



Large Infrastructure

Meeting Africa's Infrastructure Investment Need

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Last updated 25 May 2026 using IFs V8.50

Table of contents

Meeting Africa's Infrastructure Investment Need	3
Briefly	3
Continental frameworks and regional integration	3
Complementary initiatives to mobilise investments for infrastructure	5
Public-private partnerships	6
Mobilising domestic capital	6
Reducing risk and crowding in private investment	6
Donors and Sponsors	9
Reuse our work	9
Cite this research	9

Meeting Africa's Infrastructure Investment Need

- Briefly
- Continental frameworks and regional integration
- Complementary initiatives to mobilise investments for infrastructure
- Public-private partnerships
- Mobilising domestic capital
- Reducing risk and crowding in private investment

Briefly

Africa's infrastructure deficit is one of the continent's binding constraints to sustainable growth and structural transformation, as reflected in the theme on [energy](#). Major infrastructure projects are capital-intensive and often unaffordable for many low-income countries. At the same time, even upper-middle- and high-income economies rarely have the fiscal space to finance large projects entirely from annual budgets. High debt-to-GDP ratios further limit borrowing capacity. According to the [African Development Bank](#), closing Africa's infrastructure gap will require between US\$130 billion and US\$180 billion annually, yet despite substantial inflows of public and private finance, an estimated annual shortfall of US\$68–108 billion persists. This gap is driven largely by deficits in water and sanitation infrastructure (around 41%), followed by electricity supply and transport access (approximately 28% each), with ICT infrastructure accounting for the remainder. A recent [report](#) by the African Union Commission (AUC) and the OECD estimates that, as a share of total GDP, Africa's infrastructure investment needs are three times those of Latin America and the Caribbean and five times those of developing Asia.

Continental frameworks and regional integration

At the core of Africa's response is the Programme for Infrastructure Development in Africa (PIDA), a continent-wide initiative designed to accelerate the development of transformative, cross-border infrastructure. PIDA is closely aligned with key pan-African priorities such as the Trans-African Highway Network, the Single African Air Transport Market and the Continental High-Speed Rail Project, reflecting a strong emphasis on regional integration.

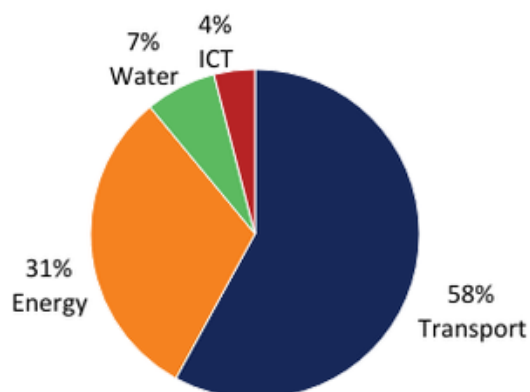
Under the PIDA Priority Action Plan 1 (PAP1) (2012–2020), 51 cross-border infrastructure programs comprising 409 individual projects were identified. While tangible progress was achieved—including the construction of more than 16 000 km of roads, 4 000 km of railways and 3 500 km of transmission lines—implementation lagged behind ambition, with only 18% of targeted projects operational by 2025. These outcomes highlighted persistent challenges related to project preparation, financing and coordination.

Building on these lessons, PIDA PAP2 (2021–2030) prioritises 69 projects valued at approximately US\$125 billion across four sectors: transport, energy, water and ICT. Project selection places strong emphasis on regional relevance and cross-border impact, while also integrating development priorities such as job creation, rural-urban connectivity, youth and gender mainstreaming, climate resilience and financial viability. Chart 12 shows the PIDA PAP2 dashboard. To strengthen implementation, PAP2 is supported by dedicated instruments—including the PIDA Service Delivery Mechanism and the PIDA Job Creation Toolkit—often developed in partnership with international actors.

