

AfIDA Insider

AFRICA INFRASTRUCTURE DEVELOPMENT ASSOCIATION

BRIDGING AFRICA'S TRANSPORT INFRASTRUCTURE DEFICIT AND IDENTIFYING, REDUCING AND MANAGING TRAFFIC RISK

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BRIDGING AFRICA'S TRANSPORT INFRASTRUCTURE DEFICIT - Identifying The Investment Opportunities For PPP's

“ A lack of bankable projects is a challenge for private investors, however there are many opportunities all across the continent as countries must develop their transport infrastructure in order to boost economic growth

Kieran Whyte
Baker Mckenzie, Johannesburg - Partner And Head Of The Energy, Mining & Infrastructure Practice

TRAFFIC RISK VERSUS AVAILABILITY PAYMENTS ON TOLL ROADS

Identifying, Reducing And Managing Traffic Risk

“ The private sector's ability to finance toll-road projects is heavily dependent on the predictability and reliability of revenues and the traffic forecasts that underpin them

Ragnar Gerig
DEG, AFRICA & LATIN AMERICA - DIRECTOR INFRASTRUCTURE

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WELCOME NOTE

Welcome Note

Dear members of the African Infrastructure Development Association (AfIDA) and stakeholder partners, it is my pleasure to welcome you to the Sixth Edition of the AfIDA Newsletter. I hope that this edition, as with its predecessors, will be informative and foster renewed interest in improving the project development ecosystem in which we currently operate and help galvanise our efforts towards substantially increasing Africa's infrastructure stock.

The association's primary aims are to foster dialogue among members, benchmark project development documents, develop market norms, build capacity, conduct research and serve as a policy advocacy forum. The current membership of AfIDA consists of a mix of project developers, project finance advisors, project owning companies, private sector infrastructure investors and development finance institutions.

The slow progress on new project closures on the continent, particularly over the past year, highlights the need for an organisation such as AfIDA, which aims to bridge the gap between early-stage project conception and the ultimate delivery of on the ground infrastructure. We believe that this void can partly be filled by the adoption of agreed-upon best practice for project implementation, as well as the development of a common understanding among all stakeholders of what constitutes project bankability.

Past editions of the Newsletter have focused primarily on the energy sector, where a number of our existing members primarily operate. In this edition, a spotlight has been shone upon the transport sector, which is key to providing the continental trade connectivity that will promote economic growth. There has been a dearth of greenfield private sector-led infrastructure projects outside the port sector on the continent, although there are green shoots of renewed activity in some parts of the continent.

Transport infrastructure, perhaps even more than the electricity sector, is an infrastructure sector where government planning and initiative is essential in crowding in private sector investment. AfIDA aims to be the chief advocate and networking space for project developers, advisors and owners operating in the African transport sector.

The organisation will over the coming months seek to engage with its existing membership and potential new members to establish



VUYO NTOI
AIIM, SOUTHERN CENTRAL AFRICA - REGIONAL DIRECTOR

what some of the more pressing medium-term needs are for project development on the continent, and we encourage all our stakeholders to engage with us in bolstering the organisation's standing as the voice for private sector project developers and financiers in Africa. We also look forward to meeting many of you at some of the upcoming infrastructure industry gatherings, such as the African Energy Forum.

We thank all the contributors to this latest edition of the Newsletter and encourage our members and stakeholders to contribute thought leadership on their areas of interest.

Vuyo Ntoi
AfIDA Board Member



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AfIDA - Who We Are

The Africa Infrastructure Development Association (“AfIDA” or “the Association”) is an association of project developers and development stakeholders in Africa.

The objective of AfIDA is to enhance the vibrancy of project development (PD) activities in infrastructure, with a view to ensuring that more projects achieve bankability and become available for financing and investment

The association aims to play an important role in the PD industry by providing members with industry updates (via newsletters and relevant research publications), workshop programs, and networking opportunities and serving as an advocacy platform.

AfIDA members include (but not limited to) project developers/ sponsors, regulators, development finance institutions and other financiers. The common goal amongst all members is to have a developmental impact in Africa by the enhancement of infrastructure development on the continent.

VISION & MISSION STATEMENT

01 VISION

Enhancing the vibrancy of project development activities in the infrastructure sector in Africa.

02 MISSION

Africa Infrastructure Development Association (AfIDA), is an association of project developers and development stakeholders in Africa, aimed at advancing the development of more bankable projects on the continent.

03 MOTTO

ADVOCACY, INCLUSIVENESS, INNOVATION & GROWTH

The AfIDA will promote and enable Project Development work in Africa, by creating a platform that will foster continuous dialogue amongst members, benchmark project development documents, develop market norms, conduct independent research and serve as a policy advocacy forum for the industry with a view to ensuring more projects on the continent achieve bankability.



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Objectives Of The AfIDA

The objectives of the AfIDA are to **PREP** the development of projects in Africa:

01 PROMOTE

The development of power and infrastructure assets in Africa; capacity building in the industry through training and knowledge sharing; transparency through information sharing and dialogue between members; and ethical and professional standards amongst its members.

02 REPRESENT

A common voice for developers on a wide range of development interests in a manner as inclusive as possible; the industry by facilitating advocacy and sector representation; the views of its members by being an industry interface to the market; and the African power and infrastructure sector to all stakeholders.

03 ESTABLISH

Tools for information gathering and dissemination between members; standardised templates for basic agreements between members; standardised templates for basic agreements between stakeholders; norms, guidelines and codes of conduct to govern project development in Africa; and regular meetings, conferences and workshops to further AfIDA's objectives.

04 PROPOSE

Recommendations for improvement in the legal and regulatory environment for project development and finance in Africa to the relevant authorities within governments; greater participation from government in order to be able to deliver bankable projects; benchmarks for market terms in certain key areas of development; and reports and results of industry research following market analysis of key indices.

WHY YOU SHOULD JOIN AfIDA

01 COUNTRY ENGAGEMENTS & POLICY ADVOCACY

Participate in AfIDA's country engagement efforts aimed at driving advocacy and inclusiveness through collaboration between public and private sector developmental stakeholders. The country engagements are aimed at addressing project development bottlenecks and identifying opportunities for development.

02 SKILLS TRANSFER

Participate in workshops and conferences where industry issues and market norms are developed.

03 THOUGHT LEADERSHIP

Gain access to AfIDA's Industry data, analyses, research and share your input on key discussion topics in the associations newsletter.

04 CAPACITY BUILDING

Access to specialised resource hubs that assist members with expertise on deal structuring, project finance, legal documentation, health and safety and other identified developmental gaps.

05 DIALOGUE & INFO SHARING PLATFORM

Network with leading industry influencers and stakeholders.

06 MARKET BENCHMARKS

Participate in the development of market standards, industry benchmarks and industry template document.



Meet The AfIDA Board of Directors



OLIVER ANDREWS
AFC
EXECUTIVE DIRECTOR & CIO
AfIDA CHAIRMAN



PETER HUTCHINSON
INFRACO AFRICA
CEO
AfIDA VICE CHAIRMAN



DAVID DONALDSON
IFC
HEAD INFRASTRUCTURE AFRICA



GAD COHEN
ELEQTRA
CEO



MARINA PANNEKEET
FMO
INVESTMENT OFFICER



RAGNAR GERIG
AFRICA & LATIN AMERICA, DEG
DIRECTOR INFRASTRUCTURE



VUYO NTOI
SOUTHERN CENTRAL AFRICA, AIIM
REGIONAL DIRECTOR



STEVEN WYNTER
NEO THEMIS SARL
DIRECTOR ENERGY



ANDREW JOHNSTONE
CLIMATE FUND MANAGERS
CEO



JASANDRA NYKER
BIOTHERM ENERGY
CEO

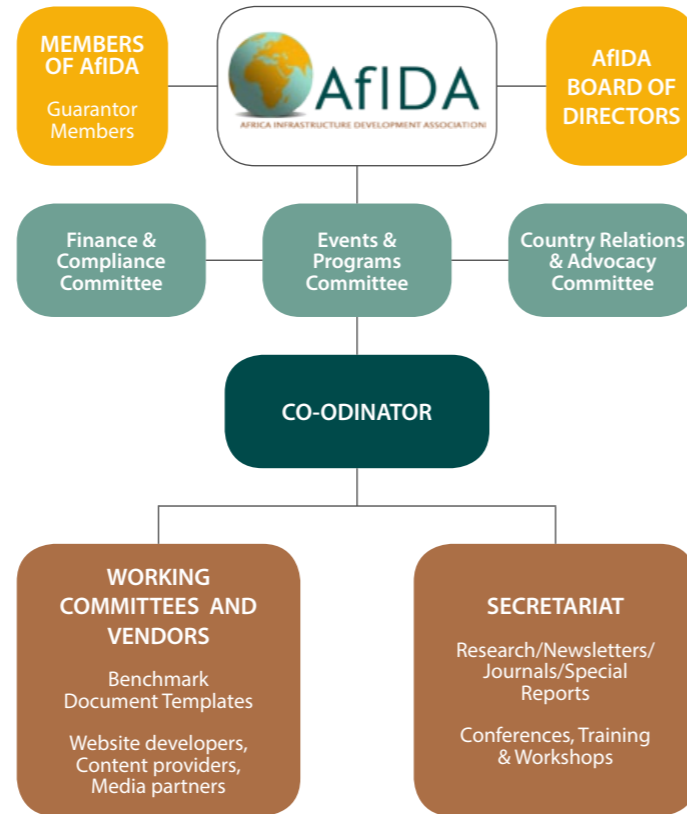


PAUL BIGGS
TRINITY
SENIOR PARTNER



SUZANNE GUJADHUR BELL
INTERNATIONAL PROXIMITY
MANAGING DIRECTOR

LEGAL AND OPERATIONAL STRUCTURE



THE OPERATING MODEL

- This association is registered in Mauritius (as a not for profit).
- The AfIDA is headed and made up of Board of Directors, with each member being a representative of the pioneer institutions: AFC, AIIM, CIO, Eleqtra, FMO, Infraco, Themis Energy, Trinity etc.
- The Board of Directors have appointed the coordinator who is responsible for the day to day running of the association.



Board Member Institutions

The Co-ordinators Report Back



PRECIOUS NKANDU
AfIDA - CO-ODINATOR

Precious oversees the management and operations of AfIDA, supported by the board of directors. In this role, she provides a vital link between the members, the secretariat and the working committees, and other parts of the association.

Precious brings a wealth of experience to the role, having worked in the past with infrastructure project developers and governments and a wide range of investors – including institutional investors, sovereign wealth funds, pension funds and family offices – to facilitate partnerships and investment opportunities.

She has also worked closely with African development finance institutions and other organisations seeking to gain access to international capital by providing them with investor relations, communication and media support as well as business development services. The knowledge gained from this background puts her in an ideal position to help AfIDA make progress with meeting its objectives and ensuring that Africa's project development space remains vibrant.

"I'm excited to be part of a team of industry leaders who are already playing a catalytic role in driving Africa's projects to achieve bankability, helping with skills transfer and serving as a collective voice of developers on the continent" she says.



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Bridging Africa's Transport Infrastructure Deficit - Identifying The Investment Opportunities For PPP's

Africa is home to some of the world's fastest-growing economies, and transport infrastructure and its role in Africa's continued development cannot be overstated. Both public and private stakeholders are continuously engaged in establishing viable, sustainable and mutually beneficial efforts to finance the continent's transport needs.

It was fascinating to note the conclusions of several findings which show the substantively high costs of intra-African trade compared to the cost of Africa's international trade. In a recent report by KPMG, which debated the disparity and extremity in the transportation costs and delays between African and Asian countries, findings demonstrate lead times in sub-Saharan Africa at an estimated 30 days compared to 13 days in developed countries.

According to PwC, Africa's intra trade is low in comparison to its global counterparts due to poor infrastructure and because most economies continue to be resource based. The findings further show that Africa's increased prominence as an investment destination in recent years has also highlighted the importance of transportation and logistics. The results show that be it imports or exports in the continent's growing economies, Africa's future growth and development will be dependent on the quality of its infrastructure and the efficiency of its transport networks.

Further reports cite infrastructure barriers to trade, excessive amounts of time and money to cross borders and trade due to logistics and transport infrastructure and recommend the implementation of trade agreements, removal of tariffs and adoption of African free trade zones as critical factors. According to the SADC regional infrastructure development masterplan, for regional integration to be successful, there is a need for competent transportation networks to aid trade and socioeconomic ties and as industries and economies develop, there is a need for increased capacity and resources.

01 By 2030, traffic for landlocked SADC countries will increase to 50 million tonnes, ramping to 148 million tonnes by 2040 – an 8.2% annual growth rate;

02 Port traffic will expand from 92 million tonnes to 500 million tonnes by 2027;

03 Port expansion projects at Dar-es-Salaam will only sustain shipment traffic through 2020;

04 OR Tambo International Airport in Johannesburg, South Africa, will add two million passengers a year by 2030 and three million a year by 2040; and

05 Kenneth Kaunda International Airport in Lusaka, Zambia and N'djili International Airport in Kinshasa, Democratic Republic of Congo, currently operate at 70% of capacity but expect traffic to expand well over 100% of capacity by 2020.

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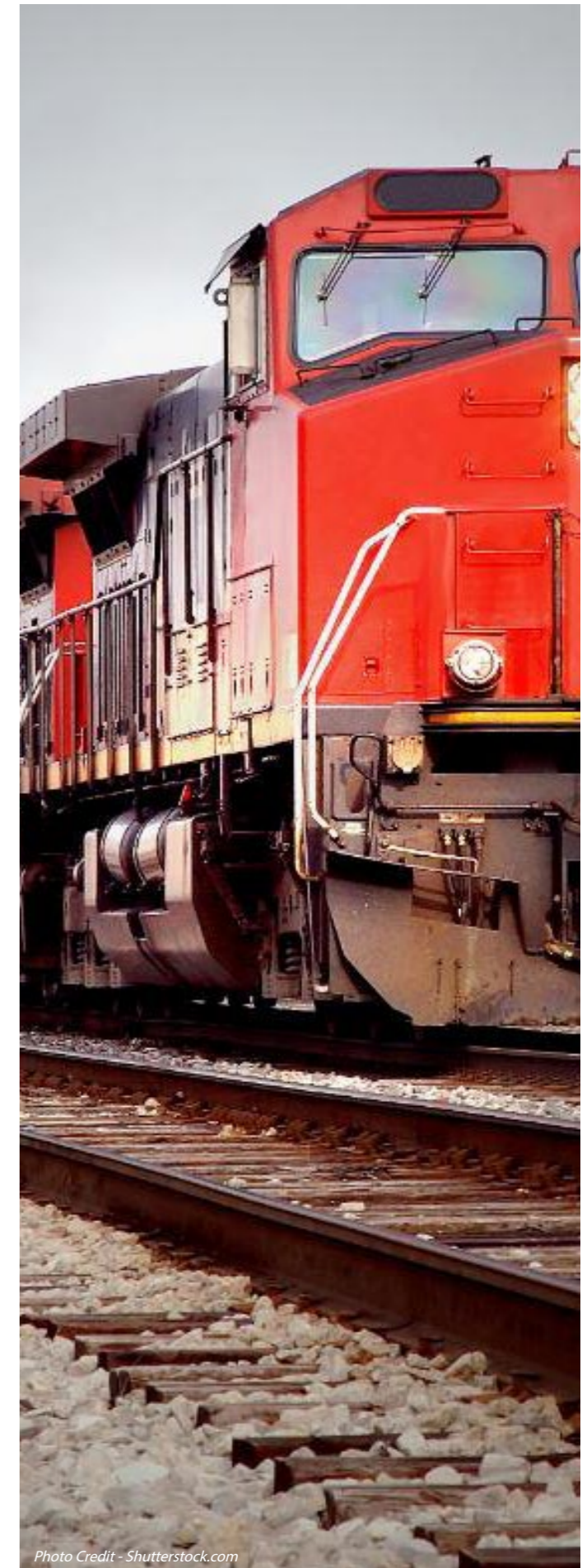


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Bridging Africa's Transport Infrastructure Deficit - Identifying The Investment Opportunities For PPP's

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PAVING THE ROAD AHEAD

According to reports by the OECD, the World Trade Organisation (WTO) and the World Bank, there is an upward trajectory in several aspects of the transport and logistics sector performance in the world. While the findings show the wide-ranging development levels across regions, there is evident potential for knowledge exchange. The reports demonstrate the synergistic nature of transport and logistics sectors and development outcomes and unanimously establish transport as a source of growth.

Several reports argue that an apparent link between transport, logistics and development is the facilitation of international trade transactions which could inherently boost national income, alleviate poverty, and thereby contributing to economic and social development through the creation of global value chains (GVCs).

