

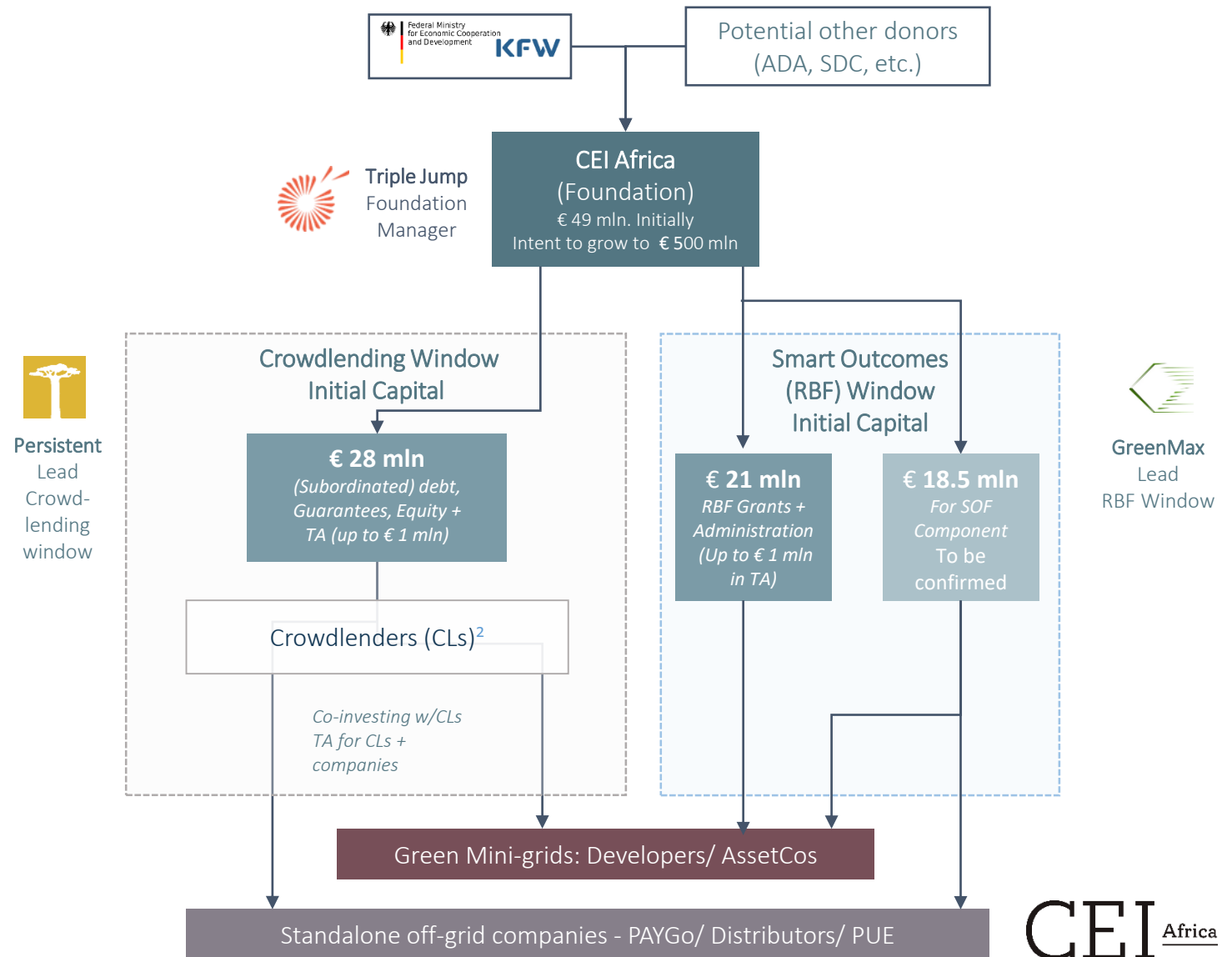
Clean Energy and Energy Inclusion for Africa Foundation

