April, 2023

Frost & Sullivan Infrastructure Barometer Q1 2023: Africa's Investment Potential in Water and Sanitation

COP27
SHARM EL-SHEIKH
EGYPT 2022

An Initiate of:

africainvestor

AFRICAN GREEN INFRASTRUCTURE INVESTMENT BANK

FROST & SULLIVAN

Introduction

Continuing with the theme of assessing the opportunity for investment in Africa, this report will focus on water and wastewater projects across the continent. As previously highlighted in the first report, Sub-Saharan African (SSA) countries are not on track to meet the goals and targets of the 2030 SDG or African Union's Agenda 2063. Much of these challenges were identified to be from a lack of bankable infrastructure projects and a lack of robust governance structures to manage investment capital.

Despite challenging global economic conditions in 2022 and the first quarter of 2023, Africa has still managed to attract attention for capital investment into infrastructure. Analysing over 450 ongoing and committed projects in Africa has revealed the key drivers and restraints to investment in the region. The major driver for investment into Africa is the rate of return on capital, which averages 7.1% globally, but averages 11.4% for the African region. On the other hand, there are restraints to investment and factors that contribute to delayed and cancelled projects. These are mainly attributed to political instability, administrative red tape, and the lack of policy coordination.

The Status of Africa's Infrastructure Projects

Frost & Sullivan tracks individual infrastructure projects across Africa on an ongoing basis and these projects are monitored across the project lifecycle:

1) **Announced/Tentative** – This includes projects at the scoping, feasibility or due diligence stages. These projects require further planning and bankability assessments before financing and execution.
2) **Committed** – These projects have been adequately assessed and developed, placing them into the post-due diligence phase and entering the commercial negotiation and procurement phases. At this stage, the projects are in the negotiation phase with investors and usually have a development company associated with the development.
3) **Ongoing** – These projects have found financial investors and a development company and have progressed into the project development and execution phase. During this phase, the previously conducted assessments (scoping, feasibility, due diligence, negotiation) come into play to mitigate risks and carry out strategies.]

Figure 1: Investment Drivers and Restraints for African Investment Projects (2022/23)

	The Impact of Investment Drivers and Restraints on the Continent's Investment Landscape, 2022	Short Term 2 – 3 years	Medium Term 3 – 5 years
DRIVERS	**Investment profitability** is higher in Africa than in any other region. The rate of return on inflows of foreign direct investment is 11.4% in Africa, compared to a global average of 7.1%.	Medium	Medium
	Prudent macroeconomic stabilisation policies are increasingly prioritised across the continent to maintain stable inflation rates and ensure debt sustainability.	Low	Medium
	A young, growing population on the continent amid aging and declining populations in other regions provides Africa with a competitive advantage in the production of labour-intensive goods.	Medium	High
	Economic growth is occurring at a greater intensity in Africa than in many other regions, with 50% of the world's fastest growing economies being located on the continent.	Medium	High
RESTRAINTS	**Political instability** across different African regions as well as the Russia-Ukraine conflict contribute to an uncertain macroeconomic outlook that is negatively impacting investor sentiment.	Medium	Medium
	Tighter financial conditions such as higher interest rates, implemented in response to surging global inflation rates, are not conducive to investment in higher risk markets.	High	Medium
	Degradations in country risk ratings, suffered by 62.5% of African countries between 2020 and 2021, hampers access to development finance and often prevents foreign investors from investing in the continent.	Medium	Medium
	Lack of policy harmonisation across African countries complicates cross-border trade, impeding the realisation of economies of scale and stunting economic growth on the continent, though this is set to improve in the near future.	High	Medium

Impact: High Medium Low

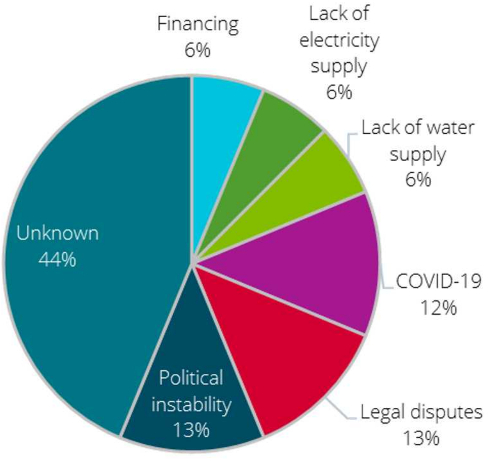
Source: Frost & Sullivan

1) **Cancelled** – This group of projects includes those that have been cancelled, abandoned or delayed due to various reasons such as force Majeure and legal issues.

