

CASE STUDY

THE EMERGING AFRICA INFRASTRUCTURE FUND LTD

DECEMBER 2018

EXECUTIVE SUMMARY

The Emerging Africa Infrastructure Fund Ltd (EAIF) is a blended multi-donor fund that operates as a specialized development finance institution (DFI). EAIF has a 15-year track record, providing \$713 million in financing to 71 private infrastructure projects across Africa to date. Most recently, EAIF successfully attracted \$120 million in commercial capital from Allianz – a global financial institution. Nearly half of EAIF’s capital is invested in the least developed countries as defined by the Organisation for Economic Cooperation and Development (OECD).

This case study reviews the history and evolution of EAIF to identify best practices and challenges for this type of blended fund, particularly as it relates to the ability to leverage concessional capital to mobilize commercial financing and achieve measurable development impact. EAIF and its portfolio projects have received numerous global awards, including nine awards in 2017 alone. EAIF presents several insights for others looking to create or invest in similar structures:

- Blended finance is a valuable tool for building markets and demonstrating the investability of the Sustainable Development Goals (SDGs)
- Mobilizing the private sector is not easy – and a track-record goes a long way
- Approaches to impact monitoring and evaluation have evolved
- The Private Infrastructure Development Group’s (PIDG) governance structure is a good model to consider for specialized multi-donor efforts

SYNOPSIS

Deal sponsor	The Private Infrastructure Development Group (PIDG)
Fund manager	Investec Asset Management (since 2016)
Fund vintage	2002
Mandate	To provide long-term debt to private sector companies building or expanding essential infrastructure for economic development in sub-Saharan Africa
Size	\$1.05 billion
Anchor investors	UK Department for International Development (DFID), Swiss State Secretariat for Economic Affairs (SECO), Swedish International Development Cooperation Agency (Sida), and Dutch Directorate-General for International Cooperation (DGIS); all through the PIDG Trust
Capital structure	First-loss equity: \$419 million Senior debt: \$627 million
Technical assistance	>50% of projects have also received a Technical Assistance Fund (TAF) grant
Leverage	\$1.49 of commercial capital mobilized for every \$1 of concessional capital
Investment instruments	Senior debt, subordinated and/or mezzanine debt, bridging finance
Impact-to-date	Total projects: 64 Total EAIF investment: \$1.2 billion Private co-investment: \$10.1 billion Lives impacted: 123.7 million Jobs created: 36,500

INTRODUCTION

Infrastructure investment in developing countries is an important enabler of economic growth. Affordable and reliable access to infrastructure services (i.e., electricity, water, telecommunications, and transportation) fosters job creation, supports productivity and income growth, and improves livelihoods. However, infrastructure has been notoriously underfunded for decades in developing countries. Barriers to infrastructure investment include unstable investment and regulatory environments, as well as underdeveloped local capital markets and limited availability of appropriate, standardized instruments aligned to both the projects' and investors' needs. There is a sizeable gap between the world economy's infrastructure needs and available financing. While infrastructure investment is traditionally funded and provided by the public sector, since the late 1990s private sector participation has been actively pursued by the donor community, including in sub-Saharan Africa.

The private sector has a critical role to play as both contractors and financiers for infrastructure creation and maintenance. Yet, the private sector will not invest without the appropriate incentives and enabling environment in place, particularly in countries with unstable market or political conditions. The Private Infrastructure Development Group (PIDG) and The Emerging Africa Infrastructure Fund Ltd (EAIF) are blended finance solutions established to leverage donor funds to help overcome barriers to private sector involvement in infrastructure development in developing countries. EAIF aims to demonstrate that private investment in countries in sub-Saharan Africa is commercially viable and can increase access to basic infrastructure services.

Launched in 2002, EAIF has been in operation for more than 15 years, establishing a strong track-record amidst an evolving infrastructure finance landscape in sub-Saharan Africa. By the end of the 2000s, in part due to the activities of EAIF, both development finance providers and private sector lenders were showing a greater willingness to offer debt finance to infrastructure projects in low-income countries in sub-Saharan Africa. In early 2018, Allianz committed \$120 million in debt financing to EAIF – a landmark commitment for EAIF and blended finance broadly. This case study reviews EAIF's extensive track-record to identify best practices and challenges for blended finance structures, particularly as it relates to the ability to leverage concessional capital to mobilize commercial financing. EAIF illustrates the potential additionality of a blended structure and the development impact of increased investment flows to private infrastructure projects.

DESIGN AND FUNDRAISING

In the late 1990s, the United Kingdom's Department for International Development (DFID) identified a timely opportunity to address the sizeable infrastructure gap in developing countries. DFID set out to deploy \$100 million in grant capital to promote private sector participation in infrastructure development in sub-Saharan Africa. The goal was to deploy this capital catalytically to mobilize private sector involvement in the financing, ownership, operation, rehabilitation, maintenance, and/or management of infrastructure.

DFID hired a team of experts to complete feasibility research and market testing. One of the key market barriers identified by DFID was the need to mobilize greater volumes of medium and long-term debt for early stage, greenfield infrastructure projects. This was particularly timely given a number of donors and multilateral development banks (MDBs) were reducing their support for infrastructure investments at the time, due to developing market conditions in the late 1990s (e.g., Asian financial crisis, Russian financial crisis). As a result, DFID set out to create an infrastructure debt fund focused on investment in low-income countries, using limited amounts of public funds to overcome the constraints deterring private investment as a way to catalyse much greater amounts of private sector capital to build and operate infrastructure in these countries.

