

2023



Sustainable Energy
Fund for Africa

Annual report

scaling private sector investments for Africa's energy transition



AFRICAN DEVELOPMENT BANK GROUP
GROUPE DE LA BANQUE AFRICAINE
DE DÉVELOPPEMENT



Acknowledgements

The 2023 SEFA Annual Report was written and prepared by the SEFA Technical Unit under the supervision of João Cunha (Division Manager) and Daniel Schroth (Director) of the Renewable Energy and Energy Efficiency Department of the African Development Bank (AfDB).

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Accelerating Africa's just energy transition

In 2023, SEFA stayed true to its mission of catalysing private sector investments in renewable energy and energy efficiency across Africa. Our journey this year was a testament to innovation, collaboration, and the relentless pursuit of project opportunities in support of a just energy transition. Step by step, we are moving closer to a sustainable Africa. We have made significant progress, from closing the SEFA 1.0 legacy portfolio to accelerating the implementation of SEFA 2.0.

SEFA's work is about more than just funding; it transforms lives and fosters sustainable development. We aim to address critical energy challenges, power homes and businesses, and contribute to economic growth and climate resilience.

Join us as we continue to turn this vision into reality, ensuring a brighter, more sustainable future for all Africans.

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Foreword

The Nairobi Declaration at the Africa Climate Summit in Kenya in September 2023 set a groundbreaking target of a five-fold increase in Africa's renewable energy generation to 300GW between 2022 and 2030. This ambition exceeds the tripling target called for at COP28. Despite this bold vision, attracting energy investments in Africa remains a formidable challenge. The 2022 Africa Energy Outlook by the International Energy Agency starkly highlights this gap. Constituting a fifth of the global population, Africa attracts a mere 3% of global energy investments and 2% of the world's clean energy investments. Reasons often cited for the low level of private investments in renewable energy include actual and perceived investment risks, compounded by the limited availability of long-term capital at affordable rates. This is precisely why concessional finance is more critical than ever.

In its this fourth year of operations as a catalytic financing facility, SEFA delivered a record-breaking performance - with nine projects approved, totalling USD 72 million. SEFA is particularly proud of its catalytic investments in (i) the 200MW Kom Ombo solar PV project in Egypt to mitigate COVID related cost increases that threatened the financial close of this important project, (ii) CrossBoundary Energy Access, an innovative blended finance platform to scale-up solar mini-grid investments, (iii) the Mauritania mini-grids programme, a first-of-a-kind PPP for energy access under the Desert-to-Power initiative, and (iv) in the Africa Guarantee



Dr. Kevin Kanina Kariuki ,
Vice President
Power, Energy, Climate
& Green Growth, African
Development Bank

Fund Risk Sharing Facility, to unlock local currency financing for decentralised renewable energy projects, among others. We anticipate more such investments in the future to ensure commercial capital keeps flowing to African renewable energy and energy access projects.

We are also pleased to note the approval of several ambitious regional technical assistance programmes, such as (a) the Africa Energy Transition Catalyst, that seeks to enhance the investment environment for utility-scale renewable energy generation, (b) energy storage and regional transmission infrastructure, (c) the expansion of the Energy Efficiency Market Development Programme, to continue promoting private investments in emerging areas such as cooling and clean cooking, and (d) the Africa Hydropower Modernisation Programme, to expand hydropower capacity quickly, more sustainably and cost-effectively, through the rehabilitation of ageing plants.

SEFA's success would not be possible without our donors' continued support and generosity. The renewed commitments in 2023, from our partners such as Germany, Italy, the UK, and the USA totalling USD 65 million are crucial to sustaining the much-needed momentum in the deployment of catalytic capital, without which urgently needed renewable energy infrastructure investments would not see the light of day.

Saying I am very proud of SEFA's remarkable trajectory since its humble beginnings as bilateral trust fund in 2012 is an under-statement. I am very excited about the Fund's rapid transformation into Africa's leading catalytic renewable energy financing facility, spearheading the continent's transition to a clean and inclusive energy future.

¹ Desert to Power is an initiative aimed at connecting 250 million people in the Sahel region to electricity by utilising the area's abundant solar resources. It will transform the Sahel into the world's largest solar production zone, with up to 10,000 MW of solar generation capacity. This initiative will also accelerate economic development through the deployment of solar technology.

Acronyms

AETC	Africa Energy Transition Catalyst
AfDB	African Development Bank
AGF	African Guarantee Fund
AGGF	Africa GoGreen Fund
AHMP	Africa Hydropower Modernisation Programme
AMAP	Africa Mini-Grid Acceleration Programme
AREF	Africa Renewable Energy Fund
ASAP	Africa Super ESCO Acceleration Programme
BESS	Battery energy storage system
BOO	Build, own, operate scheme
BOOT	Build, own, operate, transfer structure
CI	Concessional investment
COP-28	2023 UN Climate change conference
CRP	Covid-19 Off-grid recovery platform
DRC	Democratic Republic of the Congo
DREAM	Distributed Renewable Energy-Agriculture Modalities
DtP	Desert-to-Power
EA	Energy access
EE	Energy efficiency
EE MDP	Energy Efficiency Market Development Programme
ESCO	Energy service company
EVs	Electric vehicles
EnPC	Energy performance contracting
FPV	Floating solar PV
GBL	Green baseload
GEAPP	Global Energy Alliance for People and Planet
GEF	Global Environment Facility

GHG	Greenhouse gas
GMG	Green mini-grids
GoA	Government of Angola
GW	Gigawatt
HPP	Hydropower plant
IHA	International Hydropower Association
IPP	Independent power producer
JET	Just Energy Transition
KMC	Knowledge management & communications
KV	Kilovolt
LEAF RSF	LEAF Risk Sharing Facility
MW	Megawatt
NORAD	Norwegian Agency for Development and Cooperation
OGEF	Off-grid Energy Access Fund
PPA	Power purchase agreement
PPG	Project preparation grant
PPP	Public-private partnership
PUE	Productive use of energy
PV	Photovoltaic
RE	Renewable energy
RMCs	Regional member countries
RRF	Rapid response facility
SDGs	Sustainable Development Goals
SEFA	Sustainable Energy Fund for Africa
SMEs	Small & medium enterprises
TA	Technical assistance
VRE	Variable renewable energy

Executive summary

In 2023, SEFA solidified its role as the leading energy transition facility in Africa. The year marked an important milestone with the closure of the SEFA 1.0 legacy portfolio while accelerating its implementation of SEFA 2.0, which is now in its fourth year of operation. It also saw the approval of nine projects for a combined funding amount of USD 72 million that are expected to generate 2,840 MW in new renewable energy capacity, approximately 1.3 million new electricity connections, 8,394,182t CO2 of GHG emissions reductions, and create around 160,000 new jobs.

SEFA's catalytic role was exemplified by the concessional financing for the 200MW Kom Ombo solar PV project in Egypt, the Cross Boundary Mini-Grid Platform to accelerate energy access in Africa, and an innovative risk-sharing facility with the Africa Guarantee Fund (LEAF AGF) to facilitate local currency financing in the distributed renewable energy (DRE) sector.

We've continued to de-risk the investment environment and pre-investment phase of projects through technical assistance and project preparation support programmes, notably the Africa Energy Transition Catalyst (AETC), the Africa Hydropower Modernisation Programme (AHMP II), and the Energy Efficiency Market Development Programme (EE MDPII). Furthermore, our support included Mauritania's first solar

mini-grid programme with private sector participation (RMIDIR).

SEFA 2.0's current portfolio stands at USD 201.3 million for 27 projects across the three thematic areas of Green Baseload, Green Mini-Grids, and Energy Efficiency. This is expected to generate a significant impact, leveraging a total of USD 11.4 billion, representing 4690 MW in new capacity and delivering ca 2.9 million connections.

The legacy portfolio, which spanned eight years from 2012 to 2019, with the final year of implementation in 2023, supported 68 projects in 30 countries with USD 84.2 million in investments, focusing particularly on hydropower and solar PV projects. To date, it has also delivered 263 MW and more than 1 million connections.

SEFA 2.0 leveraged the accomplishments of its Fund capital mobilisation, rallying over USD 425M in donor contributions, and is poised to meet its target of USD 500M by 2030.

Our donors' financial support and confidence remained strong in 2023. Notable commitments included EUR 5M from Italy, GBP 8M from the UK, USD 6.3M from the US, and a sizeable EUR 40M from Germany. These contributions underscore the international community's trust in SEFA's vision, bringing our total funds raised to over USD 533M since inception.

We strategically participated in key sector events to enhance brand visibility and share operational insights. Notable engagements included the Africa Climate Summit in Kenya, where SEFA hosted a dedicated side event to announce new donor contributions. SEFA was also represented at the World Hydropower Congress in Indonesia, the Africa Investment Forum in Morocco, and COP-28 in the United Arab Emirates.

The sections of the report are detailed as follows:

SECTION 1

showcases SEFA's three focal areas of investment - "Green Baseload," "Green Mini-Grids," and "Energy Efficiency" - as well as strategic priorities, portfolio highlights and impact.

SECTION 02

presents key achievements in the current year, including an overview of the SEFA 2.0 portfolio and communications and visibility efforts.

SECTION 3

updates on the SEFA 1.0 legacy portfolio and highlights achievements and impact.

SECTION 4

summarises key financial indicators and resource mobilisation milestones.

SECTION 5

looks ahead to priorities in 2024 and beyond.



In 2023, SEFA approved nine projects with a combined funding of **USD 72 million**, expected to generate **2,840 MW** in new renewable energy capacity, approximately **1.3 million** new electricity connections, reduce **8,394,182t CO2** of GHG emissions, and create around **160,000** new jobs.