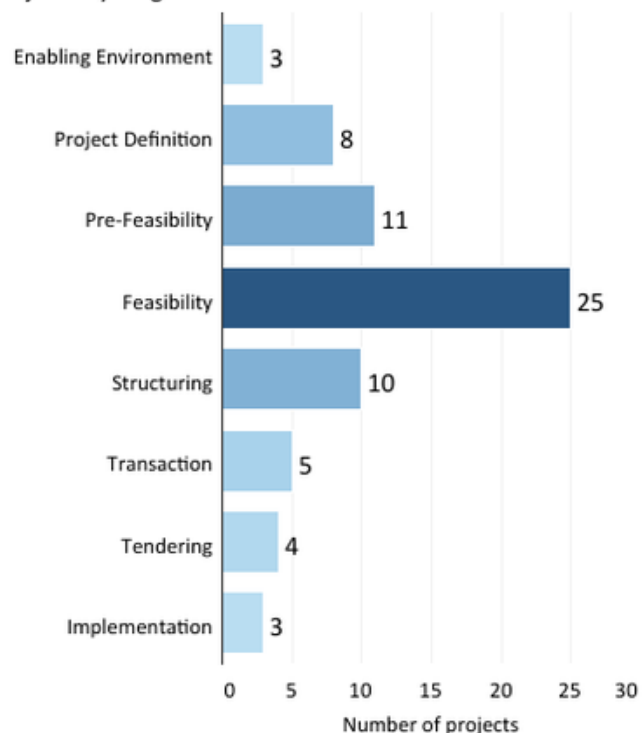
Chart 12: PIDA Priority Action Plan 2 (PAP2) Dashboard



Investment by sector, % of total investment



Projects by stage



Source: The PIDA Investment Prospectus

AUDA-NEPAD further underscores the importance of corridor-based infrastructure development, particularly multi-country projects that combine road, rail, ports and ICT infrastructure. Corridors such as the Lamu Port–South Sudan–Ethiopia Transport Corridor illustrate how integrated approaches can reduce non-tariff barriers to trade, deepen economic linkages and support coordinated solutions to shared challenges such as water resource management. Chart 13 depicts the geographic spread of PIDA projects across the continent in 2021, reflecting this regional logic: transport corridors, ports, and border investments form the backbone of Africa’s integration agenda.

Chart 13: PIDA II projects across Africa



Single Country vs Transboundary projects

Number of projects per REC

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	Transbou..	Energy	ICT	Transport
SADC	4	4	3	2
ECOWAS	3	3	3	4
ECCAS	2	5	2	3
EAC	1	2	2	5
AMU/UMA	1	0	0	6
CEN-SAD	1	2	1	1
IGAD	1	0	1	2
COMESA	1	1	1	1
Multi-REC/Cross Regional	1	1	0	1

Source: AU-PIDA 2024

Complementary initiatives to mobilise investments for infrastructure

Beyond PIDA, several African- and partner-led initiatives play a critical role in strengthening the infrastructure pipeline and mobilising finance. The NEPAD Infrastructure Project Preparation Facility (NEPAD-IPPF), established in 2005, is a multi-donor fund hosted by the African Development Bank, which supports governments in preparing bankable regional projects by addressing early-stage technical, legal and financial constraints. This upstream support is essential for unlocking downstream investment. Between 2004 and 2022, NEPAD-IPPF approved 106 grants totalling US\$115 million, leveraging US\$11 billion in investment financing.

The Infrastructure Consortium for Africa (ICA), established at the G8 Gleneagles Summit, brings together African institutions and international partners—including the World Bank and G8 countries—to mobilise financing, remove implementation bottlenecks and support major regional programmes such as power pools and transport corridors. Similarly, the African Investment Forum (AIF), led by the African Development Bank Group, convenes public and private investors to close financing gaps through pooled capital, blended finance and risk-mitigation instruments.

At the global level, initiatives such as the European Union’s Global Gateway and the G7’s Partnership for Global Infrastructure and Investment (PGII) have expanded financing for Africa’s infrastructure. Launched in 2021 and 2022, respectively, both initiatives support infrastructure development, green energy and digital connectivity while helping to coordinate international efforts. The EU’s Global Gateway adopts a more hands-on approach in Africa, working through EU

delegations to support priority value chains along 12 strategic corridors. Beyond financing, it seeks to strengthen trade links and promote near-shoring of European production, including green hydrogen. The program aims to mobilise up to EUR 150 billion between 2021 and 2027 by blending EU grants with investments and risk-sharing instruments under the European Fund for Sustainable Development Plus. By the end of 2024, Global Gateway had allocated nearly **EUR 624 million** in grants to regional infrastructure projects, mainly in energy and transport. Together, these mechanisms improve project bankability, crowd in private capital and help narrow Africa's infrastructure financing gap.