During this design phase, DFID validated the evolving solution with peer donors as well as private investors. As a result, DFID was able to identify three additional donor agencies keen to support the initiative: Swiss State Secretariat for Economic Affairs (SECO), Swedish International Development Cooperation Agency (Sida), and Dutch Directorate-General for International Cooperation (DGIS). By way of letters of intent, the four donor agencies established PIDG in early 2002. PIDG was a donor-financed group that provided a platform in which the four members could co-ordinate activities related to promoting private investment in infrastructure development. The four founding PIDG members then established the first debt fund focused on infrastructure in sub-Saharan Africa: The Emerging Africa Infrastructure Fund Ltd (EAIF). PIDG was initially established as a group by the original four donor agencies (who became the first members of the PIDG through a Memorandum of Understanding) to centralize and streamline the disbursement and governance processes relating to EAIF, which was established as the first PIDG entity.

Since 2002, PIDG has established seven more 'entities'. Aligned to the principal private sector infrastructure development mandate, the PIDG facilities aim to prepare, develop, or finance commercially viable and developmentally

sound infrastructure projects. These facilities are listed below in order of year established:

- **EAIF (2002):** Provides long-term loans to private sector infrastructure projects in sub-Saharan Africa
- **DevCo (2003):** Provides transaction advisory services to governments on PPPs to help them deliver infrastructure projects
- **Technical Assistance Facility (2004):** Provides grants to help PIDG companies overcome specific development obstacles, including building capacity, supporting project preparation, and viability gap funding to reduce the upfront cost of projects
- **InfraCo Africa (2004):** Provides risk capital and expertise to develop early-stage, commercially viable infrastructure projects in sub-Saharan Africa
- **GuarantCo (2005):** Provides local currency guarantees for infrastructure financing in Africa and South and Southeast Asia and dollar denominated guarantees in Fragile and Conflict-Affected States to avoid exchange rate risks and/or stimulate local capital sources
- **Infrastructure Crisis Facility Debt Pool (2009):** A time-limited company, which provided long-term loans to projects to support infrastructure projects which had become stranded by the global financial crisis (*now closed*)
- **InfraCo Asia (2010):** Provides risk capital and expertise to develop early-stage, commercially viable infrastructure projects in South and Southeast Asia. Comprises InfraCo Asia Developments (2010), investing early-stage development capital and, InfraCo Asia Investments (2014), offering debt and equity
- **Green Africa Power (2013):** Provided financing and support to renewable energy projects in Africa (*now closed*)

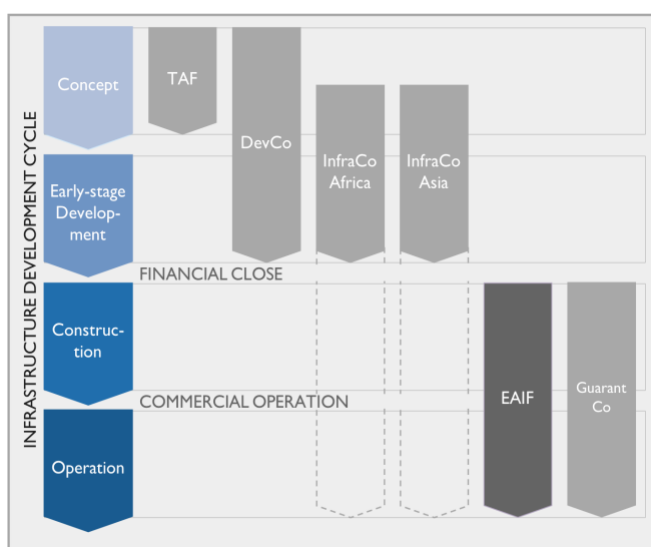


Figure 1: PIDG Facilities by Infrastructure Development Phase

PIDG’s membership has also grown. PIDG members now include: DFID, SECO, DGIS, and Sida, as well as the

International Finance Corporation (IFC) as part of the World Bank Group, Australian Department for Foreign Affairs and Trade (DFAT), Dutch Development Bank (FMO), German Development Bank (KfW), and Norwegian Ministry of Foreign Affairs. However, only some PIDG members are funders of EAIF: the four original PIDG members provide equity and FMO and KfW provide debt facilities. Ultimately, for participating PIDG members and DFIs, EAIF is a unique type of ‘specialized DFI’ dedicated to private infrastructure development. The flexible yet specialized structure of EAIF enables it to be responsive and implement new solutions without time delays as experienced by some public development organizations.

FUNDRAISING

EAIF was established for the explicit purpose of leveraging concessional donor funding to mobilize additional private sector investment for infrastructure development. The four original PIDG members jointly committed \$100 million, with DFID providing 50%, seeking to mobilize \$2 of commercial capital for every dollar provided by the donor agencies.

To capitalize the initial senior debt tranche, PIDG launched a competitive bidding process, which called for potential fund managers to bring a consortium of commercial investors with them. Initial bids were received from three bank consortia and ultimately Standard Bank was selected as the winner, supported by a consortium of \$205 million that included Barclays Bank and several DFIs (the fund manager is currently Investec Asset Management). While this approach was ultimately successful in raising senior and subordinated debt, it demonstrated the important role of concessional capital to improve the investment opportunity. Despite the Fund’s tiered structure, leverage, and the participating banks’ continuing oversight over specific investments, few international banks were willing to take on this type of investment risk as demonstrated by the three initial bids and single final bid.

Over time, EAIF has established a track record and demonstrated the viability of private infrastructure deals in sub-Saharan Africa. In 2006, EAIF refinanced its existing debt, increasing total assets by \$60 million in senior debt – to \$180 million – from Standard Bank, Barclays, and KfW. By 2014, EAIF had grown to become a \$587 million fund – nearly doubling in size. This included additional equity contributions from DFID, DGIS, and SECO, which brought the first-loss equity tranche to \$388 million. The increase in concessional capital was complemented with a slight increase in senior debt from DFIs and commercial banks.