TRANSPORT AND THE ECONOMIC ENVIRONMENT

It is interesting to observe that regardless of political will and technological progress, demand for transport still primarily responds

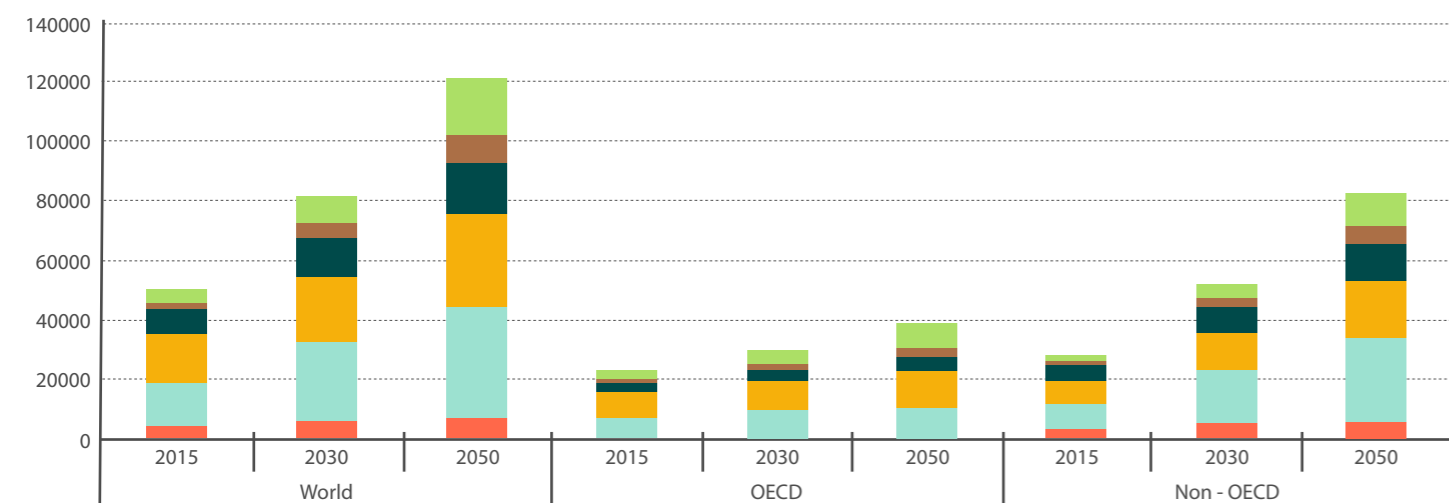
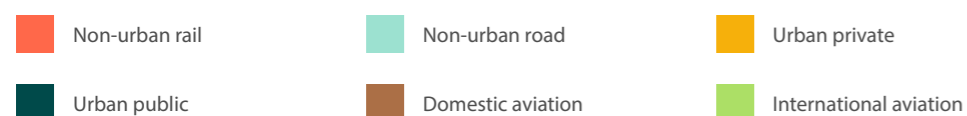
to the economic environment. Historically, there has been a close statistical correlation between the growth of Gross Domestic Product (GDP) and growth in transport, both passenger and freight (Bannister and Stead, 2002). Growth in per-capita income levels has had a positive effect on the ownership and use of private vehicles, tending to increase reliance on private vehicles to meet mobility demand, particularly in emerging economies.

Reports demonstrate that economic activity and trade are the core drivers of transport demand and that while low oil prices have sustained passenger mobility, the freight sector has suffered heavily from the below-par economic environment. Maritime transport, which is the backbone of worldwide trade, has experienced slower growth rates than anticipated.

The increasing number and size of container ships are adding to the problem of overcapacity and decreasing container freight rates. Air freight, too, slowed considerably in recent years. In contrast, world air passenger traffic is reported to have increased attributed to the decline of oil and jet fuel prices.

Demand For Passenger Transport By Mode

Billion passenger-kilometres, baseline scenario



Note: International passenger numbers are divided equally between the country of origin and the country of destination.

Source – ITF Transport Outlook 2017

THE IMPACT OF LOGISTICS REGULATION ON THE BUSINESS ENVIRONMENT

The OECD/WTO argue that regulation of the transport and logistics sector, and the quality of the business environment more generally, could be crucial factors in the development and expansion of GVCs. A private sector survey undertaken by the OECD/WTO revealed a

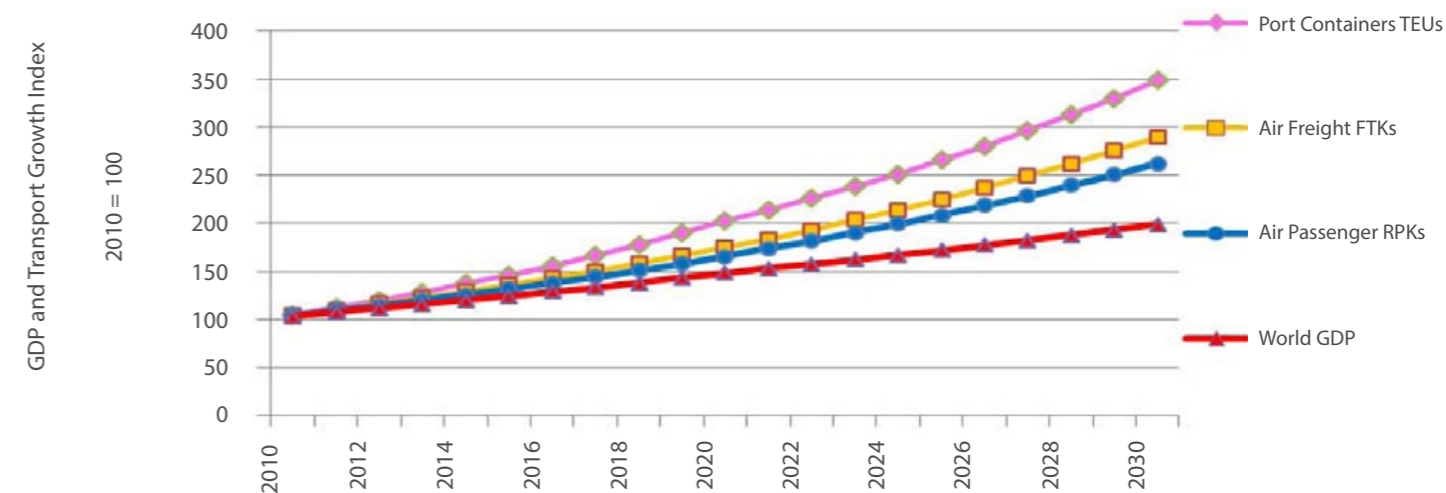
variety of responses regarding factors hindering organisations' ability to participate in national supply-side or to move up a transport and logistics GVC. The surveys most frequently cited factor is a lack of transparency in the regulatory environment (regulatory uncertainty), followed by the general business environment.

Reports show that regulatory transparency and the general business

According to PwC, Africa's intra trade is low in comparison to its global counterparts due to poor infrastructure and because most economies continue to be resource based

environment are classically areas that require extensive upgrading in many developing countries. Unless transport and logistics GVCs can limit the uncertainty that poor performance in these areas brings with it, this could deter key stakeholder participation completely, or to serve it only marginally.

World Gdp And Transport Demand Growth



Source – OECD Strategic Transport Infrastructure Needs to 2030

Type Of Aid-For-Trade Support Listed By The Private Sector As Being The 'Most Effective' In Helping Them Enter, Establish, Or Move Up Transport And Logistics Value Chains

TYPE OF SUPPORT	Percentage of respondents
Investment in infrastructure (road, rail, port, and airport capacity)	55%
Incentives for investment (domestic and foreign)	53%
Trade facilitation measures to streamline customs bureaucracy and border delays	52%
Better market access	44%
Better access to finance	40%
Support to improve the business environment	37%
Public-private dialogue with national authorities	29%
Internationally-recognized standards and certification capacity	27%
Labor force training schemes	26%
Investment in communications infrastructure	19%
Appropriate competition policy	19%
Establishment of export processing zones/special economic zones	18%
Establishment and maintenance of animal or pest-disease free zones	2%

Source – OECD/WTO

According to the OECD, globally, future investment needs leading up to 2030 will depend partly on the existing infrastructure, the growth in demand expected over that period, and the additional capacity required in the different locations. The OECD's findings established that global infrastructure investment needs across the land transport (road, rail), telecoms, electricity and water sectors would amount to around USD 53 trillion over 2010-30. The reports show that annual investment requirements for these sectors could amount to an estimated 2.5% of world GDP, which could rise to 3.5% of GDP if electricity generation and other energy-related infrastructure investments in oil, gas and coal are included.

GLOBAL	Infrastructure Investment Needs 2009-2030				
	Annual Average Investment (\$ Billion)		Aggregate Investment (\$ Billion)		
Infrastructure facilities	2009 - 2015	2015 - 2030	2009 - 2015	2015 - 2030	2009-2030
Airports capital expenditure	70	120	400	1,800	2,200
Port infrastructure facilities capital expenditure	33	40	200	630	830
Rail 'new construction' (incl. maintenance)	130	270	920	4,060	5,000
Oil and Gas – transport & distribution	155	155	930	2,325	3,255
Total	388	585	2,450	8,815	11,280

Source - OECD Strategic Transport Infrastructure Needs to 2030

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PAVING THE ROAD AHEAD

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Several reports argue that an apparent link between transport, logistics and development is the facilitation of international trade transactions which could inherently boost national income, alleviate poverty, and thereby contributing to economic and social development through the creation of global value chains (GVCs).

ATTRACTING PRIVATE SECTOR PARTICIPATION

The current debate on bridging the African infrastructure investment gap is focused on ways to attract more private sector financing. Reports show that transport investments are often regarded by governments as essential to economic growth and that private sector participation is integral to achieving government objectives. It is interesting to note that private investors are vigilant towards this asset class.

It is important to delve into the financial and regulatory drawbacks that could hinder private sector participation in transport investments. We argue that availability and the structure of transport financial mechanisms should take account of, and be malleable to, the needs of private investors. Regulatory conditions are therefore catalytic levers for governments in enabling investment and attracting private sector participation.

Private investment in transport has historically been part of the financial framework, but in recent years new developments to promote private transport financing has gained momentum in the market.

MANAGING RISK AND BARRIERS TO ENTRY

Reports show that improvement in the regulatory measures that support and shape the private sector's performance is taking place at a slower pace. It is imperative that policy makers and sectoral regulators ensure that further private sector upgrading is not repressed by an undeservedly restrictive regulatory environment.

Although institutional investors and pension funds would be regarded as the most suitable infrastructure investors due to the long term nature of such projects, a significant barrier to entry could be the estimation of the transport investment profiles (risk/return ratios). Currently, an infrastructure funds risk averseness is dependent on the structure of the fund and how the manager addresses risk; it is essential to mention.

However, that pension fund managers do not have all the necessary knowledge to make these calculations, and despite the popularity of Infrastructure Funds, there is negligible research on the topic. As a result, an extensive understanding of transport investment mechanisms would encourage pension fund managers to invest in greenfield investments and convince banks to lend.

DOES THE EXISTING REGULATION ENCOURAGE OR HINDER PRIVATE INVESTMENT?

Several reports demonstrate that in order to respond to the challenges posed by international regulation and to alleviate their adverse effects on private intervention, governments will need to draw up various initiatives/schemes. The fact that transport assets face the same capital charges as other assets highlight the conception that regulatory authorities, as well as rating agencies, may not fully recognise that lower risk is a characteristic of infrastructure fund investments.

While governments are cognizant of multiplier effects which could justify the high correlation between transport investments and GDP growth, the drain of public resources necessitates private sector participation. Investment banks and fund managers are convinced that, due to the physical, economic and financial characteristics of transport assets, investing in transport should be ideal for institutional investors like pension funds.

Findings argue that one of the most significant risks in direct infrastructure investment is a regulatory/political risk because investors have limited influence on the outcome of the political process. This distinctive risk is important since the stability of cash flows is only guaranteed if no change occurs in legal and regulatory conditions relating to a project. To circumvent the drawbacks of direct investment, Infrastructure Funds have been designed to allow investors to invest in this asset class indirectly.

THE ROLE OF PUBLIC-PRIVATE PARTNERSHIPS (PPPs)

According to the International Finance Corporation (IFC), governments have limited fiscal capacity to finance infrastructure from taxation or borrowing. Additionally, the ability to generate sufficient user fees or other revenue streams is critical to the viability of infrastructure investments. Furthermore, governments typically have limited capacity to design, construct, operate, and maintain infrastructure, particularly in low-income countries, so private construction and operation of infrastructure can add value. Private investors can complement government investment, but the challenge of paying for infrastructure services—whether by taxpayers, users, or other beneficiaries—remains.

The IFC's findings show that while PPPs do not offer either the extensive benefits of daily competition among multiple competitors or the ongoing threat of entry from would-be competitors, they do allow for competition in the contract bidding phase. Ideally, the bidder that offers the most suitable services at the lowest cost earns the right to design, build, operate and/or maintain the public good. Such competition, while never perfect, can provide strong incentives to cost and performance innovations that are often lacking within perpetual in-house monopolies. Well-designed PPPs exploit two significant sources of competitive advantage vis-à-vis publically built and operated monopolies: risk-sharing with private investors and bundling.

It is imperative that policymakers and sectoral regulators ensure that further private sector upgrading is not repressed by an undeservedly restrictive regulatory environment

THE SPECTRUM OF PUBLIC - PRIVATE PARTNERSHIPS



Source – World bank, Public - Private - Partnership In Infrastructure Resource Center

PPPs are the dominant form of private investment in transport infrastructure worldwide. The sector also has more such arrangements than any other type of infrastructure. Throughout the industrialised and developing worlds, modern transport PPPs began to take off. However, access is needed to better-quality projects that have risk-reward balances consistent with their responsibilities to fund contributor's interests. Strategic transport infrastructure could be attractive in this regard. Public-private partnerships (PPPs) are also widely used – in the transport sector, primarily for facilities that have a degree of monopoly in their geographic areas. Examples include major roads (in conjunction with user revenues from road tolls) and international gateway airports/terminals. PPPs are often successful, but there have also been some significant failures.

Several reports recommend the adoption of an integrated package of measures to get investments in strategic infrastructure back on track, in countries whose strategic infrastructure is not rated highly enough. The strategic infrastructure package needs to include improvements across all major factors, encompassing: national policy frameworks; more commercial business models; better planning and evaluation;

secure long term funding and financing; adequate gateway capacity; efficient international and inland connections; and green growth.

According to the OECD, By 2050, global investment needs for land transport infrastructure will reach an estimated USD 3 trillion per year on average, under current policies. Today's investments in transport infrastructure present an exceptional opportunity to meet growing transport demand and development goals while avoiding "locking-in" emissions-intensive development pathways. The report shows that engaging the private sector will be crucial to filling the infrastructure investment gap, particularly given current strains on public finances.

The OECD's findings argue that governments have a fundamental role to play in mobilising private investment in sustainable transport infrastructure, by establishing reform agendas that deliver "investment-grade policies". An integrated framework with clear and stable climate and transport policies, sound investment policies, and targeted and innovative tools is essential to overcome barriers to private sector investments in sustainable transport.



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Kieran Whyte on the Need to Develop Sustainable Infrastructure that is Climate Change Resilient while Embracing Digitalization

In your words, what are the key challenges to developing Africa's transport infrastructure?

The high investment risks due to political and economic instability has put investors off. In addition, inadequate regulatory frameworks, a lack of policy certainty, insufficient institutional capability and insufficient available funding has affected infrastructure development. Development Finance Institutions and multi-lateral agencies will play a pivotal role in assisting the bankability of projects.

What success stories come to mind when you look at the growth in investments into the transport sector in Africa?

China's One Belt, One Road initiative to build trade and transport links across Asia and Africa, is accelerating transport infrastructure spending in Africa. Countries that are benefitting from the One Belt One Road initiative include Kenya, Tanzania, Ethiopia, Djibouti and Egypt. East Africa has an integral role in the initiative, owing to Djibouti's ports, Ethiopia's manufacturing, and the region's existing plans to connect rail, road and energy network.

A big attraction of China's Belt & Road Initiative for both African governments and project sponsors is that it assists the speed of project implementation. Project stakeholders advise that the whole process is a lot quicker than other options. Chinese policy lenders assist in providing liquidity and contribute to the speed of implementation of projects in Africa.

The need to develop sustainable infrastructure that is climate change resilient while embracing digitalization and AI is paramount.

Are there many investable opportunities for private sector?

A lack of bankable projects is a challenge for private investors, however there are many opportunities all across the continent as countries must develop their transport infrastructure in order to boost economic growth.



KIERAN WHYTE

BAKER MCKENZIE, JOHANNESBURG - PARTNER AND HEAD OF THE ENERGY, MINING & INFRASTRUCTURE PRACTICE

In addition to PPP's, what other development approaches could be acclimatised to financing transport projects in Africa?

Development Finance Institutions, multi-lateral agencies and export credit agencies (ECAs) can provide insurance and guarantees which enables them to support infrastructure projects across the region. They also have the influence to ensure that governments meet their debt repayments and they are actively engaged in addressing regulatory uncertainty in the region. Other stakeholders are also invested in finding additional sources of funding for infrastructure in Africa including project bonds and private equity. For example, the London Stock Exchange is helping stock exchanges across Africa to develop their capital markets to be able to offer an additional source of funding to local investors.



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"A lack of bankable projects is a challenge for private investors, however there are many opportunities all across the continent as countries must develop their transport infrastructure in order to boost economic growth

Reports show that the lack of and deteriorated state of Africa's transport infrastructure has resulted in high intra-Africa transportation costs and could be credited for the reported low intra-African trade margins, what are your 10 key recommendations on what needs to be done to address these challenges?