Triple Jump – Persistent – GreenMax Capital Advisors



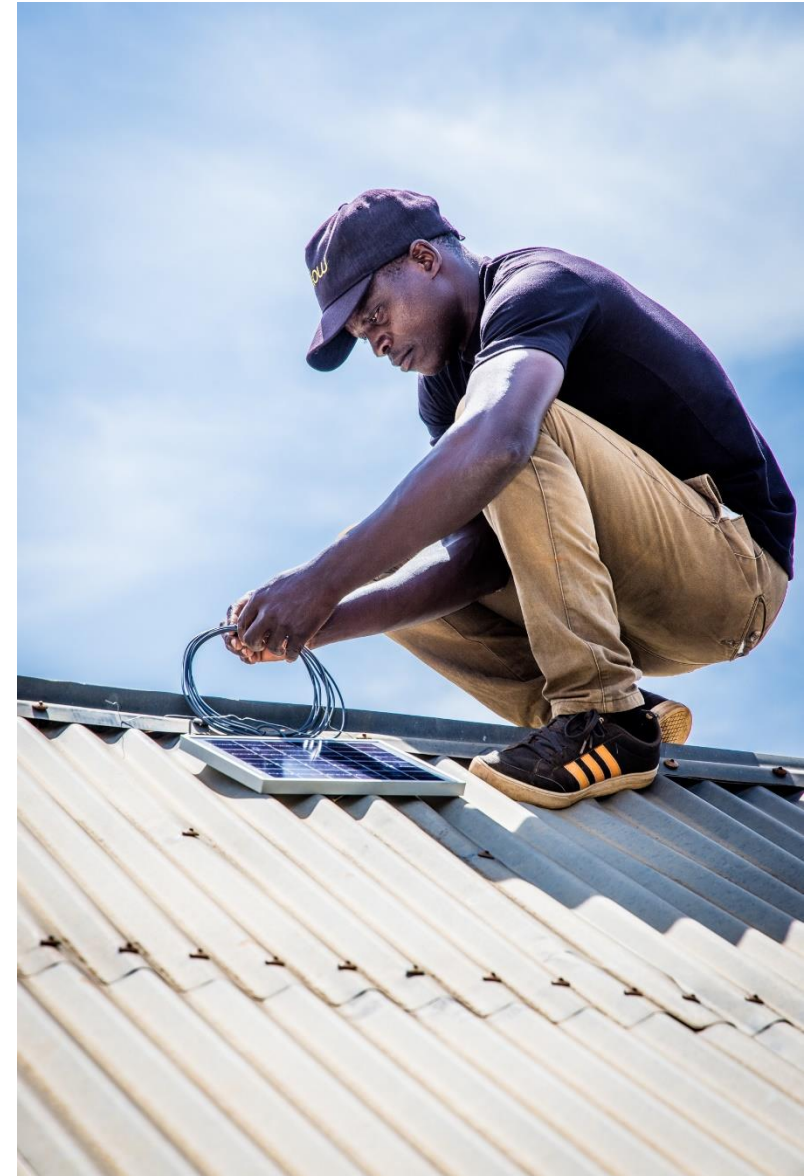
Overview – CEI Africa

- On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), KfW signed a EUR 49 million financing agreement for the Clean Energy and Energy Inclusion for Africa Foundation (CEI Africa). Additional donors to be attracted with target of € 500 mln.
- The aim of the Foundation, is to supply climate-friendly electricity for people in sparsely populated areas of Sub-Saharan Africa through two investment windows:
 - Smart Outcomes (RBF) Window € 21 mln**
 - Shall be used by CEI Africa to finance mini-grids through Result Based Financing (RBF) on a grant basis
 - Technical assistance (max. € 1 mln.)
 - Managed by GreenMax
 - Crowdlending window: € 28 million**
 - In cooperation with Crowdlenders invest in:
 - Companies selling/operating small off-grid solutions
 - Green Mini Grids
 - Technical assistance (max. € 1 mln.)
 - Managed by Persistent



CEI Africa supports: Companies in the Off-Grid Energy sector

- Supported through the Crowdfunding window
 - This includes manufacturers, assemblers, providers, developers and operators of distributed Off-Grid Energy equipment and appliances.
 - Energy needs to be based on renewable energy.
 - Appliances include Solar Home Systems (SHS), Commercial and Industrial (C&I) green off-grid systems for MSMEs and service providers, Pico Solar Systems, solar powered productive use appliances (i.e. mills, pumps, cold storage solutions).
 - End-beneficiaries include: MSMEs, Households

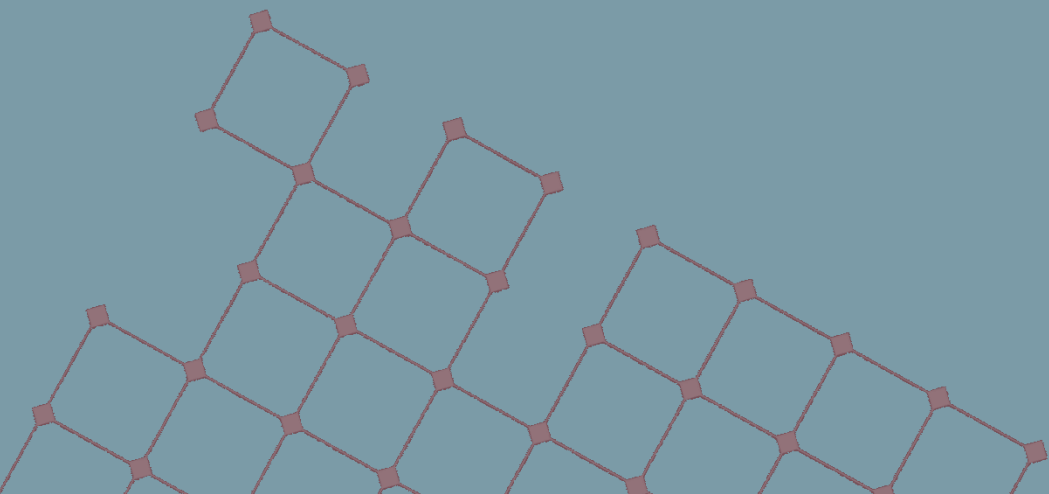


CEI Africa supports: Green Mini Grids (GMG)

- Supported through both the Crowdlending- and RBF Window
 - GMGs are defined as a set of small-scale electricity generators based on renewable sources.
 - GMGs are connected to a distribution network that supplies electricity to a localised group of customers (or e.g. a school or medical facility). It operates independently from the national transmission grid.
 - GMGs electrify off-grid towns, parts of cities, rural and remote communities (incl. healthcare facilities, schools and businesses).