Most recently in April 2018, EAIF closed an additional financing round of \$385 million, which included a \$110

million commitment from Allianz. Allianz is the first institutional investor to provide a long-term debt to a donor-backed Africa-focused infrastructure fund. The latest round of funding also includes senior debt from Standard Chartered Bank (\$50 million), African Development Bank (AfDB, \$75 million), KfW (\$100 million), and FMO (\$50 million). This reflects a conscious effort by PIDG to attract greater levels of funding from institutional and commercial sources for all PIDG companies. The ability to raise substantial debt funding speaks to the importance of a strong track record, confidence in the professionalism of the board and fund management team, and the quality of the portfolio.

STRUCTURE AND GOVERNANCE

CAPITAL STRUCTURE

EAIF was originally established as a blended, three-tier capital structure with the following tranches:

- **First-loss equity:** First-loss equity is contributed to EAIF via the PIDG Trust, which is funded by the PIDG members that elect to support the Fund. The equity is provided on sub-commercial terms: the expected return is well below market rates and historically there has been no distribution of dividends, so all profits can be retained in the fund to support the business. Further, it acts as a first-loss reserve to shield subordinated and senior investors from potential losses on the underlying portfolio.
- **Subordinated debt:** Subordinated debt was provided on commercial – or near commercial – terms. Subordinated debt was provided by DFIs on individually negotiated terms, with varying degrees of flexibility. The subordinated debt tranche was refinanced and ultimately aggregated with the senior tranche in 2013, better aligned with investors' preferences.
- **Senior debt:** Senior debt is provided on commercial terms and 'sits on top' (i.e., ranks in priority to) of both the equity tranche and, in the past, the subordinated debt tranche. Senior debt is provided by commercial banks, institutional investors, MDBs, and DFIs. As a result of the tranching capital structure, the senior lenders have a lower risk profile than if they were lending directly to infrastructure projects in low-income countries. Therefore, commercial – and quasi-commercial – investors are willing to lend larger amounts of capital on more manageable terms to EAIF.

Initially, EAIF was established with relatively equal layers of first-loss equity from donors (\$100 million), subordinated debt from DFIs (\$85 million), and senior debt from

commercial banks (\$120 million). The subordinated debt tranche was financed by three DFIs: the Netherlands Development Finance Company (FMO, \$40 million), Development Bank of Southern Africa (DBSA, \$25 million) and the German Investment and Development Corporation (DEG, \$20 million). The senior debt tranche was capitalized by Barclays and Standard Bank (\$60 million each).

Over the life of EAIF, the relative size of each capital tier has varied, with a minimum of 2:1 ratio of equity to debt and maximum of 4:1. The capital structure has evolved naturally, with the primary focus of maintaining and growing the Fund's investment in private infrastructure development in sub-Saharan Africa. Continued efforts to grow the fund have included capital increases to both first-loss equity from PIDG members and commercial and quasi-commercial investments in the senior debt tranche.

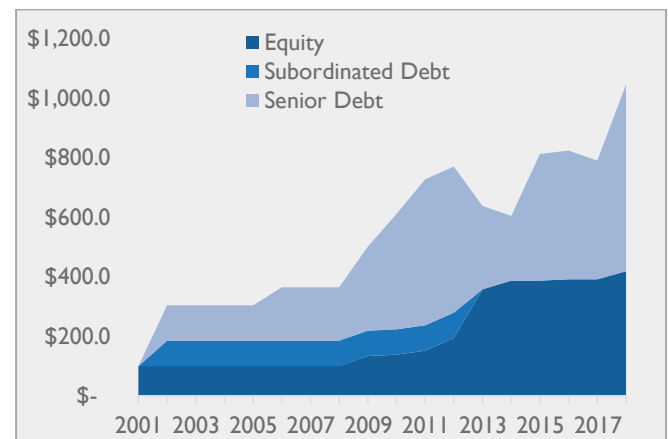


Figure 2: Capital Structure over Time

Overall, EAIF has increased the proportion of debt relative to first-loss equity; however, it has taken considerable time as well as an explicit effort to build a track record and investment opportunity that can successfully attract institutional capital, largely reflecting the difficult nature of private infrastructure development in sub-Saharan Africa. EAIF is currently capitalized with \$419 million in first-loss equity and \$627 million in senior debt from DFIs, MDBs, commercial banks, and institutional investors – representing a leverage ratio of approximately 1.5. EAIF is increasingly focused on raising commercial debt from institutional investors, with the completion of this latest fundraising as a good endorsement of the Fund's blended finance model.

TECHNICAL ASSISTANCE

All PIDG companies, including EAIF, can draw on PIDG's Technical Assistance Facility (TAF). Established in 2004 and housed within the PIDG Trust, the TAF was designed to provide general technical assistance to facilitate project development, build local capacity, and enhance inclusion and other social development opportunities. In addition to

general technical assistance, TAF funding includes Viability Gap Funding (VGF) to address the challenge of balancing the affordability of infrastructure services with the commercial viability. Through the use of VGF, PIDG seeks to make economically-impactful projects financially viable, while helping to mobilise private sector investment. The TAF is currently funded by DFID, SECO, Sida, DGIS, and DFAT.

PIDG (through the TAF) has committed close to \$60 million to 144 projects – across all PIDG companies – between 2004-2017. Approximately 55% of EAIF investments have been accompanied by some form of technical assistance (i.e. 39 of 71 EAIF projects have an associated TAF grant). In addition, EAIF operates in close coordination with the other PIDG companies, with several of the projects financed by EAIF benefitting from the services and products of other PIDG companies.

LEGAL STRUCTURE AND GOVERNANCE

EAIF is a private company limited by shares incorporated in Mauritius. EAIF currently has a board of five non-executive directors. Until 2016, EAIF was managed by Frontier Markets Fund Managers Limited (FMFML), a company originally set up by Standard Bank, FMO and Emerging Markets Partnership (EMP) specifically to manage EAIF, and later PIDG company GuarantCo. FMFML was contracted to manage deal origination, due diligence, structuring, and contract negotiations, as well as portfolio management.