1. Secure funding on competitive terms - One of the biggest challenges to the development of infrastructure in Africa is inadequate funding, and innovative ways of financing infrastructure need to be found. Because of market volatility, coupled with low credit ratings and a lack of exposure to private investors, emerging markets, and Africa in particular, require innovative financing solutions to bridge the gap between public and private investment. This is where the New Development Bank and other Development Finance Institutions (DFIs) play a pivotal role.
2. Get buy-in from all stakeholders - Investments in infrastructure are often big ticket, long term commitments with fixed locations, fixed revenue streams and structures, which require substantial financial buy-in from all parties and stakeholders.
3. Manage risks - Infrastructure projects have to identify and mitigate multiple risks notably procurement risks, completion risks, regulatory or policy uncertainty, performance risks and revenue risks to ensure that the project not only repays its debts, but also provides an adequate return for investors. The overall "bankability" and multi-faceted and interdependency of the components of the primary and enabling infrastructure of a project must not be underestimated. Compliance and governance as well as attainment of sustainability goals are essential.
4. Use Development Finance Institutions - The key role that DFIs have to play in making a project bankable include being able to provide a broad range of financing products, the ability to act as a possible first loss absorber on both greenfield as well as brownfield projects. The developmental mandate of DFIs in many instances extends beyond pure funding and in many instances includes active engagement in creating enabling environments to address regulatory and institutional challenges, and risk mitigation.
5. Encourage cooperation and integration - In order to develop transport infrastructure in Africa there is a need for greater cross border and regional cooperation and collaboration.
6. Provide greater certainty - A move towards greater legislative and regulatory certainty and the adherence to certain, independent, transparent and impartial regulation is also essential.
7. Use technology - Infrastructure development has to take place having regard to advancements in technology, the movement to digitisation, the

decarbonisation agenda and automation.

8. Build capacity - Capacity building in the public sector is needed, governments need to be able to procure and manage infrastructure projects and negotiate with international investors and lenders.
9. Nurture talent - It is also important for countries to ensure they have the required workforce that is skilled in the right areas.
10. Encourage impact investments in the infrastructure space. These investments are a way to create positive benefits, including socio-economic and environmental, around infrastructure development projects, and they are attracting a lot of private sector funding and interest.

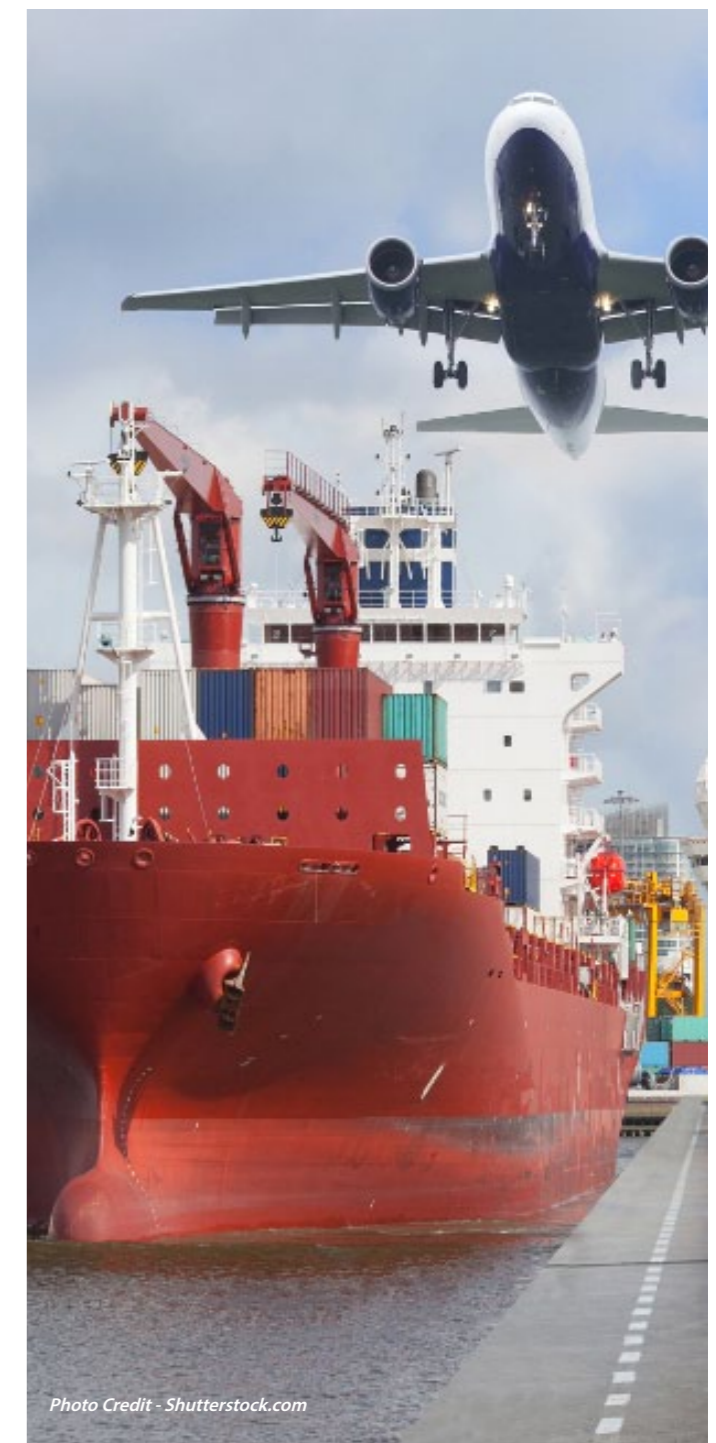


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Nosakhare Aguebor & Doris Dimoha on the Role of Regulation in Nigeria's transport Sector

FEATURE INTERVIEW - NOSAKHARE AGUEBOR & DORIS DIMOHA



NOSAKHARE AGUEBOR

G. ELIAS & CO. - SENIOR ASSOCIATE

IN YOUR WORDS, WHERE ARE THE INVESTMENT OPPORTUNITIES IN AFRICA'S TRANSPORT INFRASTRUCTURE?

Our responses in this interview will be limited to the investment opportunities in the Nigerian transport sector. Nigeria has seen much of its transport network fall into disrepair in the wake of unprecedented recent population growth, poor maintenance as well as decades of underinvestment in critical transport and social infrastructure. Although rising passenger and cargo demand continues to strain nearly every segment of Nigeria's transport sector, over the course of the last 7 years, the country has made relative progress in alleviating urban congestion, investing in critical infrastructure projects and increasing private sector participation in the development of transport arteries. The opportunities abound in view of Nigeria's demographics and the current state of our economy. The two biggest challenges are (a) having robust regulatory frameworks, especially a PPP statute and commercial regulator at the federal and most states levels and (b) long term funding through DFIs (such as the AFC) and the development of liquid instruments that pension funds can legally invest in.

Recent developments include the completion of the over 42km Abuja Light Rail system, the Abuja-Kaduna 186km railway line and the over 327km Itakpe-Ajaokuta-Warri railway line. There has also been steady progress on the new terminal at various new international airport terminals including the completion of the new international terminals at the Abuja and Port-Harcourt airports. These, together with the rising public and private sectors investment in the critical rail and road segments should see the transport sector become a key enabler of diversified non-oil growth, supporting Economic Recovery and Growth Plan targets as well as an ongoing macroeconomic recovery. We have taken time to analyse the various investment opportunities in road, rail, port and airport infrastructure in Nigeria.

Overall, there is clearly a dearth of investments in infrastructure in Africa generally and Nigeria in particular. The African Development Bank estimates an annual investment of US\$100bn over 10 years to bridge the infrastructural deficit. This ordinarily should create huge opportunities for pension fund administrators, development finance institutions, export credit agencies and commercial banks and there is need for governments to create the relevant regulatory framework to attract investors

SEVERAL REPORTS SHOW THAT THERE HAVE BEEN INCREASED INVESTMENTS IN POWER AND RENEWABLE ENERGY PROJECTS ACROSS AFRICA AND SIGNIFICANTLY LOWER INVESTMENTS IN TRANSPORT PROJECTS IN THE SAID COUNTRIES, WHAT COULD YOU ATTRIBUTE THIS DISPARITY TO?

That is correct. There have been significant increases in investments in power and renewable energy projects than in transport projects. Unlike the power sector, investors are reluctant to invest in the transport sector because of:

- (a) lack of an impartial and independent regulatory authority in the transport sector;
- (b) lack of an enabling environment for private sector participation in the provision of services in the transport sector; and
- (c) lack of an economic regulatory framework for the transport sector.

Recently (2019) the President of the Federal Republic of Nigeria, Muhammadu Buhari, signed an executive order (No. 007 2019 – Road Infrastructure Development and Refurbishment Investment Tax Credit Scheme Order 2019) granting private companies tax credits over a period of time in exchange for building federal roads in Nigeria. Although, this is indeed commendable, however, as compared to the power sector, the transport sector is still in its infancy in terms of private sector investments.

WHAT ROLE DOES REGULATION PLAY IN THE TRANSPORT SECTOR IN AFRICA? IN YOUR EXPERIENCE, HAS THIS BEEN AN ENABLER OR INHIBITOR TO PROJECT DEVELOPMENT?

Of course, regulation is an enabler in project development. However, in Nigeria, lack of regulation in the transport sector has greatly inhibited the growth of the sector. Investors are reluctant to invest in the sector because there is no regulation which amongst others:

1. establishes an impartial and independent regulatory authority for the sector; and



DORIS DIMOHA

G. ELIAS & CO. - PROJECTS AND INFRASTRUCTURE PRACTICE GROUP

FEATURE - BRIDGING AFRICA'S TRANSPORT INFRASTRUCTURE DEFICIT

"Risk allocations and management for typical infrastructure projects would vary depending on the sponsor, nature of the project, location of the project, government support and "goodwill" for the project and the agreement of the parties involved

2. creates an enabling environment for private sector participation

It is expected that this lacuna will be filled by the NTC Bill when it is eventually passed. Thus, boasting private sector participation in the sector which will significantly impact the growth of the sector.

WHAT FINANCING MECHANISMS ARE CURRENTLY AVAILABLE FOR THE FINANCING OF AFRICA'S TRANSPORT INFRASTRUCTURE? WHERE ARE THE FINANCING GAPS?

Most of the investment in transport sector in Nigeria and in much of Africa has traditionally been funded by the public sector through annual budgets. However, for projects generally, the financing mechanisms include:

Loans from Multilateral Financial Institutions - The World Bank and Africa Finance Corporation have been very active in financing projects in Nigeria through various multistate projects. Equally they have been active in the urban sector financing urban upgrading and the provision and rehabilitation of city wide urban infrastructure;

Capital Markets - Municipal loans and state Bonds. So far only two Local Governments in Nigeria could successfully issue municipal bond. They are Lagos Island Local Government in (1992) and Nasarawa Local Government (1993). For the state government bonds a total of 40 bonds were issued between 1978 and 2014 to finance various infrastructure and other projects. The incentives granted for investments in the capital markets have been a driver for activity in the capital markets.

Municipal Fund - The primary objectives of the Infrastructure Development Fund Project, World Bank assisted, were to initiate the establishment of an urban infrastructure financing mechanism in Nigeria, utilizing merchant banks to appraise, supervise and co-finance State urban infrastructure subprojects; and to assist States to improve infrastructure investment planning and programming. Public Private Partnerships - Federal and state governments now consider PPP's as a viable source of financing urban infrastructure.

Local developmental and commercial Financial Institutions - Institutions like Nigeria Sovereign Investment Authority, Infrastructure Credit Guarantee Company Limited (InfraCredit) and other such entities have recently been at the forefront of investments in infrastructure including transport infrastructure.

FINANCING GAPS

First, exposure to currency risk is a critical feature of infrastructure financing. Infrastructure project revenues are often generated in local currencies, while servicing of foreign capital. Fluctuations in the exchange rate of the domestic currency, as well as capital controls limiting currency convertibility and transferability, pose a particularly difficult problem for foreign investors and financiers.

Second, infrastructure investments are typically up-front, with a high degree of asset specificity and risky revenue streams stretching many years into the future. Investors are hesitant to make investments in such circumstances without adequate contractual protection.

Third, the scope for divesting equity holdings in infrastructure investment through IPOs is limited. As a result, project promoters would be locked in their investments for several years.

Fourth, there are very few bankable projects. The project

preparation process is not yet sophisticated enough to address bankability issues from the onset. Challenges in the project preparation stage include securing funding for costly feasibility tests and limited project precedents due to the short history of PPP projects in Nigeria.

Fifth, inadequate legal and regulatory framework hinders infrastructure financing. The Federal government and a number of state governments have made significant strides to create a suitable legal and regulatory framework that will encourage private sector participation in infrastructure development projects.

Sixth, there is high preference for 'Quick Win' Sectors. Most private sector investments in infrastructure have been in quick return sectors such as telecoms. Telecoms projects have a quicker gestation period whilst investment in concessions will be recouped over a much longer period ranging from 25 – 30 years.

Seventh, relatively high cost of projects discourages infrastructure financiers. Due to economic and political factors, the cost of undertaking PPP projects in Nigeria is relatively higher compared to costs of similar projects in other countries. Thus the opportunity cost of financing infrastructure development projects in Nigeria is relatively high.

Eighth, paucity of long-term funds, which is critical. Pension funds are not available as by law, they can invest only in liquid securities and the yield on treasury instruments is high (13 – 14%) and therefore preferable.

WITH EVERY INFRASTRUCTURE PROJECT, SUCCESSFUL MANAGEMENT AND ALLOCATION OF RISK AMONGST STAKEHOLDERS IS A CRITICAL SUCCESS FACTOR, IN YOUR WORDS, WHAT ARE YOUR KEY RECOMMENDATIONS ON HOW STAKEHOLDERS CAN MANAGE PROJECT RISK WHEN INVESTING IN TRANSPORT PROJECTS ACROSS AFRICA?

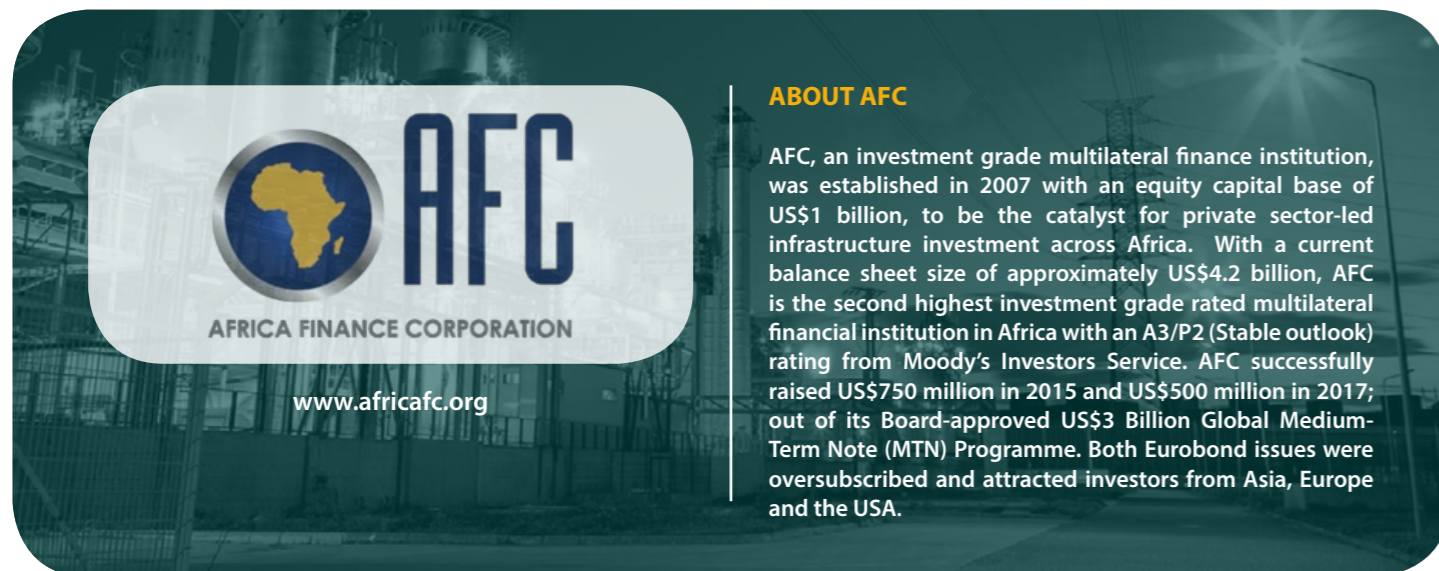
Risks allocations and management for typical infrastructure projects would vary depending on the sponsor, nature of the project, location of the project, government support and "goodwill" for the project and the agreement of the parties involved and effective risk management requires the allocation of risk to stakeholders with high tolerance.

The typical risks in a transport project will include construction, completion and operational risks which could be locked in through extensive warranties and step-in rights (by the financiers).

Political risks and Financial risks could also arise from expropriation, withdrawal of governmental consents/approval and change in law/tax and currency fluctuations. To guard against these risks, government guarantees/support agreements are crucial and management through financial instruments such as derivatives or hedging respectively.

Project risks could be addressed by ensuring early engagement of key stakeholders (community, regulators and government parties), while insurance coverage by project stakeholders be more effective and efficient in managing project risks. With the huge infrastructure deficit in Africa there is need for African governments to declare a state of emergency in infrastructure development, provide a conducive investment environment through robust policy framework and implementation and clear road maps and more support for private participation in infrastructure development.