Section 01 about SEFA

The Sustainable Energy Fund for Africa (SEFA) is a multi-donor Special Fund managed by the African Development Bank (AfDB), with a mission to provide catalytic finance to unlock private sector investments in renewable energy and energy efficiency. Since its launch in 2012, the fund has championed clean energy solutions that address climate change concerns while alleviating African inequality and poverty. Its mandate aligns with the Sustainable Development Goal for Energy, SDG7², which calls for affordable, reliable, sustainable and modern energy for all by 2030, and with the Paris Agreement. By supporting green, innovative and transformative projects, the fund is perfectly positioned to support the energy transition in Africa.

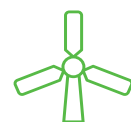
SEFA provides financial and technical support for complex projects with potential for sustainability and high impact. Through its pillars on green mini-grids, green baseload, and energy efficiency, SEFA addresses critical energy challenges faced by millions of Africans. Our projects illuminate homes and power businesses, foster economic development, enhance climate resilience, and reduce carbon emissions across the continent.

² SDG7, the Sustainable Development Goal adopted by the UN, aims to ensure universal access to affordable, reliable, and modern energy services, increase the share of renewable energy, and improve energy efficiency globally.

SEFA is also perfectly aligned with the Bank Group Ten-Year Strategy (2024-2033), which is focused on accelerating inclusive green growth and driving prosperous and resilient economies in the African continent by scaling up investment on five priority areas - referred to as the High 5s - as follows:



figure. SEFA's alignment with the AfDB's High 5s strategy



1. Light and Power Africa

SEFA contribution

renewable energy infrastructure and decentralised energy solutions



2. Feed Africa

SEFA contribution

solar irrigation, cold chains and productive use applications



3. Industrialise Africa

SEFA contribution

captive power for industries and industrial efficiency



4. Integrate Africa

SEFA contribution

cross-border generation and transmission infrastructure



5. Quality of life for Africans

SEFA contribution

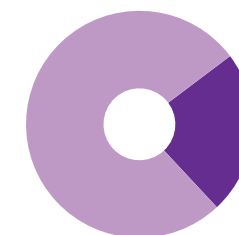
clean cooking and electric mobility

SEFA comprises a dedicated team of professionals committed to driving progress towards a more sustainable energy future for Africa. Currently, the team has **20 professionals** with diverse backgrounds and expertise, including project finance, engineering, and policy development.



figure. SEFA 2.0 portfolio

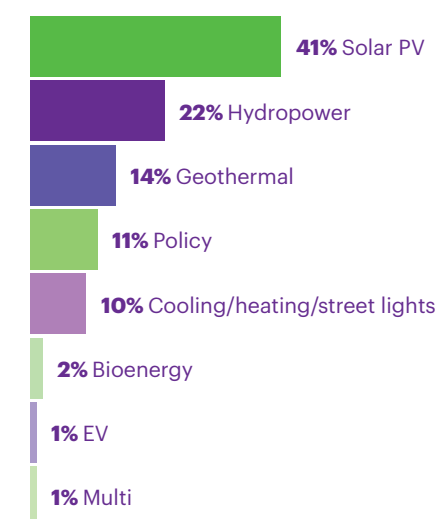
USD200.3M approved across 27 projects



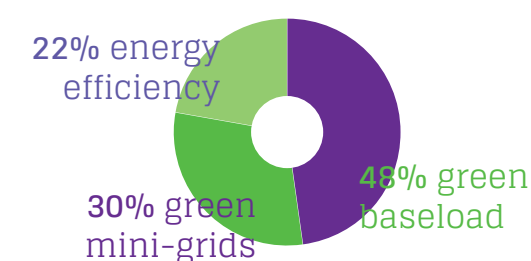
of which, **USD46.3M** are disbursed

with a distribution as follows:

a) technology



b) thematic area:



c) geographically:

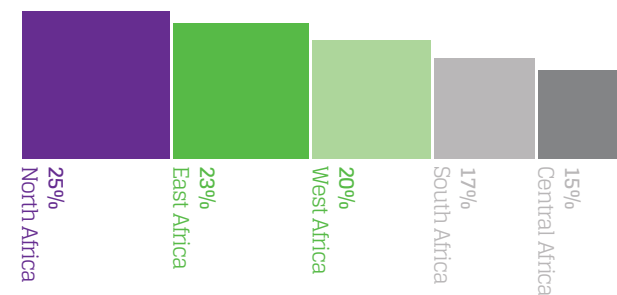








figure. SEFA 2.0 expected results

-  4,690 MW
-  2,868,004 connections
-  USD 10,519.6 total investment
-  42,148 jobs created
-  22,860,830 GHG reduced
-  1,614,000 energy savings³

³ GWh/year



The fund's work is made possible through the support of a wide range of donors, including the Governments of Denmark, Germany, Norway, Sweden, the United Kingdom, the United States of America, Italy, and Spain, as well as the Nordic Development Fund and the Global Energy Alliance for People and Planet. These donors are committed to promoting sustainable energy in Africa and supporting efforts to drive economic development and poverty reduction through access to clean energy.

SEFA DONORS



01.2 SEFA thematic areas driving positive change

SEFA's thematic areas - Green Baseload (GBL), Green Mini-Grids (GMG), and Energy Efficiency (EE) - play a pivotal role in advancing sustainable development across Africa.



1. Green baseload

sustainable alternatives to grid-based fossil-fuel based generation

GBL projects, comprising utility-scale variable renewable energy generation (e.g. wind and solar power) - integrated with energy storage to support power system stability – as well as hydropower, geothermal energy and biomass-to-power, offer alternatives to fossil fuel-based generation. Such projects also offer opportunities to create jobs and stimulate economic development while reducing carbon emissions. If supported by investments in transmission and distribution grids, utility-scale renewable energy generation facilitates enterprises' and households' access to electricity.



2. Green mini-grids

energising communities, transforming lives

SEFA looks to leverage modularity and falling costs of renewable energy to enable electricity access to some of Africa's most rural and remote populations. We aim to catalyse local economic growth and resilience-building by championing decentralised energy solutions, particularly mini-grids. SEFA provides targeted technical assistance through initiatives such as the Africa Mini-grid Acceleration Programme (AMAP), which supports

governments in improving regulatory frameworks, identifying projects, and structuring procurement programmes for private sector-led development of mini-grids. Further, SEFA leverages its concessional financing instruments to de-risk investments in green mini-grids by bridging commercial viability shortcomings to bring electricity access to some of the continent's poorest populations – including educational and health facilities - and fostering development through integration with productive uses of energy.



3. Energy efficiency

rationalising energy consumption, scaling up efficient appliances

Support for EE technologies and policies to promote sustainability and resilience across the power sector, both in generation and consumption. Areas of intervention include innovative financing solutions for appliance businesses, clean cooking and electromobility, and more classic interventions in policy advocacy and capacity building. SEFA is expected to rationalise energy consumption, enhance energy security, and lower energy bills for households and enterprises.



In 2023, SEFA approved nine projects totalling USD 72 million, expected to generate 2,840 MW in renewable energy, 1.3 million new electricity connections, and 160,000 new jobs.

Section 02

key highlights in 2023

In 2023, a total of USD 72.2 million in SEFA funding was approved for nine projects – five technical assistance and four concessional investments. Of the approved projects, four fall under the green baseload thematic area, two under green mini-grids, and three under energy efficiency.



Table 01. Projects approved in 2022

Projects	Country	Instrument	Focal area ²	Amount (USD M)
1 Africa Energy Transition Catalyst (AETC)	Multinational	TA	GBL	10.3
2 Energy Sector Integrated Resource Plan	Uganda	TA	GBL	1.0
3 Kom Ombo Solar PV (COVID-19 IPP Relief Programme)	Egypt	CI	GBL	10.0
4 Africa Hydropower Modernisation Programme - Phase II	Multinational	TA	GBL	9.7
5 CrossBoundary Energy Access II	Multinational	CI & TA	GMG	11.0
6 DtP - Mini-Grids Financing Programme (RIMDIR)	Mauritania	CI	GMG	15.0
7 Energy Efficiency Market Development Programme II	Multinational	TA	EE	5.0
8 Empower New Energy TA Facility – top up	Multinational	TA	EE	0.2
9 Africa Guarantee Fund Risk Sharing Facility	Multinational	CI	EE	10.0
TOTAL				72.2

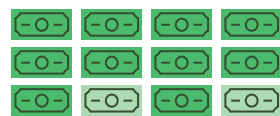


Africa Energy Transition Catalyst (AETC)

CLIENT Various public sector institutions⁴



CLIENT TYPE
Public sector



AMOUNT AWARDED
USD 10.28M

TYPE OF FINANCE
Grant

Project description

The Africa Energy Transition Catalyst (AETC) aims to support Africa's energy transition by facilitating the integration of renewable energy generation at national and regional levels. This initiative focuses on enhancing policy, regulatory and institutional frameworks while deploying new technologies and business models to accelerate the transition to sustainable energy sources.

The AETC includes support for various initiatives such as the Mega Solar Programme in Botswana and Namibia, project preparation assistance for the ZiZaBoNa regional transmission interconnector project, a priority project

under the Global Green Grids Initiative, collaboration with the African Energy Commission (AFREC) to develop a continental energy transition framework, and the implementation of national just energy transition (JET) initiatives in Senegal, Tunisia, Nigeria, and Mauritania – the latter focusing on the nascent green hydrogen sector.

The AETC is expected to contribute to regional and national just energy transition efforts by increasing renewable energy generation capacity, mobilising private capital, reducing greenhouse gas emissions, and creating employment opportunities.



The AETC underscores the Sustainable Energy Fund for Africa's role as Africa's leading energy transition platform.

Dr. Daniel Schroth
Director of Renewable Energy
and Energy Efficiency at the
African Development Bank



what is JET?

Just Energy Transition (JET) refers to the shift from fossil fuels to renewable energy sources in a manner that prioritises equity and social justice. It ensures that the benefits of transitioning to clean energy are accessible to all, particularly marginalised communities, while addressing the transition's economic, social, and environmental challenges.