A significant proportion of projects are committed, with $380bn of investment in the pipeline. It must be noted, however that many of these projects may not reach financial close as the analysis shows that there is an average of 75% drop-off rate for projects to reach the actual negotiation phase and another 50% drop-off of the remaining projects to reach financial close. This means that of the $858bn tentative and committed projects we only expect $86bn to reach financial closure.

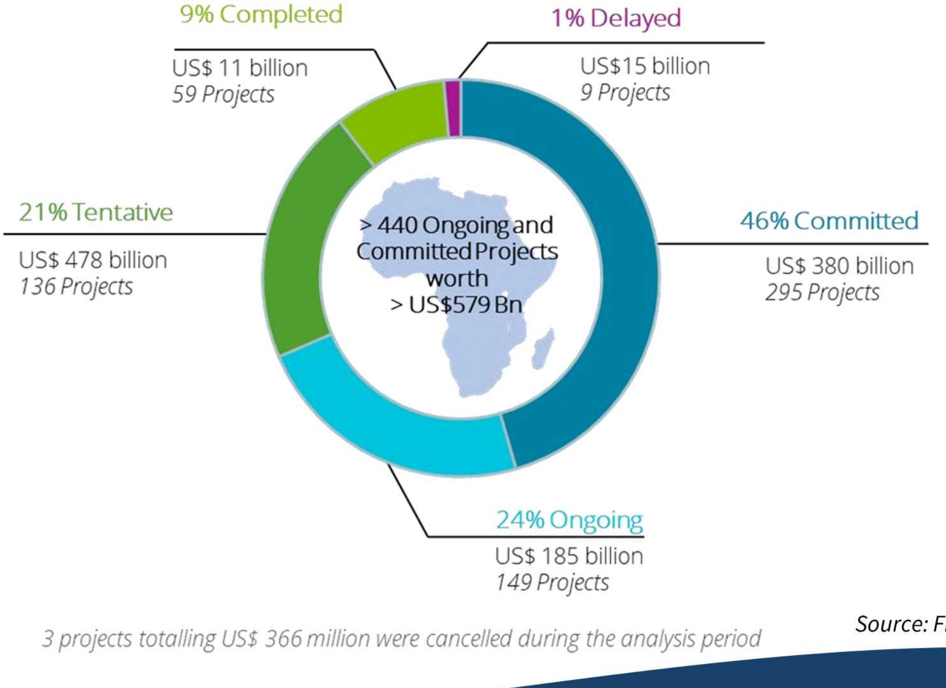
During the analysis period (2020 to 2022), projects totalling US$ 14 billion were significantly delayed. The sectors that experienced the most delays in Africa were energy, transport & logistics and construction, with the average length of the delays ranging between 12 to 24 months. Energy sector delays averaged 36 months. Transport & Logistics sector delays averaged 15 months. Construction delays averaged 12 months and Water & Sanitation delays averaged 30 months. Delays frequently occurred in the pre-construction and procurement phases of projects, due to disagreements over contract terms, land disputes and procurement. Throughout the region, the COVID-19 pandemic continued to cause disruptions to various projects in 2021 and into 2022. This was predominantly through supply chain disruptions, the prevention of site visits and reduced negotiations due to restricted travel.

Figure 3: Reason for Project Delay (2020-2023)



Source: Frost & Sullivan

Figure 2: Status of Africa's Infrastructure Projects (2020-2023)