“ AFC on Investing in Cote D’Ivoire’s Power and Transmission Infrastructure



ABOUT AFC

AFC, an investment grade multilateral finance institution, was established in 2007 with an equity capital base of US\$1 billion, to be the catalyst for private sector-led infrastructure investment across Africa. With a current balance sheet size of approximately US\$4.2 billion, AFC is the second highest investment grade rated multilateral financial institution in Africa with an A3/P2 (Stable outlook) rating from Moody’s Investors Service. AFC successfully raised US\$750 million in 2015 and US\$500 million in 2017; out of its Board-approved US\$3 Billion Global Medium-Term Note (MTN) Programme. Both Eurobond issues were oversubscribed and attracted investors from Asia, Europe and the USA.

AFC INVESTS €174 MILLION IN 44-MW SINGROBO-AHOUATY HYDROELECTRIC POWER AND TRANSMISSION PROJECT IN CÔTE D’IVOIRE

Africa Finance Corporation (“AFC” or the “Corporation”), the leading infrastructure development finance institution in Africa, is pleased to announce financial close of a bridge loan facility contracted by Ivoire Hydro Energy (“IHE”) for the construction of the 44-MW Singrobo-Ahouaty hydroelectric power project (“SAHP” or the “Singrobo-Ahouaty Hydropower Project”) and associated infrastructure. AFC’s commitment towards IHE amounts to a total of €174 million, comprising a majority equity investment of €24.4 million, and a bridge loan facility of €149.6 million. The first disbursement of the bridge loan facility occurred in December 2018.

IHE’s other shareholders include Themis, a project development company, and IHE Holding, a company incorporated by Ekolan Alain Etty, a local entrepreneur. The SAHP will be built by Eiffage, a French leading EPC contractor, selected following an international competitive bidding.

AFC adopted an innovative financing strategy for the project. This involved utilising a bridge loan to shorten the project cycle and commence project construction. SAHP’s financing structure was designed to shorten the development phase for projects of this type from circa 10 years to fewer than 5 years. It is expected that this approach will accelerate the process of developing projects in Africa and enable more power projects to come on stream. AFC arranged the bridge loan facility to kick-start construction while awaiting long-term lenders to secure their final credit approvals. African Development Bank is arranging the long-term debt financing, most of which has already secured approvals.

Côte d’Ivoire currently generates 2,200 MW of electricity making it one of the leading generators of power in West Africa with approximately 70% through thermal generation with the remainder being renewables, mainly hydroelectric. The SAHP will increase the country’s overall power capacity as well as reduce generation costs due to the low operating cost of hydroelectric power. SAHP will also further Côte d’Ivoire’s goal of becoming a forerunner in the field of renewable energy.

In respect to the bridge facility closing, Samaila Zubairu, President & CEO of AFC, commented: “Since 2015, when AFC began working

with SAHP as a financier and co-developer, we have achieved many development milestones. We are proud to be a major investor and facilitator in the Singrobo-Ahouaty Hydropower Project because this new source of renewable power will be integral to Côte d’Ivoire’s economic growth and social development.

“The Singrobo-Ahouaty Hydropower Project is an example of AFC’s objective of supporting Africa in unlocking its economic potential while also attaining attractive returns for our shareholders. As our first equity investment in a hydro Independent Power Producer (“IPP”) and our first power equity investment in a Francophone country, SAHP is an optimal step in diversifying AFC’s power portfolio, building our balance sheet and expanding our reach across French-speaking Africa.

“Oliver Andrews, Executive Director & Chief Investment Officer of AFC, commented on SAHP’s bridge facility: “AFC’s objective is to expedite the continent’s growth. Seeing as SAHP would not be able to continue with development and construction because it was awaiting finalisation of its long-term lenders’ credit approval processes, we decided it was an ideal opening for AFC to get further involved with the Project and continue participating in Africa’s IPP market.”

Tas Anvaripour, CEO of Themis, indicated: “Themis is proud to have contributed to the success of the SAHP, which is the first hydropower IPP to reach financial close in West Africa. Themis joined the original developers back in 2013 when the project was still in the feasibility stage. Complementary skills between the local sponsor, AFC and Themis was a project key success factor.

“Ekolan Alain Etty, the majority shareholder of IHE Holdings, said: “I am very pleased to see SAHP taking another stride towards development. Since I began working as an engineer in 1981, I have seen first-hand the opportunities electrification brings to a country. Today, however, it is not enough to have just power. We need a cost effective renewable and sustainable energy source so that development is inclusive and does not adversely affect the environment. The Singrobo-Ahouaty Hydropower Project achieves all of these objectives.”

“ IFC on Restoring the Transgabonais Railway System



AN IMPROVED RAILWAY PUTS GABON ON THE RIGHT TRACK

An eight-year-long, €315 million (\$362 million) investment program and recovery plan supported by IFC is helping restore the transport capacity of the Transgabonais railway. The project will lower the railway’s direct operating cost while fostering national economic growth through improved, shared infrastructure. The financing was awarded to Société d’Exploitation du Transgabonais (SETRAG), the concessionaire that has run the 650-kilometer Transgabonais rail line since 2005. The rehabilitated railway will provide an efficient, cost-effective transport solution for mining companies and general freight clients—facilitating firms’ access to markets, industrial investment, and economic growth in Gabon. The improved network will also offer a cleaner and safer form of transportation to more than 300,000 passengers who travel via train annually.

Over the past 40 years, Gabon’s oil wealth has made it one of the few middle-income countries on the African continent. However, Gabon’s human development indicators are well below those of countries with similar GDP per capita, and income inequality remains high. Against this backdrop, oil production is now declining. To strengthen Gabon’s economy and better serve its citizens, Gabon’s government

is diversifying the sources of economic growth—and paying special attention to the development potential of its mining sector. A better railway system will play a transformational role. By reliably transporting manganese, wood products, and agricultural products bound for export, the rehabilitated Transgabonais—a single-track, standard gauge line that links the city of Franceville in Gabon’s eastern mining region via 23 stations to its main port of Owendo—can contribute to Gabon’s economic diversification.

Once the rehabilitation of the railway infrastructure and overhaul of operating procedures are completed in 2022, the daily transport capacity of the rail line will double to 16 train roundtrips. This will effectively add the equivalent of up to 20 million tons per year of long-haul mining transport capacity.

This added capacity will be delivered at a lower cost: projected transport tariffs are expected to decrease by at least 15 percent in real terms by 2022, compared to 2015, when the project was launched. The lower tariffs will be sustainable because SETRAG achieved profitability in 2017—two years ahead of schedule. These benefits will reach many Gabonese. Projections indicate that tens of thousands of direct and indirect jobs could be created in the mining and agricultural sectors because of the rehabilitated transport infrastructure.



ABOUT IFC

IFC, a member of the World Bank Group, is the largest global development institution focused on the private sector in emerging markets. Working with more than 2,000 businesses worldwide, we use our capital, expertise, and influence to create markets and opportunities in the toughest areas of the world. In FY17, we delivered a record \$19.3 billion in long-term financing for developing countries, leveraging the power of the private sector to help end poverty and boost shared prosperity.

Nathaniel Lowbeer-Lewis on the Need for Innovative Ways to Combine Public and Private Funds to Achieve Desired Outcomes



NATHANIEL LOWBEER-LEWIS

CPCS - MANAGING DIRECTOR, Infrastructure Development

Is your institution currently invested in transport projects in Africa? What has been your experience so far?

CPCS has been involved in the transportation sector in Africa for over 40 years. Indeed, our company began as the international consulting arm of the Canadian Pacific Railway Company, so transportation is in our DNA.

Over the years, we have advised African governments and financial institutions on everything from transport master plans to the privatization and concessioning of ports and railways. While this advisory work continues, more recently as a captive developer for InfraCo Africa, we have been putting our years of advisory experience into practice by developing of transport projects. We've been working on some water ferry and logistics projects that have significant promise.

In your words, what are the key challenges to developing Africa's transport infrastructure?

Let's remember, Africa consists of 54 countries and each one has its own unique challenges. There are, however, some currents that cut across the region. Willingness to pay is a complex issue, although one that is not unique to Africa. In general, transportation projects, especially those that transport people and not freight, cannot be financed on a full cost recovery basis. While the economic benefits of a transport project may be positive for the economy as a whole, they don't necessarily accrue entirely to the operator. Consequently, governments or other organizations need to step in and offer support for projects to get built. And therein lies the second issue. Capital costs, especially for big projects like highways, metros and railways, can be large. Financing, whether it's public or private can then become an issue.

More importantly than just the quantum, of funds however, is that traditional project finance structures, that have for example enabled many independent power projects, are less applicable in the sector as the underlying cash flows don't always support the debt payments.

A final challenge is regional interoperability and cooperation. As I mentioned at the beginning, Africa has 54 countries. That means 54 sets of standards and 54 different political decision makers, among other things. This can create headaches for regional integration, which in turn can have a negative impact on trade and flows of people and goods.

What success stories come to mind when you look at the growth in investments into the transport sector in Africa? Are there many investable opportunities for private sector?

Port privatizations have been, in general, quite successful across the continent. This is aided by the fact that ports are generally revenue generating, so privatization is relatively easier than, say a passenger railway or metro.

Another potential success story in Africa is bus rapid transit. BRTs are inefficient and cost effective mode of transport and have been very successful in other emerging markets. The initial success of BRT projects in Lagos and Dar es Salaam attest to the potential across the continent.



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Capitalizing on new pools of finance, such as green finance or climate finance is another interesting avenue for transportation projects to exploit

In addition to PPP's, what other development approaches could be acclimatised to financing transport projects in Africa?

Looking at innovative ways to combine public and private funds to achieve desired outcomes is critical for success. For example, in the rail sector, moving towards open access - basically allowing private operators to use public rails - can offer an interesting middle ground between fully public or private modes of operation and the challenges associated with each of these paths. In a classic open access model, governments are responsible for building the high-capital infrastructure, such as the actual rail lines while the private sector is allowed to operate services on the public raise. This can increase efficiency and reliability while avoiding the need to finance large capex projects in the private markets.

Capitalizing on new pools of finance, such as green finance or climate finance is another interesting avenue for transportation projects to exploit. Many mass transit projects can significantly reduce carbon emissions and as such can be eligible for climate finance, which has proliferated with impressive speed over the past few years.

Reports show that the lack of and deteriorated state of Africa's transport infrastructure has resulted in high intra-Africa transportation costs and could be credited for the reported low intra-African trade margins, what are your key recommendations on what needs to be done to address these challenges?

Greater regional cooperation and planning is key and will help unlock greater trade if the right investments can be made in a coordinated matter. Using evidence to support these decisions is also critical, and will help ensure that investments that are made contribute in a positive way to economic growth and trade.

Don't forget that smaller issues, such as border efficiency, adequate parking and maintenance facilities, and other details can provide significant increases to efficiency without having to write huge cheques. Finally, innovation is key. We need to look as a region to more innovative solutions for transportation infrastructure, that support the regions goals of increasing trade and development and also are mindful of our growing impact on the environment.

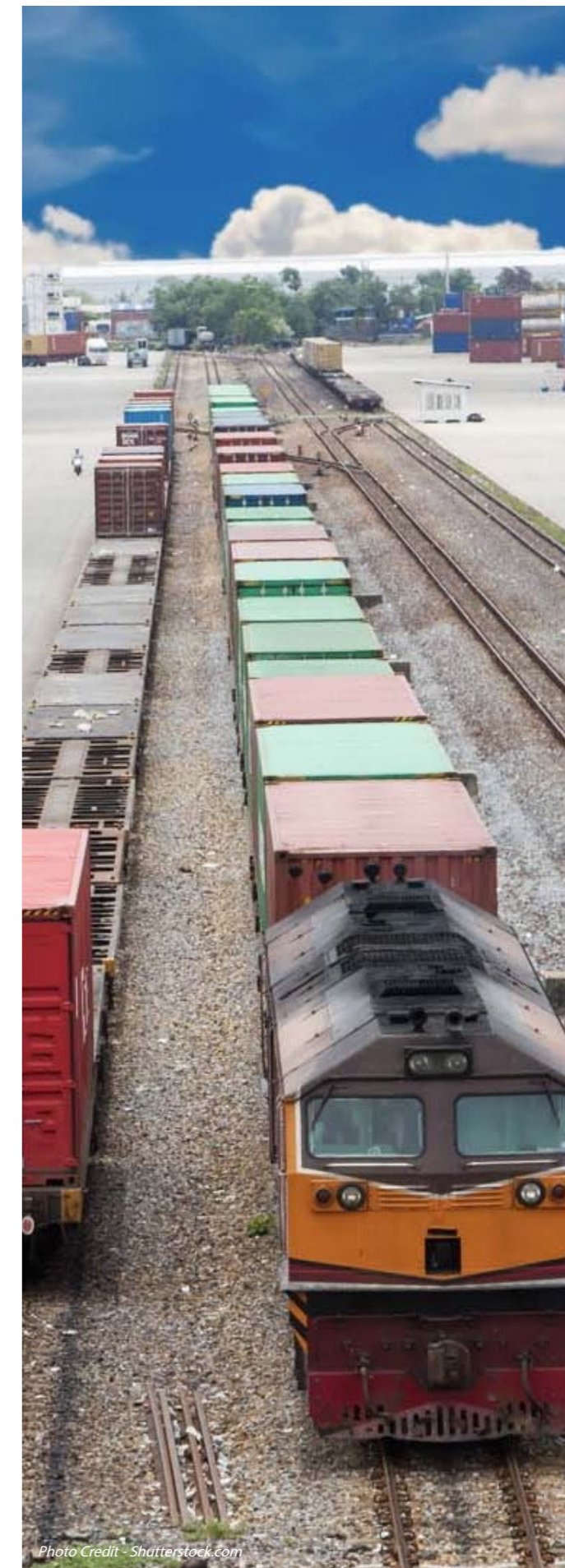


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Themis on Investing in Nigeria's Gas to Power Projects



www.themisafrica.com

ABOUT THEMIS

Themis is an Africa-centric power generation company focused on renewable and gas-fired power projects. The team, headquartered in Casablanca, Morocco, has a proven track record in Africa and extensive execution capabilities, including a 2,000MW project pipeline. Themis landmark references are the USD350 million 80MW thermal power plant in Rwanda, which reached financial close in 2017, and the EUR195 million 44MW hydroelectric plant in Côte d'Ivoire, which reached financial close in 2018.

THEMIS AND KINGLINE PARTNER TO DEVELOP A 550MW NATURAL GAS-FIRED POWER PROJECT IN NIGERIA

The landmark project will be fully operational by 2022. Set to become one of the world's lowest cost gas-to-power facilities, providing 4.5TWh of secure, affordable energy.

Themis, an Africa-focussed power company backed by Denham Capital, today announced a new partnership with Kingline Development Nigeria Limited (Kingline) to develop a 550MW natural gas-fired power plant in Ondo State, Nigeria.

The Kingline Power Project is currently in its development stage with a target to proceed to financial close by Q2 2020, becoming fully operational in 2022. It will be located on 111 hectares of land in the Ondo State Industrial Park, adjacent to the existing Omotosho Power Plant.

At a Project cost of approximately USD600 million, the Project will be one of the lowest cost gas-to-power facilities in the international market. The Project pricing is underpinned by a signed EPC Agreement with an international contractor who has successfully delivered over 4,000MW of gas fired power plants in Africa. Accordingly, the Project has already attracted significant interest from multilateral and private institutions in arranging project debt, while the project

equity requirements can be fully funded by the existing partners, with Denham Capital being the majority shareholder.

On completion, the Project is expected to provide approximately 4.5TWh of affordable energy via a highly competitive, cost-reflective tariff structure, which is expected to have a positive impact on the cost of electricity in Nigeria, delivering long-term value and affordability for energy consumers.

Tas Anvaripour, CEO of Neo Themis, commented: "Our partnership with Kingline has already presented synergies that will contribute to the successful development of the Project. Themis' involvement in the Project has played a fundamental role in laying the foundations for what can become the lowest cost-per-MW thermal plant in Nigeria. Kingline offers compelling advantages for the Federal Government of Nigeria given its extremely competitive pricing, availability of peripheral gas and transmission infrastructure, timing to operation, and technical flexibility."

Sean Kim, CEO of Kingline, added: "We are excited to be working with Themis, who bring critical expertise and extensive power development experience, as well as proven access to financial markets. The Project has strong technical and financial support and will deliver a power solution for Nigeria, cost-competitive within any international market."



Photo Credit - Shutterstock.com

ENGIE Investing in Zambia's Energy Infrastructure



Source: ENGIE

ENGIE INAUGURATES FIRST MINI-GRID IN ZAMBIA AND ACCELERATES ITS ELECTRIFICATION EFFORTS IN AFRICA

ENGIE inaugurated today its first PowerCorner in the Zambian village of Chitandika in presence of Matthew Nkhuwa, the Zambian Minister of Energy, ENGIE's leadership team as well as local stakeholders. Chitandika, located in the East of Zambia, counts 378 households (1500 inhabitants) who previously were deprived access to electricity. With the installation of this first PowerCorner, ENGIE confirms its progress in off-grid renewable energy solutions to improve electricity access in Africa.