Fund Management Consortium



Triple Jump – Foundation Manager CEI Africa

- Fund manager and advisor with 15+ years of track record, USD 1 Bln AuM, 5 regional offices (regional presence in Nairobi, Kenya), corporate set-up in Amsterdam, 110 staff
- Strong track record in pioneering in markets where finance offers solutions to key challenges poverty, inequality and climate
- Investors ranging from pioneering impact foundations and NGOs to high profile investors (Dutch and US Governments, reputable banks and insurance companies)
- Investment firm license obtained in 2012, supervised by Dutch Central Bank and Financial Markets Authority (AIFMD)
- Dedicated energy team building on top of our 15+ years' experience in combining investments with TA
- **Role CEI:** overall responsible for Foundation management, fund services and E&S
- Full-fledged fund services back office, in-house legal counsel and compliance function, Portfolio/Risk Management department and a dedicated Impact and ESG function

Regional Presence

Triple  Jump



Diverse range of investors



Persistent – Lead CL Window

- Founded in 2012 as the 1st institutional investor and 1st and leading financial intermediary in the off-grid energy sector
- Proven track record in investing in and building early-stage businesses in underserved markets
- Invests earlier and works closer than any other institutional investor in the sector
- 17 investments in 16 countries, out of which: 2 successful exits; 7 currently raising their first funding round; 12 successfully closed at least one funding round with third-party investors since Persistent's investment
- Team of 20 experienced professionals with complementary skill set
- **Role CEI Africa:** lead of the CL window, incl. first point of contact for crowdlenders, off grid companies, application processes, assessment applications, IT platform.
- Regional offices in Lagos, Nigeria and Nairobi, Kenya

Regional Presence



Diverse range of investors



cottier donzé
FOUNDATION

Shell Foundation | 

BCP
—
BAMBOO
CAPITAL PARTNERS

SCALING
OFF-GRID
ENERGY:
A GRAND CHALLENGE
FOR DEVELOPMENT



GreenMax – Lead RBF Window

- Established emerging markets sustainable energy finance advisor with deep project finance expertise. HQ in the US and regional presence in Sub Saharan Africa.
- Raised over USD 1b in capital for renewable energy projects. Specialists in off grid energy risk mitigation and local currency financing – launching the Green4Access First Loss Facility and the GreenStreet Africa DevCo.
- **Role CEI Africa:** lead of the RBF window, incl. first point of contact for mini-grid developers, application processes, assessment applications, IT platform.
- Regional offices in Lagos, Nigeria; Nairobi, Kenya and Lome, Togo

Regional Presence



Diverse range of partners



Consortium – CEI Africa core team



Sascha Huijsman

- Project Manager CEI Africa
- Over 10 years experience in impact investing, fund investments in emerging- and frontier markets.



Gerlof de Korte

- TJ: Head of Fund Services
- CEI Africa: Overseeing fund services (finance & admin, CDD/KYC, legal transactions)



Michelle Muntenau

- ESG and Impact expert at CEI Africa with focus on gender.
- ESG and Impact Officer at Triple Jump, focusing on sustainable energy portfolio
- 5 years DFI experience in E&S management and impact analysis



Marnix Mulder

- TA / RBF CEI Africa
- Director Market Development at Triple Jump
- Extensive experience in management of public mandates and TA programs in SSA investments



Tobias Ruckstuhl

- Current CFO at Persistent
- Robust experience in appraising, advising and managing crowdlending institutions and other digital peer to peer funding brokerage platforms



James Fabola

- Member - Crowdlending Window Team
- Principal Venture Builder at Persistent
- Extensive debt and equity experience investing in clean energy, power, manufacturing, funds and food & agri
- Formerly with Norfund and Synergy Capital Managers



Thomas Gallas

- Co-lead - Crowdlending Window
- Principal Venture Builder at Persistent
- Extensive private equity experience investing in clean energy and impact
- Formerly with FMO and Pymwyc



Faith Wilson

- Over 6 year's experience in consulting and advisory services for SMEs / RE.
- Previous worked as an Investment Analyst with AECF (SMEs in Renewable Energy and Agribusiness) and as a Senior Accounting Advisor at KPMG East Africa.
- Certified Public Accountant.



Clifford J. Aron (Lead)

- CEI SteerCo member + Founding Principal of GreenMax
- 43 years clean energy finance experience
- 17 years arranging project and corporate financing for projects in SSA focusing on both grid connected and off grid renewable energy



Shelmith Theuri

- Smart Outcomes Lead CEI Africa + Deputy Director Off Grid fund Management at GreenMax
- 12+ years in finance and development in SSA and has led financing for Off-grid Energy businesses (SHS, PUE, MG), Captive Solar businesses, IPP's



Ifechukwude Uwajeh

- RBF DD Coordinator CEI Africa + Director, Africa Transaction Advisory at GreenMax
- 12+ years SSA experience as Energy Specialist and Process Engineer with on-grid and off-grid financed power infrastructure development, deep engagement mini grid sector development in Nigeria



Daniel Kitwa (Main contact)

- RBF Lead CEI Africa + Deputy Director, Energy Access Finance at GreenMax
- 9 years finance + accounting experience working with SSA off grid companies
- Mini grid sector + RBF program design expert

Crowdlending window



Crowdlending – our unique approach

Market observations



Insufficient opportunities and access to international financing for Women and African owned companies



Limited resources and technical capacity to source and evaluate risks during due diligence



