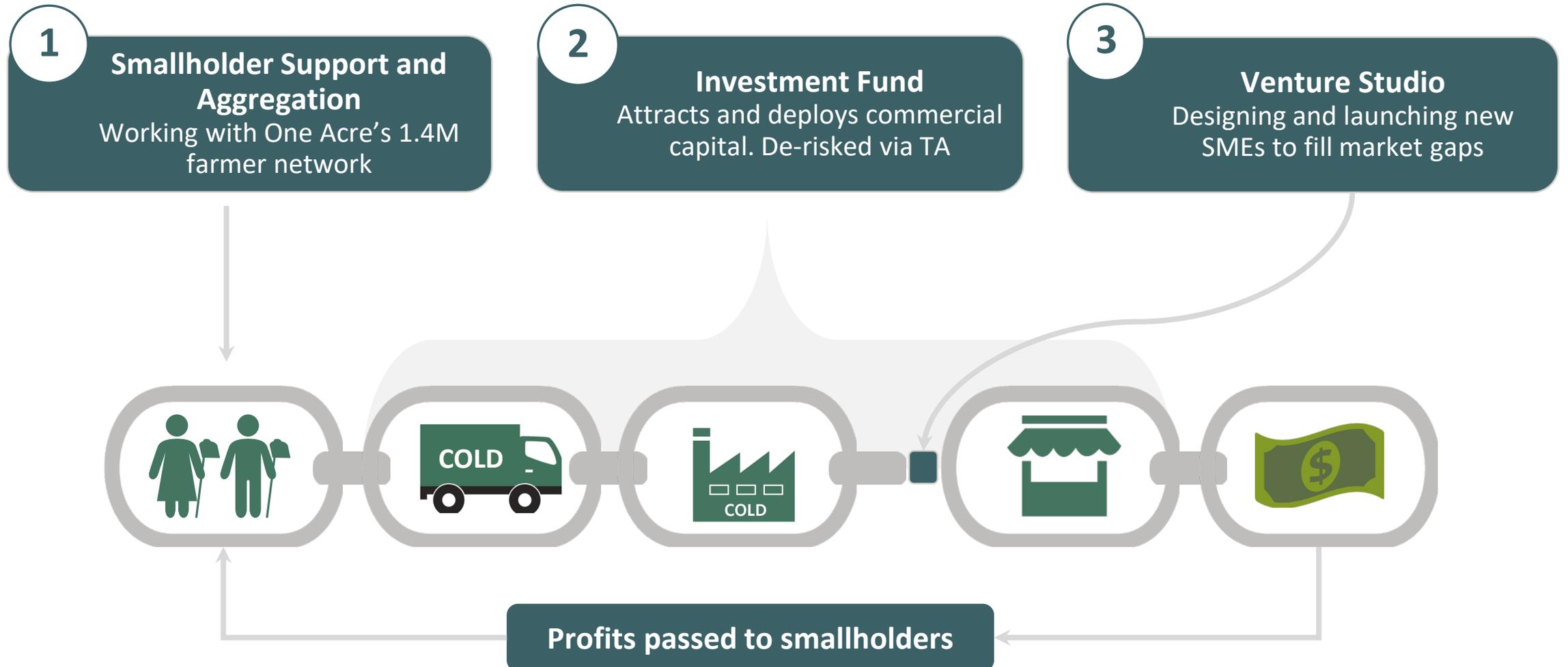
SRF aims to address market failures for farmers and the value chain



Solution: Synchronized investment



To address the challenges at all levels, we will deploy a multi-pronged, 'synchronized investment' approach.



Impact: resilience for smallholders and the environment



By enabling smallholders to engage in more productive, climate-friendly value chains, both people and planet will benefit

Stable incomes from crop diversification

Increased annual income by farming high-value crops



Christine Mukamabano,
Kayonza District, Rwanda



Carbon sequestration through tree planting

Agroforestry, land restoration, and improved biodiversity



Example: Avocado in Rwanda



Illustrative

1

Smallholder Support and Aggregation

Working with One Acre's 1.4M+ farmer network

Examples

Seedling distribution, extension, offtake

2

Investment Fund

Attracts and deploys commercial capital. De-risked via TA

Equity investment in avocado oil processor, working capital for seedling production and exporters

3

Venture Studio

Designing and launching new SMEs to fill market gaps

Building cold chain and certification company



One Acre Fund is uniquely positioned to improve African food systems and improve smallholder resilience

1.4M farmers, 9 countries

One Acre Fund is a trusted partner for farmers and has boots on the ground in East Africa with strong field presence & farmer network.

Partnerships with a large network

of government stakeholders, agri-SMEs, and end market buyers

Track record raising \$74M of debt from investors,
including commercial banks and Development Finance Institutions

History of farm-finance innovation

(e.g. largest provider of smallholder crop insurance)

Executive leadership team



Andrew Youn, CEO



Ayanda Mngadi, CFO



Eric Pohlman, RW Country Director

Country Statistics (2021)

700,000+

Direct clients

1M+

*Farmers served
through partnerships*

\$33M+

Total loan portfolio (\$)

2,730

Country program staff

Our presence in Rwanda



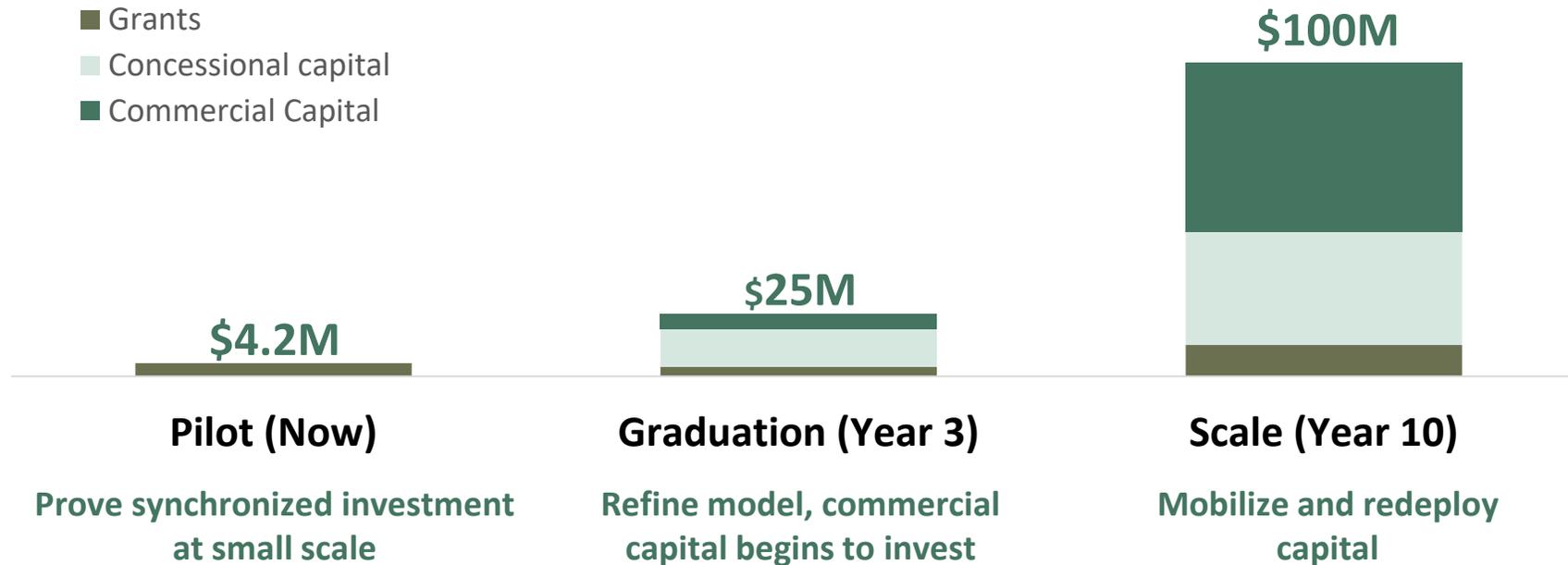
Felicite Ntawangaheza, a One Acre farmer from
Bugesera District

We are Ready to Launch:



We are launching a grant-funded pilot to learn and de-risk before mobilizing concessional and private capital

Capital needs - Amount deployed per year



Outcomes:

1 million+
farmers served
(50%+ women)