This mini-grid provides energy to households and local businesses and supports public services such as the Rural Health Centre and 2 schools. ENGIE's PowerCorner will foster economic development by enabling other electrical productive uses (such as water pumping for agriculture use or carpentry and welding machines) and by triggering business opportunities for entrepreneurs in the village.

ENGIE has successfully developed its own approach to mini-grids for the electrification of villages in Tanzania in addition to Zambia with a total of 13 mini-grids in operation or construction. ENGIE is pursuing its goal to develop 2,000 mini-grids by 2025 in Africa enabling 2.5 million people, entrepreneurs, SMEs and local businesses to access renewable, reliable and cost-effective energy. As part of its decentralized energy developments, ENGIE is also expanding Fenix, its solar home system business. Since the launch of its operations in Zambia in October 2017, ENGIE Fenix has reached 70,000 customers in the country, supplying 350,000 people with clean lighting and power. To date, Fenix has sold over 400,000 solar home systems across Uganda, Zambia, Nigeria, the Ivory Coast and Benin, changing the lives of over 2 million people.

Isabelle Kocher, CEO of ENGIE, said: "At ENGIE, we believe that universal access to electricity is possible in the foreseeable future thanks to a smart combination of national grid extensions, mini-grids and solar home systems, depending on the local characteristics of energy demand. ENGIE is already present along the whole spectrum of solutions with its subsidiaries PowerCorner and Fenix for off-grid solutions, and utility-scale grid connected generation such as Kathu, our 100 MW concentrated solar power plant in South Africa. Within a constantly changing world, it is ENGIE's role to make a cost-efficient zero-carbon transition possible for the benefit of the African population."



www.engie.com

ABOUT ENGIE

Our group is a global reference in low-carbon energy and services. In response to the urgency of climate change, our ambition is to become the world leader in the zero carbon transition of our customers, in particular businesses and local authorities. We rely on our key businesses (renewable energy, gas, services) to offer competitive turnkey solutions "as a service".

For over 50 years, ENGIE has been active in many African countries through its energy engineering business and more recently as an independent power producer in South Africa and Morocco with a total capacity of 3,000 MW either in operation or under construction. By 2025, ENGIE wants to be a reference partner in several African countries for power plants, energy services to businesses and decentralized solutions for off-grid customers – communities, companies and households. ENGIE already has more than 1.5 million customers with domestic solar installations and local microgrids, and aims to become one of the viable leaders on the continent's off-grid service market.

Traffic Risk Versus Availability Payments On Toll Roads

Identifying, Reducing And Managing Traffic Risk

DEBUNKING TOLL-ROAD PPPS AND TRAFFIC RISK

World Bank reports argue that Public-private partnerships (PPPs) could habitually be regarded as the ideal resolution for governments balancing inadequate budgets and growing infrastructure demands. The idea of the private sector raising finance to fund construction and improvements to highway infrastructure, to be recovered through future toll payments from road users, could be attractive to cash-strapped governments in both developed and developing countries. Reports show that records of failed high-profile toll-highway PPPs demonstrate that the implementation of such projects is often not as straightforward as many governments envisage.

Several reports attribute these failures to traffic volumes (and the subsequent toll revenues) that could be significantly different from what was initially forecast. This risk of actual traffic being lower (or higher) than the forecast, and the erroneousness of traffic forecasts, is referred to as traffic risk. Traffic risk has been evident in many projects, leading to several financially distressed toll-road assets, which in turn could lead to high-profile bankruptcies, renegotiations and government bailouts.

Such failures have led to increased private financiers' cognisance of traffic (and revenue) risk and have become more risk-averse towards highway PPP projects increasingly. Findings show increased support for projects that provides financiers with significant shelter from the risk of lower traffic flows or that apportion these risks wholly to the government. Financiers operating in today's project-finance market have the choice of either adding significant risk pricing to their financing or electing not to invest in the project at all.

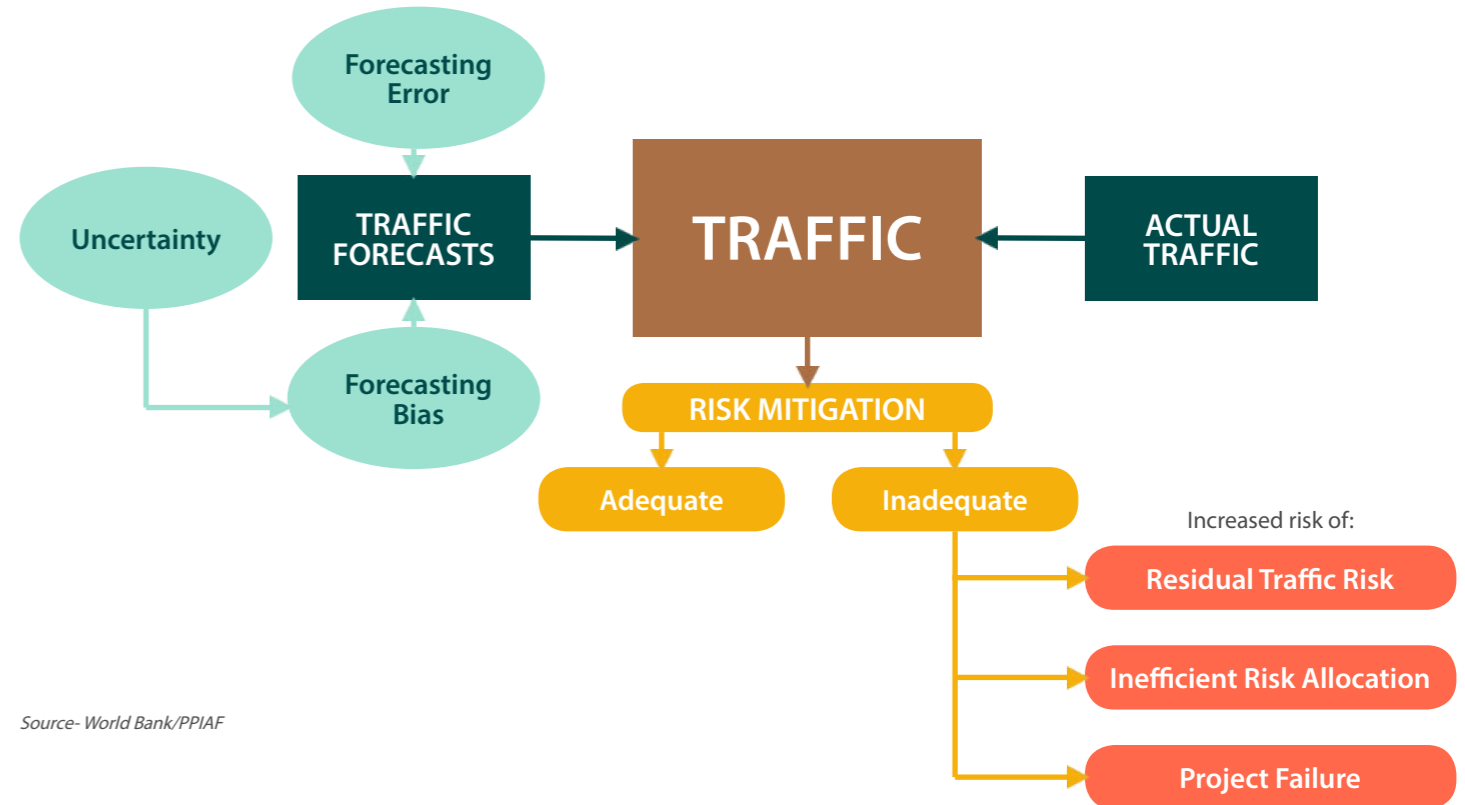


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Traffic Risk Versus Availability Payments On Toll Roads - Identifying, Reducing And Managing Traffic Risk

The Cause and Effect of Traffic Risk



Source- World Bank/PPIAF

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It is interesting to note that while traffic risk is imminent, project parties have the ability to minimise the impact and residual risk by allocating the risk to the party that can most efficiently manage it. Therefore, this approach could reduce the risk of project failure and capital flight from road projects. It is this entire causal process, from how traffic risk arises through to how it can be reduced and then managed/ allocated, that diffuses the structure of the guide.

Historically, governments have raised both public and private finance to fund highway construction and improvements against the cash flows of future toll revenues. There is always a risk that actual traffic and revenues may be lower than forecast, which could perpetrate damage on financiers and possibly on road users and governments which could result in relatively few projects reaching financial close.

SOURCES OF TRAFFIC AND REVENUE RISK

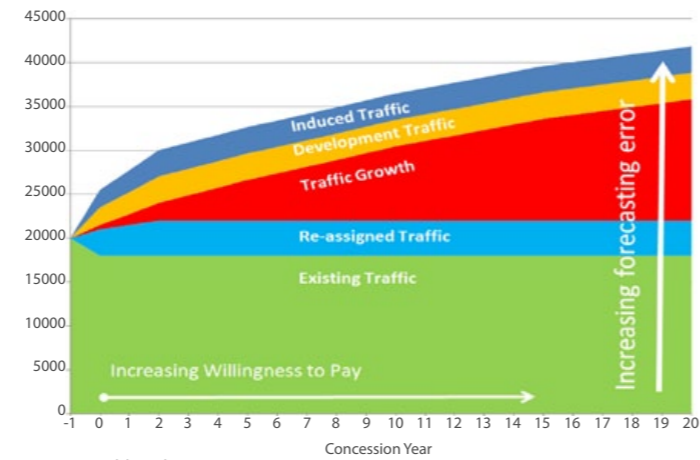
Forecasting Error and Forecasting Bias

Reports show that the probabilistic nature of forecasting lends itself to errors and that the extent of the errors is dependent on the type of traffic being forecasted. Findings also show that traffic forecasts are prone to optimism bias, which could misinform project parties into believing they are less exposed to risks than similar projects. Optimism bias typically starts with government promoters who are seeking project approval and could extend to scheme sponsors/ bidders keen to win a bid by minimising the cost to the government. Forecasting bias could also extend to 3rd party financiers who may be pressured, incentivised or poorly positioned to do adequate due diligence.

According to the World Bank, the potential deviation between predicted and actual traffic volumes becomes critically important if some or all of a project's costs are to be recovered from users through toll payments. Notwithstanding whether a project is publicly or privately financed, revenues could be compromised if the forecast is higher than the actual revenue resulting in financial losses. However, in instances where the forecast is lower than the revenues, there could be allegations of profiteering to the detriment of road users.

Results show that while traffic risk is present in all projects funded partially or entirely by toll revenues, it is most critical in projects financed by the private sector.

Therefore, for governments to attract and sustain private investment in their transport infrastructure, the perceived range of future traffic levels and expected revenue forecasts must be lessened as much as possible to reduce uncertainty around the investment. Only by achieving this will private capital view a toll-highway asset as sufficiently stable to attract and sustain a reasonable cost of capital.



Source- World Bank/PPIAF

GOVERNMENTS' ROLE IN REDUCING AND MITIGATING TRAFFIC AND REVENUE RISK

Several findings recommend that in order to mitigate traffic risk, governments should; contract reputable consultants to undertake independent traffic studies which highlight robust risk analyses that would inform risk allocation decisions, establish clear policy intentions to address exogenous risk and ensure adherence to contractual obligations that would foster consistent revenues. The reports also encourage governments to align bidder incentives with deliverables.

CATEGORY	LOW TRAFFIC RISK	MEDIUM TRAFFIC RISK	HIGH TRAFFIC RISK
Type of Asset	Brown field highway improvements with existing traffic flows	Existing highways that require substantial improvements or extensions or partially developed	Greenfield or very early stages of development
Level of User Benefit	Offer substantial benefit to users and address clear transport need	Offer significant benefit to users and address a transport need	Offer small, difficult to monetize, user benefits and do not address a specific need
Traffic Mix	Designed to attract peak traffic movements and/or relieve severe congestion	Expected to attract mix of peak and off-peak trips and/or relieve areas of reasonable congestion	Expected to attract high proportion of discretionary trips and not relieve congestion
Integration	Efficiently linked to highway network with few competing alternatives	Reasonably linked to highway network with some competing alternatives	Not well-linked to existing network and experience strong competition
Toll Strategy & Willingness to Pay	Have a relatively simple, transparent toll strategy with WTP demonstrated by revealed preference	Simple toll strategy with some discounts offered and WTP demonstrated by stated preference	Have a complex toll strategy and no history of willingness to
Policy	Government policy on approach to expanding competing network is clear	Government committed to expand competing network but within specified horizon	Government's policy to expanding competing network is unclear and unpredictable

Source- World Bank/PPIAF

Traffic forecasts play a crucial role in the development of future transport infrastructure by enabling the assessment of project economic feasibility, infrastructure design and revenue-generating potential by governments

THE IMPORTANCE OF TRAFFIC FORECASTING

Traffic forecasts play a crucial role in the development of future transport infrastructure by enabling the assessment of project economic feasibility, infrastructure design and revenue-generating potential by governments. Existing traffic often forms much of the projected demand for an upgraded highway, particularly in the early years of a concession. Existing traffic is also important for greenfield

projects because the forecaster needs to establish demand on the competing network from which demand for the new road will be captured.

Reports show that while inaccuracies in any forecast are eminent, existing traffic generally is less susceptible to forecasting error. It is important for traffic studies assumed to take account of existing traffic conditions by undertaking a program of traffic surveys.

Forecasting-Error Sources and Reduction Measures

FORECASTING ELEMENT	SOURCE OF ERROR	ERROR-REDUCTION MEASURES
Existing traffic	<ul style="list-style-type: none"> Traffic surveys Annualization factors 	<ul style="list-style-type: none"> Extensive traffic-data collection Up-to-date traffic data High sample rates Time-series data User-class and time-period disaggregation
Re-assigned traffic	<ul style="list-style-type: none"> Travel-demand model 	<ul style="list-style-type: none"> TDM validation following industry standards Accurate scheme specification and network coding Controlled matrix estimation Model-validation report
Diverted traffic: willingness to pay	<ul style="list-style-type: none"> Revealed- or stated preference surveys Traffic-capture model Toll-diversion curves 	<ul style="list-style-type: none"> Benchmarking willingness-to-pay parameters User-class disaggregation Realistic scheme benefits (time, distance, motorway bonus) If stated preference is required, employ a specialist market-research company Pilot surveys Sensitivity testing

Source- World Bank/PPIAF

UNCERTAINTY: FORECASTING FUTURE TRAFFIC

It is interesting to note findings which demonstrate that regardless of how the forecaster develops the traffic-growth model, the relationship between economic growth and traffic growth is typically the most important relationship to establish in a traffic forecast. Evidence suggests that toll-highway traffic is more susceptible to economic downturns than toll-free highway traffic.

Reports delve into the Ramp-up period and describe this as the performance of a toll highway regarding traffic and revenues during the early years of a concession. The ramp-up period is a pivotal precursor to the financial viability of the concession, and the diverse nature of the projects makes it difficult to assess accurately. Notwithstanding statistically robust traffic-growth models, the overall reliability of the model is dependent on the assumptions made for the forecasts of the socioeconomic variables themselves.

World Bank/Public-Private Infrastructure Advisory Facility (PPIAF) reports argue that If governments do not provide any information about their own traffic studies, there is a likelihood for more significant discrepancies among the bidders' forecasts which could lead to value uncertainty. Alternatively, if governments provide the traffic study or key information sources that led to it, there is a higher probability of reduced variances of traffic forecasts among bidders and reduce the uncertainty around traffic and revenue predictions.

STRUCTURING AND ALLOCATING TRAFFIC RISK

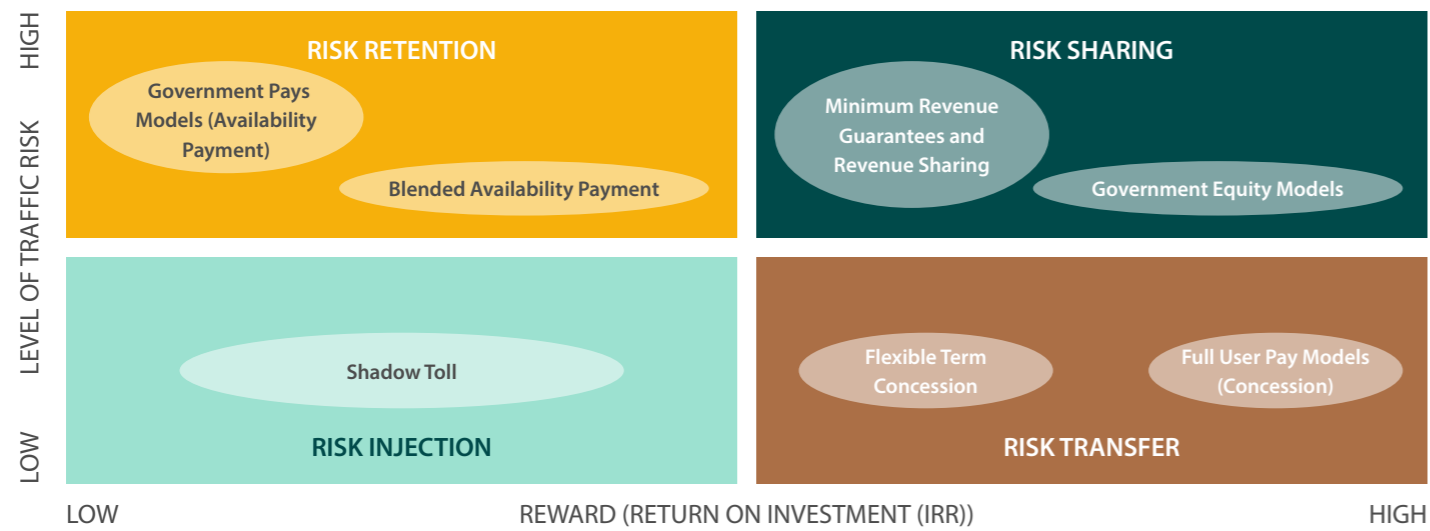
Results show that the allocation of traffic risk should adhere to the general principle of assigning the risk to the party best positioned to manage it. Usually, the higher the traffic risk, the less manageable the risk is for the private sector. Findings attribute this to the private sector's lack of policy tools or financial capacity to efficiently reduce and absorb the risk. Therefore, if high levels of traffic risk are transferred to the private sector, that can lead to the project being unbankable or unaffordable if the private-sector partner must aggressively price risk.