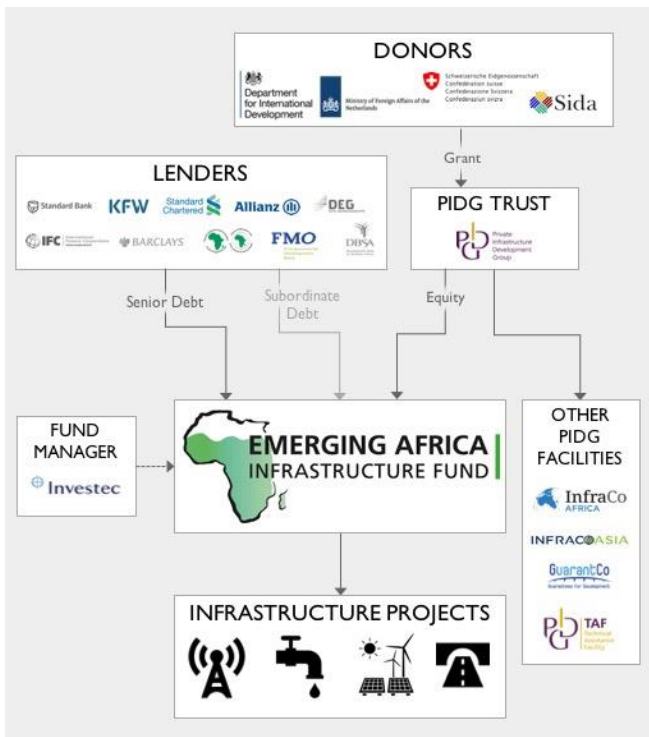


Figure 3: EAIF Structure

FMFML acted as the fund manager of EAIF between 2002-2016. As required under PIDG operating policies and

procedures, EAIF retendered the fund management function in 2016, in part to maintain competitiveness and high-performance standards, as well as to restructure the fees to better align the fund manager’s incentives to PIDG’s target outcomes. Following a competitive procurement process, Investec Asset Management (IAM) was selected as the new fund manager. IAM was established in South Africa in 1991 and manages EAIF from its offices in Cape Town and London. IAM is responsible for deal origination, deal execution, portfolio management, and the day-to-day operations of the Fund. However, while the management contract was transferred from FMFML to IAM, key members of the fund management team have transferred over as well. This allowed institutional knowledge and expertise to carry over.

It is also instructive to understand PIDG’s legal structure and governance. PIDG is a multi-donor group established and directed by its members. PIDG established the PIDG Trust – a special purpose trust incorporated in Mauritius – as a vehicle for the PIDG members to pool, coordinate, and administer funds. More simply, the primary purpose of the PIDG Trust is to be the shareholder of EAIF and the other PIDG companies. Donor agencies (“members”) contribute funds to the PIDG Trust, which contribute this capital as equity to EAIF and is its sole shareholder. Importantly, PIDG members choose to increase or decrease contributions.

PIDG is essentially a “bureaucracy-light, delivery-heavy” structure. PIDG members govern the overall strategy and policies for PIDG activities, while delegating corporate governance for activity-specific strategies, business plans, and day-to-day operations. PIDG members set the investment policies, code of conduct and operating policies and procedures. PIDG members select the board of directors and hold PIDG accountable for all activities of the group through regular reporting, including annual general meetings. The PIDG board is supported by committees and a full-time executive team, which assist in the implementation of the investment strategy and investment decisions. This model is intended to ensure accountability, quality, independence, continuity and stability and value for money.

In April 2018, PIDG announced a new governance structure, focused on decentralizing decision-making power while increasing coordination across PIDG companies. There is now a new company – The Private Infrastructure Development Group Ltd – whose board and committees oversee development and investment priorities across the entire organization (i.e., across PIDG companies) to improve efficiency, maximize impact, and provide a common point of entry for investors and developers. This represents a significant shift in the governance structure of PIDG and the PIDG companies, including EAIF. For IAM, this allows for greater autonomy in reviewing and approving projects as manager of EAIF.

PROFILE: KIGALI WATER LIMITED

SUMMARY

Country	Rwanda
Date	2017
Sector	Water
Instrument	Junior + senior debt
Investment size	\$21.6 million
Terms	18-year tenor

PROJECT OVERVIEW

With the support of EAIF, Kigali Water Limited (KWL) is building the first Bulk Surface Water Supply in sub-Saharan Africa using a public-private partnership (PPP) model. Rwanda aims to see 100% of its 12.4 million people have reliable access to clean water within the next few years. Currently, some 86% of urban areas and 72% of rural areas have access to improved sources of drinking water.

To attract private sector investment and address Kigali's water shortage, the government sought to develop a PPP. Following a competitive tendering process, KWL – a fully owned subsidiary of the private sector developer Metito – received a 27-year operating license under a Build, Operate and Transfer (BOT) contract. Through a purchase agreement, KWL will sell potable water to the government-owned Water & Sanitation Corporation of Rwanda (WASAC) for service delivery and distribution.

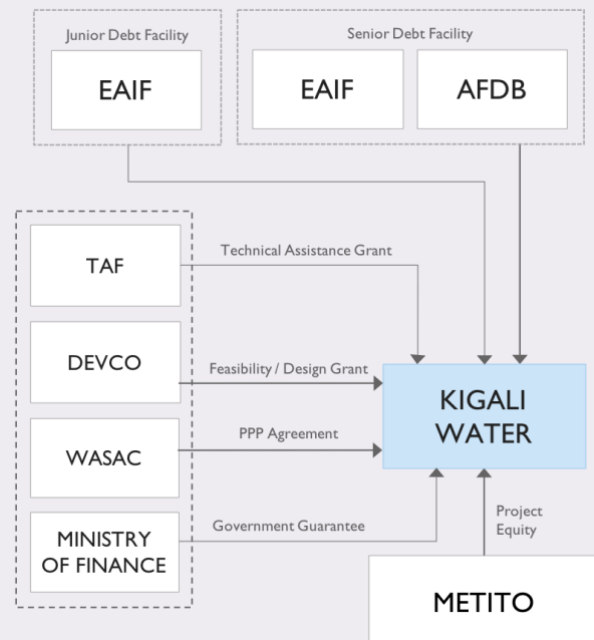
The water treatment plant, due for completion in 2020, will produce 40,000m³ of clean water per day. The site for the new facility is in Kanzenze, south of Kigali. Water will be drawn from the Nyaborongo River and treated before distribution to domestic, commercial, and industrial customers.