10 million+
fruit trees planted

Replication in multiple countries & value chains

Grant figures are raised annually



Jeremy Golan
Senior Director, SRF Lead
jeremy.golan@oneacrefund.org

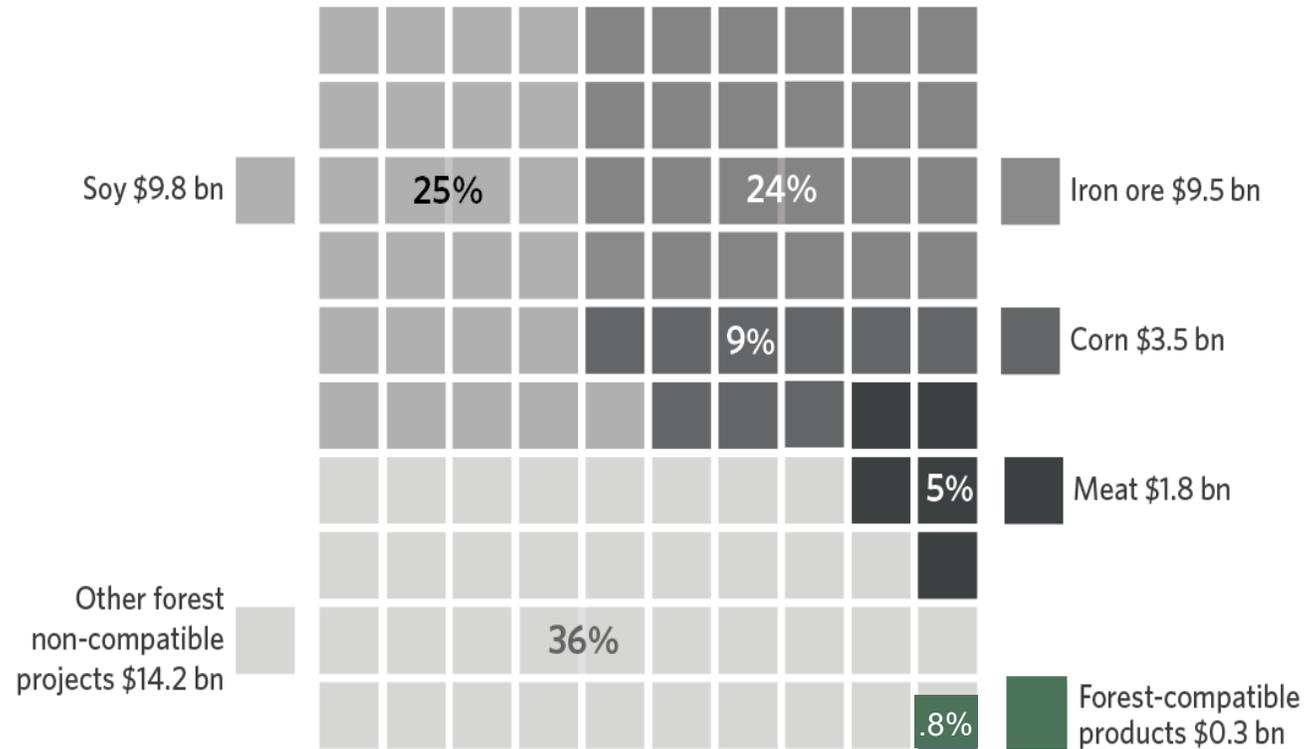
AMAZONIA SUSTAINABLE SUPPLY CHAINS MECHANISM (AMSSC)

amazonia viva



PROBLEM

The Amazon region contains 67% of the world's tropical forest cover. **Yet the region contributes to not even 0.2% of the USD 175 billion global market for forestry-compatible products**



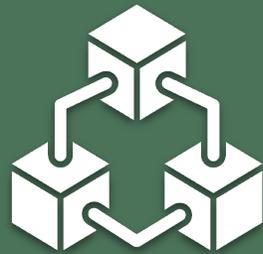
Exports from the Amazon

MAIN CHALLENGES

Small producers and cooperatives in the Brazilian Amazon are unable to take advantage of the growing global demand for forest-compatible bioeconomy, **AS THERE IS SYSTEMIC LACK OF:**



FINANCING



ROBUST VALUE
CHAINS



PRODUCTIVE
CAPACITY



LOCAL
INFRASTRUCTURE

THE SOLUTION

AMSSC scales Amazonian bioeconomy value chains, amplifying investments in the region and building community resilience



Offtake
agreements



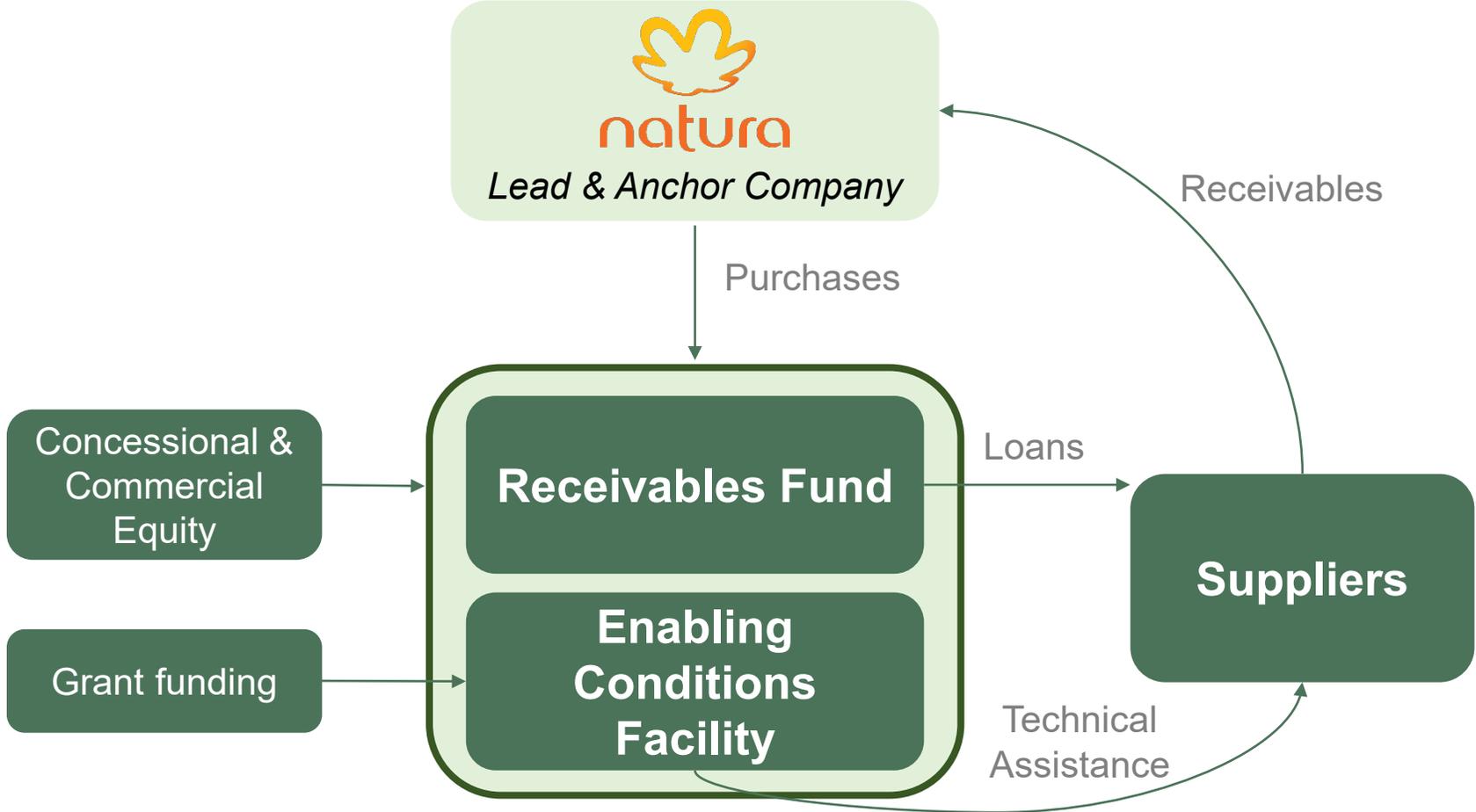
Sustainable
commitment



Technical assistance
& Enabling
Conditions Fund

**UPSTREAM
FUNDING**

INSTRUMENT MECHANICS



Cooperatives in the Brazilian Amazon
Natura's suppliers of over 37 bioingredients and agroforestry palm oil



Fund that leverages bioeconomy off-take agreements with a holistic focus on value chains

IMPACT



Bio-ingredients growing 140% in the next 10 years



Over 10,000 households in the Brazilian Amazon



89 supply chains



Build capacity of 40 smallholder cooperatives in bioeconomy value chains



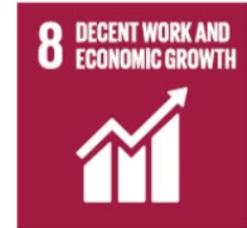
3 million hectares of the Brazilian Amazon



Sustainable livelihoods with direct investments from the ECF



1.4 billion tons of CO₂ emissions



IMPLEMENTATION PATHWAY

1-3 years

- Co-construct value proposition by **engaging cooperatives**
- **Fundraising for the Enabling conditions fund (ECT)**
- **Develop a monitoring and evaluation strategy**
- **Receivables fund reaching up U\$ 15mm**

3-5 years

- **Engage and finance** growing number of **cooperatives**
- **Increase pipeline and opportunities** with other suppliers
- **Include one off-taker** in the platform
- **ECF**: phase out from donations

Year 5 and beyond

- **Receivables fund reaching up U\$ 50mm**
- Include **another off-taker** in the platform
- **Other financial instruments** are developed and used by ECF

INVESTMENT OPPORTUNITIES: INITIAL 3-YRS

Investment type	Amount (USD)	Role of capital
Subordinate Tranche	3 MM (20%)	First-loss / de-risking
Mezzanine Tranche	1,5 MM (10%)	Support fund with return of principal & reduce costs of financing
Senior Tranche	10,6 MM (70%)	Support scaling
Philanthropic		Contribute to the Enabling Conditions Facility. Non-refundable grants

USD equivalent of the Brazilian real (BRL) is calculated using the exchange rate of 1 USD = 5 BRL



AMSSC brings a new model for companies to interact with their suppliers, promote sustainability in supply chains, and contribute to the betterment of suppliers' communities

CONTACT INFORMATION:

Carolina da Costa
cdcosta@mauacapital.com

P-REC Aggregation Fund

Extending the renewable energy
revolution to fragile states

Presented by:



Sherwin Das
Managing Director, Energy Peace Partners



Katie Retz
Renewable Energy Finance Lead, Energy Peace Partners

About Energy Peace Partners



Mission



Leverage climate and finance solutions to promote peace in the world's most fragile regions.