Additionally, governments also need to understand and address the residual risk present in all road projects through deal structuring processes by assessing the bankability, affordability and risk transfer of a project in a way that is satisfactory to all parties. Projects that are not cognizant of the three aspects may not be sustainable in the long term.

Continued from page 28

Continued from page 27

Forecasting Error and Forecasting Bias



Source- World Bank/PPIAF

GOVERNMENT-PAYS MODELS: AVAILABILITY PAYMENT

There has been growing interest in payment models that adequately allocate risk and ensure enhanced private sector participation. In the Availability-Payment (AP) model, the public sector assumes all traffic risk while the private sector uses its working capital to operate and maintain the highway and is reimbursed by conditioned periodic fixed payments from the government. However, this raises the question of capacity and African governments ability to absorb all traffic risks.

The availability-payment model is intended to remove lenders' exposure to traffic risk, by delinking the private sector's revenue from the level of traffic. This reduction in risk will likely reduce the overall cost of financing because the risk premium is reduced or eliminated, which allows lenders to provide more debt in place of equity. However, reports show that the AP model is susceptible to risks like government-payment risk due to the private sectors over-dependence on government revenue and that this could be particularly challenging for fiscally distressed governments.

If the availability-payment is backed up by toll revenues, one could argue that the private sector is still exposed to some traffic risk because any inaccuracy in the traffic and revenue forecasts could reduce the amount of payment security available. Thus, even in availability-payment models, it is not always possible for the private sector to completely dismiss traffic risk.

Availability-payments could be deemed as the most bankable structuring solution vis-à-vis transferring traffic risk, but the affordability and the liabilities of the government need to be assessed on a project basis to account for potential prevailing payment risks. Reports also show that the AP model may be ineffective for projects whose economics are weak.

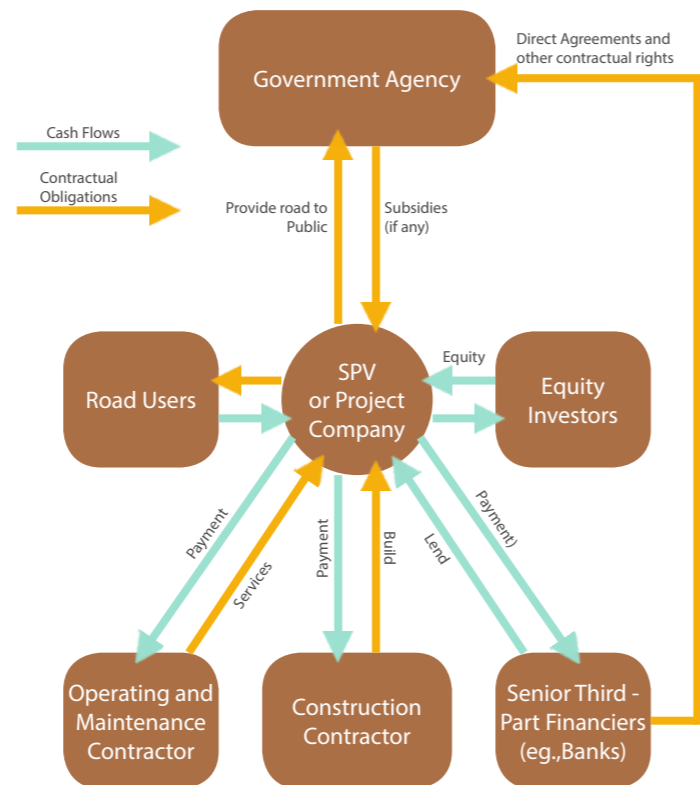
GOVERNMENT-PAYS MODELS: BLENDED-AVAILABILITY PAYMENT

The ability to combine government payments with toll revenues is well espoused in the Blended-Availability model which lends itself to scenarios where project financial feasibility is deemed weak but could also be applied to reduce or offset the availability-payment

obligation. Findings further caution the potency of this model as underpinned by moderate traffic risk as the model could expose the private sector to payment and traffic risks.

Therefore, the blended-availability payment structures could be best suited for cases with low financial viability but minimal traffic risk. Allowing the private sector to benefit from the toll revenues can then help reduce the fiscal pressure on the government which also. Likewise, it safeguards the government from any downside traffic risk and therefore makes budgeting more straightforward.

Typical PPP Contract Structure



Source- World Bank/PPIAF

“The availability-payment model is intended to remove lenders' exposure to traffic risk, by delinking the private sector's revenue from the level of traffic

Findings show that Availability Payments could be regarded as advantageous due to the limited level diversion of traffic to other roadways since users themselves do not pay tolls. AP concessions signify a shift of substantial risk from private investors back to taxpayers.

THE AP CONCESSIONS ADVANTAGE IN HIGHWAY INFRASTRUCTURE

Reports show that AP concessions sensible because of project complexity, where more than the usual number of players would have to work together on a technically complex project. AP concessions could be used where corridor improvements are needed, but toll revenue will only support a portion of the overall project cost. The AP structure enables significant construction risk transfer and should result in a cost-efficient delivery mechanism with a guaranteed price and date of delivery.

LIMITATIONS OF AP CONCESSIONS FOR HIGHWAYS

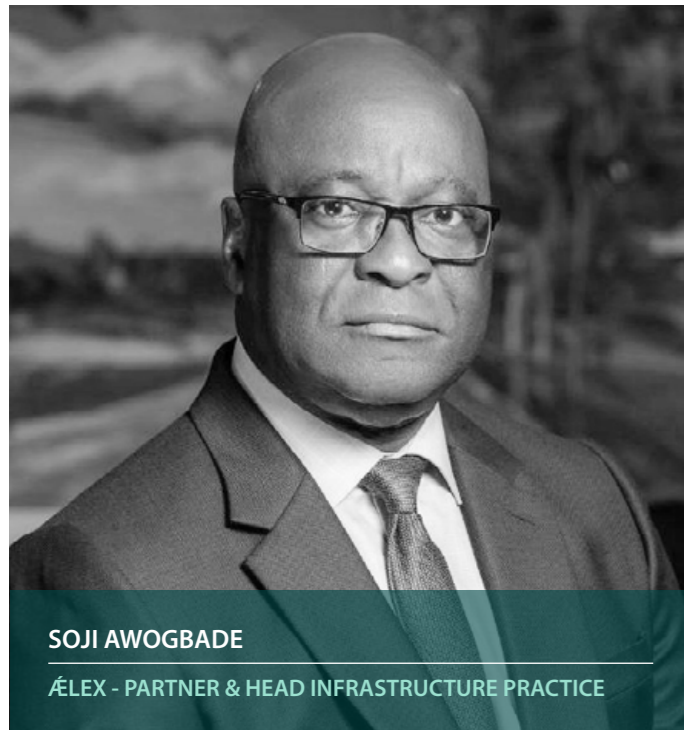
According to the Reason Foundation, AP concessions represent a significant enhancement over traditional design-bid-build and design-build procurement methods, especially for large and complex transportation projects. Regarding the highways and bridges sector, AP concessions have a number of inadequacies, compared with revenue-risk concessions and policymakers cognizant of these differences in deciding which type of concession to use on individual projects.

Availability payment concessions can fill important niches in conditions where real tolling is mismatched with the project's purpose, or where toll revenues may be too small or too uncertain to permit a project to be financed on that basis.



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Soji Awogbade and Ugonna Ogbuagu on Accurate Traffic Forecasting as the only Determinant of Project Economic Viability by Either Government or the Project Sponsor



SOJI AWOGBADE

ALEX - PARTNER & HEAD INFRASTRUCTURE PRACTICE

What role does accurate traffic forecasting play in managing traffic risk?

Accurate traffic forecasting is the only means by which either government or the project sponsor can determine the economic viability of the project. It provides the information required for the proper allocation of traffic risk; and it determines participation and financing options as well as the length of the concession.

It is also required for efficient design, as accurate data on traffic growth projections would influence the design of a road project. Perhaps no other road project in Nigeria in recent times accentuates the need for accurate traffic forecasting like the Lekki Toll Road, which has witnessed adjustment to the original design in order to accommodate increasing traffic.

Apart from design changes, inaccurate forecasting has also led to bankruptcies, distressed projects, renegotiations, or bailouts. A well-known example is the Indiana Toll Road in the USA where it was projected that traffic volumes would increase at a rate of 22 percent over the first seven years. Instead, traffic volumes shrank 11 percent in the first eight years. The concession company declared bankruptcy in September 2014 with a debt of almost US\$5.6 billion.

Reports by the PPIAF show that governments continue to seek both public and private sector finance to fund highway construction and improvements, however, there is an imminent mismatch between actual traffic and revenue forecasts which could have an adverse impact on financiers, road users and governments alike. In your words, how can these challenges be addressed to ensure that projects reach financial close?

Project sponsors, road users, and governments typically have varying interests in the development of traffic infrastructure. This delicate balancing act lies in aligning the interests of all parties.

This balancing of risk exposure will ensure that risks are allocated

such that risk falls to the party that can efficiently bear it. Project sponsors would be persuaded to close if they receive assurances from government of returns on their investments. These assurances could be in the form of concession term extensions, shadow tolls, minimum revenue guarantees, an availability payment arrangement, debt guarantees and exchange rate guarantees.

The support of institutions like the Multilateral Investment Guarantee Agency (MIGA) can be crucial in this regard. MIGA de-risks features of such projects by issuing construction, liquidity and termination guarantees.

According to a World Bank report, while PPPs could be a viable solution for cash-strapped governments to finance transport infrastructure with the promise of future payments through tolls, implementation is often challenging. With reported high traffic risk resulting from disparities between forecasts and actual revenue, what would be a viable financing approach?

A viable financing approach would be that which has been adopted in projects carried out in France and Spain. In essence, once the profit falls beyond a certain threshold, the compensation (which may include the change in contract length, increase in tolls, or provision of public subsidies) will set in. It was adopted in the Toll Highway Concessions of the Madrid Metropolitan Area.

Another approach may be to guarantee the annual traffic or revenue, as has been deployed in Chile in several road projects including the Red Vial Litoral Central concession for the construction of an inter-urban highway. This approach typically has both a lower band and an upper band.

Another viable financing approach may be to match the duration of the concession to the revenue. This model was adopted in the construction of the Severn Bridge in the United Kingdom. Once the stipulated revenue is collected, the concession is automatically determined.



UGONNA OGBUAGU

ALEX - SENIOR ASSOCIATE

Availability payment concessions could be an effective risk management tool as it addresses unpredictable user demand in user fee revenue-based projects

Reports show that pure availability-based payment structures avoid the transfer of risk to the private sector. Do you think this would be a sustainable approach for Africa's transport infrastructure needs? Do African governments have the capacity to bear all the risk?

A pure-availability-based payment structure will reduce the private investor's risk exposure and encourage its participation in infrastructure development. However, this structure contemplates amongst other things (i) a predetermined performance-based payment plan; and (ii) periodic performance evaluation of private partners.

Whilst the merit of this model is clear and attractive, its sustainability in Africa is highly doubtful, as many African governments may not have the capacity to bear the associated risk. Indeed, given propensity for bureaucratic bottlenecks and political uncertainties in Africa, there is the possibility that governments will be irregular in their performance evaluation and payments to private partners.

Risk allocation is a significant aspect of managing traffic risk, who is currently bearing the risk and how can the allocation of risk be managed sustainably? Could Availability payment concessions be used as risk management tools?

There is no uniform model for risk allocation. Instead, the contractual terms for each individual project determines who bears the risk. However, risk allocation must be based on an assessment or evaluation of the project characteristics, such as the contract structure (including payment mechanism), the size and complexity of the project, the risk profile of the parties, and float. This would ensure that risk is allocated to the entity best able to manage it.

Availability payment concessions could be an effective risk management tool as it addresses unpredictable user demand in user fee revenue-based projects. This is because the monthly payments made by government guarantees revenue for the concessionaire during the concession period.

Reports show an increased interest in the Government Builds, Tolls then Sells (GBTS) model, where the government bears the Traffic Risk during the ramp up phase, while private sector bears the risk post ramp up stage. Do you think this approach would be successfully adopted in Africa? What are the possible limitations?

There would be significant problems with the implementation of the GBTS model in Africa. The model, which contemplates the transfer of the financing and development obligations to government, poses a few challenges to governments in Africa.

Many governments in Africa are financially constrained in receding economies, high inflation, foreign exchange constraints, and internal conflicts, and do not have the resources to finance large scale projects, hence the increased reliance on PPPs for the financing and development of infrastructure. In view of the expectation of private investment to finance and develop infrastructure assets, the imposition of the burden to raise funds on government may be unrealistic.

Besides, it is common for citizens to exhibit a sense of entitlement to the non-charge use of public infrastructure constructed out of public funds. Therefore, the tolling by government on such infrastructure and/or its eventual sale to private investors would likely be met by public resistance which would affect the economic viability of the model.

There have been several successful and failed toll road projects, South Africa's e-toll project being one of such unsuccessful project, what are your 10 recommendations on how stakeholders can ensure successful development of transport infrastructure in Africa?

1. A Government must have PPP legislation (which creates a specialised PPP unit) that must be consistent with other existing laws.
2. The PPP unit (established under the PPP legislation) must work within their defined scope of authority with other government ministries, departments or agencies to implement projects alongside private sector participants.
3. Government must ensure that its economic policies are consistent. Policy flip-flops have discouraged private investment in infrastructure in Nigeria.
4. Project sponsors should conduct extensive due diligence on a project, including traffic forecasts using independent and competent experts.
5. There must be proper risk allocation between the public and private sectors before an investment in road infrastructure takes place.
6. To mitigate a private investor's risk exposure, government must be willing to offer guarantees (or issue other acceptable assurances).
7. Government should ensure that the project procurement and development process is transparent. This will reduce public resistance to the imposition of tolls or other user fees.
8. Government must be willing to assist private investors during the implementation of projects, such as by obtaining land and right-of-way access, liaising with end users and host communities.
9. Toll fees for road toll projects must not be exorbitant. This would reduce public resistance to the imposition of the toll.
10. Investors may approach MIGA for the provision of political risk insurance to private sector investors.

Ragnar Gerig on the need for Economically Viable and Realistically projected Traffic Volumes to Attract Private Sector Investors

What role does accurate traffic forecasting play in managing traffic risk?

Accurate forecasting plays a crucial role in mitigating traffic risk. The private sector's ability to finance toll-road projects is heavily dependent on the predictability and reliability of revenues and the traffic forecasts that underpin them.

First of all, the traffic forecasts serve as input for net-present value calculations and economic internal-rate-of-return calculations. If the forecasts are not accurate, the project might turn out to be unable to cover debt service or the project does not receive financing in the first place. This is especially relevant for greenfield projects in urban areas, in which many alternative routes are available for end-users.

Accurate traffic forecasts are very challenging since the results depend on a series of assumptions with considerable uncertainties (e.g. long-term GDP growth, development of purchasing power, development of traffic growth, existing/future alternatives to toll roads, acceptance of toll fees by the population, etc.); furthermore, the responses from interviewed people are not always reliable i.e. they may wish a new toll road but are later not willing to pay. In projects being exposed to traffic risk, accurate forecasting is crucial.

Reports by the PPIAF show that governments continue to seek both public and private sector finance to fund highway construction and improvements, however, there is an imminent mismatch between actual traffic and revenue forecasts which could have an adverse impact on financiers, road users and governments alike. In your words, how can these challenges be addressed to ensure that projects reach financial close?

In order to address this issue, it is important to understand how traffic forecasts and the thereof resulting revenue forecasts are structured. In a first step, traffic volume on a toll-free version of an existing highway is studied.



RAGNAR GERIG

DEG, COLOGNE - DIRECTOR, INFRASTRUCTURE, AFRICA & LATIN AMERICA

Afterwards, the loss of a proportion in local traffic (diverted traffic) due to the new toll road is estimated. On the other hand, a larger proportion of existing traffic from other highways is attracted due to higher capacity and shorter travel times (re-assigned traffic). In a next step, future traffic growth has to be calculated, using various statistical methods. However, predicting traffic growth and induced traffic is subject to uncertainty and can hardly be controlled by the forecaster.