ROLE OF EAIF

EAIF led the arrangement of \$40.6 million of the \$60.8 million required to finance the project. EAIF arranged the debt package with the African Development Bank (AfDB). The debt package included two tiers of capital: EAIF provided \$2.6 million in junior debt and \$19 million in senior debt, and AfDB matched EAIF with another \$19 million of senior debt. The loans are issued with 18-year tenors. The balance was provided as equity finance by Metito.

Kigali Water benefited from a well-coordinated package of financing. In addition to the junior debt, Kigali Water also received design-stage grant funding and technical assistance via two other PIDG facilities. DevCo provided initial financial support to the Government of Rwanda for the legal, financial,

technical and environmental feasibility assessment of the project. The Technical Assistance Facility (TAF) provided a \$6.25 million grant for pre-financial close financial structuring, environmental assessment, and legal support, as well as viability gap funding.



While there was interest in the project from other MDBs and DFIs, EAIF was ultimately the most flexible and willing to adapt the funding structure to the evolving nature of the transaction. In arranging financing for the project, EAIF focused on the business viability and commercial sustainability of the project. Further, EAIF played an important role coordinating between Metito, government entities and co-financiers, ensuring fair approaches to project governance, ESG compliance, and impact measurement.

IMPACT AND FOLLOW ON

The plant will have the capacity to supply up to 500,000 people with fresh, clean water, equivalent to one-third of Kigali's total supply. Construction is forecast to take thirty months from the commencement date in late 2018 and employ 100 people. It is estimated that 50 new full-time jobs will be created to manage and maintain the plant.

The KWL project has been recognized globally, receiving awards such as Africa Water Deal of 2017 by IJGlobal and Africa Investor's Water Deal of the Year (2018). Dedicated funds, like EAIF, play a trailblazing, risk-reducing role in the sector, demonstrating what is possible and encouraging the private sector to invest in similar schemes with the public sector. The Kigali Bulk Water Supply project will serve as a model for other large-scale water projects in Africa

PROFILE: ALBATROS ENERGY MALI



SUMMARY

Country	Mali
Date	2017
Sector	Energy
Instrument	Senior debt + Islamic Finance
Investment size	€8.8 million (\$11.3 million)
Terms	15- + 14-year tenor

PROJECT OVERVIEW

With the support of EAIF, Albatros Energy Mali is in the process of developing the first Independent Power Project (IPP) in Mali. The thermal project will provide a strong foundation for the development of the renewable energy sector in Mali, which requires base load to stabilize the grid.

Mali's first post-conflict infrastructure project, Albatros Energy Mali was developed by Redox Power Solutions (Redox). Redox first worked closely with the Government of Mali to establish a well-balanced Concession Agreement as well as a 20-year Power Purchase Agreement with the national utility, Énergie du Mali (EDM). Albatros Energy Mali contracted the Danish plant construction company Burmeister & Wain Scandinavian Contractor (BWSC) to build, operate and maintain the plant.

Completed in October 2018, the 90 MW thermal power plant produces a minimum of 578 GWH of electricity per year. The new energy plant aims to address Mali's energy shortage and will operate on a base load basis, increasing total installed production capacity and providing a supply of reliable electricity. Albatros Energy Mali will provide a much-needed sustainable energy source, increasing access to electricity for Malians and enabling industry to grow.

ROLE OF EAIF

Given political turbulence and market uncertainty, Albatros Energy Mali initially struggled to secure financing for the \$140 million project. EAIF played a key role both in providing financing as well as offering multilingual fundraising support. The project was ultimately financed through a limited recourse project finance structure, which uniquely combined ordinary shares and shareholder loans, a conventional project finance facility, and an Islamic finance facility.

EAIF contributed to both debt finance facilities, providing a total of \$11.3 million through a conventional Euro-denominated loan (€5.0 million) and a Sha'ria loan (€3.8 million). Other conventional debt providers included OPEC

Fund for International Development (\$16.8 million) and West African Development Bank (\$22.4 million). The Islamic debt providers included Islamic Corporation for the Development of the Private Sector (\$22.4 million) and Islamic Development Bank (\$22.4 million). The Islamic financing tranche offered more concessional terms compared to the conventional tranche, with all investors given a 14-year repayment period.

In addition, EAIF brought in GuarantoCo to provide a 13-year guarantee on the Debt Service Reserve Account (DSRA). The guarantee enables Albatros Energy to pay back its loans over a longer period of time, while mitigating risks for lenders and keeping electricity prices affordable to Malian consumers. PIDG's TAF provided \$500,000 to support legal and environmental study-related development costs.

It should also be noted that Albatros Energy Mali benefited from the early involvement of Denmark's Investment Fund for Developing Countries (IFU), which provided equity and brought BWSC to the table. BWSC invested in the project and signed a contract for the delivery and operation of the thermal plant, as well as maintenance for at least 13 years. The project developer, Redox, also invested equity. The project's largest shareholder is African Infrastructure Investment Managers (AIIM), holding a 44% stake.