Team



Brings together expertise in peacebuilding, renewable energy and climate security

Peacebuilding



Dave Mozersky
President

Renewable Energy



Sherwin Das
Managing Director

Climate Security



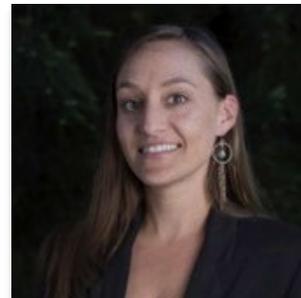
Linda Wamune
Program Director



Bessma Mourad
Operations & Planning
Lead



Dave Williams
Renewable Energy
Finance Advisor



Katie Retz
Renewable Energy
Finance Lead



Orrin Cook
Innovative Finance
& Asia Lead

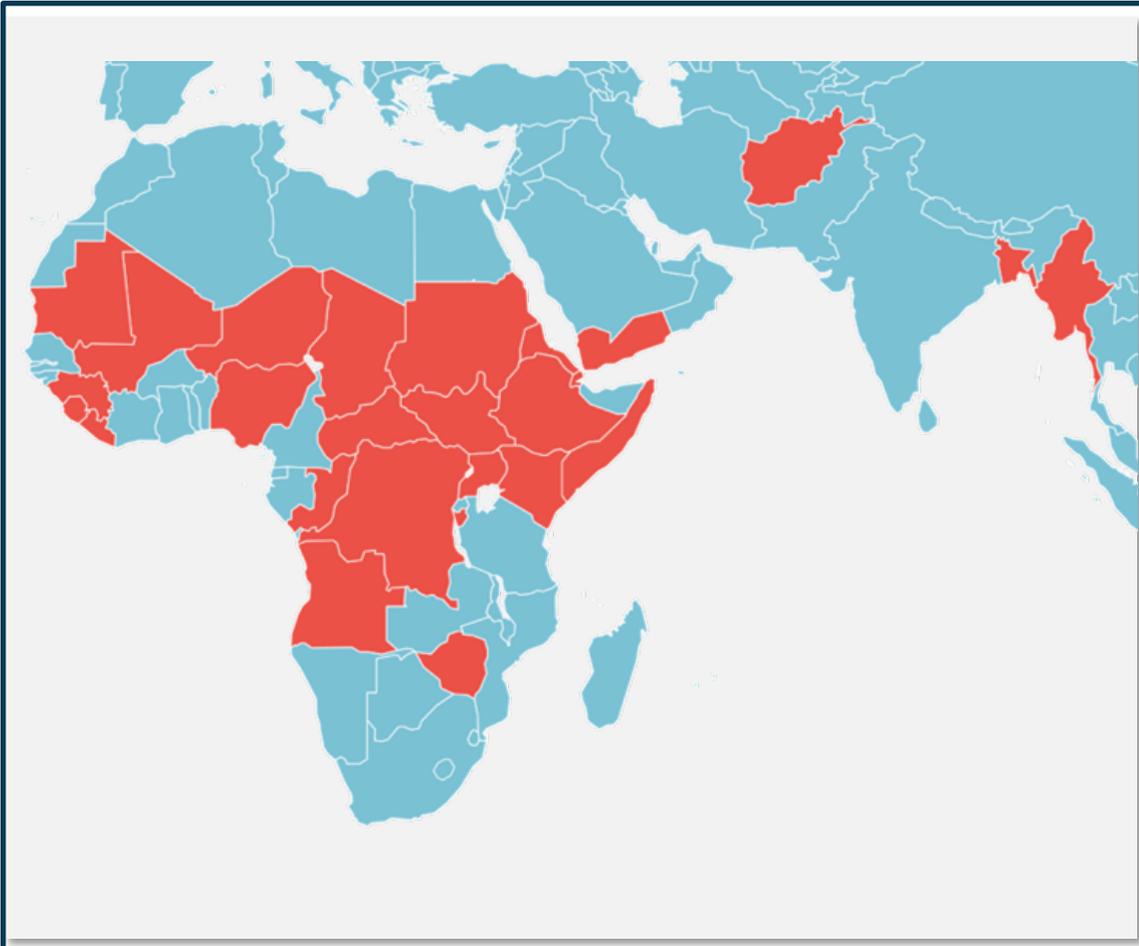


Andrea Abel van Es
Peace Analytics
& Impact Advisor

The Challenge



Limited RE investment in fragile states in sub-Saharan Africa



Least electrified countries are also most vulnerable to conflict and climate impacts. Yet less than 5% of global renewable energy (RE) investment reaches these nearly one billion people.

Sub-Saharan Africa:

- **75%** of world's population **without electricity access**
- Energy access **progress limited** to few countries
- **Fragile states** suffer from persistent energy poverty alongside risks of conflict and climate change
- Uncertain political and economic environments **deter RE investors** and limit access to affordable finance



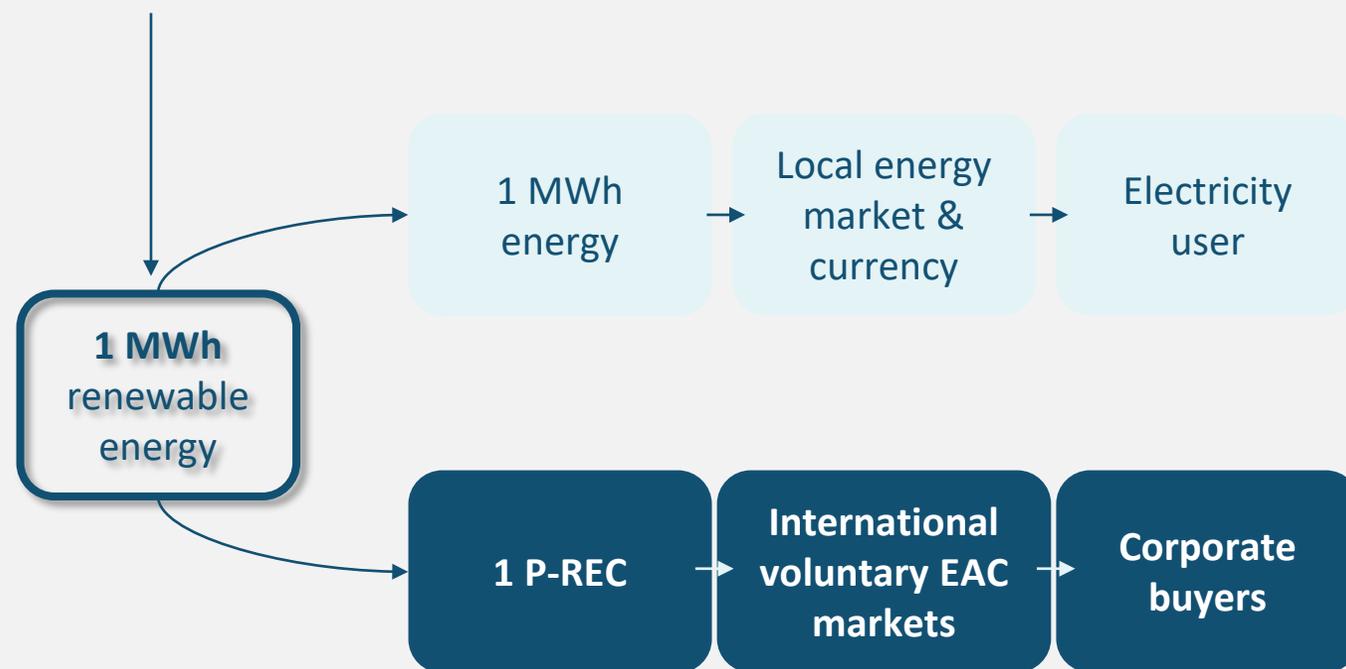
The Innovation

Peace Renewable Energy Credits (P-RECs)



- **High-impact energy attribute certificates (EACs):** 1 MWh = 1 P-REC
- **Values** social & environmental benefits of RE generated from qualifying projects
- **Sales** allow developers additional way to monetize RE, unlocking new revenue stream
- **Purchases** help multinational companies meet environmental and social goals