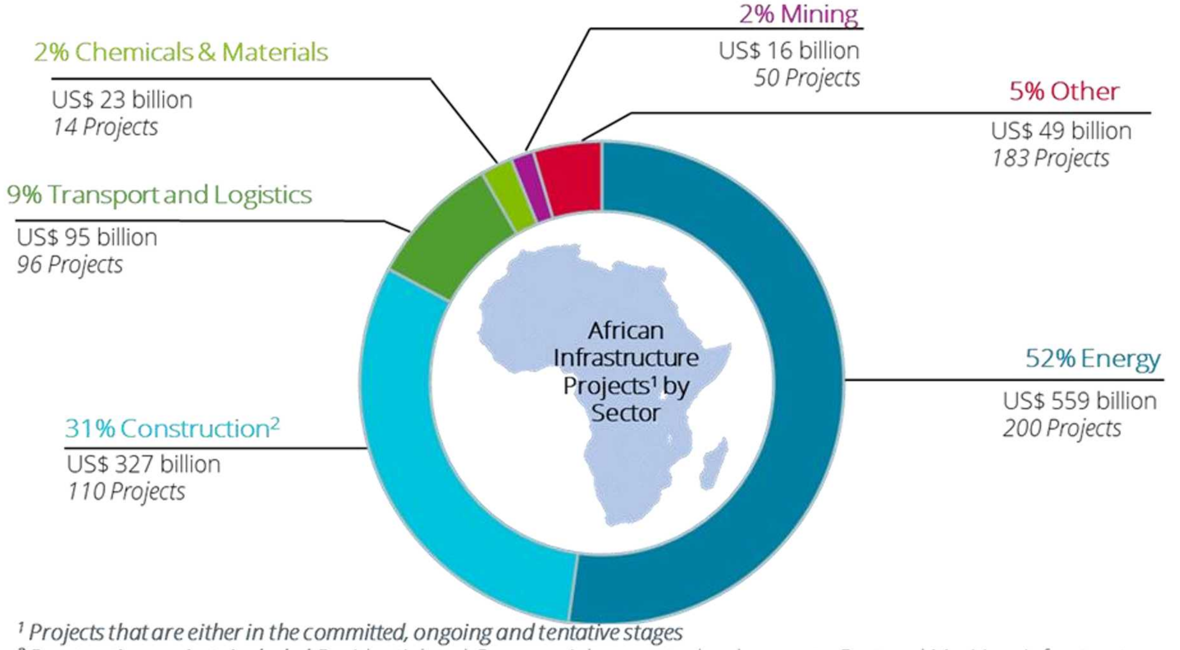
Source: Frost & Sullivan

Sectoral Analysis of Africa's Infrastructure Projects

Energy and Construction projects form the largest portion of ongoing, tentative and committed projects, with $559bn in Energy and $327bn in Construction projects ongoing in the pipeline. This makes up more than 80% of the value of projects currently ongoing or in the pipeline in Africa.

In the past three years there has been a substantial uptick in the number and value of energy projects in Africa. This is driven by funding of renewable energy projects, natural gas and significant interest in green hydrogen infrastructure. This trend is expected to continue, with a rise in water and wastewater projects also expected.

Figure 4: African Infrastructure Projects by Sector (2020-2023)



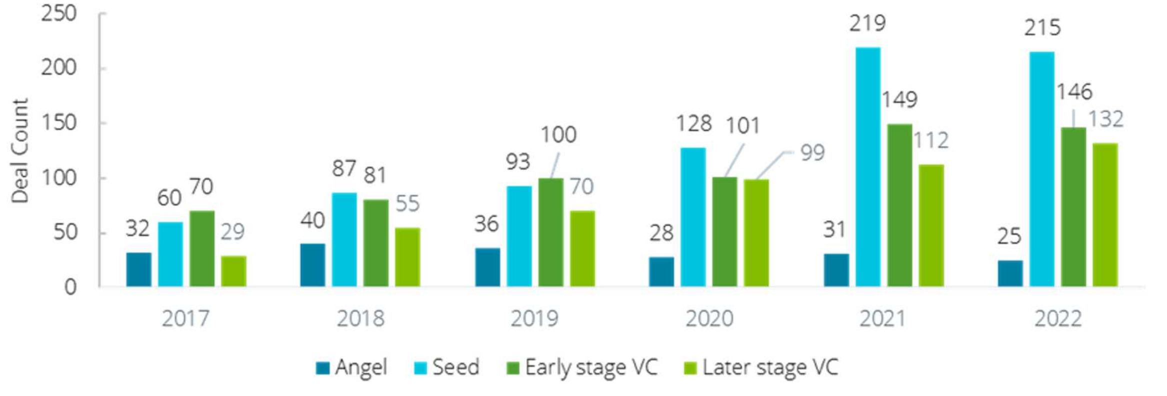
[1] *Projects that are either in the committed, ongoing and tentative stages*
[2] *Construction projects included*: Residential and Commercial property developments, Port and Maritime infrastructure development and Public Infrastructure developments

Source: Frost & Sullivan

Financing Infrastructure Projects

Africa's infrastructure financing needs are vast, estimated to be around US$170Bn by 2025, with a financing gap of US$ 100 billion. Funding for infrastructure projects is currently dominated by African governments, which held an average 41.5%, followed by development finance institutions. Project financing overall saw a decline from international banks in 2020 with the COVID-19 pandemic, and this has driven the need for new sources of financing which attributes to the increase in Seed funding and Venture Capital as evidenced in Figure 5.