IMPACT AND FOLLOW ON

Albatros Energy Mali achieved financial close in June 2017 and construction commenced in July 2017, with an ambitious 16-month timeline. The project became fully operational on 31 October 2018. Located near the rural villages of Kayes and Medine, the construction has created jobs for 190 local people and the plant will employ 50 full-time local staff once operational. The plant should improve Mali's base load power by 30%, providing electricity for up to 4.5 million people – half of whom live below the international poverty line – and reducing reliance on imports and rented mobile generators. The thermal plant will additionally provide a valuable supplement to Mali's hydropower, which is unreliable during periods of low rainfall.

Albatros Energy Mali has developed and implemented an environmental and social management system, including monitoring air quality and establishing strong labour standards. In addition, Albatros Energy Mali will include several community projects, including refurbishing and equipping a dispensary and maternity ward, and providing doctor, nurse consultation, and ambulance services in Medine.

OPERATIONS

INVESTMENT CRITERIA

EAIF invests between \$15-50 million in private sector-owned, -controlled or -operated projects, including start-up or greenfield infrastructure projects, operating infrastructure companies, and privatized or to-be-privatized infrastructure companies in sub-Saharan Africa. EAIF cannot invest more than 25% of its portfolio in a single country, 10% in a single client, and 40% in a single sector (with the exception of the power sector).

EAIF can support infrastructure development in the following 'sectors':

- **Energy:** Including generation, transmission, and distribution of electricity, including rural electrification
- **Water and Waste Services:** Including urban and rural fresh water production and treatment, supply and distribution, sanitation, solid waste disposal or collection and waste treatment, bulk water supply
- **Transportation:** Fixed transportation, including toll roads, bridges, tunnels, light and heavy rail and railway equipment, airports, ports and harbors, warehousing and bulk storage / handling facilities
- **Telecommunications:** Including the development and operation of long distance and local telephone services, cellular radio and other radio services, and telegraph, microwave, satellite, and private communication networks
- **Gas Transportation:** Including gas pipelines and bulk storage / logistical facilities, and downstream gas development
- **Mining:** Only where projects includes the expansion of existing infrastructure and associated services and where the owner agrees to allow local, third-party use of the assets
- **Infrastructure components and equipment:** Including for cement plants and steel manufacturers
- **Agriculture:** Infrastructure for the agriculture sector, including shared irrigation, processing, warehousing, and logistics

In addition to being the first fund of its kind, EAIF is one of the few sub-Saharan infrastructure funds that offer long-term senior and subordinated debt. EAIF provides senior debt, subordinated and mezzanine loans, with the main focus on senior debt. Senior debt can be offered on a standalone basis or with co-lenders. EAIF can act as an arranger, offer bridge financing, underwrite loans (up to \$50 million), or join a lending syndicate. EAIF can offer debt financing products in US dollars, Euros, and local currency. EAIF will generally lend

with a minimum tenor of five years and will not exceed maturities of 20 years.

EAIF's pricing for senior loans and subordinated loans target a return commensurate with the underlying risks and with due recognition of EAIF's cost structure and investment terms.

INVESTMENT PROCESS

EAIF seeks to maintain a flexible investment process, which reflects the time- and cost-intensive nature of project development, fundraising, and operations in the infrastructure sector. Moreover, EAIF provides hands-on support to deal sponsors, including supporting the development of the project proposal, financial structuring, and impact outcomes. From initial screening to project management, there are three high-level stages in EAIF's investment process:

Phase 1: Deal Screening

1. **Initial Screening:** Deals are screened at the IAM Credit Investment Forum (CIF) for a 'Go' / 'No Go' decision before the IAM investment team commits significant time to the transaction. Once approved at the CIF, detailed due diligence and term sheet negotiations take place prior to presentation of potential investments to the Credit Committee. CIF focuses on EAIF's mandate, the project's background and sponsor / off-taker credit standing as well as ESG standards and practices.
2. **Due Diligence:** IAM conducts comprehensive due diligence on projects that are approved by its CIF and prepares detailed credit committee papers for the EAIF-IAM credit committee to review. EAIF's portfolio benefits from a specialized team and a solid credit evaluation process.

Phase 2: Credit Approval

3. **EAIF-IAM Credit Committee (CC):** The CC is able to approve any transactions proposed by the origination team that are within the EAIF's investment policy criteria. The CC focuses on the credit case and country political and economic risks. The presence of a credit committee with experience in the market has an impact on the projects selected, which in turn strengthens the quality of the overall portfolio. The CC is composed of senior Investec managers, as well as members of the PIDG credit committee, who are required for a quorum. All decisions must be unanimous. The CC is responsible for reviewing and approving all credit proposals; reviewing and approving material waivers and/or restructurings; and determining level of provisioning on transactions.

4. **PIDG Credit Committee (PIDG CC):** Any transactions presented to the CC that are out of policy or that present particular challenges need to be escalated to the PIDG CC for approval. The PIDG CC is composed of members of the PIDG Ltd Board, PIDG executive management team, and non-executives.

Phase 3: Project Management

5. **IAM Transaction Management:** Oversight of the project moves to IAM Transaction Management team with input from the Investment Team

INVESTMENT ACTIVITY TO-DATE

Initial investment activity – both commitments and disbursements – started slowly for EAIF, with considerable challenges closing financing transactions as well as meeting conditions for disbursements of the transactions in the first few years of operation. Three years into its operations, the Fund managed a small portfolio of five projects having committed only one-third of its capital and pushing back the anticipated breakeven point to before 2006. Further, EAIF took a fairly cautious approach to investing in new sectors and markets, usually maintaining a limited exposure until it built a level of expertise.

After a decade of operations, EAIF had approved more than 30 transactions and maintained a portfolio of projects valued at approximately \$500 million. The majority of these investments were in the energy and telecommunication sectors, but there was an increasing emphasis on a more diversified set of infrastructure ‘sectors’, including manufacturing, mining, and transportation. Throughout, EAIF maintained a focus on low income countries and continued to expand its reach to new countries, particularly fragile and conflict affected states.