Renewable energy projects in fragile countries



P-REC sales unlock new revenue stream for RE developers

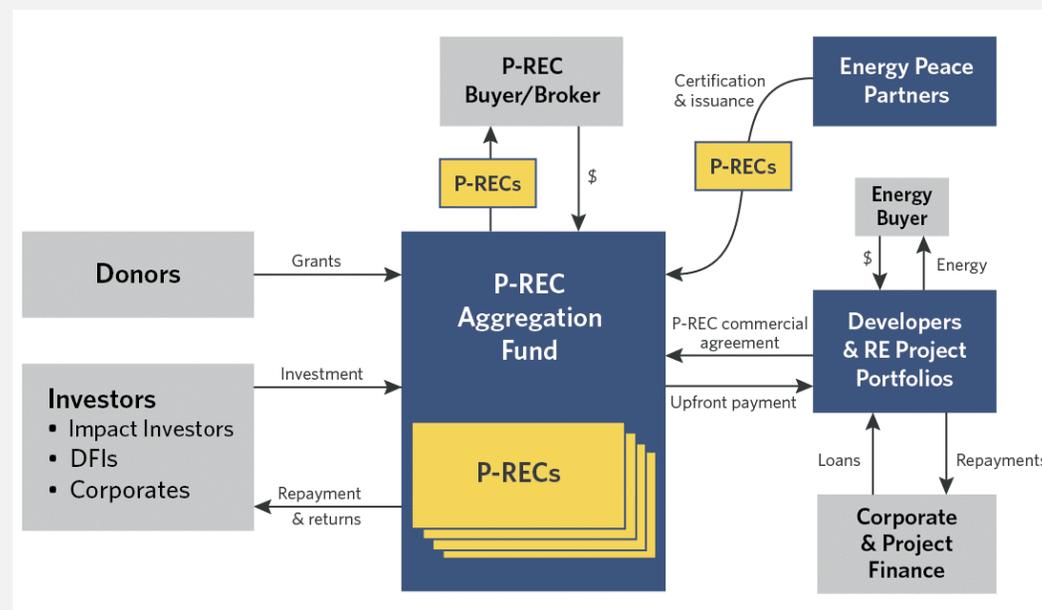


The Solution

P-REC Aggregation Fund

Instrument Mechanics

- 10-year P-REC purchase agreements executed with RE developers
- **RE developers paid upfront** at Commercial Operation Date for future P-RECs.
- P-RECs issued into Fund as power is generated
- **Fund aggregates and resells P-RECs** in voluntary RE markets



Value Proposition

- Monetizes future P-RECs to **provide capital upfront**
- **Supports finance & construction** of new electrification / energy transition projects in **hardest-to-reach communities**
- Developers can use P-REC revenue as sponsor equity or to pay down debt
- **Portfolio approach** and **flexible procurement** options for corporate P-REC buyers

Impact



Market Impact

Focused on **fragile, energy poor countries in sub-Saharan Africa**



- **11 countries** with high impact potential identified
- Includes **DR Congo, South Sudan, Chad, Somalia, Uganda** (current pipeline)

Financial Impact



Unlocks **USD 90M (9X)** for emerging RE projects in underserved markets



Improve investment environment by de-risking projects, stimulating lender interest, and increasing flow of capital

Community Impact

- **Advances SDGs**
- **57MW** in new RE capacity
- **9,900 jobs** created
- **325K households** connected
- **658K mt CO2e** avoided



Go-to-Market Strategy



2020

- Executed first P-REC sales agreements – with **Microsoft** and **Google**

2021

- Opened EPP **Nairobi office** to expand P-REC project pipeline
- Issued **first P-RECs**
- Launched **P-REC Aggregation Fund**
- Designate Fund manager

2022

- Establish Fund entity
- Source Fund capital
- Execute P-REC purchase agreements with developers
- Execute P-REC sale agreements with corporate buyers

2023

- Finalize Fund capitalization
- Provide upfront payments to developers as projects achieve COD

2024

- Begin regular P-REC Issuance to the Fund

Funding and Investment Opportunities



Type		Purpose	Amount
Seed Funding	Grant	Fund preparation & set up	\$ 0.5 million
Fund Capital	Grant	First-loss tranche	\$ 5.125 million
Fund Capital	Concessional (11% annualized return)	-	\$ 5.125 million
			Total \$ 10.75 million

P-REC Aggregation Fund

Summary

- **Impact-focused fund supporting RE projects** in fragile, energy poor countries in sub-Saharan Africa.
- Increases access to finance by **monetizing and paying RE developers upfront** - at COD - for future P-RECs.
- **Builds on increasing P-REC market demand** from developers (sellers) and corporates (buyers).
- Fund can **expand in future to include commercial capital and be combined with lending facilities** to provide more comprehensive financing support.



Photo credit: Thierry Normand, African Parks

P-REC Aggregation Fund

Extending the renewable energy revolution
to fragile states

Contact:

Sherwin Das
sdas@energypeacepartners.com

Katie Retz
kretz@energypeacepartners.com



Nithio

Data Driven Energy Access

Kate Steel
Co-Founder and COO



Madeleine Gleave
Chief Data Scientist



Raghav Sachdeva
Chief Investment Officer



Chris Woolhouse
General Counsel



Grace Fenton
Director, Go-To-Market



JohnPaul Namoma
Investment Officer – East Africa



Noel Agbegha
Investment Officer – West Africa



Ardan Demirayak
Investment Associate



Dave Wilson
Data Solutions Analyst



Njeri Kara
Associate Data Solutions Analyst



Akintayo Jabar
Associate Data Scientist



The Opportunity



Products already exist **but they're not scaling** at the rate needed to reach everyone

and



270 million Africans lack access to energy, but have the ability to pay

The Challenge

Money won't flow



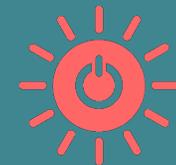
No scalable financing infrastructure because it's hard to accurately assess risk

The Implications



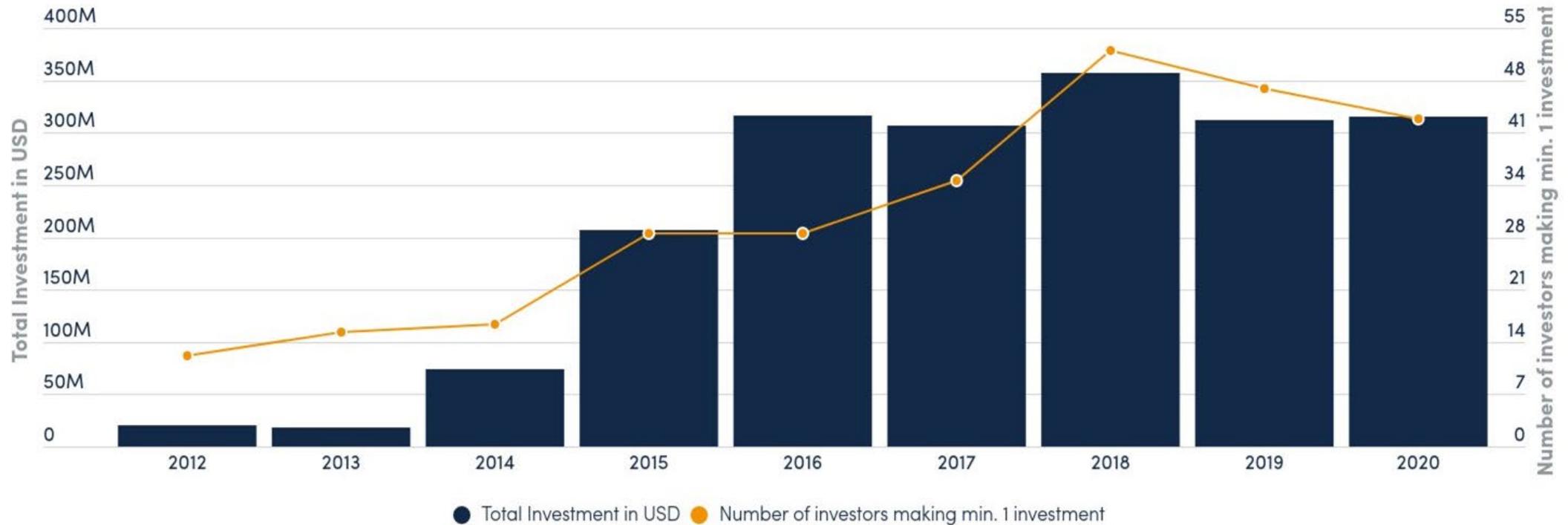
Households, smallholder farmers, and micro-entrepreneurs are **vulnerable to climate change**

and



Universal energy access **will not be achieved by 2030**

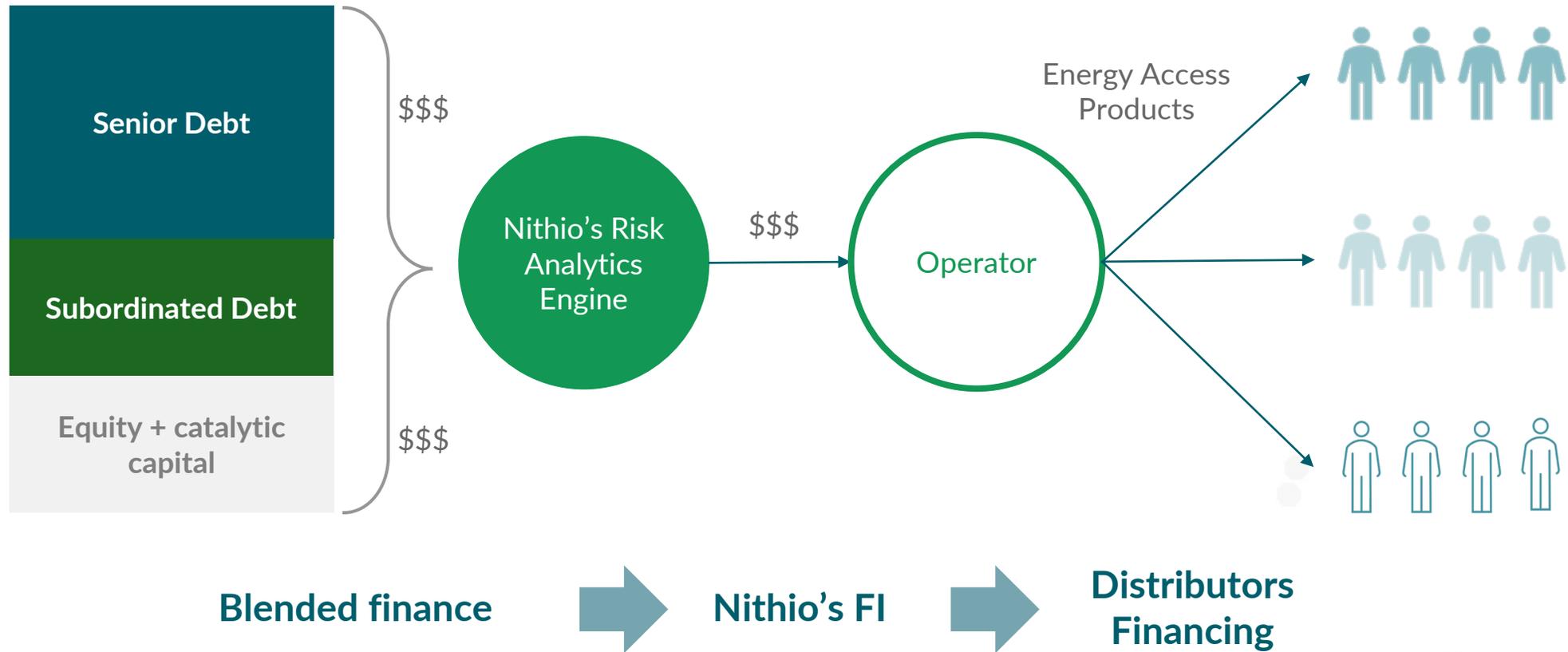
The status quo without Nithio Total capital raised in the off-grid solar sector is not scaling