⁴ Société Tunisienne de l'électricité et du Gaz – STEG (Tunisia); Africa Energy Commission; Ministère du Pétrole et de l'Energie du Sénégal; Botswana Ministry of Minerals and Energy; Namibia Ministry of Mines and Energy and Southern African Power Pool Project Advisory Unit 2 and, the remaining two support Nigeria's JET and the development of Green Hydrogen undertakings.

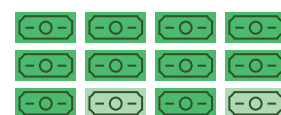


Uganda Energy Sector Integrated Resources Plan

CLIENT Ministry of Energy and Mineral Development (MEMD)



CLIENT TYPE
Public sector



AMOUNT AWARDED
USD 1M

TYPE OF FINANCE
Grant

Project description

The technical assistance project aims to develop an Integrated Resource Planning (IRP) framework for Uganda's energy sector. Its primary objective is to identify the most cost-effective combination of energy supply and demand measures to meet long-term requirements while ensuring energy security in alignment with national objectives.

The project focuses on enhancing sector-wide planning and governance, improving technical and financial sustainability, and supporting private-sector investments. This includes developing a roadmap for a least-

cost diversified energy mix, targeting a 50% increase in electricity access by 2030, and curating a pipeline of investments spanning generation, transmission, distribution, and off-grid solutions—including mini-grids. The IRP, which builds on Uganda's energy transition plan presented at COP28, is expected to contribute to reducing generation overcapacity while positioning the African Development Bank as a key partner in fostering the power sector's economic sustainability, supporting the transition to clean energy, and promoting universal access through decentralised technologies.



Kom Ombo Solar PV (COVID-19 IPP Relief Programme)

CLIENT ACWA Power



CLIENT TYPE
Private sector



AMOUNT AWARDED
USD 10M

TYPE OF FINANCE
Reimbursable Grant

Project description

The Kom Ombo Solar PV project involves constructing and operating a 200 MW photovoltaic solar power plant in Egypt.

The project encountered formidable hurdles resulting from the COVID-19 pandemic, including substantial cost escalations of key components such as solar modules, trackers, and inverters, as well as logistical challenges causing supply chain disruptions and delays. In this context, SEFA's concessional investment, which formed part of the Fund's COVID-19 IPP Relief Programme, was structured to sustain the

project's financial viability and complement the extraordinary measures taken by project sponsors and other lenders.

The capital mobilised for the project amounts to USD161 million, contributing to the diversification of Egypt's electricity generation mix. This is expected to result in an estimated reduction of 318,000 tons of CO2 emissions per year. The project is also expected to create approximately 400 jobs during construction.



Businesses that work with renewable energy, like ours, have had to expand their thinking, efforts and partnerships to overcome the unusual supply chain disruptions that have been caused by the pandemic. We welcome the reimbursable grant by the Sustainable Energy Fund for Africa, as it enables the development of an important renewable energy project in Egypt—where we have significant plans for expansion. As this country progresses, we remain committed to growing our portfolio as it helps communities getting access to essentials for life in a sustainable way.

Sharath Rao
CEO – Egypt projects of the ACWA Power



Africa Hydropower Modernisation Programme – Expansion Phase (AHMP II)

CLIENT Various Hydropower project sponsors and OEM



CLIENT TYPE
Public and Private sector



AMOUNT AWARDED
USD 9.72M

TYPE OF FINANCE
Reimbursable Grant/Grant

Project description

The Africa Hydropower Modernisation Programme (AHMP) - Phase II aims to revitalise Africa's aging hydropower infrastructure. Specifically, this TA initiative aims to promote private sector participation in the modernisation of ageing hydropower assets in Africa and increase renewable energy generation capacity quickly and cost-effectively, as part of accelerating energy transition efforts. AHMP was originally set-up as a “one-stop-shop” to project owners and developers, providing market studies and pipeline identification, feasibility studies to define the scope of modernisation, development of public-private partnership templates and

legal documentation and trainings on new technologies. AHMP - Phase II broadens the initiative, across three key workstreams: project preparation, plant rehabilitation, and private sector-led modernisation. It emphasizes efficient resource utilisation and strategic partnerships with public sector institutions, and provides a knowledge hub for sharing of experiences and lessons learnt.

AHMP - Phase II is poised to deliver substantial environmental and economic benefits by unlocking additional hydropower capacity, cutting carbon emissions, mobilising major investments,

and generating employment. Expected outcomes include 200 MW additional generation capacity, creation of 150 green jobs (30% for women), reduction of carbon emissions by 300 ktCO₂/year, and mobilisation of USD 100 million, with 13% from the private sector.

“This work by the African Development Bank and IHA to identify, promote and invest in new and modernised sustainable hydropower development is of existential importance to Africa's development. Africa is facing an energy crisis. With limited supply, especially of renewable energy, prices are high and there is a high dependency on other countries. Over 60% of the hydropower capacity is from plants that are over 20 years old. These need to be refurbished and modernised to increase the existing capacity, whilst longer term projects are undertaken.

Anton-Louis Olivier

Chair, International Hydropower Association



Africa Hydropower Modernisation Programme – Expansion Phase (AHMP II)

CLIENT Various Hydropower project sponsors and OEM



CLIENT TYPE
Public and Private sector



AMOUNT AWARDED
USD 9.72M

TYPE OF FINANCE
Reimbursable Grant/Grant

Project description

The Africa Hydropower Modernisation Programme (AHMP) - Phase II aims to revitalise Africa's aging hydropower infrastructure. Specifically, this TA initiative aims to promote private sector participation in the modernisation of ageing hydropower assets in Africa and increase renewable energy generation capacity quickly and cost-effectively, as part of accelerating energy transition efforts. AHMP was originally set-up as a “one-stop-shop” to project owners and developers, providing market studies and pipeline identification, feasibility studies to define the scope of modernisation, development of public-private partnership templates and


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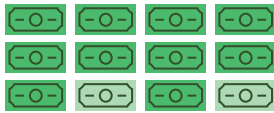
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Cross-Boundary Energy Access II

CLIENT CrossBoundary


CLIENT TYPE
Private sector


AMOUNT AWARDED
USD 10+1M

TYPE OF FINANCE
Concessional loan
and TA grant

Project description

CrossBoundary Energy Access Platform II (CBEA-II) is an innovative financing platform specifically designed to catalyse USD150 million of investments in solar mini-grids across Africa. It addresses barriers hindering mini-grid scalability by aggregating diverse assets into a bankable project finance facility, partnering with leading mini-grid developers to enhance energy access.

CBEA-II is structured as a blended finance facility to balance the tight economics of underlying mini-grid projects with the return requirements of commercial investors, whilst the aggregation helps reduce underlying projects risks. More specifically, it blends equity with

concessional mezzanine debt to invest in mini-grid projects' construction, operation, and maintenance. The expected USD75 million in risk capital is also expected to unlock an additional USD75 million in senior debt.

CBEA-II aims to provide 250,000 first-time electricity connections, benefiting 1.2 million people across rural Africa. By installing 17.7MW of solar capacity and displacing traditional diesel sources, it aims to significantly reduce carbon emissions. The initiative is expected to create approximately 5,600 direct jobs, empower women, and promote the Productive Use of Energy (PUE), driving Africa's economic growth and environmental sustainability.



CrossBoundary Access is proud to partner with SEFA, AFDB to bring clean energy to people in rural Africa. This USD10 million investment is a testament to the growing maturity of the mini-grid sector and its ability to attract impact-driven institutional capital. Our blended finance approach coupled with support from our partners will be fundamental in unlocking the capital needed to bridge the gap for those who do not presently have access to electricity.

Lynne Wesonga

Associate Director, CrossBoundary Access



what is PUE?

Productive Use of Energy (PUE) refers to using energy sources to stimulate economic activities and enhance income-generating opportunities, particularly in rural and underserved areas. It encompasses using renewable energy to power various business operations, agricultural processes, and community services, such as

milling, sewing, refrigeration, and water purification. By enabling access to reliable and sustainable energy, PUE initiatives not only improve living standards and reduce poverty but also contribute to the financial sustainability of mini-grids by increasing loads and improving the consumers ability to pay for electricity.



Desert to Power – RIMDIR⁵ 1 Green Mini-Grid Electrification Project in Mauritania

CLIENT SOMELEC and Mini-Grid Developers



CLIENT TYPE
Public sector



AMOUNT AWARDED
USD 15.4M

TYPE OF FINANCE
Grant

Project description

The Green Mini-Grid Electrification Project in Mauritania (RIMDIR) pioneers private sector investment in Mauritania's electricity sector through a unique PPP model.

Operational subsidies from the Government ensure alignment with country-wide tariffs, providing a sense of stability and confidence, while cross-subsidising private mini-grid developers. The project falls under the Desert-to-Power initiative, the Bank's flagship initiative to promote economic development in Sahel countries by unlocking their vast solar resource potential.

Implemented by SOMELEC - a state-owned company responsible for the production, transmission and distribution of electricity throughout the country- the project will electrify 98 localities, of which 40 are supported by the SEFA grant to help the Government close the tariff gap. Additional grant resources are also provided for technical assistance, embedded advisors in SOMELEC, and the promotion of productive use technologies across all 98 localities to bolster demand and commercial viability.

The project aims to deploy 0.7MW of renewable energy, connecting

approximately 3,300 households and benefiting around 23,000 individuals. Additionally, it targets an annual reduction of roughly 530t CO₂e. Beyond these tangible outcomes, RIMDIR seeks to establish a robust evidence base for private sector-led PPPs in rural electrification in Mauritania while becoming a potential model for similar initiatives elsewhere.



We are delighted with the Bank's support, exemplified by this major grant for the first structured PPP project in Mauritania's electricity sector. The project supports our policy of universal access to electricity by 2030 and an energy transition to promote economic growth, particularly in rural areas, in line with the Priority Programme of the President of the Republic, Mohamed Ould Cheikh El Ghazouani. The RIMDIR project illustrates the remarkable work of the Desert to Power initiative in our country.