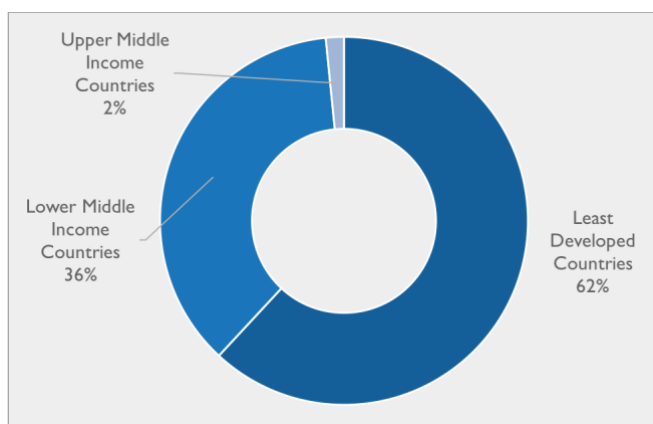


Figure 4: Portfolio by Country Income Level (December 2017)

EAIF now has over 15 years of experience investing in private infrastructure projects in sub-Saharan Africa. EAIF has invested more than \$1.3 billion in more than 70 projects

across 21 countries to date. As of 30 June 2018, EAIF’s portfolio was worth \$713 million (disbursed loans and commitments to disburse), across 17 countries and 7 sub-sectors. 76% of the capital mobilized by EAIF is in countries that are considered fragile and conflict-affected and 58% of the portfolio is currently invested in the least developed and low-income counties (~72% historically). Energy and related projects still account for just over 50% of EAIF’s loans portfolio.

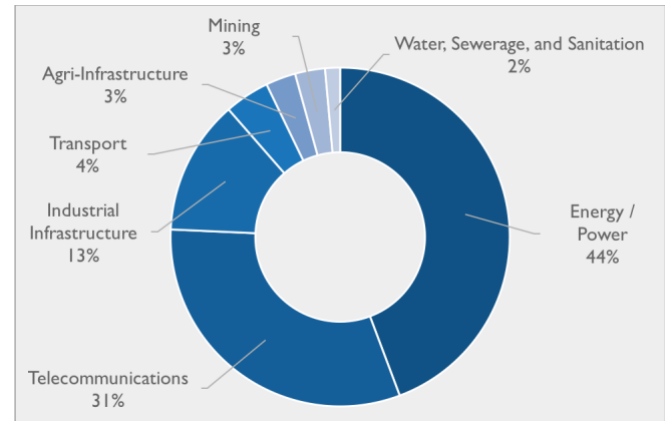


Figure 5: Portfolio by Infrastructure ‘Sector’ (December 2017)

A number of EAIF’s projects have been recognized globally. In 2011, the Lake Kivu methane power project was recognized as one of Africa’s most innovative infrastructure projects and awarded the top rating (gold) public private infrastructure partnership in the IFC-PPIAF publication *Emerging Partnerships*. In 2018, three out of 10 of EAIF’s infrastructure projects received awards: Albatros Energy Mali received Private Equity Africa’s ‘Infrastructure Deal of the Year’, Kigali Water Limited received Africa Investor’s ‘Water Deal of the Year’, and Ravinala Airports in Madagascar received Project Finance International’s ‘Best Transport Deal of the Year’.

Further, EAIF is a sustainable and profit-generating revolving fund. The costs are covered by the revenues, and retained earnings are reinvested in the fund’s activities. Returns are positive on average (typically 2-3% net) with some volatility due to movements on provisions. It should be noted that EAIF’s success, as per the EAIF board (i.e., PIDG members), is not determined by its level of returns or profitability, but by the achievements of its development and impact objectives. Loan losses from inception to date are limited, with \$20 million of principal and \$15 million of accrued interest written off.

IMPACT METRICS

The objective of EAIF is to mobilize private sector investment to assist developing countries in providing the infrastructure needed to boost *their own* economic growth

and combat poverty and focus on projects that would not have otherwise received funding, with the additional benefit of creating a demonstration effect over time.

Initially, EAIF focused primarily on mobilizing private investment in infrastructure (i.e., focusing on financial additionality). The PIDG members have required EAIF and the other PIDG companies to focus on development impact and on additionality, monitoring access to infrastructure, jobs created, and economic activity generated. (Figure 6). To date, EAIF has impacted 129 million people, providing access to new or improved infrastructure. Through the projects financed, EAIF has created 21,000 long-term jobs and an additional 18,400 short-term jobs. EAIF estimates that \$1.6 billion in fiscal benefits to host nations has accrued.

Result Level	Results Indicator	Components
Outputs	Mobilization	<ul style="list-style-type: none"> Mobilizing commercial capital (domestic / foreign) Mobilizing DFI capital
	Viability / sustainability	<ul style="list-style-type: none"> Reaching financial close Operational sustainability
Outcomes	Access	<ul style="list-style-type: none"> People with access to new / improved infrastructure
	Employment	<ul style="list-style-type: none"> Short- / long-term jobs created
	Economic Impact	<ul style="list-style-type: none"> Value / opportunities created for local business
	Development Impact	<ul style="list-style-type: none"> Local tax revenues / income generated Other (as relevant)
	Demonstration	<ul style="list-style-type: none"> Indirect capital mobilization

Figure 6: Overview of impact metrics tracked

Arguably, the most notable impact – on the financing for development agenda – achieved by EAIF is the success in mobilizing private sector involvement in the financing, ownership, operation, rehabilitation, maintenance, and/or management of infrastructure in sub-Saharan Africa. In addition to the commercial capital mobilized at the fund-level, EAIF also catalyzes additional private investment at the project level. EAIF can play three catalytic roles:

- **Co-financing:** Enable co-financing of the project from other sources alongside the EAIF facility
- **Gap funding:** Provide loans that fill a gap in the total debt requirement of a project because other private sector or DFI lenders have exhausted credit limits
- **Signalling effect:** Act as lead lender; its willingness to lend enables it to persuade other lenders to join

Initially, it was difficult for EAIF to mobilize additional private sector investment at the project level, especially to local currency-earning projects. As of 2014, there had only been one commercial bank, which had participated in a power plant financing in 2006 as well as a few telecommunication projects. As the Fund has evolved and developed a strong track record, it has effectively mobilized private sector

investment into infrastructure in the fragile and frontier markets of sub-Saharan Africa. To date, projects supported by EAIF have received total investment capital of \$17 billion, of which \$10.8 billion is private sector investment.