Nithio is an AI-driven platform for clean energy investment.

We standardized credit risk assessment to catalyze billions of dollars of capital geared to address climate change impacts and achieve universal energy access.

Nithio uses data analytics on loan portfolios to forecast customer repayment risk and more appropriately calculate loan risk and channel blended capital to distributors.



Scale Climate Investment through Nithio's Data-Driven Energy Access

2021



\$23 million in assets



Lending in Nigeria, Kenya, and Uganda



Deployed **4 loans to date** and have a robust and **growing pipeline**



Receivables and inventory backed financing for SHS, productive use appliances, microfinance

2025



\$111 million in deployed capital



24,000 jobs created



3.5 million people now with electricity



\$60 million additional income



Finance **700,000+** appliances

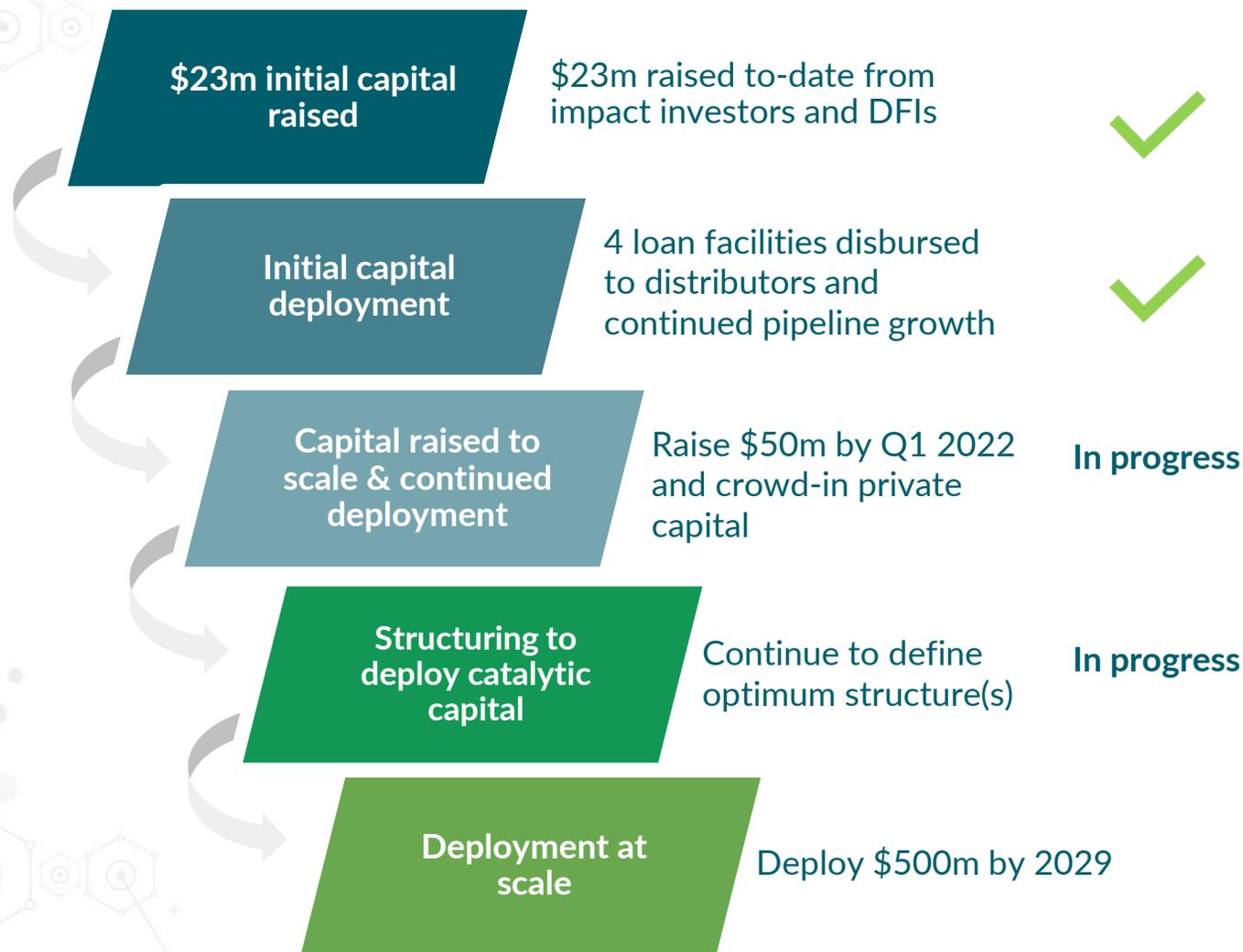


Offset **218,000+** tons of CO2 emissions

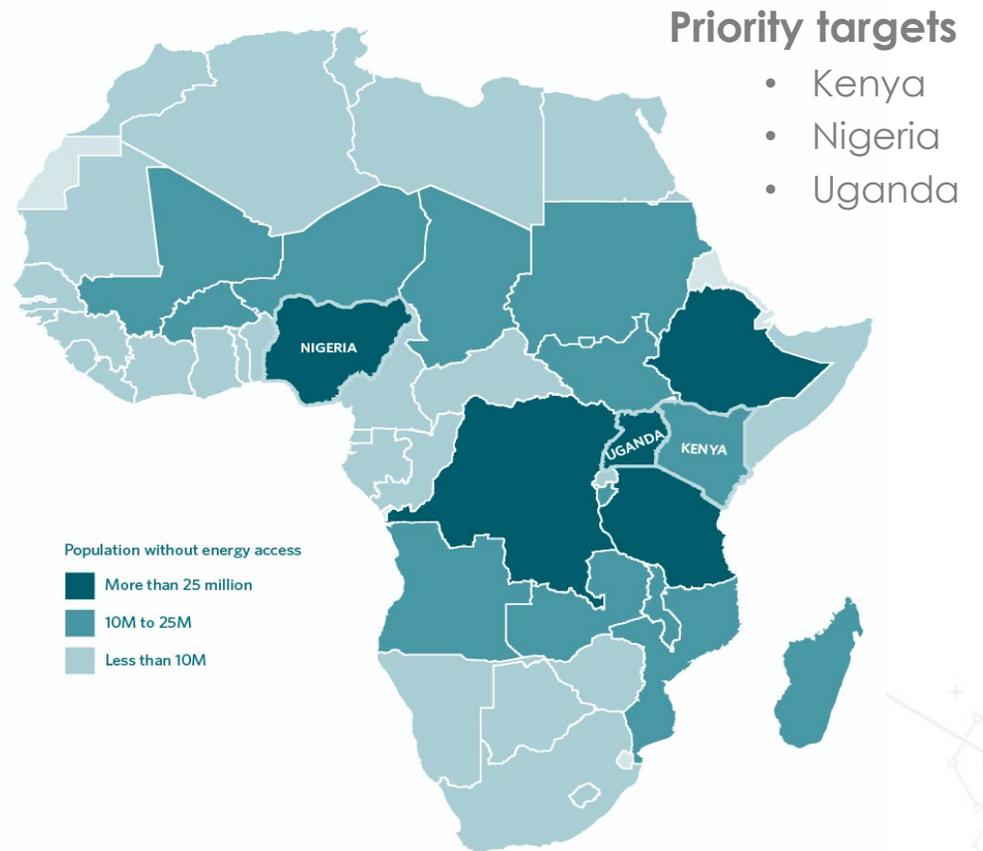


Replace **170,000+** diesel generators





Implementation: Deployment underway



A decorative graphic in the top left corner of the slide, showing a network of interconnected nodes and lines, resembling a molecular structure or a data network.