Nani Ould Chrougha
Minister of Energy of Mauritania



what is the Desert to Power Initiative?

The AfDB's Desert to Power Initiative addresses the challenge of limited electricity access in the Sahel region of Africa. This region boasts abundant sunshine, a valuable natural resource. The initiative aims to leverage this resource by developing solar power plants to generate clean and reliable electricity.

The ambitious project target is 10 gigawatts (GW) of solar power by 2030. This large-scale project has the potential to significantly impact the lives of millions of people across 11 countries in the Sahel, including Burkina Faso, Ethiopia, Eritrea, Djibouti, Mali, Mauritania, Niger, Nigeria, Senegal, Sudan, and Chad. The expected benefits are multifaceted: providing electricity access to an estimated 250 million people, stimulating economic growth through job creation in renewable energy sectors, and contributing to climate change mitigation efforts by reducing reliance on fossil fuels.

SEFA is a critical player in the Desert to Power Initiative. With contributions from donors like SIDA – the Swedish International Development Cooperation Agency, SEFA provides crucial financial and technical support. SEFA's interventions have been catalytic, providing technical assistance to the G5 Sahel countries. This assistance includes developing studies on integrating renewable energy and hybridising existing power systems, as well as financing mini-grid projects (examples: technical assistance through AMAP and the RIMDIR Mauritania project).



Energy Efficiency Market Development Programme II (EE MDP II)

CLIENT Various public sector institutions



CLIENT TYPE
Public sector



AMOUNT AWARDED
USD 5M

TYPE OF FINANCE
Grant

Project description

The Bank has been implementing the SEFA-funded Energy Efficiency Market Development Programme (EE MDP) over the last three years to address barriers to efficiency investments and contribute to the development of sustainable EE markets. The second phase of the MDP will continue the work initiated in the first phase while covering additional countries and widening the scope also to cover national-level energy efficiency plans, including clean cooking, efficient appliances and efficient cooling, to leverage more private investments in these emerging areas.

EE MDP II adopts a comprehensive two-pronged approach: Investment Programme/ Project Design and support for a conducive Enabling Environment. The first component will strengthen clients' abilities to establish project pipelines and facilitate investments in


high-energy-efficient technologies and newer business models. It will encompass activities related to the development of action plans in sustainable cooling measures across economic sectors, preparation of investment projects, design of tailored financing facilities, and support for clean cooking scale-up. The second component will provide support for knowledge sharing and the design of policy and regulatory tools, including the development of regional energy-related standards and labelling schemes, thereby providing a clear understanding of its strategy.

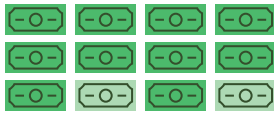
EE MDP II aims to catalyse at least USD 200 million in investments yielding significant energy savings, GHG reductions, job creation, and economic growth. It lays the groundwork for dedicated financing from SEFA, the Bank, and other sources to establish national EE programmes and fund specific projects.



Empower New Energy TA Facility – top up

CLIENT Empower New Energy


CLIENT TYPE
Private sector


AMOUNT AWARDED
USD 0.23M

TYPE OF FINANCE
Grant

Project description

Empower New Energy Ltd (ENE) is an impact fund manager investing in small-scale renewable energy projects that would otherwise struggle to attract project finance. The Fund is developing and building a pipeline of decentralised and grid-connected solar projects in Sub-Saharan Africa, supporting their development through construction and managing the operational assets before refinancing and transferring to long-term investors. SEFA has been a financial partner of ENE since its creation by capitalising its TA Facility for project preparation. A top-up of USD 227,500 is now being provided to expand the scope of this facility, focusing on carbon credit due diligence for existing and potential renewable energy projects.

The approved top-up will enable ENE to conduct thorough carbon credit due diligence activities, enhancing project viability and opening new revenue streams. These activities include preparing project design documents, supporting validation and audit processes, and facilitating carbon credit purchase transactions.

With the approved top-up, ENE expects to certify nine solar PV projects, generating an additional 68.2 MWp and producing 115 GWh per year. These projects aim to avoid 99,636 tonnes of CO2 emissions annually. Revenue from carbon credits will reduce investment costs, enabling further investment in renewable energy projects.




Decentralised solar projects in Africa are one of the fastest avenues to decarbonisation but struggle to attract carbon financing due to the high upfront costs. SEFA’s support to Empower New Energy’s preparation of projects for carbon credits aims to overcome these barriers, unlocking the avoidance of around 180,000 tonnes of CO2 per annum and demonstrating the potential of carbon credits to spur investment in Africa’s decentralised renewable energy sector.

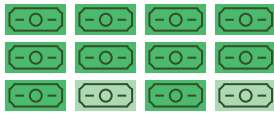
Terje Osmundsen
CEO, Empower New Energy



Africa Guarantee Fund Risk Sharing Facility

CLIENT Africa Guarantee Fund


CLIENT TYPE
Private sector


AMOUNT AWARDED
USD 10M

TYPE OF FINANCE
Reimbursable grant

Project description

The Africa Guarantee Fund (AGF) Risk Sharing Facility (RSF) aims to enhance access to finance for Small and Medium Enterprises (SMEs) in the decentralised renewable energy sector across six African countries. It targets solar home systems, green mini-grids, and commercial/industrial solutions, aligning to catalyse economic growth and reduce poverty through increased financial access for SMEs. SEFA is providing a USD10 million reimbursable grant to enable an increased volume of DRE-focused guarantees and strengthen AGF's capital base.

The AGF RSF employs a two-layered counter-guarantee mechanism to mitigate risks associated with SME financing. It leverages AGF's expertise and shareholder

base, supported by financial backing from the AfDB and the Green Climate Fund (GCF). Technical assistance provided under the Leveraging Energy Access Finance (LEAF) programme enhances the capacity of financial institutions (FIs) to engage effectively in DRE investments.

The project is expected to catalyse USD 267 million in local currency financing for DRE projects, with AGF guaranteeing up to USD 200 million of the FIs' portfolio. The intervention aims to support approximately 160 companies, including 30% women-led businesses, resulting in 112 MW of installed solar generation capacity, approximately 234,162 t CO₂eq of GHG emission reductions, and the creation of roughly 2,000 full-time jobs.



With the support of the Green Climate Fund, African Development Bank and Sustainable Energy Fund for Africa, the African Guarantee Fund will unlock financing for decentralised renewable energy projects through the LEAF programme. LEAF will address financial and investment barriers by deploying credit enhancement instruments and new financial products to crowd in local currency debt and commercial capital. This initiative will not only tackle the energy shortfall but also reduce CO₂ emissions and simultaneously boost local economies and businesses.

Jules Ngankam
Group Chief Executive Officer at AGF



02.2 Portfolio overview

comprehensive review of SEFA's investment portfolio

Over the past four years since conversion to a blended finance facility, SEFA has approved a total of USD 200.3 million across 27 operations, of which nearly half (48%), or USD 96 million, has been allocated to Green Baseload projects; USD 60 million, or 30% of funding, has been approved for Green Mini-Grids; while Energy Efficiency projects have received USD 44 million, representing 22% of the total.

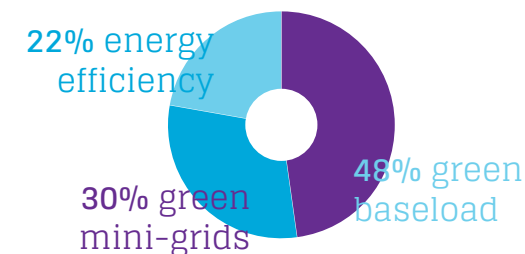
These align closely with SEFA's Strategic Framework indicative allocation targets, which aim for a distribution of 50%, 35%, and 15% across Green Baseload, Green Mini-Grids, and Energy Efficiency projects, respectively.

Other notable portfolio highlights include a 36% allocation for technical assistance and 64% for concessional investments, with top technologies being solar PV (41%), hydropower (22%), and geothermal (14%). Technical assistance focuses 35% on the enabling environment and 65% on project preparation, with investments evenly distributed across Eastern Africa (23%), West Africa (20%), Northern Africa (25%), Central Africa (15%), and Southern Africa (17%).