Lack of equity and long-term financing



Significant FX risk and little access to local lending

Foundation objectives Proposed strategy

Build resilience, and empower local people and women

- Evaluate investments via local ownership and 2X Challenge gender lenses
- Use TA technical support to open currently underserved markets and support innovative business models
- Target companies and projects in underserved markets

Support crowdlenders' growth by leveraging public funding

- Offer subordinated debt to enable the CL to raise more capital and to strengthen the borrower
- Share pipelines and planning with participating CLs
- Support smaller CLs and look for opportunities to “venture-build” CLs
- Leverage Persistent's and TJ's board experience for CL's governance approach

Promote currently underserved markets and support innovative business models with a tailored financing offer

- Coordinate RBF grants and Mini grid crowdlending to maximum impact
- Provide equity and sub-debt financing
- Offer local currency financing and longer tenors for mini-grids
- Provide technical assistance to help companies fundraise and meet the requirements of international investors

Leverage the capabilities of crowdlenders through the expertise of the Foundation's manager

- Leverage the capabilities and existing processes of crowdlenders for small tickets sizes by using an “express DD” process
- Complement the strengths of the CL, sharing the resources and experience of Foundation managers for complex and larger co-investments
- Do DD that CLs can readily use to originate more efficiently

Market Feedback – Engagement Process

Objectives

- Introduce the CEI Crowdlending window to Crowdlenders
- Gauge interest in participating in CEI collaboration
- Assess industry needs, constraints and desires, goals and objectives

Approach

- One-on-one meetings and workshops with various stakeholders, led by the Persistent team
- Meetings with Mini-grids developers were organized together with the Greenmax team.
- Various forms of engagement with 5 Crowdlenders i.e (Trine, Lendahand, Energise Africa, Charm Impact, Frankly Green)

Key Takeaways

- Crowdlenders are interested and keen to find ways to work and collaborate with CEI
- CEI is needed to keep Crowdlenders engaged in the SHS sector and to get them involved in the GMG sector
- Crowdlenders do not have a strong pipeline in most of the 8 countries selected for CEI's SHS concentration – identified opportunities based on current pipelines are Ghana, Mozambique, Senegal and Uganda
- Currency risk is a key concern for both borrowers and lenders
- Largest need among Crowdlenders is for subordinated debt with significant potential to derisk Crowdlenders
- Given the challenges Crowdlenders are having with their current SHS loan portfolios, there is an opportunity to invest equity in SHS companies as a way of catalyzing Crowdlenders to increase SHS exposure

Summary overview Crowdlending strategy



Objective: Strengthen Crowdlenders and their capacity to invest in the off-grid energy sector (catalyze private funding) and ensure lending to Off-Grid Energy Sector and GMG sector

A. Target sectors and countries

Off Grid Energy companies:



- Sectors: SHS, off-grid C&I, Productive Use of Energy (e.g. solar irrigation).
- Focus countries: Benin, Ethiopia, Ghana, Ivory Coast, Mozambique, Namibia, Senegal, Uganda, Zambia

Green Mini Grids (GMG):



- Type of finance: Corporate lending and project finance
- Focus countries (first round): Sierra Leone, Benin, Mali, Madagascar, Kenya, DRC (to align with RBF Window)

B. Products

Co-financing with with Crowdlenders:

- Senior debt (20-30%)
- Sub-debt (30-50%)
- Equity/Quasi-Equity (20-30%)
- Guarantees (e.g. FX) (0-20%)

Technical Assistance (TA) (up to EUR 1m):

Operational strengthening of Crowdlenders and their investees

C. Process

- **Process 1:** Onboard Crowdlenders: Assessment of Investment, E&S and KYC Capabilities.
- **Process 2:** Co-financing with Crowdlenders through “Lean Lending” or direct investments

RBF window



Value proposition and guiding principles

Value proposition

- **Nimble:** We are not bound by country mandates. Thus, our target is to impact 6-8 countries in the first 5 years.
- **Opportunistic approach to scale the GMG sector:** Flexible connection subsidy
- **“One stop shop” RBF + Debt financing:** One end to end bundled DD process
- **Supporting the growth of small, locally owned GMG Developers:** TA support to incorporate ASSETCO structures

Guiding principles

- **Be catalytic:** Unlocking crowd lender capital
- **Avoid market distortion:** Stakeholder involvement
- **Achieve impact:** Gender lens approaches, local developer support



Summary overview RBF strategy



Objective: to improve energy access to Africa's most vulnerable populations. CEI will accelerate the growth of renewable electricity provision via Green Mini Grids through Results Based Financing (grants).

A. Target sectors and countries



Green Mini Grids (GMG):

- Sectors: Corporate and project finance.
- Focus countries (first round): (1) Kenya (2) DRC (3) Sierra Leone (4) Benin (5) Madagascar (6) Mali

B. Products

Result based financing payments:

- Grants

Technical Assistance (TA) (up to EUR 1m):