\$25m

Raise by Q1 2022

**Blended Finance
Approach Needed to
Reach all Households**

Nithio FI is seeking catalytic capital, equity, subordinated and senior debt

Nithio FI is an open-ended fund looking for investors across the capital stack



Kate Steel
k.steel@nithio.com

Guarantee Fund for Biogas (GFB)

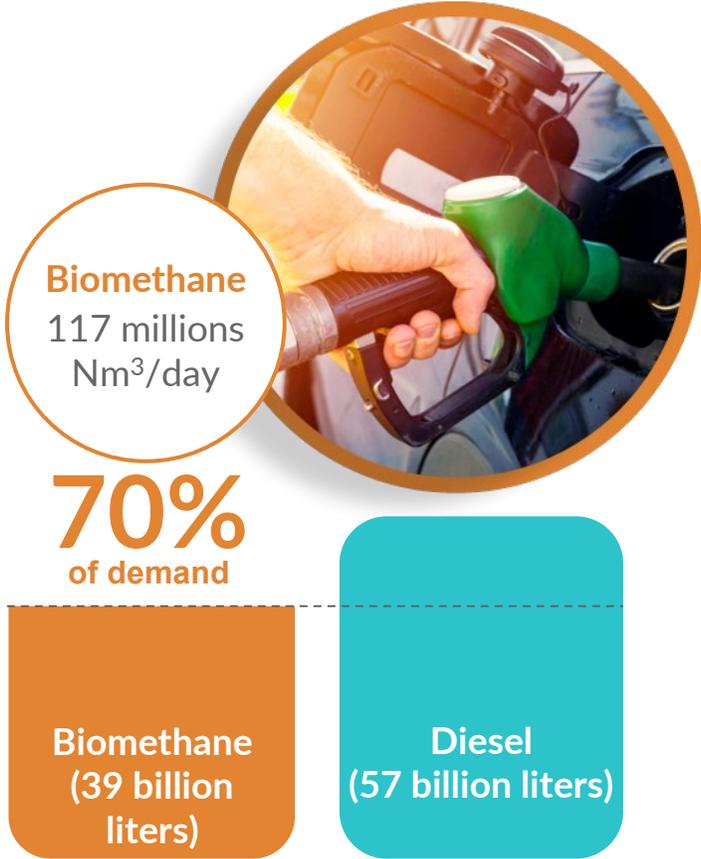
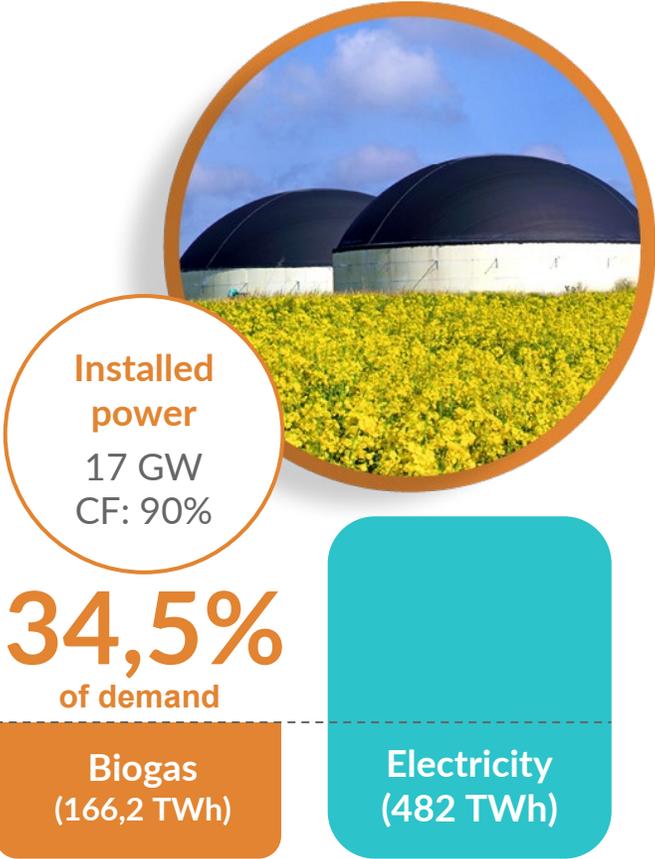
ABiogás

Brazilian Biogas Association

Biogas scenario in Brazil

Electric energy demand (EPE)

Fossil fuel demand (ANP)



- Brazil is a large agroindustrial and animal producer, which leads to an enormous biogas potential
- But biogas production today equals to **less than 2%** of the potential

The Guarantee Fund for Biogas (GFB)



Innovation:
1st Private,
Environmental-oriented
and Biogas focused
Guarantee Fund in Brazil



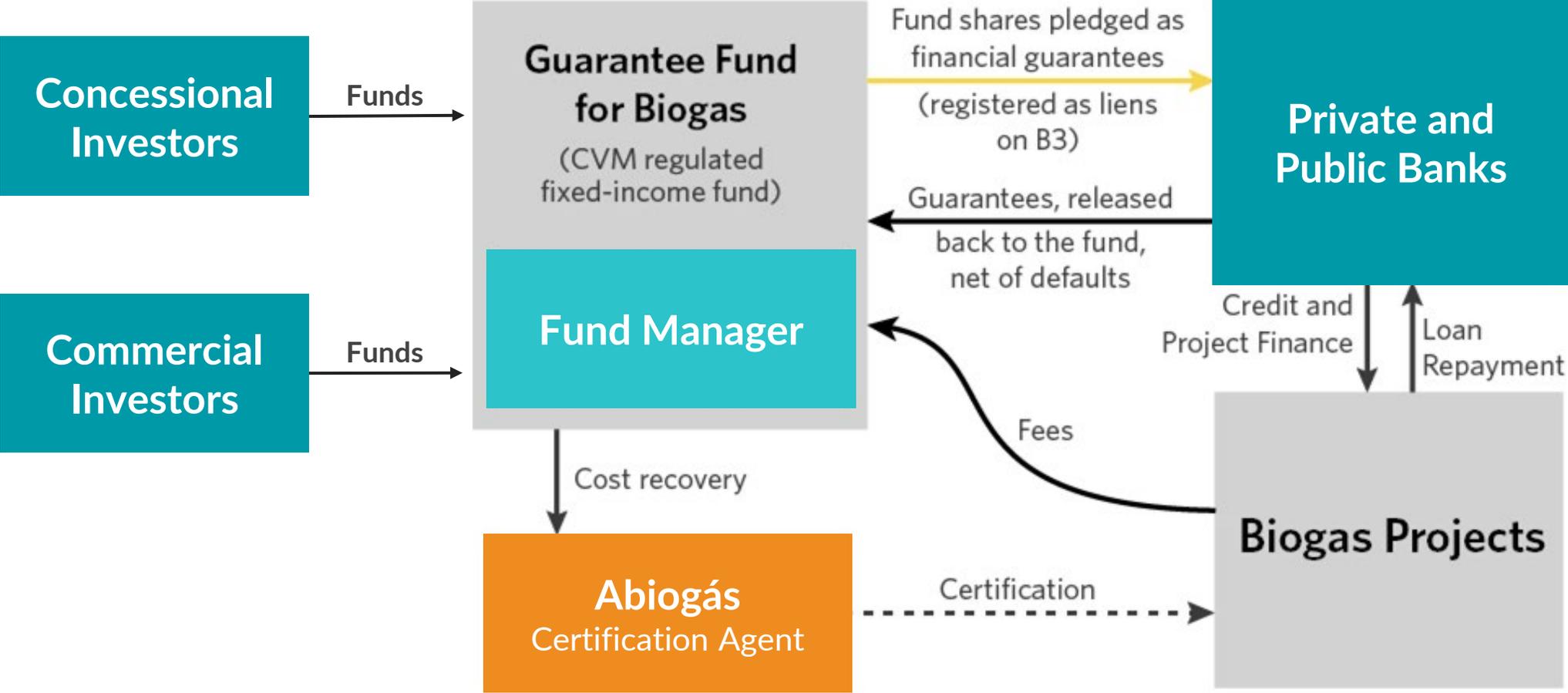
Closed fixed-income
fund which will pledge
its shares as collateral



Construction-phase
guarantees for project
loans

- **Certification agent (Abiogás)** will establish and verify projects parameters aiming to reduce investors' risks: stability, efficiency and CO₂ emissions reduction

Instrument Description



Team

ABiogas



DEVELOPERS



SUPPLIERS



CLIENTS



Alessandro Gardemann

PRESIDENTE



Gabriel J. Kropsch

VICE-PRESIDENTE



Tamar Roitman

GERENTE EXECUTIVA

ASSOCIATED COMPANIES (81)



Impact



PRIVATE FINANCE MOBILIZATION

Initial pilot is expected to raise **USD 53 million** from commercial and concessional sources



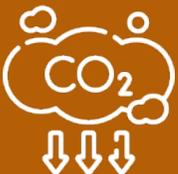
FINANCIALLY SUSTAINABLE

The GFB will be able to **leverage up to 3 times its resources as collateral**



REPLICATION

Considering that 10% of potential can be addressed, replication would enable **USD 2.14 billion in loans** (USD 184 million in investments) along 10 years.



DECARBONIZATION

Mitigation of up to **135 thousand tons CO2e per year** in pilot phase. In scale, reduction can reach **1.1 million tons CO2e per year**.



Go-to-Market Strategy

2021

Fundraising and
Manager Selection

Q1-Q3 2022

First registration

October 2022

Fund launch

Pilot Implementation

Target markets

- Projects ranging from 200 KW to 10 MW
- USD 0.4 million to USD 26 million

Initial portfolio:

- 37 projects
- Adding up to 244 MW of energy generation capacity
- Aiming for USD 193 million in credit operations.



