

NAVIGATING THE CHALLENGES

of delivering IPPs in Africa



AFRICAN INFRASTRUCTURE INVESTMENT MANAGERS

Ashwin West, Manager -
Transactions, African Infrastructure
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Ashwin is responsible for originating potential deals, analysing, assessing, structuring and negotiating investment opportunities, as well as the execution, performance monitoring and realisation of investments.

Ashwin has worked on infrastructure project finance deals in the thermal energy and renewable energy sectors, as well as the transport sector. Most recently, Ashwin was involved in the successful execution of the 350MW gas fired Kpone IPP power project in Tema, Ghana. During 2011, he was involved in the successful execution of two renewable energy investments in South Africa, namely the 139MW Cookhouse Wind Farm and 81MW REISA Solar PV investment, both of which reached commercial operations in 2014.

Prior to joining AIIM, Ashwin spent 8 years with Aurecon. Ashwin's areas of focus were the large infrastructure, energy and water sectors. Before joining Aurecon, Ashwin spent two years in the UK working for Thames Water in project management and management systems implementation and review.



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Paul Frankish, Manager - Asset
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Paul is responsible for the structuring and development of AIIM's managed funds as well as new business initiatives.

Paul led the structuring of AIIM's dedicated renewable energy investment vehicle, Apollo, focused on building out a portfolio of investments in the South African renewables market. Paul has also been involved in the selection and submission of bids supported by the AIIM funds in the South African renewable energy procurement programme and led the integration of these projects into the AIIM portfolio. Paul represents the AIIM funds on the board of the Cookhouse Wind Farm.

Prior to joining AIIM, Paul spent five years working on the alternative assets structuring desk at Credit Suisse in London where he was responsible for the development, structuring and execution of alternative investment products for the pension and insurance industries.

It is a well-known and cited fact that sub-Saharan Africa (SSA) is desperately short of electricity, and, from an access-to-electricity perspective, is considered to be one of the worst regions in the world. SSA has 13% of the world's population, but 48% of the global share of the world's population without access to electricity.¹

Only seven countries in SSA have electricity access rates in excess of 50%, while the remainder of SSA has grid access rates of circa 20%¹. However grid access doesn't necessarily equal access to reliable electricity, with demand outstripping supply, and regular interruptions to the electricity supply common. Average annual electricity consumption per capita in SSA (excluding South Africa) is 150 kWh. If South Africa is included, the average increases to 540 kWh/capita, far below the average of other emerging

markets.² Historically, the provision of electricity generation capacity has been financed by state-owned power utilities with support from international lenders and agencies. However, with the challenges facing the power sector in SSA, there have been changes in the financing approach, resulting in power projects being funded by, among others, Chinese companies through concessional Chinese government-backed funding, development finance institutions (DFIs) and private sector independent power producers (IPPs). This has come as a

¹ Castellano A, Kendall A, Nikomarov M, Swemmer T, 2015, Brighter Africa: The growth potential of Sub-Saharan electricity sector, McKinsey & Company

² Non-OECD Energy Statistics, World Bank Group, 2013, World Development Indicators, World Bank Group, www.worldbank.org

result of government sector reforms as well as initiatives such as the “Power Africa” programme, to promote alternative sources of financing into the SSA power sector.

African Infrastructure Investment Managers (Pty) Ltd (AIIM), as the manager and advisor of five infrastructure funds with circa USD1.3 billion of equity under management, participates in the financing of infrastructure projects, on a project finance basis, and through its investment in power projects in SSA has consequently gained a wealth of experience and weathered many challenges. The lessons learnt stem from engaging throughout the project lifecycle, from project developer through to equity investor. This article highlights some of the key challenges AIIM has experienced in the pursuit of energy infrastructure investments across SSA.