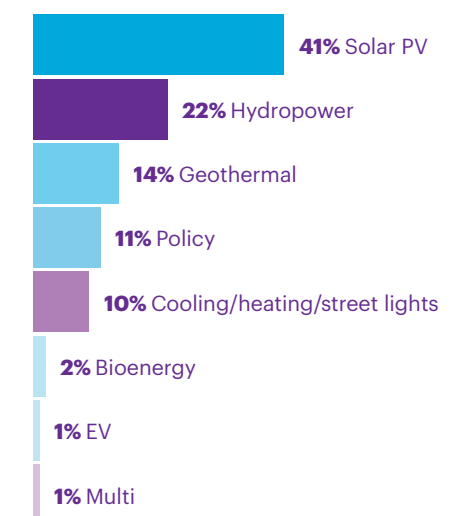


figure. SEFA 2.0 portfolio distribution breakdown

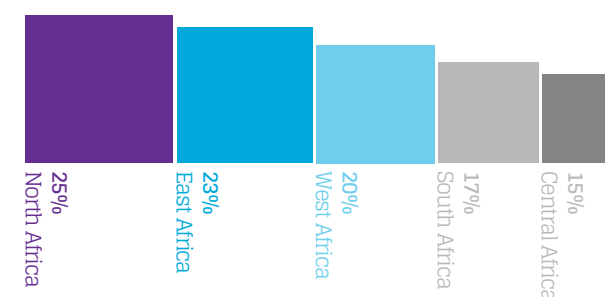
a) per thematic area



b) per technology



c) per geographic region



c) per financing window

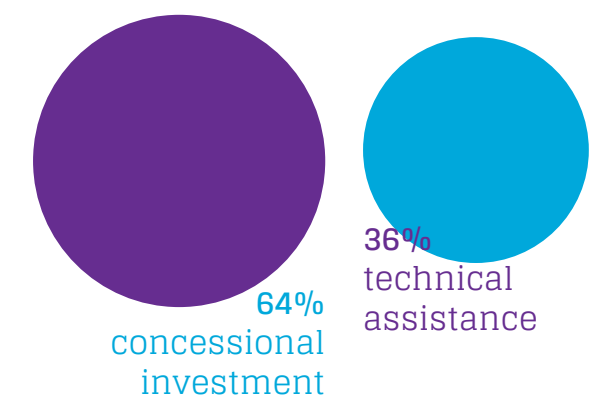




Table 02. Project portfolio overview

Project name	TA/CI	Country	USD M approved
GREEN BASELOAD			
Africa Renewable Energy Fund II – Equity+ Project Support Facility	CI	Multi	15.0
Kinguele Aval HPP	CI	Gabon	10.6
Kairouan Solar PV IPP	CI	Tunisia	17.0
Algeria Renewable Energy Programme	TA	Algeria	0.9
Desert to Power TA Programme	TA	Multi	5.0
COP26 Energy Transition Council RRF	TA	Multi	1.0
Africa Hydropower Modernisation Programme I + II	TA	Multi	10.7
Renewable Energy IPP Programme	TA	Botswana	1.0
Renewable Energy Integration Programme	TA	Mozambique	2.5
NewAfrica Biomass-to-Power	TA	Sierra Leone/Ghana	1.0
Tulu Moya Geothermal Resource Development	TA	Ethiopia	10.0
Kom Ombo Solar PV (COVID-19 IPP Relief Programme)	CI	Egypt	10.0
Africa Energy Transition Catalyst (AETC)	TA	Multinational	2
Energy Sector Integrated Resource Planning	TA	Uganda	1
SUB-TOTAL			96

GREEN MINI-GRIDS

Covid19 Off-Grid Recovery Platform	CI/TA	Multi	27.0
Africa Mini Grid Acceleration Programme	TA	Multi	7.0
Mini-Grids Financing Programme - Preparatory Phase	TA	Togo	1.0
CrossBoundary Energy Access II	CI/TA	Multinational	11.0
Mini-Grids Financing Programme (RIMDIR)	CI	Mauritania	14.0
SUB-TOTAL			60

ENERGY EFFICIENCY

SPARK+ Africa Clean Cooking Fund	CI	Multi	10.0
AfricaGoGreen Fund	CI	Multi	10.0
Africa Guarantee Fund Risk Sharing Facility	CI	Multi	10.0
SIE Super Esco	TA	Morocco	1.0
KPLC Super Esco	TA	Kenya	1.0
Green Mobility Facility for Africa – TA Window	TA	Multi	1.0
Africa Super Esco Acceleration Programme	TA	Multi	5.0
Energy Efficiency Market Development Program II	TA	Multi	5.0
SUB-TOTAL			44

TOTAL			201
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figure. SEFA 2.0 portfolio geographic distribution



14

number of
multinational
projects



02.3 communications and visibility 2023 highlights

In 2023, SEFA continued to strengthen its communications and knowledge management practices, with a focus on stakeholder engagement and disseminating crucial information.

SEFA developed and implemented strategies aimed at boosting visibility and building brand recognition. This included updating and enriching digital content such as programme-specific factsheets and publishing knowledge products showcasing the fund's activities and impact.

Additionally, SEFA actively participated in, sponsored, and co-organised key industry events. These events provided platforms for SEFA to highlight its work and engage directly with stakeholders, emphasising the fund's role in driving sustainable energy initiatives.

Throughout 2023, these coordinated communication and knowledge management efforts increased SEFA's visibility and strengthened its position as a leading advocate for renewable energy solutions in Africa.



communications and visibility spotlight. knowledge products

The "Africa Hydropower Modernisation Report: Continent Wide-Mapping of Hydropower Rehabilitation Candidates" was launched during the Africa Energy Forum in Nairobi in June 2023. This report provides a comprehensive analysis of hydropower modernisation potential across the continent, underscoring the critical role of hydropower in Africa's energy transition.

Highlight on the "Africa Hydropower Modernisation Report"

At the Africa Energy Forum, we introduced the "Africa Hydropower Modernisation Report," a comprehensive resource outlining opportunities for upgrading hydropower plants across the continent. This report, essential for policymakers, investors, and industry experts, underscores hydropower's vital role in Africa's energy transition. The key findings are that modernising existing plants requires less investment than building new ones, improving efficiency and safety while aiding economic development and climate resilience. Environmentally and socially, modernisation initiatives can enhance plant sustainability.

Additionally, integrating floating solar panels into hydropower reservoirs offers cost-effective energy solutions. The report identifies that 4.6 GW of hydropower capacity urgently needs modernisation, representing over 10% of Africa's total fleet and requiring an estimated USD 2.1 billion investment. Further investment and feasibility studies are recommended to proceed, considering potential barriers like financing and environmental concerns. This publication reflects SEFA's commitment to informed decision-making and our ongoing efforts to advance sustainable energy solutions in Africa, as demonstrated by the approved expansion of AHMP in 2023.



spotlight. key events

The year was marked by SEFA's participation in several high-profile events, further reinforcing our position as a key player in the African energy scene.

24-25 January

Oslo, Norway

Blended Finance Seminar on Renewable Energy in Africa and SEFA Governing Council Meeting 2023

The Norwegian Agency for Development Cooperation (Norad) and the SEFA co-organised a seminar in Oslo focused on the role of blended finance in promoting investments in renewable energy in Africa. Aimed at informing Norwegian development agencies and private investors on the challenges and successes of combining public concessional funding with commercial capital, the seminar featured three panels that discussed strategies to increase capital flow, the effectiveness of blended finance instruments, and ways to expand the pipeline of bankable projects. Key participants included representatives from the AfDB, Nordic Development Fund (NDF), Norfund, Swedish International Cooperation Agency (SIDA), Power Africa, and other private sector entities. The seminar also showcased five SEFA-funded initiatives: the Facility for Energy Inclusion (FEI), AfricaGoGreen Fund (AGGF), Spark+ Clean

Cooking Fund, Africa Renewable Energy Fund (AREF), and Empower New Africa. The event highlighted the general perception of African energy markets as high-risk due to insufficient understanding and knowledge about risk management, emphasising the need for more public funding on favourable terms to attract private investment. Discussions also covered unlocking carbon financing and providing guarantees for currency risk as potential solutions.

In conjunction with the seminar, the SEFA Governing Council held its first in-person meeting since 2019. Representatives from ten donor institutions and the AfDB reviewed SEFA's achievements, approved the 2023 work program and budget, and recommended emerging activities. This meeting further solidified SEFA's commitment to addressing financing hurdles and facilitating long-term investments in the renewable energy sector in Africa.



21-23 March

Abidjan, Côte d'Ivoire

ARE Energy Access Investment Forum (EAIF) 2023

SEFA played a significant role as a key sponsor and co-organiser. This was evident through SEFA's high-level participation in opening and closing remarks and the successful organisation of a well-attended and insightful side event. A side event on "Productive Use of Energy (PUE)" was successfully organised, focusing on a key driver for the financial viability of green mini-grids. This event was a cornerstone of our participation, as it generated a lively and constructive dialogue among attendees, underscoring the crucial role that innovative business models play in enhancing the financial viability of green mini-grids. This has shown the role of SEFA in addressing the financing hurdles in the GMG sector, providing structural technical assistance, and facilitating long-term investments with patient capital, while organisations like ARE provide comprehensive support to developers.



20-23 June

Nairobi, Kenya

Africa Energy Forum (AEF) 2023

The Africa Energy Forum (AEF) provided a platform to launch the AfDB/SEFA/IHA report on hydropower modernisation opportunities in Africa, highlight AfDB's Africa Hydropower Modernisation Programme (AHMP), and facilitate market consultations and engagement with interested partner institutions. The event underscored the modernisation potential of approximately 15 GW and the AfDB's commitment, through AHMP, to support a batch of 15 priority projects to be announced by the third quarter of the year. The panel unanimously agreed on the priority of rehabilitation/modernisation for the continent, its crucial role in the just energy transition, and the need for the private sector's close involvement, particularly in developing Public-Private Partnership (PPP) financing templates. There was also a call for Development Finance Institutions (DFIs) to be more active in supporting project development and transaction advisory to public counterparts.



31 May - 1 June

Kampala, Uganda

Unlocking Solar Capital Africa (USC Africa)

SEFA sponsored and participated in the 5th edition of Unlocking Solar Capital (USC) Africa in Uganda, an event co-organised by Solarplaza and GOGLA. This key solar industry event witnessed the presence of over 400 stakeholders, ranging from investors to government representatives. Disruptive technology was on the show, with actors from the household, e-mobility, productive use, carbon finance, connectivity and C&I spaces showcasing the breadth and depth of disruptive solar tech transforming the continent. The event highlighted the urgent need to catalyse ten times more capital into energy access and, through the proper financial mechanisms, to achieve a just and clean energy transition that leaves no one behind. This includes catalytic equity and concessional debt to de-risk and leverage commercial finance and public-private partnerships underpinned by subsidy frameworks to close viability gaps in nascent business models.



4-6 September

Nairobi, Kenya

Africa Climate Summit (ACS) 2023

SEFA hosted an official side event, marking the formal announcement of nearly USD50 million in new funding commitments from Germany and the United States. This event bolstered SEFA's prominence as a climate finance entity, highlighting its contributions to catalysing climate action and accelerating Africa's just energy transition. Germany, SEFA's largest donor, underscored its strong support for climate action in Africa and its positive experience working with SEFA, which serves as a testament to the strength of their partnership. With the announcement of a new EUR 40 million contribution, Dr Bärbel Kofler, Parliamentary State Secretary in the German Federal Ministry for Economic Cooperation and Development (BMZ), stated, "With SEFA, the African Development Bank is demonstrating its commitment to seizing the opportunities presented by the energy transition and renewable energy deployment."