By employing more than one specialist market-research companies and applying pilot survey and sensitivity testings, estimations of traffic growth can be made more reliable.

The private sector can most probably only take traffic risk in first tier highway projects in urban areas. All other projects are likely to require backing by the Government (revenue guarantee) to ensure a minimum cash flow of the project and hence secure debt service and adequate equity return. Involved traffic risks can be mitigated by either different concession type (availability-based, or hybrid-availability-based) or by flexible concession terms (target traffic-linked to adjust for under-/over-performance: e.g. concession payment/concession periods)

According to a World Bank report, while PPP's could be a viable solution for cash-strapped governments to finance transport infrastructure with the promise of future payments through tolls, implementation is often challenging. With reported high traffic risk resulting from disparities between forecasts and actual revenue, what would be a viable financing approach?

Realistically projected traffic volumes need to allow economic viability in order to attract private sector investors. If this is not given, either availability-based concessions or viability-gap funding support would need to be offered. A viable financing approach would entail minimum revenue guarantees, which are assurances by the government to the concessionaires that they will receive a fixed level of revenue for the duration of the contract. This will reduce lenders risk perception in presence of traffic risk. However to make this approach work, the government needs to assume a low-traffic base case as basis for the project. If the government is financially not sound, third-party risk guarantees are a suitable option.

Reports show that pure availability-based payment structures avoid the transfer of risk to the private sector. Do you think this would be a sustainable approach for Africa's transport infrastructure needs? Do African governments have the capacity to bear all the risk?

With rising debt levels, reaching 45.9% of GDP in Sub-Saharan Africa (as of 2017)*, many governments face serious spending constraints. This makes a pure availability-based project finance structure hardly viable.

The private sector's ability to finance toll-road projects is heavily dependent on the predictability and reliability of revenues and the traffic forecasts that underpin them

Risk-sharing models might be a more realistic alternative. PPP projects should focus on in principle viable projects, in which the private sector can take a certain level of (traffic) risk and the Government only guarantees a minimum traffic level/revenue and hence project return. Projects, which dispose of insufficient traffic/too high traffic risks for the private sector should therefore be realized by the Government financed out of the budget.

Risk allocation is a significant aspect of managing traffic risk, who is currently bearing the risk and how can the allocation of risk be managed sustainably? Could availability payment concessions be used as risk management tools?

In between a conventional toll road, where the PPP company and its lenders are fully exposed to traffic risk, and an availability-based payment concession, are several methods to share traffic revenue risk:

- Revenue-sharing bands: lower and upper thresholds for sharing traffic revenue risk between the PPP Company and the Authority if traffic is outside the thresholds;
- Flexible-term contracts: the PPP contract will end when the PPP Company has received a certain amount of revenue from users,
- Contracts based on shadow tolls: usage of the infrastructure is free for the users and the Authority remunerates the PPP company on the basis of the observed traffic levels; and
- Financial re-balancing: provisions to change the financial elements of the PPP contract if traffic is much lower/higher than planned or at set regular intervals.

Availability payments are not an adequate risk management tool since the traffic risk is all borne by the government and not shared at all.

Reports show an increased interest in the Government Builds, Tolls then Sells (GBTS) model, where the government bears the traffic risk during the ramp up phase, while private sector bears the risk post ramp up stage. Do you think this approach would be successfully adopted in Africa? What are the possible limitations?

Since the ramp-up phase is considered to be the most critical part of a toll-road, lenders are usually keen if this risk is not borne by them. However to make this work, the government has to run a sensitivity analysis of ramp-up assumptions, benchmark similar toll roads and potentially initiate a marketing campaign to build driver awareness of the new road.

The limitations are the risk that the required level of traffic will never be achieved and hence the Government will be responsible for a longer or the whole concession period and possibly not able to honor its obligations.

In order to be able to pass-on the projects to private sector after ramped-up operation and to allow easy access to financing and favourable terms, best-international practices and governance standards (including environmental, social, health and safety) should be applied from the very beginning. Offering a bundle of projects with diversification effect might provide for further optimization.

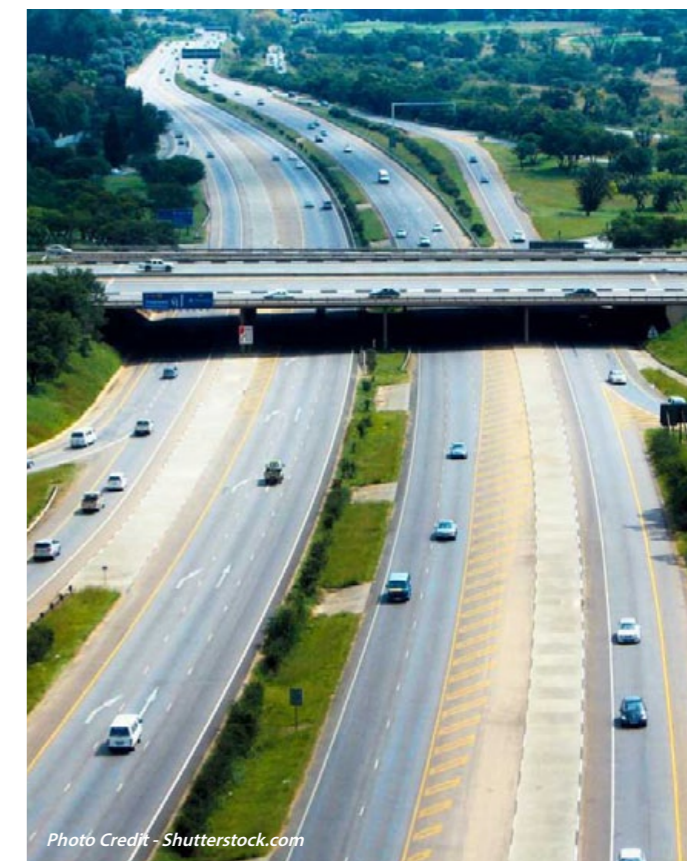


Photo Credit - Shutterstock.com

There have been several successful and failed toll road projects, South Africa's e-toll project being one such unsuccessful project, what are your 10 recommendations on how stakeholders can ensure successful development of transport infrastructure in Africa?

Key drivers for successful toll road projects:

1. Focus on tier 1 projects in urban areas for private sector,
2. Strong, experienced sponsors
3. Turn-key EPC contracts to avoid cost-overruns,
4. Select tier 1 EPC contractor,
5. Select tier 1 O&M contractor,
6. Undertake conservative market analysis and traffic forecast, run sufficient down-side sensitivities,
7. Carefully analyse assumptions on toll fee and real purchasing power,
8. Find a fair risk allocation between private investors and Government,
9. Do only projects in countries with sound budgets/economies so that Government can honor its financial obligations, if required,
10. Do only private sector toll road projects in countries which dispose of good governance and track record in private infrastructure projects; include PRI, if needed.

Source: <https://www.theafricareport.com/515/africas-new-debt-crisis/>

Co-authors
PAUL HEINEMANN
Vice President, DEG

STEPHAN DIEFENTHAL
Vice President, DEG

Trinity on Standardising Transaction Documents to Drive Zambia's GET FiT Program

GET FIT ZAMBIA AWARDS 120MW(AC) IN A SOLAR PV TENDER

GET FIT Zambia announced the award of six solar PV IPP projects, totalling 120MW(AC). The lowest successful bid came in at \$3.999c per kWh and the weighted average of all six successful projects is \$4.41c per kWh.

This is the largest single solar PV tender implemented in sub-Saharan Africa (SSA) to date outside of South Africa, and is the first time a tariff below \$4c per kWh is achieved through a public tender in SSA. The GET FIT tender had a target outcome of 100MW(AC), but due to the favourable results, the GRZ and GET FIT Investment Committee decided to award an additional 20MWac. Notably, the award was not based on price alone but was based on a total combined technical and financial score. GET FIT is the government of the Republic of Zambia's programme to facilitate private sector investment in small- and medium-scale Renewable Energy Independent Power Projects (IPPs) in Zambia.

The programme is a partnership between the Department of Energy and the German Development Bank, KfW, and is implemented by the GET FIT Secretariat (staffed by Multiconsult).

SUCCESSFUL CONSORTIUMS

The consortiums that have proven successful in the tender are summarised below. An important aspect of the tender design has been to ensure timely implementation and compliance to both technical and environmental compliance, including IFC E&S Performance Standards. These elements were captured in the technical minimum criteria and scoring.

- 1st Award – Two proposals of Joint Venture Building Energy & Pele Energy - Bulemu East & West– 20MW(AC) each at \$3.999c per kWh(AC).
- 2nd Award- Two proposals of Joint Venture Globeleq & Aurora Power Solutions - Aurora Sola One & Two - 20MW(AC) each at \$4.52c per kWh(AC).
- 3rd Award – Two proposals of Joint Venture of InnoVent & CEC - Garneton North & South Solar- 20MWac each at \$4.80c per kWh(AC).

In addition to the awarded bidders, two consortiums have been awarded "Reserve" status.



Source: Trinity

GET FIT Zambia reserves the right to call upon these consortia, each of which has also submitted bids for a total of 40MW(AC) each, in the event that any of the awarded consortium is unable to either meet pre-established timeframes and/or meet compliance requirements.

NO MARKET DISTORTIONS

Ryan Anderson, the Tender Agent Team Leader noted: "It is important to recognise that these tariff results represent a truly competitive outcome. Not only were developers required to find and acquire their own suitable sites and pay for shallow grid connection, but GET FIT Zambia has offered no form of grant financing, nor has it arranged for concessional finance."

Marco Freitag of KfW Development Bank agrees, "what has made this such a competitive outcome is the bankable standardised transaction agreements, the effective tender implementation and the steadfast commitment of the government of Zambia and ZESCO."

It is however noted that GET FIT Zambia made concerted efforts to facilitate bidders' access to competitive finance, including ATI's Regional Liquidity Support Facility which provides short-term liquidity backing for ZESCO's offtake commitment under the PPAs. Trinity International LLP prepared the standardized transaction documents including the PPA, IA and GCA.

Orli Arav (GET FIT Investment Committee member) also emphasised the reputation and role of GET FIT Zambia and KfW Development Bank: "The GET FIT program has now established a track-record in two countries in terms of enabling renewable IPPs, first in Uganda, and now in Zambia. KfW's role as an honest broker in terms of finalizing transaction documents and advising the government is central to the success of this model."

ABOUT TRINITY

Trinity International LLP is a niche projects, finance, corporate and commercial law firm focusing on emerging markets, notably Africa but also the Middle East, Latin America and Asia. We have wide sector experience including in power, energy/renewable energy, resources, transport infrastructure, industry and agriculture.

Trinity offers an innovative approach to providing legal advice and the structuring of its fee arrangements. The firm is able to offer financial flexibility and encourages an approach that is not focused on hourly rates. As an example, Trinity is able to share transaction risk alongside its clients.

www.trinityllp.com

IDBZ on Recapitalising Zimbabwe's Infrastructure Sector



ABOUT IDBZ

The IDBZ was formed on the 31st of August 2005, taking over the assets and liabilities of the former Zimbabwe Development Bank ("ZDB"). It was primarily set up as a vehicle for the promotion of economic development and growth, and improvement of the living standards of Zimbabweans through the development of infrastructure, which includes but not limited to energy, transport, water and sanitation, information communication technology (ICT) and housing. The Bank is also enjoined to develop institutional capacity in undertakings and enterprises involved in infrastructure development in Zimbabwe (IDBZ Act (Chapter 24:14). The Bank, therefore, operates primarily as an infrastructure development finance institution (DFI).

"To champion sustainable infrastructure development through: mobilization of resources; capacity building; and knowledge generation and sharing in support of national efforts for inclusive socio-economic development".

IDBZ GUNS FOR \$1BN RECAPITALISATION

The Infrastructure Development Bank of Zimbabwe (IDBZ) says it is aiming towards a recapitalisation base of up to \$1 billion in the long term in a bid to meet infrastructure development needs of the economy. Chief executive officer, Mr Thomas Zondo Sakala, said in a statement accompanying the bank's financials for the period ended 31 December 2018, that the bank was driving at harnessing partnerships for infrastructure development in line with the country's economic growth targets as espoused in the Transitional Stabilisation Programme (TSP) and the 2030 middle-income vision.

Although the bank's operations have been significantly affected by the challenging environment, particularly lack of liquidity in the Zimbabwean economy, he said the financing entity has adequate resources to continue in operation going forward.

"The bank is working on a recapitalisation programme in pursuit of its capitalisation targets of \$500 million in the short term and \$1

billion in the long term," said Mr Sakala.

"Apart from scaling up the bank's underwriting capacity, the recapitalisation is intended to bring on board strategic institutional investors who are aligned to the bank's developmental mandate and who would facilitate access to long term capital suitable for infrastructure investment."

He revealed that the bank has already raised a total of \$127,3 million through the issuance of infrastructure development bonds since the bond issuance programme commenced in 2012. During the reporting period, Mr Sakala said the bank raised \$10,34 million towards project financing activities and more could have been mobilised were it not for delays due to procurement regulatory approvals for some projects.

The IDBZ is already seized with implementation of various infrastructure projects across the country such as the \$16,8 million Kariba housing project, \$14,2 million Bulawayo students accommodation project, \$6,9 million Empumalanga housing scheme in Hwange, \$34 million university hostels projects, water and sanitation, transport and institutional housing projects among others.

"The bank is also working on putting together an alternative investment platform, which seeks to pool capital resources from pension funds and other institutional investors for increased infrastructure investments," said Mr Sakala.

In order to broaden funding sources and build the required critical mass, he said, the bank would accelerate its engagement with regional, continental and international development finance institutions and multilateral finance bodies to establish strategic partnerships.

These are expected to facilitate collaboration in preparation and financing of infrastructure projects.

Meanwhile, the entity's revenue spiked 54 percent to \$13 million from \$8 million, driven by strong performance in net interest income, said Mr Sakala.

The asset base also grew by 212 percent to \$590 million from \$188 million spurred by receipt of additional capital of \$152 million from Government and growth in Public Sector Investment Programme (PSIP) funds earmarked for public infrastructure projects. This resulted in increases in cash and bank balances, as well as increases in money market placements.

These positive developments saw the bank recording a profit of \$0,8 million as it exited from a loss making position of \$581 000 in 2017. Mr Sakala said the \$152,9 million capital injection from Treasury in 2018 helped boost the entity's income generation capacity.

Sean MacDonald on the needs for Good Legal Compliance to Ensure Tolls can be Collected and Violations Enforced



SEAN MacDONALD

AIIM - INVESTMENT DIRECTOR

What role does traffic forecasting play in managing traffic risk?

Assessing likely volumes of traffic is a critical aspect of any toll road project because it affects the revenues that are expected to be generated. Whether the road is tolled or not, predicted traffic volumes also directly determine the design of the road and therefore its cost. In due course this can mean the operator having to add extra lane capacity and pay higher maintenance charges, both of which can add considerable costs to the scheme.

Forecasting traffic flows on a particular road is not an exact science, however. There are many variables that can lead to dramatically different outcomes particularly over long periods of time.

Forecasters generally use data from network and traffic surveys based on existing road infrastructure to replicate existing traffic flows. Information on the network is not usually subject to much uncertainty but traffic data can be much less reliable. Count data collected over many years will naturally be more reliable than counts

conducted over a few days and then extrapolated to a full year. However, high quality data is not often available.

Forecasters also need to know where people are travelling to and from and whether the purpose is for business or leisure because these factors will determine people's journey times and the routes they might take. Reliable origin-destination data is usually difficult to obtain. With toll roads, it is necessary to make an assessment of people's willingness to pay a toll and how this may change over time as prices change. Again, there can be a lot of uncertainty in these assessments.

Having replicated the existing situation forecasters then need to predict how things will vary over time, including possible changes to the network as new links are built, the impact of competing modes of transport, the way the economy is expected to grow and how vehicle ownership may change. These assumptions are of course subject to uncertainty.

According to a World Bank report, while PPP's could be a viable solution for cash-strapped governments to finance transport infrastructure with the promise of future payments through tolls, implementation is often challenging. With reported high traffic risk resulting from disparities between forecasts and actual revenue, what would be a viable financing approach?

One of the main challenges for toll road projects is gauging the willingness of users to pay the required tolls. This normally depends upon the time savings that are possible, but it's not easy to predict either with certainty. There needs to be good legal compliance to ensure tolls can be collected and violations enforced, and tolls should be low enough to encourage willingness to pay in the first place. Under these circumstances, the private sector is usually willing to consider funding toll road projects. Of course it's vital that the developer's revenue forecast is both sufficient to repay the debt raised and provide a sufficient return on the equity investment. The developer and its lenders are likely to err on the side of caution regarding the revenue forecasts. This is particularly the case following some high profile failures where toll road forecasts have proved to be too optimistic. If the forecasts are deemed too low, some form of government support may be required in the form of a subsidy, but if governments themselves are struggling to service debt then this solution will not be available.