Public-private partnerships

Public-private partnerships (PPPs) are expected to play an increasingly important role in infrastructure delivery, particularly through concession models such as build-operate-transfer (BOT) arrangements. PPPs offer the potential to mobilise private finance through user-pay principles, such as port fees or road tolls. Still, they also raise concerns about affordability, equity and fiscal risk. Large toll roads remain concentrated in a few countries, including South Africa, Morocco and Senegal, and poorly designed projects risk excluding low-income users or imposing excessive contingent liabilities on governments. Recent projects illustrate these tensions. The Mombasa-Nairobi Standard Gauge Railway, financed largely through Chinese loans at commercial rates, significantly increased Kenya's debt burden and stalled before full regional extension. Similarly, the Nairobi Expressway, developed under a long-term concession, guarantees substantial profits to the operator through tolls that may limit access for poorer users. These cases underscore the importance of transparency, sound project selection and careful risk allocation.

Mobilising domestic capital

As global financing conditions tighten and donor countries prioritise domestic agendas, mobilising domestic capital has become increasingly critical. Analysts estimated that Africa already holds over **US\$1.1 trillion** in domestic capital, including pension and insurance assets, sovereign wealth funds, public development banks, commercial banks and foreign exchange reserves. Yet much of this capital remains underutilised for long-term investment.

Institutional investors represent the largest pool of long-term savings. Pension and insurance funds together manage around **US\$777 billion**, while sovereign wealth funds and public development banks account for roughly **US\$400 billion**. However, these assets are typically concentrated in low-risk, short-term instruments such as government securities, limiting investment in infrastructure and other productive sectors. Fragmented capital markets, high informality and regulatory constraints further weaken the link between savings and investment.

Strengthening public capital institutions—notably sovereign wealth funds and public development banks—offers a powerful lever to crowd in private finance, support counter-cyclical investment and reduce reliance on external borrowing. At the same time, expanding the formal savings base could unlock significant additional resources. It is estimated that partial formalisation of the informal economy alone could generate more than **US\$200 billion** in new long-term savings.

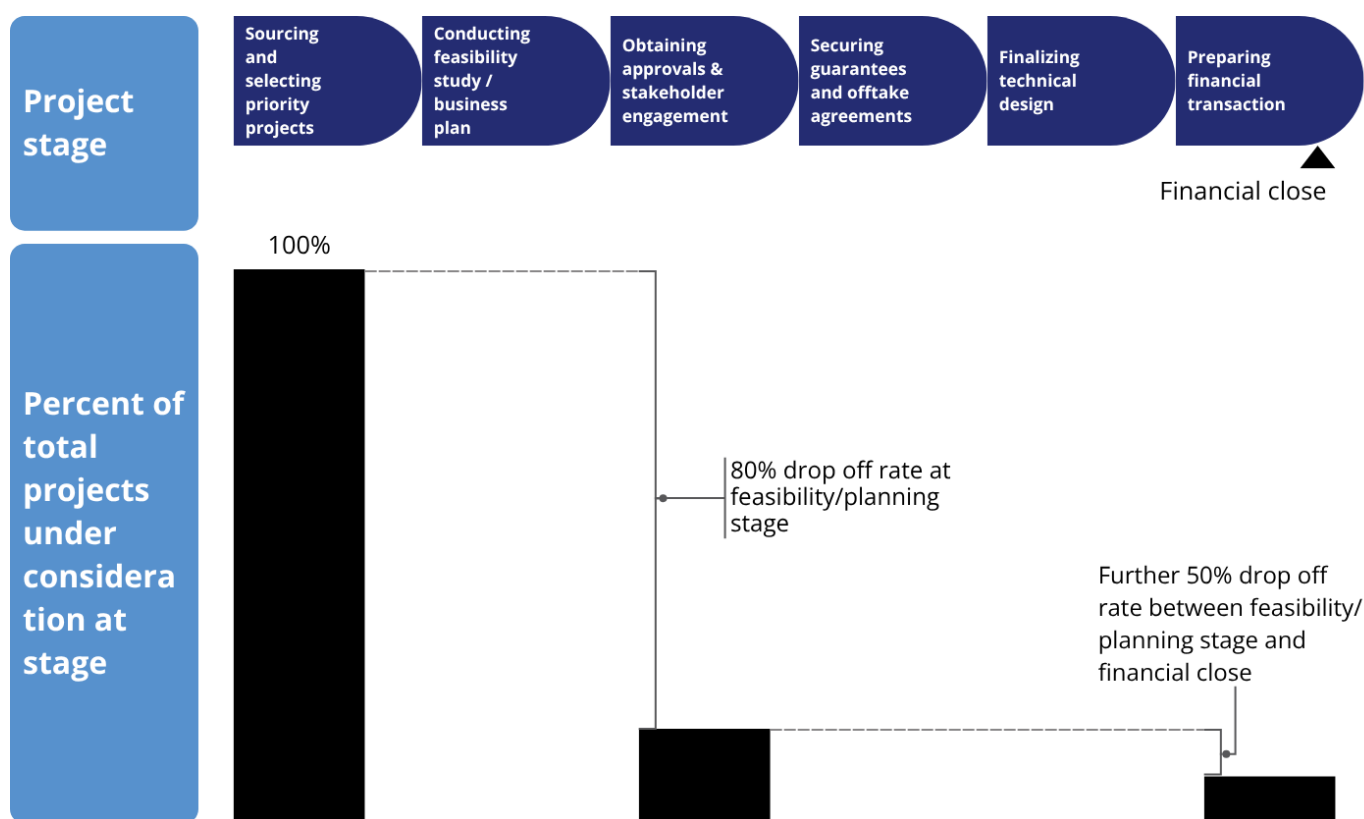
Remittances also represent a largely untapped source of financing. In 2024, Africa received over **US\$95 billion** in remittance inflows, comparable to total FDI and more resilient than other capital flows. While primarily used for consumption, these funds could be leveraged for infrastructure through structured instruments such as diaspora bonds integrated into national investment strategies.