USAID Power Africa, reflecting on its long-standing commitment to promoting a low-carbon and climate-resilient energy sector in Africa, reaffirmed its strong partnership with SEFA: "Power Africa's additional contribution of USD 6.2 million to the Fund underscores the high value and impact of our partnership with the AfDB and SEFA. Together, we are supporting Africa's low-carbon and climate-resilient development through clean energy solutions that make a real difference in people's lives across the continent," said David Thompson, USAID Power Africa Acting Coordinator.



31 October – 2 November
Bali, Indonesia

2023 World Hydropower Congress

Bringing together more than 1000 decision-makers, innovators and experts from industry, governments, finance, civil society, and academia, the WHC provided a stage for high-level policy statements, recommendations and commitments to influence the global growth of sustainable hydropower. The President of the IHA,

Malcolm Turnbull, emphasised the critical role of sustainable hydropower in future energy systems and the journey to net zero. The main topics discussed included reaching a consensus on policy and finance recommendations for advancing the clean energy transition, demonstrating the complementary of hydropower with solar and wind to fast-track the shift away from coal, and highlighting the immense untapped hydropower potential that exists in many regions of the world, particularly Africa. The event showcased SEFA-funded work on hydropower modernisation and its multifaceted benefits, such as enhanced technical and financial performance, improved environmental and social standards, and increased climate resilience.



8-9 November
Marrakech, Morocco

Africa Investment Forum 2023

With its core focus on commercial finance mobilisation, AIF provides a unique platform for SEFA to showcase high-impact projects that offer both development impact and prospects for risk-adjusted returns by their blended finance capital structures. At the

2023 edition, SEFA showcased two projects in exclusive boardroom sessions designed to attract potential investors and partners: KawiSafi Fund II and CrossBoundary Energy Access Platform. This demonstrated innovative financing structures and business models to enhance energy access and promote sustainable development in Africa.



30 November – 12 December
Dubai, United Arab Emirates
COP-28

SEFA participated in the side event "Gearing up Africa's energy transition by conducive policy and legislative frameworks" at the Italian Pavilion, hosted by Res4Africa and GSE. The event was significant for Italy, announcing a contribution of EUR 5 million. The discussions emphasised the need for comprehensive electricity sector reform in Africa, private sector investments, and the role of technical assistance programmes in supporting sustainable transformations. In addition, SEFA was prominently featured in African Development Bank interventions, including in the 8th Energy Transition Ministerial Council meeting at COP28.

Vanna Gava, the Italian Deputy Ministry of Environment and Energy Security, remarked, "Today at the Italian Pavilion we took part in the side event organized by Res4Africa and GSE focusing on Africa's energy transition. This new contribution of 5 million Euro to the Sustainable Energy Fund for Africa (SEFA) Special Fund strengthens the attention that the Italian Government devotes to Africa, a geographical region of priority importance for our country's energy and climate policies. Our long-lasting cooperation with the Africa Development Bank, launched in 2015 with the contribution to the first cycle of SEFA and the Africa Climate Change Fund (ACCF), is further reinforced by this commitment."

Section 03

legacy portfolio – a comprehensive overview

The SEFA 1.0 funding cycle – also known as the legacy portfolio – covers an eight-year period from January 2012 to December 2019, with 68 projects supported in 30 countries with a total approved amount of USD 84.2 million. This portfolio splits between 49 Technical Assistance (TA) projects, receiving USD 45 million, and 19 projects under the African Renewable Energy Fund (AREF), receiving USD 39.2 million in capital for project development and equity investments.

The legacy portfolio is technically fully disbursed and reached its sunset in December 2023, with only a few operations outstanding for closure in 2024. While most of the portfolio will deliver results over the next years, the current universe of 37 closed operations has already translated into 262 MW of installed capacity and over 1.2 million connections on the ground.

Overall, the SEFA 1.0 funding cycle has helped to further policy dialogue, build capacity, advance project development, and create new funding structures for private sector investments in sustainable energy in Africa. It laid strong foundations for future investment in the sector and positioned the African Development Bank as a lead partner for the energy transition.



legacy portfolio. key milestones

SEFA has proven critical in support of first-of-a-kind projects and the development of blended financing facilities for sustainable energy in Africa, having played a catalytic role in the launch of two pioneering investment funds for the sector: i) the Africa Renewable Energy Fund (AREF), one of the first pan African equity funds for renewable energy launched in 2013, which reached a USD 205 million capitalisation in 2014, and (ii) the Facility for Energy Inclusion, (FEI), a pan-African debt financing platform delivered through two independent funds (off-grid and on-grid) supporting small-scale and decentralised renewable energy investments with a combined capitalisation of USD270 million.

SEFA 1.0 has also driven the AfDB's engagement in the decentralised renewable energy sector, leading the Bank into an important domain of Africa's energy future. The Fund's Green Mini-Grid Market Development Programme (GMG MDP), which closed in 2019, provided a one-stop shop to address bottlenecks in the mini-grid sector through its developer and policy helpdesks, as well as various market assessments informing new investment programmes in several countries, such as the Nigeria Electrification Programme (NEP).



Green Mini-Grids Market Development Programme

The GMG MDP was launched in 2015 and designed to address several barriers to mini-grids market development, including inadequate policy and regulatory frameworks, market fragmentation, limited standardisation in project preparation and implementation, limited human and institutional capacity, a lack of proven business models, and a lack of access to affordable finance.

The GMG MDP became a leading source of knowledge and resources for the mini-grids industry, providing much-needed information on market dynamics in selected countries on the continent, offering template documents for regulatory and contractual approaches, and crucially, providing an interactive Help Desk which allowed small-scale, early stage, and local developers access to advisory services including technical design, business model development, financial modelling and fundraising support. Additionally, the provision of specific advice to policymakers has allowed for licensing and regulatory frameworks to become increasingly harmonised across the continent.

By creating in-depth market intelligence reports that provide a baseline of investment climates in more than 15 countries, stakeholders can craft their respective activities accordingly. Developers have quickly identified what countries are worth assessing for potential market entry, while development partners and financiers have been able to use the reports to inform project and programme operations.

Finally, the thought leadership provided by the MDP on industry issues, including access to finance, tariff setting, and the productive use of energy in mini-grid implementation, has contributed to some of the industry's most fundamental aspects.

The GMG MDP was subsequently replaced with SEFA's flagship technical assistance programme for mini-grids, the Africa Mini-Grid Acceleration Program (AMAP). Since its operationalisation, this USD 7M technical assistance programme has supported public beneficiaries in over eight countries.



figure. SEFA components



Project preparation

Technical assistance grants provided to private sector partners to facilitate the development of new projects to the bankability stage and to establish catalytic financing platforms. These grants aim to stimulate investments in innovative projects in the sector.

Equity investment

Capital contributions through an intermediary fund to support small- and medium-scale renewable energy projects. These investments aim to demonstrate the viability of smaller renewable energy projects and generate a robust pipeline for commercial investors.

Enabling environment

Technical assistance grants to public sector institutions to strengthen national policy, regulatory, institutional, and investment frameworks to support sustainable energy development. These grants aim to create an environment conducive to private sector investments in sustainable energy.



Table 04. Snapshot of SEFA 1.0 portfolio

COMPONENT	SEFA approved amount (USD M)	# projects
I – Project preparation	USD 21M	25
II – Equity investment	USD 39M	19
III – Enabling environment	USD 24M	24
TOTAL	USD 84M	68



03.2 legacy portfolio snapshot

The SEFA portfolio is well-rounded and varied across instruments, technologies and geographies:

Financial instruments

Equity investments form the bulk of the portfolio with a 44% share, with enabling environment and project preparation grants representing 30% and 26%, respectively.

Technology focus

Hydropower is the dominant technology, making up 62% of the interventions by the AREF equity portfolio. Programmes and projects involving Solar PV technologies take second place at 27% portfolio share, with the remainder of technologies accounting for 11%.

Regional spread

Approximately half of the SEFA financing was allocated to Eastern African countries, primarily due to the East Africa equity portfolio of AREF. Western and Southern African regions have represented smaller financing shares, at 15% and 12%, respectively. Central Africa has a modest representation of 6%, while multinational projects comprise 12% of the portfolio. It's important to note that about 20% of SEFA's interventions have targeted countries in transition.