PIDG is committed to transparency, including through their results monitoring database and disclosure around annual reports. EAIF also provides project fact sheets and case studies to support broader lessons learned for the market.

FUTURE ACTIVITIES

Moving forward, EAIF is focused on building a robust pipeline; proactive origination, arranging, and underwriting; and focusing on new infrastructure sub-sectors and the countries with the lowest level of infrastructure investment. EAIF needs to continue to grow and evolve to meet the shifting opportunities and barriers for private infrastructure development in low income countries. More recently, the appetite of the equity market to invest in greenfield infrastructure projects has not kept pace with that of the debt providers. In response, PIDG continues to refocus and pivot as is necessary to maintain a unique position in the market. EAIF has developed a more ambitious business plan for the next five years, which is partly based on increasing EAIF’s ticket size by supporting larger projects and acting more as a lead arranger.

Renewable energy is a key priority for EAIF, with the goal for renewable energy to be at least 50% of EAIF’s energy portfolio in the future. In addition to areas like transport, water, and telecommunications, EAIF is now well-established as a skilled provider of debt to solar and renewable power projects. In 2017 alone, EAIF provided finance to independent power projects that will bring 90MW of new solar power to Africa. Since 2015, it has backed renewable energy projects in Mali, Mozambique, Rwanda, and Uganda.

KEY INSIGHTS

- **Blended finance is a valuable tool for building markets and demonstrating the investability of the SDGs:** Beyond the direct and indirect impact of EAIF’s investments (i.e., access to infrastructure, jobs created), there have been positive demonstration effects for private infrastructure in sub-Saharan Africa. For example, EAIF provided loans – as a lender of last resort– to the telecommunications sector in sub-Saharan Africa in the early 2000s, when the private sector and DFIs were unwilling or uninterested. These investments have been very successful in demonstrating the viability of the sector, with a notable increase in private investment in telecommunications. With EAIF as an example, well-

designed blended finance structures hold the potential to attract new investors to a sector or region, who over time become more comfortable with the sector or region, and ultimately require less catalytic capital. While difficult to measure, this is another important aspect to measuring the impact of blended finance.

- Mobilizing the private sector is not easy – and a track-record goes a long way:** EAIF has secured the first long-term commitment from an institutional lender to a donor-backed African infrastructure fund, but only after 15 years of operation. While this commitment from Allianz exemplifies the gains to be made from blended finance approaches, it equally reflects an active effort to attract institutional investors as well as EAIF’s extensive track record of success in private infrastructure investment in sub-Saharan Africa. Blended finance holds the potential to mobilize private sector capital, but ultimately the perception that many of these countries and sectors pose considerable risk limits the appetite of commercial investors even to participate in “subsidized” deals. Concessional capital providers should be patient and recognize the value of an established track-record, seeking to increase the volume of commercial capital over time.
- Approaches to impact monitoring and evaluation have evolved over time:** While EAIF has maintained a consistent impact focus on increasing access to infrastructure in sub-Saharan Africa through more private infrastructure development, the key metrics around measuring, monitoring, and evaluating success have evolved alongside a similar evolution among the community of practice. Initially, EAIF focused primarily on financial additionality – simply targeting private infrastructure projects that were unable to raise adequate levels of capital through traditional market players or even DFIs. Over time, the PIDG members have required EAIF to increasingly focus on both financial and development additionality. This reflects an important stride in the mainstreaming of blended finance: donors now recognize blended finance as an important approach in the sector that should be held to high development impact standards equivalent to or suitably differentiated from traditional benchmarks.
- The governance structure of PIDG is a potential model for a specialized multi-donor effort:** The PIDG structure is well-conceived, with different PIDG companies performing specialized roles and therefore requiring complementary types of expertise and management. Separate companies help ring-fence risks, which facilitates mobilizing the right amounts and types of private capital into each facility. Further, creating

different facilities with different roles and risk appetites affords PIDG members the option to choose which facilities to support both initially and over time. Following the governance changes, the PIDG Ltd Board and Executive team are responsible for delivering the Group’s five-year strategy, priorities and day-to-day activities of all PIDG companies – including EAIF.

SOURCES

Interviews with Albatros Energy Mali, DFID, EAIF, Investec, KfW, PIDG, Metito, and SECO.

Documentation provided by EAIF and PIDG.

PIDG. (2004). Emerging Africa Infrastructure Fund Progress Review 2004. Accessed [here](#).

PIDG. (2009). Emerging Africa Infrastructure Fund Progress Review 2009. Accessed [here](#).

PIDG Annual Reports. Accessed [here](#).

EAIF Annual Reports. Accessed [here](#).

ABOUT CONVERGENCE

CONVERGENCE is the global network for blended finance. We generate blended finance data, intelligence, and deal flow to increase private sector investment in developing countries.

BLENDED FINANCE uses catalytic capital from public or philanthropic sources to scale up private sector investment in emerging markets to realize the SDGs.

Our GLOBAL MEMBERSHIP includes public, private, and philanthropic investors as well as sponsors of transactions and funds. We offer this community a curated, online platform to connect with each other on blended finance transactions in progress, as well as exclusive access to original market intelligence and knowledge products such as case studies, reports, trainings, and webinars. To accelerate advances in the field, Convergence also provides grants for the design of vehicles that could attract private capital to global development at scale.

www.convergence.finance