Figure 5: African Infrastructure Projects by Sector (2020-2023)

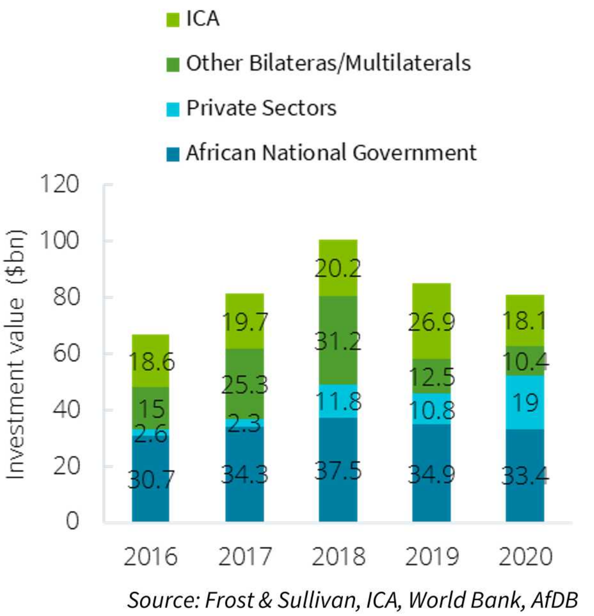


Source: Frost & Sullivan, AVAC, Disrupt Africa, GPCA, Partechpartners, Pitchbook, UNCTAD

Although slow, private sector investment is rising and reached about 20% by 2020, which is critical in achieving higher project success as private sector involvement improves the ability to reach financial close. Currently, many challenges with project success on the continent are linked to high drop-off rates in early project stages (70-80% drop-off) but can be reduced with early private sector support. Early 2022 recorded at least 12 infrastructure deals from private capital deals. These deals come as private equity, debt finance, and specialist infrastructure funds.

Tracking investment sources from 2016 it is evident that private sector investments have increased significantly from 2016 to 2020, from $2.6bn to $19bn over the period. This trend is expected to continue, although there is downside risk as a result of banking institutional pressures and the possibility that the United States may move into recession. Investment from African governments has remained consistent during the same period (2016-2020) and is a positive indication to investors that governments are invested in infrastructure growth initiatives.

Figure 6: Infrastructure Investment Funders, Investment Amounts (2016-2020)



Source: Frost & Sullivan, ICA, World Bank, AfDB

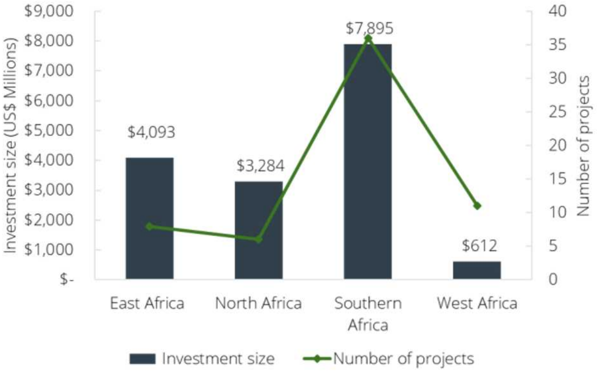
Water and Sanitation Infrastructure

The African continent has a pressing need for investments in water and sanitation infrastructure, requiring an estimated US$ 50 billion annually to achieve water security and sustainable sanitation by 2030. However, current foreign direct investment (FDI) inflow for water and sanitation ranges between US$ 10 billion and US$ 19 billion a year, which is well below the amount needed. As a result, Sub-Saharan Africa is estimated to lose 5% of its GDP annually due to water shortages or poor sanitation. Investing in the water and sanitation sector is crucial to achieving the UN Sustainable Development Goal 6 for universal access to clean water, sanitation and hygiene.

In the beginning of April 2023, the International High-Level Panel on Water Investments for Africa, at the UN Water Summit, called for greater mobilisation of Institutional Investor-Public Partnerships (IIPPs) to facilitate additional $30bn annual investments toward bankable water security and sustainable sanitation projects in Africa. The partnership between government and institutional investors will allow mobilisation of private capital at scale and within the necessary timeframes to deliver on many country's NDC and SDG commitments. IIPPs have the ability to mobilise long-term capital where Multilateral Development Banks (MDBs) and concessional finance have the ability to de-risk investments. In order to attract investments at this scale it will be necessary to ensure the establishment of legal and regulatory frameworks that promote risk-sharing mechanisms among private and public investors.