figure. legacy portfolio at a glance

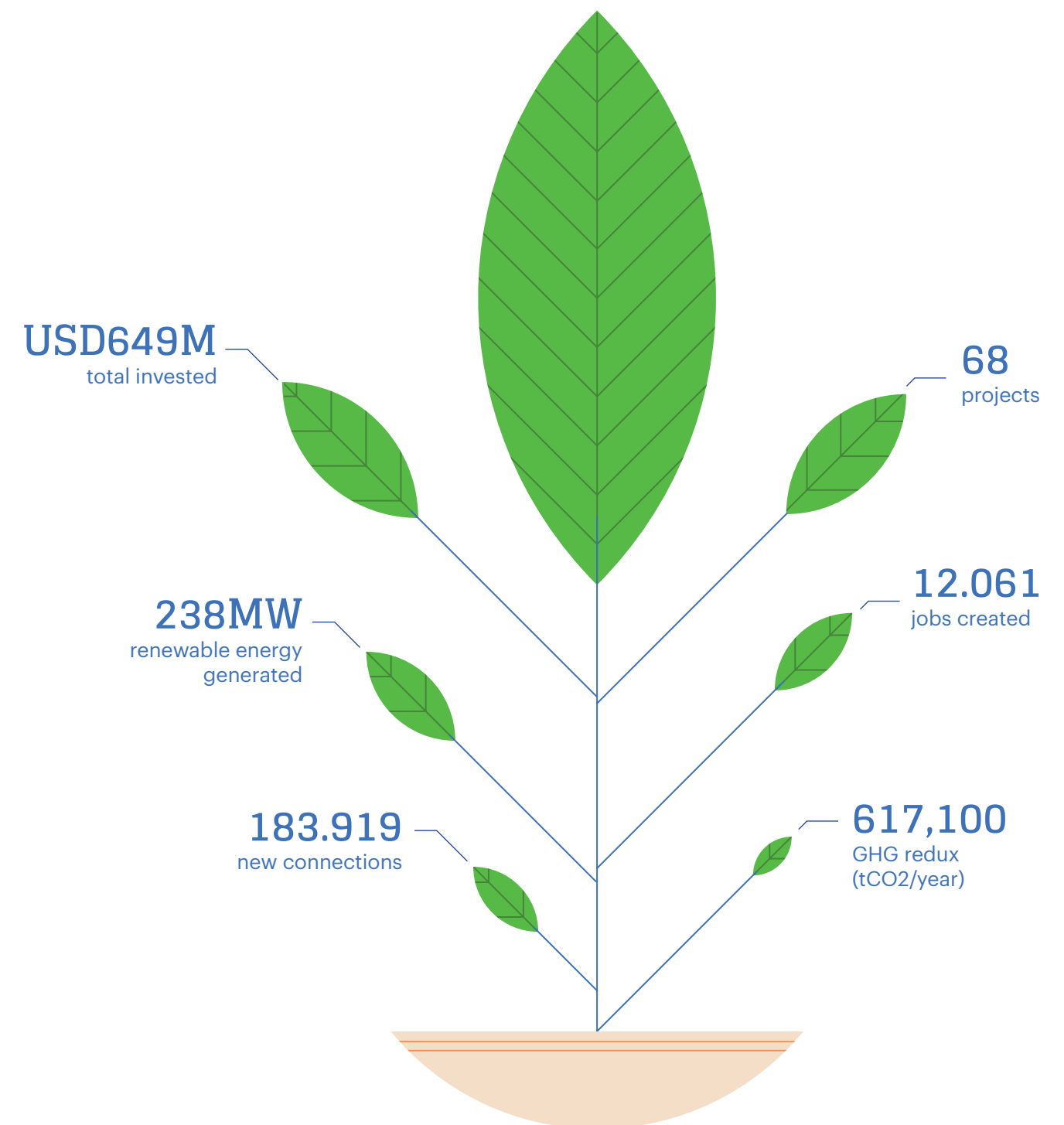
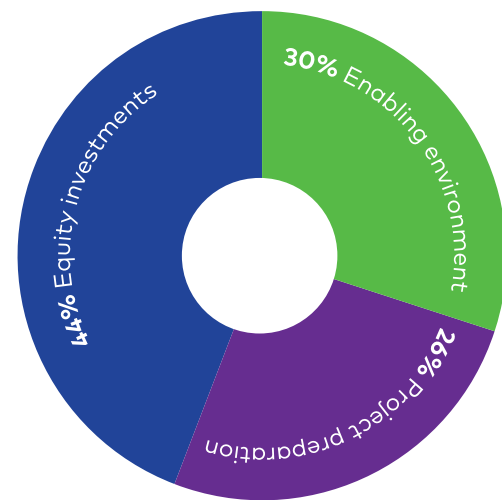


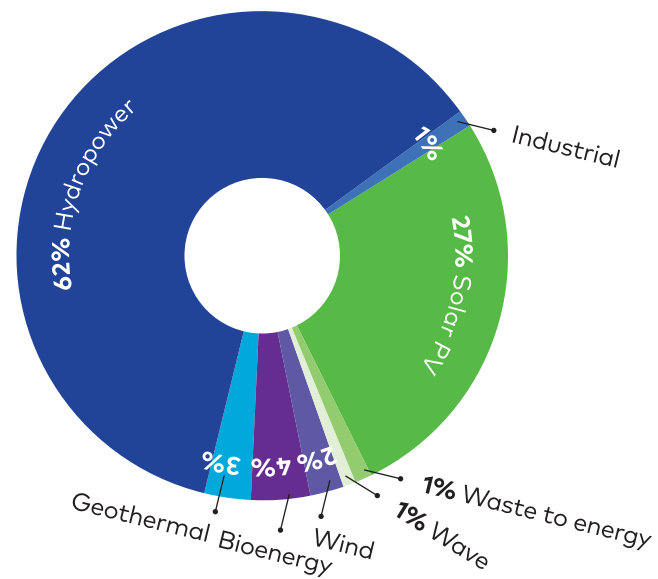


figure. legacy portfolio % share breakdown

a) per component



b) per technology



a) per regions

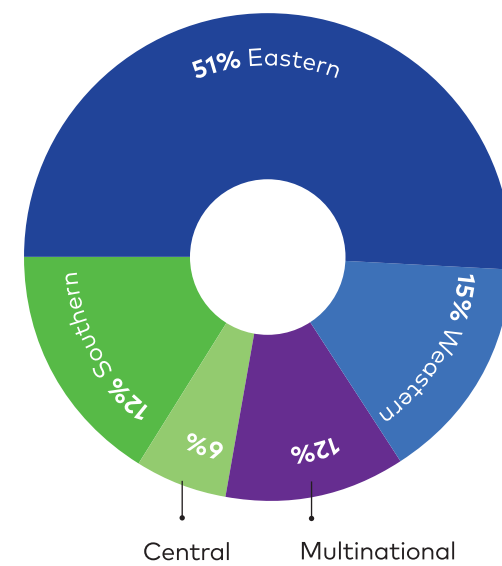
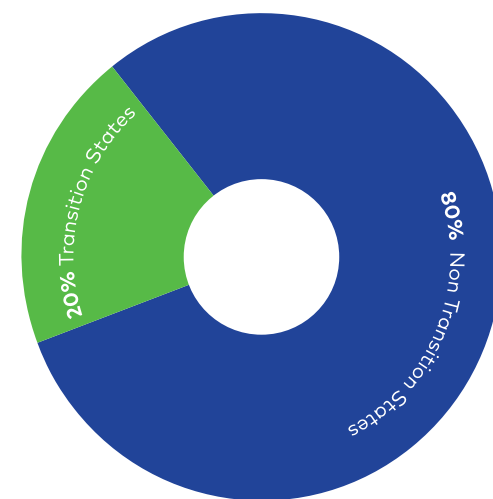
a) in transition states⁵

figure. SEFA 1.0 portfolio geographic distribution



⁵ Approximately half of this represents capital commitments to FEI and OGEF funds.



figure. SEFA 1.0 portfolio technology distribution



03.3 SEFA 1.0 projects overview 2023 completed operations

This section provides an overview of some of the project preparation technical assistance grants completed in 2023.

Guinea Bissau Saltinho Hydro Power Project

CLIENT Organisation pour la Mise en Valeur du fleuve Gambie (OMVG)



CLIENT TYPE
Public sector



TYPE OF FINANCE
Grant

Project description

The Guinea Bissau Saltinho project is a 19MW run-of-river hydropower station under development by OMVG that aims to boost Guinea Bissau's energy infrastructure by connecting to the regional grid.

SEFA's project preparation grant of USD 965,000, complemented by UNIDO's co-financing of USD 650,000, has been instrumental in advancing the project's technical, economic, and environmental feasibility studies.

Crucial milestones achieved include the submission and validation of the feasibility and execution studies, the Environmental and Social Impact Assessment (ESIA), and the Resettlement Action Plan (RAP), as well as the project's inclusion in the AfDB's 2024 Sovereign Operations pipeline.

Mozambique Electra Namaacha

CLIENT eleQtra Ltd



CLIENT TYPE
Private sector



TYPE OF FINANCE
Grant

Project description

The Namaacha Wind Power Project in Maputo Province was poised to become Mozambique's first-ever utility-scale wind farm by boasting the country's best wind resource. With a targeted capacity of 60 MW, this pioneering endeavour seeks to address peak-load deficiencies in the national grid and spearhead the development of additional wind projects while fostering a more diversified and secure energy landscape within the country and the region, potentially enabling energy exports.

SEFA's involvement in the project included providing a project preparation grant to conduct topographic and geological studies and assessing the wind farm's potential impact on local bat populations. Additionally, SEFA offered legal support to eleQtra and Electricidade the Moçambique (EDM), facilitating the project's regulatory and contractual processes.

Significant milestones have been achieved, including initiating negotiations for a power purchase agreement (PPA) with EDM and securing authorisations for power generation. Ongoing discussions aim to establish a financeable framework for the project, with potential applicability to other wind projects in the Namaacha region and beyond, thus laying the groundwork for sustainable energy development in the country.

Nigeria Energy Access Fund

CLIENT All On, established by Royal Dutch Shell



CLIENT TYPE
Private sector



TYPE OF FINANCE
Grant

Project description

The Nigeria Energy Access Fund (NEAF) project, a collaboration between the African Development Bank (AfDB) and All On, supported the development of Arm-Harith Distributed Power (ADP), an off-grid asset company, to scale up its energy access investments. The support included legal structuring advisory, tax advisory for Nigeria and international vehicles, pipeline development, financial modelling, and climate and gender impact enhancement.

The ADP Fund targets a capital pool of USD 50-60 million for off-grid solar, green mini-grid, and small/medium-scale renewable Independent Power Producer (IPP) solutions. By featuring a blended capital structure, ADP aims to attract various pools of capital with different risk-return profiles, thereby enhancing private sector mobilisation. Expected outcomes include installing 110 MW in additional renewable-based generation capacity, with targeted investments in solar power distribution, Solar PV utility-scale, waste-to-energy, energy storage, interconnected solar distribution for C&I, electric bus urban transport and charging infrastructure, and clean cooking projects.

Additionally, technical assistance was provided to Nigerian authorities, including the Lagos State Ministry of Energy and Mineral Resources and the Rural Electrification Agency, to enhance their capacity and improve systems for licensing, data collection, and monitoring electrification progress.