Operational strengthening of Crowdlenders and their investees

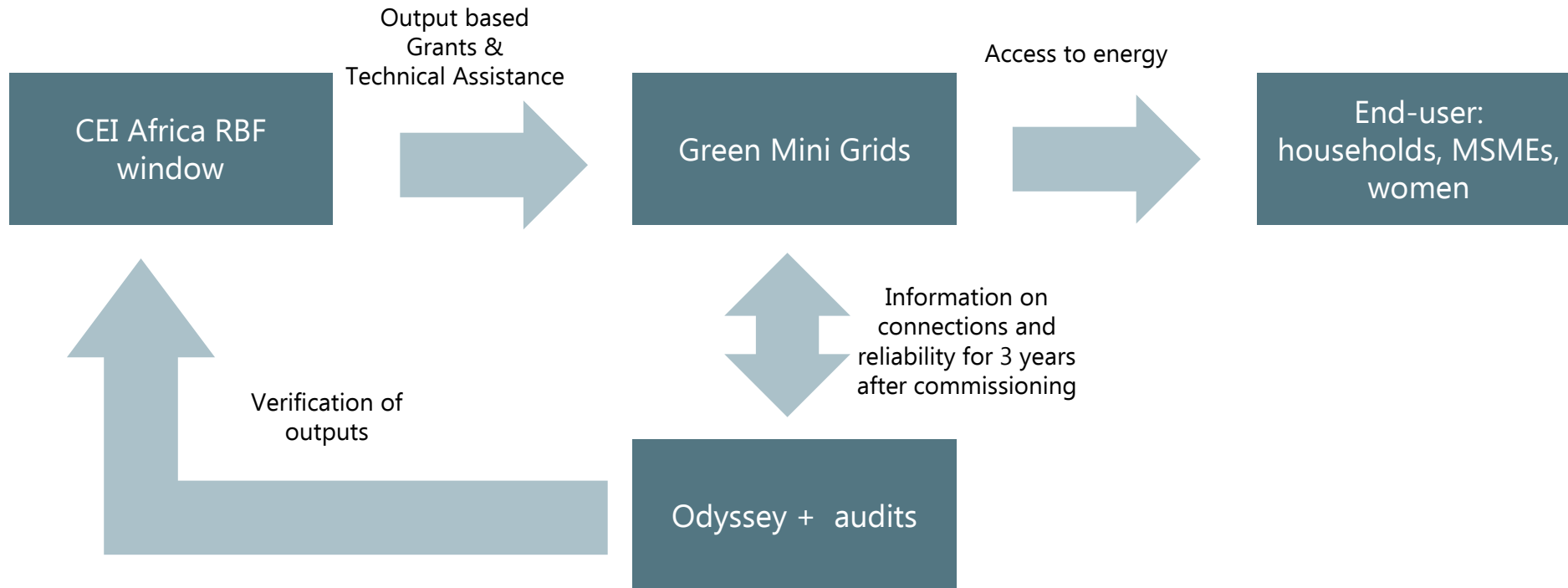
C. Process

- **Process 1:** Pre-qualification of GMG developers
- **Process 2:** Grant application for specific Green Mini Grid sites

D. Odyssey IT Platform

- Grant payments are done based on number of connections (claims made by developers)
- GreenMax, through the IT Platform Odyssey conducts remote verification of all submitted connection claims.
- Grantees agree in the Grant Agreement to provide quarterly project mini-grid data to CEI Africa for 3 years after commissioning of project in order to support measurement and evaluation on the overall and country-specific mini-grid sector and market development.

RBF Window – output based



Payments of resultbased grants are based on number of connections

Smart Outcomes Fund (SOF) Component



Summary overview SOF Component strategy (sub-strategy of RBF)



Objective: Positively impact rural and peri-urban livelihoods by incentivizing the deployment of Productive use of energy (PUE) technologies, and thus supporting the growth of the PUE sector in Sub-Saharan Africa.

A. Target sectors and countries



Green Mini Grids (GMG):

- Sectors: Corporate and project finance.
- Focus countries (first round): tbd

Stand-alone off-grid energy enterprises



- Such as SHS distributors, including PAYGO and PUE companies

B. Implementation in two phases

- **Phase 1:** Grants to Green Mini Grids to provide PUE
- **Phase 2:** Grants to Stand-alone off-grid energy enterprises such as SHS distributors, including PAYGO and PUE companies.

C. Products

Financial products:

- Financial Incentives (outcome-based funding)

Technical Assistance (TA) :