Funding / Investment Opportunities

Investor type	Amount (USD)
Concessional	26.5 million
Commercial	26.5 million
Total Pilot	USD 53 million



37
projects



244 MW
of energy generation capacity



USD 193 million
in credit operations

Thank you!

Tamar Roitman
executivo@abiogas.org.br
+55 (21) 99359-2892

**Guarantee Fund
for Biogas (GFB)**

The ACT Fund

Arm-Harith
Cities & Climate Transition Fund

Sustainable Infrastructure for West Africa



WHO WE ARE



Infrastructure for Impact

ARM-Harith Infrastructure Fund (ARMHIF) is a joint venture between **Asset & Resource Management Holding Company (ARM)**, Nigeria's largest non-bank financial services provider, and **Harith General Partners**, a leading Pan-African infrastructure fund manager based in South Africa.

ARMHIF was the first infrastructure fund to be licensed by the Nigerian Securities and Exchange Commission under its recent Infrastructure Fund rules while ARMHIF Mauritius is licensed under the FSC of Mauritius.



Established in 1994 as an asset management firm, ARM offers wealth creation opportunities within Africa and major international markets through a unique blend of traditional asset management and alternative investment services.

ARM currently manages over US\$2.7bn of assets, has an AA rating from Agosto and Co..

ARM developed, funded and exited the Lekki Concession Company, the first private toll road concession in Nigeria.



Harith

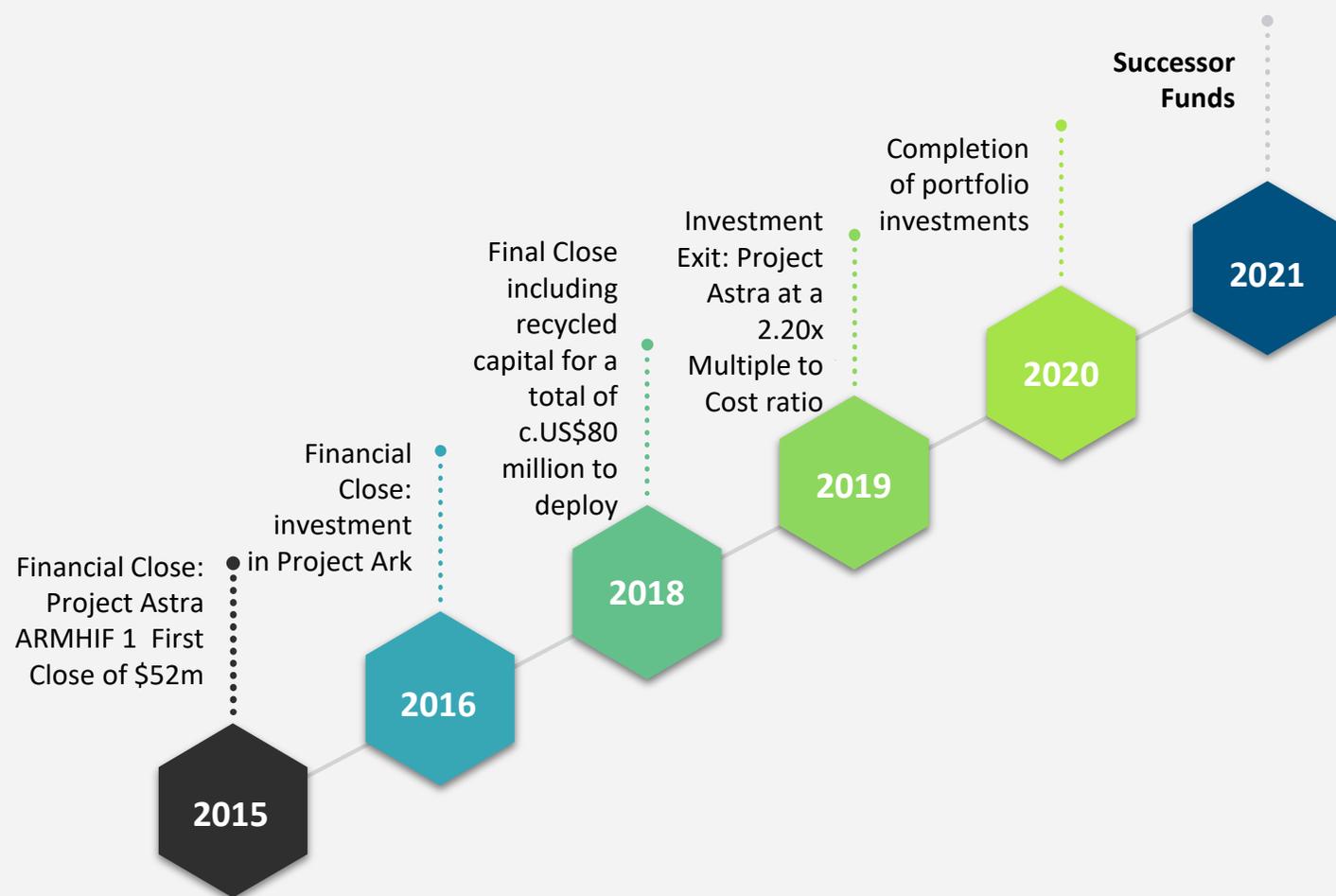
Harith is a leading Pan-African fund manager for infrastructure development. responsible for managing Africa's first 15-year infrastructure fund, the US\$630m Pan African Infrastructure Development Fund (PAIDF 1), and a second fund - the US\$435m PAIDF2.

The firm has a long track record of value creation across the continent.

Harith delivered anchor investments in Henri Konan Bédié Bridge in Abidjan and the the Main One Cable Company in Lagos



ARM-Harith has a strong track-record for investments underpinned by robust ESG



Arm-Harith Manages Capital From Nigerian Pension Funds and International Investors Including The African Development Bank

ENVIRONMENTAL & SOCIAL MANAGEMENT SYSTEM

- Compliance with all applicable laws
- Safe and healthy working conditions
- Continuous improvement of ESG
- IFC's Performance Standards and relevant AfDB and CDC Group's guidance

MEASUREMENT & DISCLOSURE

- Integration of community and social engagement into project outcomes
- ESG outcomes measurement framework
- Registering with PRI



MANAGEMENT TEAM



Tariye Gbadegesin

Managing Director & Chief Executive Officer

- 20+ years of experience in finance, principal investments and infrastructure
- Mobilized US\$3Bn+ of capital for infrastructure projects in Africa.
- Founding team of AFC



Jobalo Oshikanlu

Legal and Investment Director

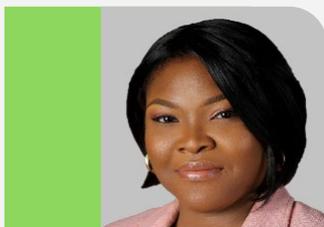
- Commercial lawyer with over 20 years of experience and extensive exposure to public-private partnership, infrastructure development and infrastructure project finance



Ernest Nyarko

Investment Director

- 25+ years of experience and extensive exposure to Infrastructure Development and Private Equity, Pension Funds Management, and Privatization



Adaobi Nnorukah

Investment Director

- 16+ years of experience in structuring bankable infrastructure projects, project development and project management



Efe Okoh

Legal & Compliance

- Infrastructure Finance Lawyer with over 9 years of experience working across advisory, transaction structuring, corporate finance and capital markets transactions



Tobi Edun

Investments

- Experienced investment professional, driving origination and execution of transactions as well as management of existing portfolio companies.



Oyedele Oyinbojuni

Finance & Accounting

- Diverse experience spanning IT services, manufacturing, and financial services, with a proven track record of performance and value addition

BOARD OF DIRECTORS



Mr. Offong Ambah

Independent

Chief Executive Officer of Marine Network Ltd an oil service company



Tariye Gbadegesin

Managing Director

Managing Director & Chief Executive Officer of ARM-Harith



Mrs. Boma Alabi

Independent (in Process)

Managing Partner, Primera Lega Services (Senior Advocate of Nigeria)



Jumoke Ogundare

Non-Executive Director (ARM)

Chief Executive Officer of ARM



Sadiq Mohammed

Non-Executive Director (ARM)

Deputy Group CEO of ARM



Alwyn Wessels

Non-Executive Director (Harith)

Deputy Chief Executive Officer of Harith



Lesibana Morallane

Non-Executive Director (Harith)

Senior Investment Director at Harith

THE PROBLEM

**950
million**

**Additional people will live in
African cities in the next 30 years**



**\$68-108
billion**

**Annual funding gap for
infrastructure projects**

Private financing is limited, costly, and time consuming



Decisions made today on how urban infrastructure is built will shape the continent's carbon footprint for decades to come

**HOW DO WE ATTRACT A WIDER ARRAY OF INTERNATIONAL AND LOCAL
INVESTORS?**

SOLUTION

The ACT Fund

ARM-Harith

Cities & Climate Transition Fund

1

Attract investors to participate in a faster pace of sustainable infrastructure project development

- De-risking international equity with early exits
- Via local-currency senior debt refinancing completed projects
- Incorporate blended finance tools that enhance risk/return profile