Reducing risk and crowding in private investment

Mobilising private investment in Africa's infrastructure requires systematically reducing project risk and strengthening the enabling environment. While corruption and governance challenges remain concerns, even well-intentioned infrastructure projects face significant structural barriers that deter private capital.

A central constraint lies in project preparation. Chart 14 shows Africa’s infrastructure pipeline. Early-stage development—including feasibility studies, technical design, environmental and social assessments and financial structuring—can account for 5–12% of total project costs and take up to seven years to complete. For large-scale projects worth hundreds of millions or billions of dollars, this represents a substantial upfront investment, often with no guarantee of commercial viability. As a result, up to 90% of infrastructure projects in Africa fail before reaching financial close, with approximately 80% stalling at the feasibility stage. Weak preparation, inconsistent planning standards, and limited technical capacity further increase perceived risks for private investors.

Chart 14: Africa’s infrastructure pipeline



Addressing these challenges requires coordinated action from governments, international financial institutions (IFIs) and private investors. Governments play a critical role in reducing regulatory, political and currency risks through predictable policies, transparent procurement processes and credible legal frameworks, particularly for PPPs. Strengthening institutions and regulatory regimes is essential, as poorly developed PPP frameworks and investment regulations often limit participation by major institutional investors such as pension funds, especially in countries below investment grade.

IFIs and development partners can help mitigate risk through guarantees, blended finance instruments and other risk-sharing mechanisms that improve project bankability. They can also expand support for high-quality project preparation facilities to reduce early-stage failure rates. Private investors, for their part, can engage earlier in the project cycle to shape feasibility assessments and financial structuring, aligning projects more closely with market expectations.

At the continental level, institutions such as AUDA-NEPAD are working to strengthen project preparation and signal investment readiness. Initiatives like the PIDA Quality Label aim to identify bankable projects, while mechanisms such as the African Infrastructure Guarantee Facility seek to share and mitigate risk.

However, governments must also carefully balance commercial viability with development priorities. Certain high-impact but low-return investments, such as basic water, sanitation and rural transport infrastructure, are likely to remain

primarily public responsibilities. In contrast, commercially viable sectors such as energy generation, ports and telecommunications may be better suited to private participation under appropriate risk-sharing frameworks.

Ultimately, closing Africa's infrastructure gap demands deeper coordination among governments, development partners and the private sector. Improving the quality of preparation, strengthening institutions and deploying effective risk-mitigation tools are essential to crowding in private capital at the scale and quality required for sustainable development.

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Cite this research

Kouassi Yeboua (2026) Africa Large Infrastructure Futures. Published online at futures.issafrica.org. Retrieved from <https://futures.issafrica.org/thematic/11-large-infrastructure/> [Online Resource] Updated 25 May 2026.



About the authors

Dr Kouassi Yeboua previously worked as a Senior Researcher at AFI, where he led significant ISS studies on the long-term development prospects of the Democratic Republic of Congo, the Horn of Africa, Nigeria, Malawi, and Mozambique. His research focuses on development economics, macroeconomics, gender, and economic modeling. He holds a PhD in Economics.

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