- Operational strengthening of GMGs and stand-alone off-grid enterprise

D. Outcomes based grants

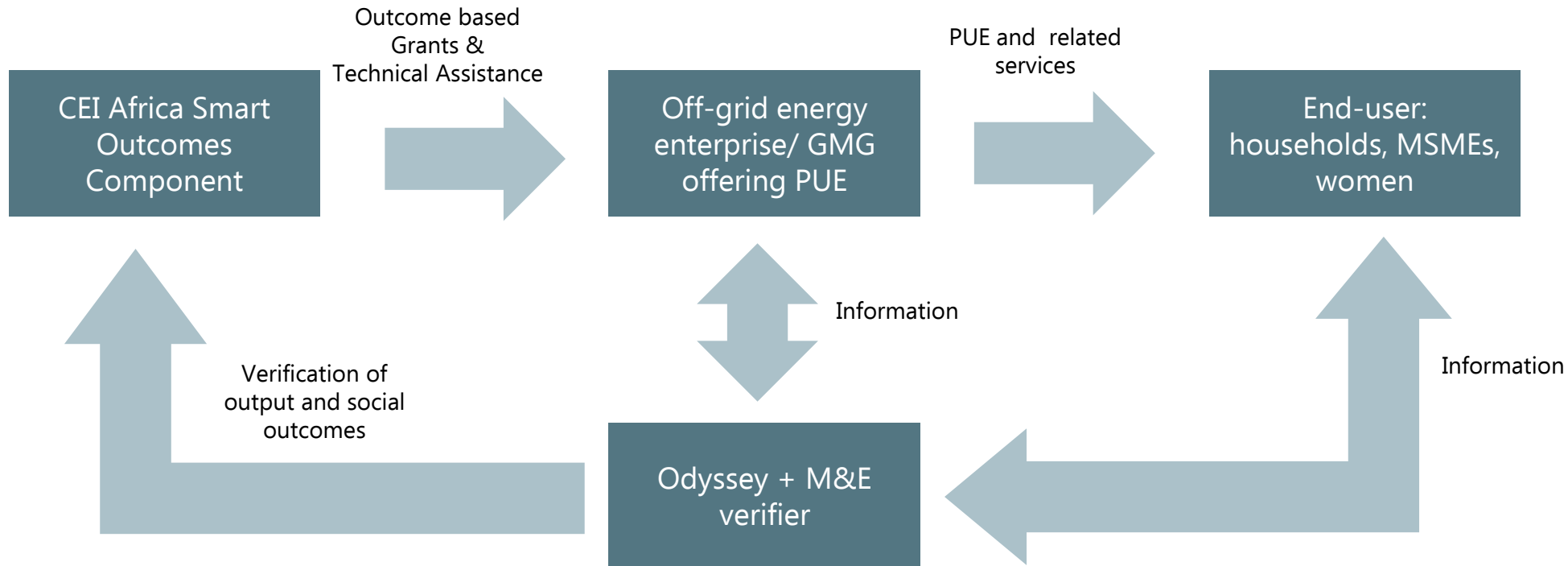
Based on SIINC methodology:

- Partly based on outcomes, e.g. impact on end-beneficiaries

Innovative

- Methodology has been applied to other sectors but not yet to energy

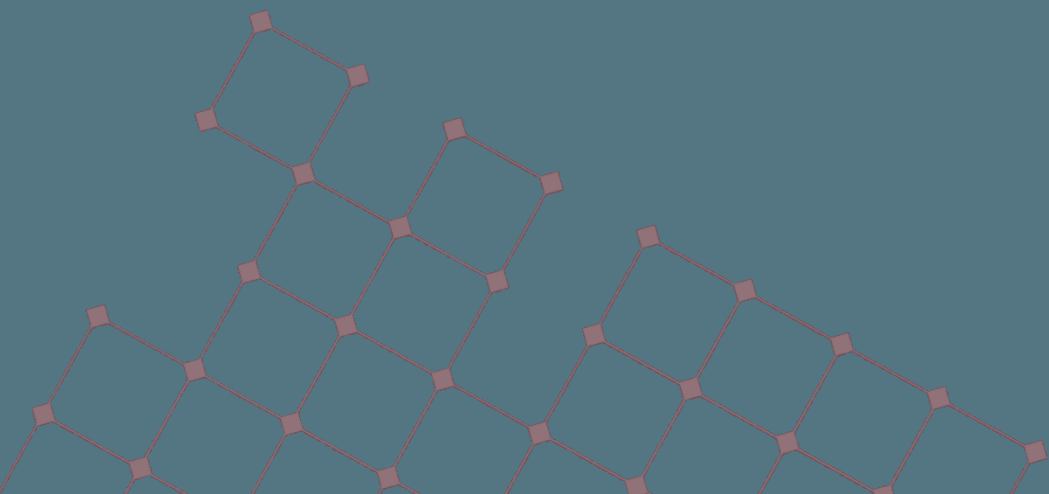
SOF Component and SIINC Methodology



SIINC Methodology:

- Reward impact-oriented private enterprises for the specific positive impacts they generate.
- Financial Incentives based on PUE deployment & agreed impact.
- Impact verification
- **Indicators include** no. of people reached with PUE equipment, first time access to PUE Technology, Women's empowerment

Technical Assistance strategy



Technical Assistance CEI Africa



Objective: enhance CEI Africa's impact through strengthening the capacity of the respective target groups of the two windows: companies in the off-grid sector, Green Mini Grids and Crowdlenders.

Capacity development support will be provided by external service providers / consultants.

Technical Assistance Offer

Crowdlenders



- Support on developing and implementing ESG policies and practices, Impact measurement and gender strategies.
- Capacity building and training on the technical aspects, legal and financial aspects of GMG operators/developers.
- Support around core operational areas, legal aspects, DD capacity based on the business model and stage of company growth.

Off Grid Energy companies:



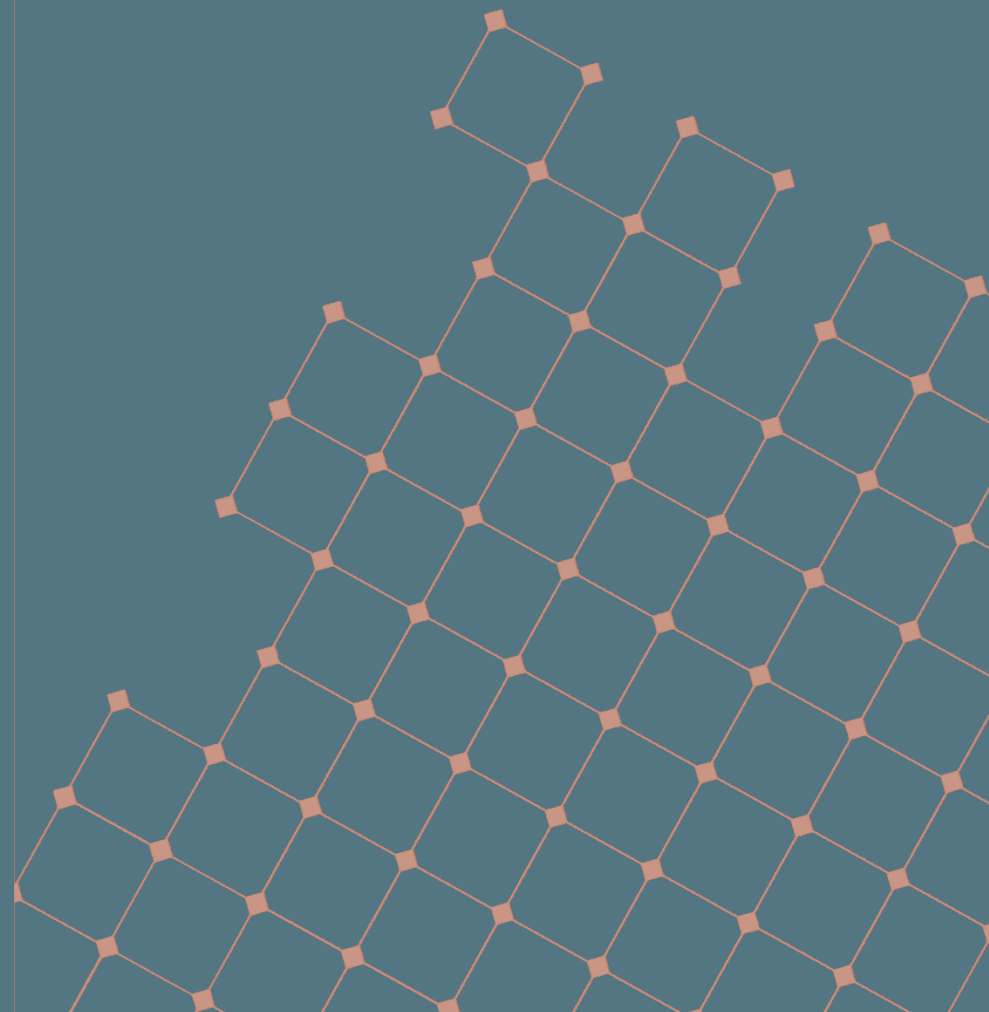
- Support around core operational areas, legal aspects, DD capacity based on the business model and stage of company growth.

Green Mini Grids (GMG):



- Capacity building support around ESG assessment, policy development, execution and reporting
- Supporting in legal due diligence; Developing O&M contracts & policies; Structuring of project SPVs i.e. ASSET Cos and OPCos
- For medium/ large GMG - Capacity building support around project management e.g. compliance reporting, refinancing etc.; business model execution e.g. PUE business models into GMG.
- Capacity building support on financial management, general investor readiness, reporting and project finance.

Impact



SDG 7 is closely linked to – and a precondition for all SDGs in Africa



Africa's poorest people are paying among the world's highest prices for energy.



Women and children are the primary victims of pollution from cooking with charcoal and firewood.



50% of Africans will be living in cities by 2030, placing a huge strain on energy infrastructure.



More than enough food is being produced but up to 1/3 of all food is spoiled or wasted rather than being consumed.



Energy sector bottlenecks and power shortages cost the region 2-4% of GDP annually undermining sustainable growth, jobs and investment.



No region has contributed less to climate change yet Africa pays the highest price for failure to avert a global climate catastrophe.



36,000 women die in childbirth each year in Nigeria. Lifesaving medical care is hampered by lack of lighting.



60% of operator network costs for mobile phone operators are spent on diesel fuel.



Collecting firewood and producing charcoal are the main causes of deforestation in Africa.



In 9 African countries more than 80% of primary schools lack electricity.