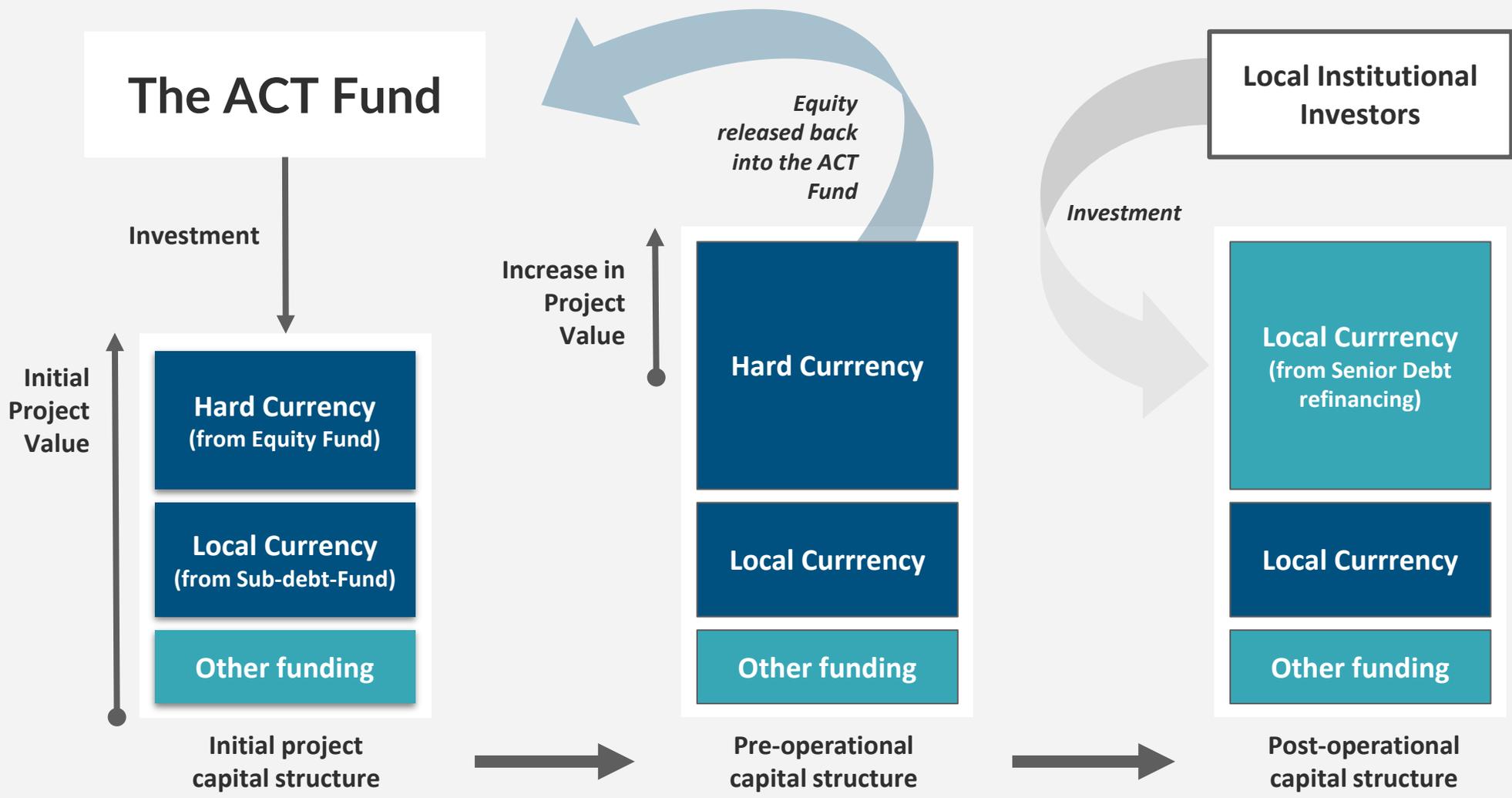
2

Advance the climate infrastructure equity asset class for West Africa by creating a blended finance fund

- Mobilizing domestic local currency capital to participate in climate action
- Increasing availability of equity and higher risk components of the capital structure



FUND STRUCTURE



*Graphic created by the Global Innovation Lab for Climate finance

COVERAGE AREAS

Verticals

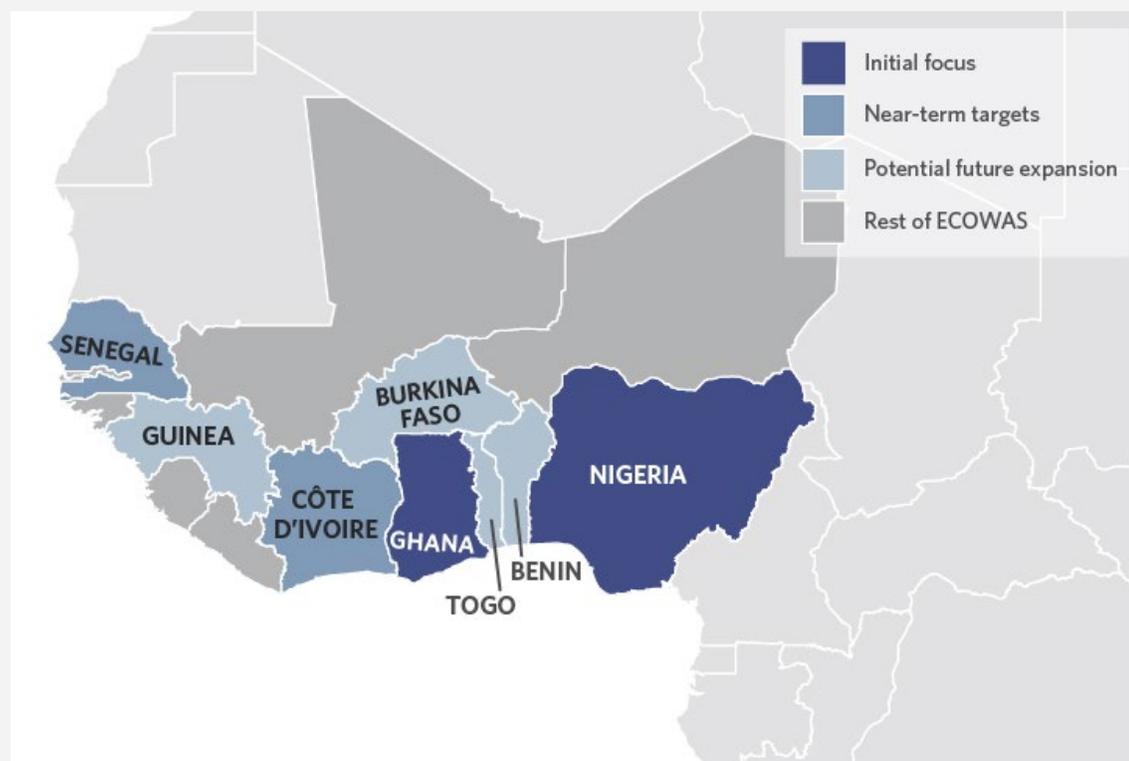
Renewable Energy

Mobility

Waste

Water

Regional Focus



Impact



PIPELINE

Project Name	Sector	Country	Description	Ticket Size (in US\$M)
Sunray	Solar-EaaS	Nigeria	Commercial and industrial solar energy solutions for industrial clients (energy as a service).	10
North Star	Solar-PV	Nigeria	Subnational Solar PV Project in Northern Nigeria.	10
Orion	Solar-Minigrid	Nigeria	Renewable Energy Multiple MiniGrid Asset Company	10
Gongola	Solar-PV	Nigeria	Originally utility scale, currently being re-purposed into industrial and sub-national renewable energy	25
Waterfall	Solar-PV	Ghana	A utility scale renewable energy project for the development of Govt. Power Authority's 50MW Solar Farm	15
Pluto	Solar-PV	Ghana	Expansion of existing project	15
Westwing	Solar-PV	Guinea	Greenfield utility-scale solar power project to generate 82.5MW of clean, reliable, and affordable energy for Guinea. Being supported by German government under Compact Africa	25

Total

110

IMPLEMENTATION PATHWAY

Phase 1: Fund Establishment

1.5 years

◆ Month 1-16: Sept 2021 – Dec 2022



Complete fundraising for TA, equity and debt funds



Equity and local currency debt fund legally established

Phase 2: Deployment

3 years

◆ Month 17-42



Project development and investments

Phase 3: Management and project Exits & Re-deployments

8.5 years



Arrange equity exits



Reinvest in projects



Project payoff debt & dividends

Phase 4: Replication - Act Fund 3 & Beyond- Start at year 2.5



INVESTMENT OPPORTUNITIES

Investor type	Amount (USD)	Role of capital
Grant Funders	10M	Technical Assistance Fund: Will include Project development technical assistance and establishment costs
DFI, private capital	150M	Equity Fund: Combination of commercial & concessional equity led by DFI.
Local Institutional	100M	Subordinated debt fund: Commercial capital
DFIs	varied	Risk mitigating instruments: at both Project and Fund level (i.e., Debt, Equity guarantees, insurance)

CONTACT INFORMATION

Tariye Gbadegesin

Managing Director & Chief Executive Officer

tariye.gbadegesin@armharith.com

Jobalo Oshikanlu

Legal & Investment Director

jobalo.oshikanlu@armharith.com

ARM Harith
INFRASTRUCTURE FUND MANAGERS

INVESTING FOR
A RESILIENT
AFRICAN FUTURE



www.armharith.com

IMPROVING ECONOMIES & TRANSFORMING COMMUNITIES



Call for Sustainable Investment Ideas

The Lab is looking for innovative finance solutions that can unlock investment for a net zero economy transition.

Selected ideas will receive guidance, robust analysis, stress-testing, and development by expert working groups and access to a network of high-level public and private investors.

SUBMIT

climatefinancelab.org

DEADLINE:

Dec 22nd



Thank you!