Evaluating water and sanitation projects across Africa, the largest number and value of projects remain in Southern Africa at almost $8bn and then East Africa at $4bn, but investment into water and sanitation in West Africa is very low. There is clearly a need for water and sanitation investment in West Africa.

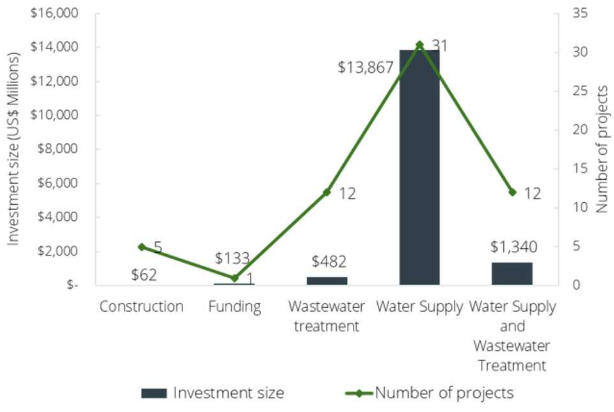
Figure 7: Funding in the Water and Sanitation Sector, By Region, Value and Volume, Africa, (2020 – 2022), US$ Mn



Source: Frost & Sullivan

Between 2020 and 2022, the water supply subsector had the most projects with 31, followed by wastewater treatment subsector with 12, and projects covering both of these subsectors with 12. The largest investment values were in water supply with US$ 14 billion, followed by projects covering both water supply and wastewater treatment with US$ 1.3 billion and solely wastewater treatment projects with US$ 482 million. In South Africa, there are five water supply projects exceeding US$500 million, which include building dams and pipelines for water supply, all funded by local governments.

Figure 8: Funding in the Water and Sanitation Sector, Africa, By Sub Sector, Value and Volume, (2020 – 2022), US$ Mn

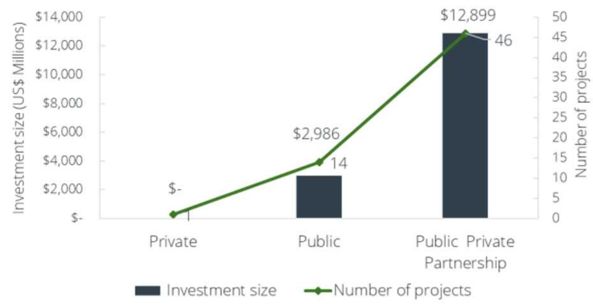


Source: Frost & Sullivan

Governments remain as the chief and most important source of funding for these projects. But, in order to drive private sector investment, a more coordinated approach to financing water and sanitation projects is needed, with more accountability for the use of funds. Innovative financing mechanisms such as blended finance, impact investing and social impact bonds can help attract private capital to the sector. Of the deals done in this sector in the second half of 2022, all deals were made in the pre-venture stage. This suggests that there is a significant need for early-stage investment in the water and sanitation sector in Africa, in order to develop and support projects through to later stages of financing.

The Continental Africa Water Investment Program (AIP) aims to mobilize US$ 30 billion per year by 2030, with a High-level Panel at Heads of States level established to achieve this.

Figure 9: Private/Public Water and Sanitation Sector Projects, Africa, Value and Volume, (2020 – 2022), US$ Mn



Source: Frost & Sullivan

With renewed commitment to water and sanitation, the outlook for infrastructure investment into this sector is positive, with an increase in large-scale private investment expected in the next 2 years.

Hendrik Malan

Frost & Sullivan

CEO and Partner – Africa

Email: Hendrik.Malan@Frost.com

Mobile: +27 (0)71 608 8629

Phone: +27 (0)21 680 3260

Lynne Martin

Frost & Sullivan

Business Development Director – Africa

Email: Lynne.Martin@Frost.com

Mobile: +27 (0)84 590 9199

Phone: +27 (0)21 680 3260

Dr. Hubert Danso

Africa investor (Ai) Group

CEO and Chairman

Email: hdanso@africainvestor.com

"Frost & Sullivan is a strategy consulting and market intelligence firm. We support the development of the continent by informing organisations of market dynamics, advising on how to respond to those dynamics, and connecting them to relevant stakeholders in Africa and beyond."

If you are interested in gaining access to the full database of infrastructure projects, please contact Frost & Sullivan for a subscription quotation.

FROST & SULLIVAN