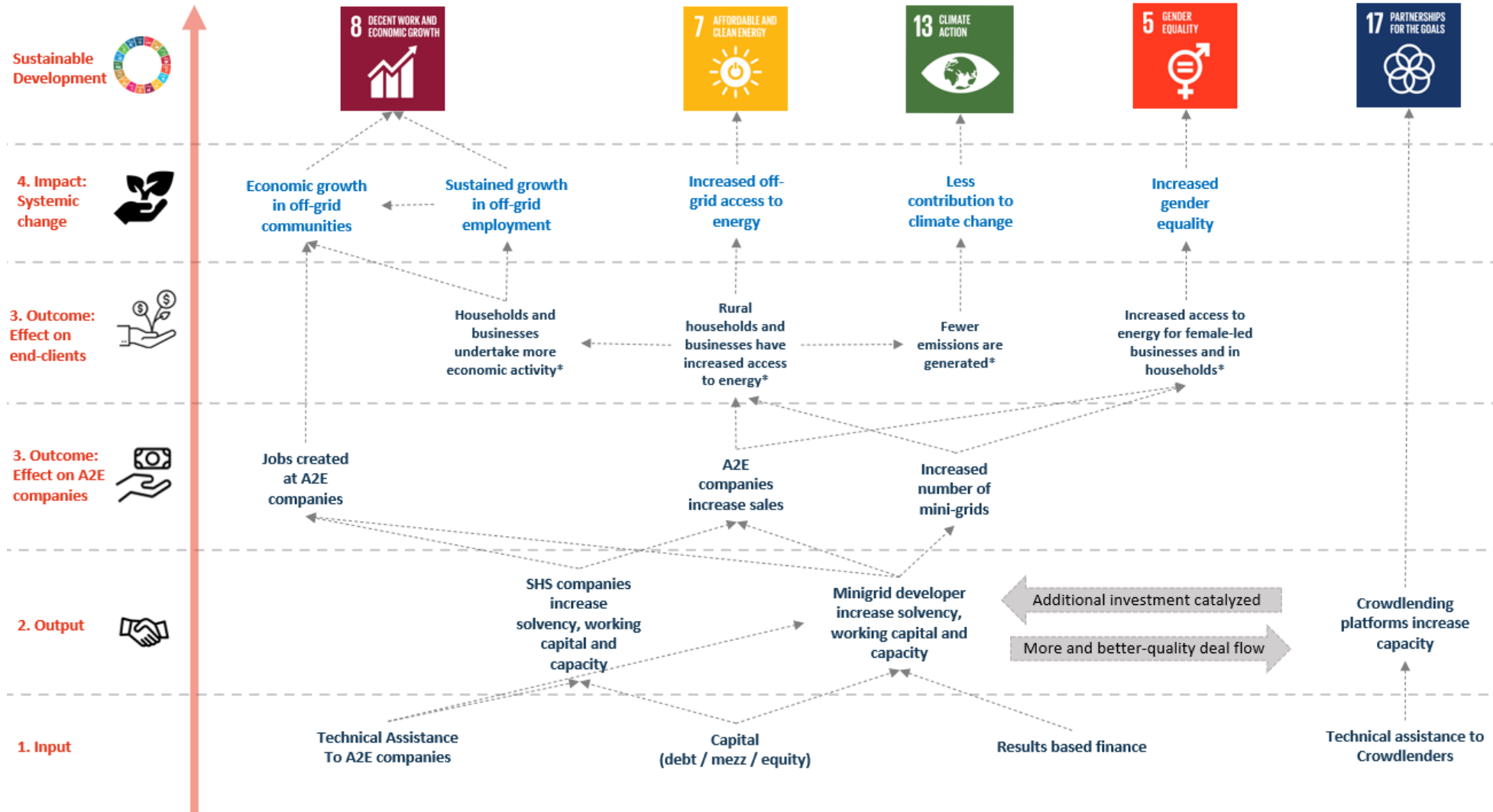


The energy gap between Africa and the rest of the world is widening.



African countries are unable to leverage the finance needed to manage climate risk and deliver energy to all.

CEI Africa focused on SDG 5,7,8, 13 and 17



CEI Africa expected impact

IMPACT PROJECTIONS 17 YRS (2022-2038)					
Indicator #		CL Small offgrid	CL Mini-grid	RBF Mini-grid	Total
1a	Mini-grids #	n/a	285	105	390
1b	Connections #	444.512	53.101	36.288	533.901
2	Mobilized (private) capital (EUR M)	65	69	9,0	143
3	Installed capacity (MW)	3,7	13,7	5,0	22
4	CO2te reduction p.a.	14.542	8.535	6.285	29.362
5	Beneficiaries #	2.444.817	271.613	199.584	2.916.014

IMPACT PROJECTIONS 5 YRS (2022-2026)					
Indicator #		CL Small offgrid	CL Mini-grid	RBF Mini-grid	Total
1a	Mini-grids #	n/a	150	105	255
1b	Connections #	136.172	15.624	36.288	188.084
2	Mobilized (private) capital (EUR M)	33,3	33,3	9,0	75,7
3	Installed capacity (MW)	1,1	7,2	5,0	14
4	CO2te reduction p.a.	15.146	2.052	6.285	23.483



Incorporating gender into CEI Africa

			Threshold
Direct Criteria	1	Entrepreneurship	1A. Share of women ownership 51%
			<i>OR</i>
			1B. Business founded by a woman Y/N
		<i>OR</i>	
Direct Criteria	2	Leadership	2A. Share of women in senior management 30%
			<i>OR</i>
			2B. Share of women on the Board or IC 30%
		<i>OR</i>	
Direct Criteria	3	Employment	3A. Share of women in the workforce 30 - 50%*
			<i>AND</i>
			3B. One “quality” indicator beyond compliance Y/N
		<i>OR</i>	
Direct Criteria	4	Consumption	4. Product or service specifically or disproportionately benefits women Y/N
			<i>AND</i>
Indirect	5	Investments through Financial Intermediaries (FIs)	5A. <i>On-Lending facilities</i> : Percent of the Investor/FI loan proceeds or percent of FI’s portfolio supporting businesses that meet direct criteria 30%
			<i>OR</i>
			5B. <i>Funds</i> : Percent of portfolio companies that meet the direct criteria 30%

Sector-Specific Thresholds

3.A Women in the Workforce*		
Grp.	Sector	%
Low	Infrastructure, Power, Telecoms	30%
Mid	Financial Services, Manufacturing	40%
	– Heavy, Agribusiness & Food, Professional Services	
High	Healthcare, Education, Consumer Services, Manufacturing	50%
	– Light ³	

*Room for judgement: Investees in unique sectors or geographies may require case-by-case consideration.

*sector-specific thresholds

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