If the private sector is not prepared to accept the traffic risk but the

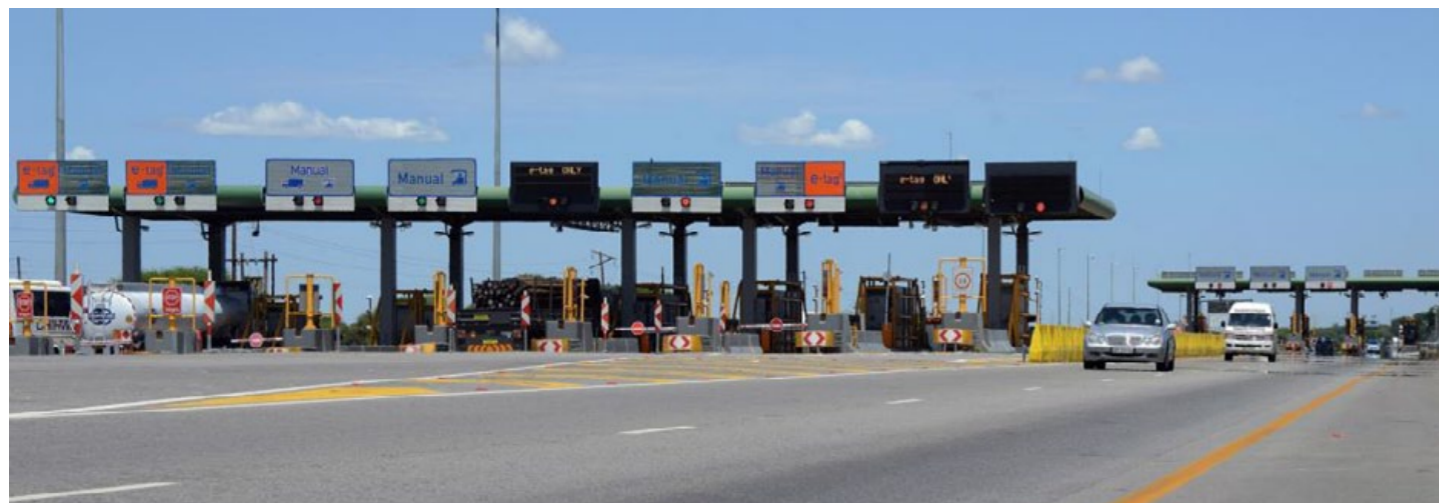


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Shadow tolls and availability mechanisms can help mitigate currency risks which is one of the biggest challenges faced by investors in this sector of infrastructure

road is nevertheless to be tolled, an alternative approach might be for the government to take the traffic risk rather than the private sector. The concessionaire would collect the tolls as is typical under conventional models but instead pass revenues to the government. In return the concessionaire is paid an availability-based fee. Some of the risk is transferred to the government but if the concessionaire banks on that revenue to pay the availability fees then it effectively accepts a portion of the risk too.

If there are to be no tolls at all then an availability-based fee is the usual model. The concessionaire may still bear some traffic risk if it is obliged to expand the road capacity as traffic grows and operating and maintenance costs will be higher.

Shadow tolling is another possible alternative. In this model, the concessionaire bears the traffic risk but one of the key revenue risks – the users' willingness to pay a toll – is eliminated. Payment is made by the government based on agreed shadow toll rates for the volume of traffic that uses the road. Toll bands can be set for different levels of traffic and this can be used to greatly reduce the exposure to traffic volumes for both the concessionaire and the government.

Shadow tolls and availability mechanisms can help mitigate currency risks which is one of the biggest challenges faced by investors in this sector of infrastructure. Unless long term funding is available in the local currency there will be a mismatch between the project's revenues and its debt service. The currency risk can be transferred to the public sector with shadow tolls and availability mechanisms but it is not possible to do so with real tolls.

Reports show there is an increased interest in the Government Builds, Tolls then Sells (GBTS) model, where the government bears the traffic risk during the ramp up phase, while the private sector bears the risk after the ramp up stage. Do you think this approach would be successfully adopted in Africa? What are the possible limitations?

This sort of approach has been used before, notably the H407 ETR in Toronto which was leased rather than sold to a concessionaire shortly after opening. There have been similar examples in the USA such as the Chicago Skyway and the Indiana Toll Road although these were leased many years after opening. In each case the public sector received considerably more than the original cost of building the road. The main limitation of this approach is that most African governments do not have the funds to build the road in the first place. Another constraint is the fact that the DFIs, one of the main source of debt finance for this type of infrastructure, are unlikely to participate because of the lack of an development angle.



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There have been several unsuccessful toll road projects, South Africa's e-toll project being one such example. What are your top recommendations on how stakeholders can successfully develop transport infrastructure in Africa?

- The underlying economic case for the project needs to be sufficiently strong. A good example is an estuarial crossing where significant journey time savings are possible meaning a high proportion of travellers will be prepared to pay the toll. Projects where demand is likely to be low and where such time savings are not evident will always be challenging.
- A comprehensive concession contract is required to underpin the whole project.
- The concessionaire will require reassurance that no future competing roads will be built.
- A strong toll payment enforcement regime is required so the concessionaire can be confident that the revenues can be collected. This means having the appropriate laws in place so that money can be recovered from people who violate the system. It also requires having physical restrictions such as boom gates at toll plazas. Sanral's e-toll road is a good example of where not having booms and not rigorously implementing enforcement has severely impacted revenues.
- Land acquisition is better dealt with by governments rather than the private sector. This process can take a long time and it needs to be done in accordance with current environmental and social standards.
- Toll levels – there is usually a reluctance to allow the concessionaire complete freedom to vary the toll levels so it is able to maximise revenues. Instead governments usually opt for tolls that are fixed at the start and only escalated with inflation.

“Globeleq on Investing in Zambia’s Renewable Energy Sector

GLOBELEQ, AURORA POWER SOLUTIONS TO BUILD PV PROJECTS IN ZAMBIA

Independent power producer (IPP) Globeleq and renewable energy company Sola Group’s Aurora Power Solutions have been awarded two 20 MW solar photovoltaic (PV) projects, in Zambia.

These projects form part of the Get Fit Zambia programme, through which the government aims to procure 200 MW of renewable energy projects within the next three years.

The Globeleq and Sola consortium was selected as one of ten consortiums to submit two project proposals after an initial qualification stage.

Globeleq CEO Paul Hanrahan believes that this award is a “direct result” of the consortium’s project development and execution capabilities, coupled with its experience in Africa, as well as its ability to submit a competitive tariff.

The consortium submitted a tariff of \$0.045/kWh for its Aurora Sola One and Two projects.

“We are delighted to move forward towards the realisation of the Zambian government’s commitment to provide the country with least-cost clean energy,” Hanrahan added.

Sola board member and Aurora Power Solutions founder Dr Chris Haw comments that, once built, these projects will provide reliable and clean electricity to the Zambian government for 25 years.

“The competitive pricing of the awarded projects shows the affordability of solar PV as an energy source. Zambia’s commitment to procure clean energy is not just about supporting a low carbon future, it is also about providing affordable energy to grow its economy,” he said.

The first phase of Get Fit Zambia’s procurement of renewable energy allows for 120 MW of solar PV capacity. During their first year, the awarded projects are expected to produce 360 GWh of clean power for the country and will encourage economic development and implementation of local capacity building programmes

ZAMBIA SOLAR TENDER SETS SUB-SAHARAN PRICE RECORD

The latest GET FIT tender in Zambia has awarded 120MW of capacity and set a record low price for Sub-Saharan Africa.

The tender had originally been for 100MW but was extended, owing to the quality of the received bids.

The lowest bid of 3.999 Us cents per kWh is the first under the four-cent mark. The weighted average price across all projects was 4.41 cents.

The scheme is run by Zambia’s Department of Energy and the German development bank KfW.

“What has made this such a competitive outcome is the bankable standardised transaction agreements, the effective tender implementation and the steadfast commitment of the Government of Zambia and [state power company] ZESCO,” said Marco Freitag of KfW Development Bank.

The six winning bids were awarded in pairs to three successful bidders, whittled down from 23 consortia.

- Two Proposals of Joint Venture Building Energy & Pele Energy - Bulemu East and West-20MWac each at USDc 3.999/kWhac.
- Two Proposals of Joint Venture Globeleq & Aurora Power Solutions - Aurora Sola One and Two - 20MWac each at USDc 4.52/kWhac.
- Two Proposals of Joint Venture of InnoVent and CEC - Garneton North and South Solar20MWac each at USDc 4.80/kWhac.

“It is important to recognise that these tariff results represent a truly competitive outcome. Not only were developers required to find and acquire their own suitable sites and pay for shallow grid connection, but GET FIT Zambia has offered no form of grant financing, nor has it arranged for concessional finance,” said Ryan Anderson, the tender agent team leader.



www.globeleq.com

ABOUT GLOBELEQ

Founded in 2002, Globeleq has become a power industry leader by operating or acquiring interest in multiple power facilities across the world. Now with its focus on the African continent, the company’s experience in implementing an array of generating technologies in different geographic locations, provides Globeleq with a unique perspective and strong foundation for developing new capacity.

Under the ownership of shareholders CDC (70%) and Norfund (30%), the cornerstone of our strategy is to be the trusted, reliable and committed partner of choice within the African IPP industry. We will achieve this by adding significant MWs of new power generation over the next decade while positively contributing and impacting the communities in which we operate.

With the support and expertise of our staff operating out of our London head office, our regional offices in Nairobi, Cape Town, and Doula, and our eight power plants located in Tanzania, South Africa, Côte d’Ivoire, Cameroon and Kenya, we currently generate approximately 1,300 MW, and have another 2,000 MW in development.

“Peter Hutchinson o Leading InfraCo Africa to New Heights



PETER HUTCHINSON

INFRACO AFRICA - CEO

SCALING UP INFRACO AFRICA’S SUCCESS

I have recently taken over as InfraCo Africa’s CEO and it is an extremely exciting time to be leading the company. We are delighted to be entering a new phase of our development as a business and as part of the Private Infrastructure Development Group (PIDG).

With the announcement of significant further funding from our Owners, DFID, DGIS and SECO, and the recent launch of PIDG’s new strategy, we are well positioned to deliver on our ambitious new vision 2023. InfraCo Africa is currently active in 18 projects; our new vision seeks to substantially scale-up our pipeline in sub-Saharan Africa, doubling the commitment we make to projects.

We pride ourselves on our ability to mobilise private sector expertise and finance to deliver transformational infrastructure projects. Projects which alleviate poverty and promote inclusive economic development. This approach will remain at the heart of our business model.

62% of the projects we currently have under development are located in fragile or conflict affected states and, as we grow, our new strategy will see us continue to prioritise high-quality infrastructure development in the world’s poorer countries and fragile states. InfraCo Africa will continue to deliver replicable projects which reflect our commitment to environmental, social, health and safety and anti-bribery and corruption best practice.

Working together with our co-development partners and contracted developer teams, we will see our current project portfolio through to construction and operations; sustaining an interest beyond financial close where this is required.

InfraCo Africa currently has over 700MW of renewable energy under development. We intend to build on our deep in-house power capability to expand the frontiers of renewable energy – exploring innovative mini-grid and storage technologies with potential to scale. Delivering clean power to more people, more quickly. We are proud to be leading in this increasingly important area: a recent poll



www.infracoafrica.com

ABOUT INFRACO AFRICA

Over the last ten years we’ve received US\$126 million in funding and have developed projects that mobilised US\$2 billion of investment, from the private sector and from Development Finance Institutions (DFIs). This investment has provided new infrastructure for approximately 13 million people, improving living standards and powering economic growth. Our projects employ over 8,000 people either during construction or once new services are operational.

We are actively deepening our pipeline and growing our business, with the result that each year we commit support to more early-stage projects. The dependency between power and economic development is just one reason why power will continue to be a focus for us. However, we are also increasing our interest in water and marine transport: seeking innovative ways to incorporate water initiatives into power projects and so attract investment into frontier markets. We continue to focus on innovative or pioneering projects and will increase the volume of pilot projects we provide capital and support to, getting projects operational sooner and demonstrating their viability.

of African developers saw 34% highlight energy storage as key part of their short-term investment strategy.

In collaboration with our private sector partners, we will expand our presence in the transport and water sectors; building on expertise gained through our Kalangala Infrastructure Services and Lake Victoria Marine Transport initiatives and will explore opportunities to further diversify our pipeline in the future.

We are also committed to exploring new ways to maximise the developmental impact of our projects. To date, this work has included creating employment and seeking opportunities to integrate delivery of water supply, sanitation, irrigation and other initiatives as part of our larger power and transport ventures. We will continue to champion the views of people living in the communities in which we work; designing our development-focused initiatives to deliver inclusive and lasting impact.

“ IFC, DEG & FMO on Adopting New Impact Principles

IFC, DEG & FMO AMONG 60 INVESTORS COMMITTED TO MANAGE \$250 BILLION IN ASSETS IN LINE WITH NEW IMPACT PRINCIPLES

Washington, D.C., April 12, 2019—A front of European development banks, including FMO, are amongst the 60 investors to adopt the Operating Principles for Impact Management—a market standard for impact investing in which investors seek to generate positive impact for society alongside financial returns in a disciplined and transparent way. The Principles bring greater transparency, credibility, and discipline to the impact investing market. European development banks signing these principles are united in EDFI, the Association of bilateral European Development Finance Institutions. The organizations adopting the Principles today collectively hold at least \$250 billion in assets invested for impact, which they commit to manage in accordance with the Principles. EDFI's share hereof is substantial. The Principles provide a common market standard for what constitutes an impact investment, addressing concerns about “impact-washing.” IFC, a member of the World Bank Group, led the development of the Principles, in collaboration with leading asset managers, asset owners, asset allocators, development banks, and financial institutions, following a three-month public stakeholder consultation.

Peter van Mierlo, FMO's Chief Executive Officer: “We're very pleased with this next step towards harmonizing our impact measurement standards. Without a taxonomy, without universally agreed upon definitions, we will not be able to measure the progress we're making on fighting climate change and reducing inequalities. We are proud to be part of a big group of European DFI's who support this strongly and unite with IFC and impact investors in order to make progress on this front”

Impact investing needs to offer investors a transparent basis on which they can invest their money to achieve positive measurable outcomes for society in addition to adequate financial returns. The Principles launched today facilitate this process by creating clarity and consistency regarding what constitutes managing investments for impact, thereby bolstering confidence in the market.

The Principles reflect best practices across a range of public and private institutions. They integrate impact considerations into all phases of the investment lifecycle: strategy, origination and structuring, portfolio management, exit, and independent verification. Critically, they call for annual disclosure as to how signatories implement the principles, including independent verification, which will provide credibility to the adoption of the Principles.

IFC AND FMO'S NL BUSINESS PARTNER UP TO PROMOTE WATER AND HEALTH PPP'S

On April 13, 2019, during the World Bank Group Spring Meetings Emmanuel Nyirinkindi, Director of IFC's Transaction Advisory Services Department and Jorim Schraven, Director Strategy & Corporate Affairs of FMO and David Kuijpers, Manager Partners for Impact (P4i) of FMO, signed a trust fund agreement.

Under this arrangement FMO's NL Business will allocate EUR 1 million from the Development Accelerator, a fund from the Dutch Ministry of Foreign Affairs managed by FMO, to a trust fund managed by IFC. The funds will be used by IFC for preparation, structuring and tendering public-private partnership (PPP) projects in water and healthcare, the two important sectors where The Netherlands have advanced expertise. The arrangement aims to bring business

FMO
Entrepreneurial
Development
Bank
www.fmo.nl

ABOUT FMO

FMO was founded in 1970 and is a public-private partnership, with 51% of our shares held by the Dutch State and 49% held by commercial banks, trade unions and other members of the private sector. FMO has a triple A rating from both Fitch and Standard & Poor's

FMO is active in an international environment and is aware of the importance of being open to the needs and wishes of each stakeholder, while taking into account its own integrity and social responsibility.

FMO strives for a flawless reputation for integrity. Accordingly, we expect all employees, irrespective of their position, to behave beyond reproach. They should act, and in certain cases refrain from acting, fully as FMO expects a good employee to do. We have created an open culture based on respect, integrity and social responsibility. Our employees are engaged, want to make a difference and cooperate to create excellence

opportunities to the market that are relevant for the Dutch private sector and at the same time create development impact in emerging markets. Therefore, the projects for funding from the trust fund will be carefully selected in partnership between IFC and FMO. FMO and IFC will work together to spark interest for PPP projects and tenders among potential Dutch investors by actively including them in investors conferences, market sounding and matchmaking meetings.

IFC has been a trusted partner of FMO for many years. With this arrangement, both parties aim to deepen the partnership and to benefit from IFC Advisory's successful track record and expertise as PPP transaction advisors. This partnership would also boost the project development capacity of FMO's NL Business. Through this arrangement, FMO has access to 90 IFC PPP Advisory staff based in more than 20 countries. IFC PPP Advisory has offices in Sub-Saharan Africa (Kenya, South Africa, Senegal, Nigeria), Middle East and North Africa (UAE, Egypt), Latin America and the Caribbean (Brazil, Mexico), Asia (India, Bangladesh, Philippines, Singapore), Europe and Central Asia (Serbia

AfIDA Members and Partners

AfIDA Would Like to Thank it's Partners for your Continued Support in Driving the Project Development Eco-system in Africa.



www.afida-africa.org



precious.nkandu@afida-africa.org



Ebene Esplanade,
24 Bank Street, Cybercity, Ebene, Mauritius



info@afida-africa.org

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