03.4 SEFA legacy portfolio
actual and expected results

The legacy portfolio has resulted in 263 MW of new renewable energy capacity installed, over 1.2 million new connections, and approximately USD 648 million in investments mobilised. The capacity additions, mainly from the equity portfolio, include 158 MW of operating capacity in Uganda and Madagascar's hydropower projects, with USD 261 million in capital mobilised. The new connections, totalling over 1,141,965, are primarily due to the project preparation component, reflecting progress on the Facility for Energy Inclusion implementation.



Table 05. SEFA 1.0 actual results by component by end 2023

COMPONENT	Capacity MW	Connections (#)	Total invest. (USD M)	Jobs created (#)	GHG reduced (tCO2/year)
I -Project Preparation	63	1,141,965	381	15,618	338,777
II- Equity Investment	158	-	261	261	369,347
III - Enabling Environment	16	63,631	5	600	-
CURRENT TOTAL	263	1,205,796	648	16,479	708,124

As we forge ahead, we expect further results from the SEFA 1.0 portfolio of project preparation and equity investments, leading to over 1 GW of new renewable energy generation capacity, almost 8 million new electricity connections, over 34,000 direct jobs, and over USD 2 billion in new investments.

We also estimate that our enabling environment interventions at the national and regional level will contribute to addressing regulatory and policy impediments alongside other national government programmes, other donor initiatives, and private sector advocacy.



SEFA's 1.0 decade of impact key milestones



2012

SEFA's journey began with establishing its secretariat, marking the initial phase of its mission to catalyse sustainable energy projects in Africa with an initial contribution of the Kingdom of Denmark



2013

With a USD 5 million contribution from the Power Africa initiative, SEFA became a multi-donor facility, broadening its impact and outreach. Additionally, SEFA co-sponsored and served as the Africa Renewable Energy Fund (AREF) anchor investor with a USD 25.5 million junior equity investment to catalyse commercial investors into the fund, marking its first blended finance transaction.



2014

In 2014, SEFA launched the enabling environment window to help public sector partners enhance their country's conditions for private sector clean energy investments while also expanding into the green mini-grid space through the UK's Department for International Development (FCDO).



2015

AREF achieved its final close at USD 205 million, showcasing SEFA's catalytic role, and the Green Mini-Grid Market Development Programme (GMG/MDP) was launched to strengthen the ecosystem for mini-grid projects in Africa.



2016

SEFA enabled the first 250 direct connections through early-stage support to JUMEME Rural Power Supply Ltd. in Tanzania and achieved financial close for the 42 MW Achwa Hydro project in Uganda, benefiting from substantial equity support through AREF.



2017

The project preparation grant for Madagascar Nosy Be and Mauritius Deep Ocean Water Applications was completed, initiating the financial structuring phase. Phase 1 of the Green Mini-Grid Market Development Programme was also completed, supporting the first mini-grids on the continent.



2018

The SEFA co-sponsored Facility for Energy Inclusion (FEI), designed to finance small-scale renewable energy projects, was operationalised with the first close of the Off-Grid Energy Fund (FEI OGEF) at USD 55 million. A total of USD 4.8 million was raised for the expansion of the Green Energy and Biofuels (GEB) bio-refinery project in Nigeria.



2019

SEFA's conversion into a "special fund" (SEFA 2.0) was approved by the Bank's Board of Governors, transforming it into a catalytic financing facility with a broader range of financial instruments to support the energy transition in Africa better. The first phase of the rural electrification programme (CIZO) targeted deploying 300,000 individual solar units over a 5-year period in the PAYGO model and creating 60 direct jobs.



SEFA 1.0 has delivered 263 MW of new renewable energy capacity, over 1.2 million new connections, and approximately USD 648 million in investments mobilised.

Section 04

administration and

financials

In 2023, SEFA successfully mobilised approximately USD 66 million in additional funding, with contributions from Germany (€40 million), the United Kingdom (£8 million), Italy (€5 million), and USAID (USD 6.25 million). Since its inception in 2012, SEFA has received commitments totaling USD 533 million.

Additional financial assets

USD 34 million in project reflows, credit interest and income from investment since January 2012, covering both "legacy" projects (2012-2019) and new projects (2020-2023).

Operations commitments

ca. USD 276 million committed to projects since January 2012, covering both "legacy" projects (2012-2019) and new projects (2020-2023).

Overhead costs

USD 15 million has been disbursed since January 2012 in Bank management fees and operational costs with the secretariat/technical unit.

Net funds available

ca. USD 149 million available for new projects, which should cover the needs for 2024 and 2025 taking into account the 3-year rolling work programme expected commitments.



Table 06. Financial summary as of end of December 2023 (USD)

DONOR CONTRIBUTIONS PAID-IN (+)		USD
SEFA 1.0		107,938,824
SEFA 2.0		309,100,756
SUB TOTAL		417,048,601
ADDITIONAL FINANCIAL ASSETS (+)		
Project reflows		11,935,645
Credit interest and income in invesment		22,185,985
SUB TOTAL		34,121,630
TOTAL FUNDS AVAILABLE (A)		451,161,210
LIABILITIES:PROJECT COMMITMENTS (-)		USD
Project commitments SEFA 1.0		74,994,143
Project commitments SEFA 2.0		201,298,311
SUB TOTAL		276,292,454
Overhead SEFA 1.0		16,557,961
Overhead SEFA 2.0		14,996,943
SUB TOTAL		25,878,089
TOTAL OPERATIONS AND OVERHEAD COMMITMENTS (B)		302,170,543
NET FUNDS AVAILABLE (A-B)		148,990,667



Donor pledged contributions in SEFA 2.0
envisaged disbursements for 2024-26

DANIDA	USAID	GEAPP	TOTALS
Pledged. USD 59,559,381 (DK 400 million) Disbursed. 100%	Pledged. USD 8,735,000 (USD 8,735,000) Disbursed. USD 2,470,000	Pledged. USD 35,000,000 (US 35 million) Disbursed. USD 25,000,000	Pledged. USD 425,415,496 Disbursed. USD 309,100,756
NORWAY	2024. USD 6,265,000	2024. USD 10,000,000	2024. 80,383,329 2025. 28,602,900 2026. 7,581,000
Pledged. USD 52,022,988 (NOK 500 million) Disbursed. USD 21,074,659	NDF	ITALY	
2024. USD 15,786,329 2025. USD 7,581,000 2026. USD 7,581,000	Pledged. USD 11,755,746 (EUR 10 million) Disbursed. USD 11,091,746	Pledged. USD 5,498,127 (EUR 5 million) Disbursed. 100%	
SWEDEN	2024. USD 332,000 2025. USD 332,000	FCDO	
Pledged. USD 14,165,955 (SKK 125 million) Disbursed. 100%	GERMANY (BMZ)	Pledged. USD 10,161,760 (GBP 8 million) Disbursed. USD 6,485,371	
SWEDEN MoF	Pledged. USD 210,711,205 (EUR 190 million) Disbursed. USD 145,959,205		
Pledged. USD 17,805,333 (SKK 170 million) Disbursed. 100%	2024. USD 48,000,000 2025. USD 17,000,000		

Section 05

looking ahead

Reflecting on a transformative year and the closure of the SEFA 1.0 portfolio, SEFA is poised to advance its mission with renewed focus and strategic initiatives in 2024. The journey ahead is shaped by the insights gleaned from a decade of fostering sustainable energy solutions across Africa.

The path forward in 2024

The upcoming year will be pivotal for SEFA, with ambitious plans to solidify our position as the premier provider of catalytic financing for sustainable energy investments in Africa. This entails a broadened scope of activities, from scaling up investments in renewable energy infrastructure to enhancing access through decentralised energy solutions, promoting energy efficiency and increasing access to clean cooking solutions. SEFA plans to expand its team to support these endeavours, bolstering our capacity to manage a growing portfolio of intricate technical assistance and investment projects.



Strategic priorities for 2024

Delivering the SEFA 2.0 mid-term review

The Governing Council and stakeholders will receive a comprehensive and critical assessment of SEFA's strategy, operational procedures, implementation progress, and results delivery.

Advancing Africa's energy transition

Our commitment to supporting Africa's just energy transition is more important than ever. This involves fostering investments across the renewable energy spectrum and providing technical assistance for national and regional initiatives, aiming to create enabling environments for increased private sector investments in sustainable energy projects.

Championing decentralised energy solutions

SEFA will continue to champion decentralised energy access solutions. This aligns with our goal to extend energy access to rural and unelectrified areas, focusing on promoting productive use applications to spur economic benefits for communities experiencing electrification for the first time.

Scaling up energy efficiency

Our efforts in the energy efficiency domain will expand, leveraging financial intermediation and supporting efficient appliance businesses and access to clean cooking solutions. This approach addresses the technical and economic barriers that

have traditionally impeded the scaling of energy efficiency investments in Africa.

Delivering SEFA 1.0 portfolio results

With the SEFA 1.0 portfolio implementation reaching its conclusion, our focus shifts to ensuring the delivery of the expected outcomes and sharing the lessons learned. An impact report will be launched detailing SEFA's journey over its first ten years, offering insights into the transformative impact of SEFA's work.

Mobilising climate finance

Building on the momentum, SEFA will continue to mobilise additional grant contributions. This includes engaging existing donors for additional contributions and bringing new donors to SEFA on board.

Knowledge sharing and community engagement

A key facet of our strategy for 2024 involves intensifying our knowledge-sharing initiatives. This includes disseminating insights from the SEFA 1.0 portfolio and sharing key technical reports and findings from SEFA-funded programmes.

Enhanced communication efforts

SEFA will continue to revamp its external communications, reflecting our strategic priorities and the lessons learned over the past decade. This involves updating our corporate materials, launching a new website, and actively participating in key industry events to share our insights and learnings.



As we embark on this next chapter, SEFA will remain true to its mission. Armed with the experience, insights, and partnerships developed over a decade of work, we are poised to innovate, expand, and deepen our impact, contributing to Africa's just energy transition.

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Fund for Africa

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