AIIM PORTFOLIO OF PROJECTS

AIIM’s experience as a project developer in the power sector commenced in 2008, with the development of the Umoya Energy wind farm, a 66 MW facility in the Western Cape province of South Africa. Shortly thereafter, in 2009, AIIM and Macquarie formed a joint venture called African Clean Energy Developments (Pty) Ltd (ACED) with the mandate to develop a pipeline of renewable energy projects in South Africa. The first of these projects to be delivered to market was the Cookhouse Wind Farm, a 138.6 MW facility in the Eastern Cape in South Africa. Based on the success of its South African developments, AIIM leveraged its renewable energy-development experience beyond South Africa’s borders, in the Kinangop (60 MW) and Kipeto (100 MW) wind farms in Kenya, and the Azura 450 MW open cycle gas turbine power station in Nigeria. As a financial-close investor, AIIM’s funds have invested equity at financial close in Renewable Energy Investments South Africa (Pty) Ltd (REISA), an 81 MW solar photovoltaic facility in the Northern Cape in South Africa and Cenpower Generation Company Limited, a 350 MW combined cycle gas fired power station in Tema, Ghana.

PRE-FINANCIAL CLOSE CHALLENGES AND LESSONS LEARNT

• IPP PROJECTS TAKE A LONG TIME TO DEVELOP

Developing large-scale, capital-intensive infrastructure projects are time consuming and resource intensive. The situation is compounded by uncertainty in and changes to regulatory frameworks across SSA.

When AIIM commenced the development of the Umoya Energy project in 2008, there were no specific opportunities



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for IPPs but the need for renewable energy was strong. AIIM persisted with the development of the project and engaged with several potential off-takers. The introduction and subsequent cancellation of Eskom’s medium-term power purchase programme, and the renewable energy feed-in tariff programme added uncertainty to the development process, until the competitive bidding process for renewable energy (referred to as the Renewable Energy IPP Procurement Programme (REIPPPP)) was introduced by the South African Department of Energy in 2011. The process delays were frustrating for developers, however those who continued with project development were rewarded when the REIPPPP was launched, and the first round of power purchase agreements awarded in November 2011. The REIPPPP is considered to be one of the best, if not the best, public private partnership in Africa, but even this programme has had its challenges with the announcement of preferred bidders and financial close being delayed in the various procurement rounds.

The aforementioned IPP projects in Ghana and Kenya were in the development phase for circa eight and six years respectively, before achieving financial close. The developers faced uncertainty and endured numerous government elections before the necessary approvals and financing could be secured to achieve financial close. The drawn-out development process creates a drag on developer cash flows, and often results in developer and advisor ‘fatigue,’ causing projects that are eventually abandoned. Optimism, realistic expectations, tenacity and a risk appetite to continue investing in project development is required to overcome the regulatory uncertainty hurdles.

• KNOW YOUR STAKEHOLDERS AND ENGAGE WITH THEM REGULARLY

Stakeholder engagement is critical to the success of a power project, which has many interfaces including the local community, the power purchaser, energy regulator,

construction contractor, operations contractor and fuel supplier, among others. Each of the stakeholder groups has an active role to play in the development, construction and operation of the project, and must be engaged appropriately.

During the development phase, one of the wind farm projects in South Africa was placed under pressure when, in 2012, in the lead-up to financial close, the engineering procurement and construction (EPC) contractor was forced to enter into a debt restructure programme, due to its inability to service certain debt obligations which fell due in mid-2012. ACED, the equity investors and senior lenders to the wind farm, as well as the EPC contractor, were forced to adopt a pragmatic approach in order to restructure the project and facilitate financial close. Material amendments were made to the EPC contract to rebalance the risk profile, which allowed the project to proceed. The ability to engage with the key project stakeholders, in this case the EPC contractor and the senior lenders, in an open and

compensation, and his children are not compensated directly. A well-considered and structured stakeholder engagement plan is required to map out key stakeholders to be engaged, determine their level of interest and influence, to track when key stakeholders have been engaged, and to plan all future engagements.

• CHOOSE YOUR LOCAL PARTNER CAREFULLY

The development of a large infrastructure project, such as a power project, requires numerous permits, licences, exemptions and waivers from a range of government institutions prior to and during the construction process. A local partner who knows the processes in-country and has experience in undertaking the processes to obtain the various authorisations is key to the success of a project. Furthermore, a local partner with stature in the industry and who has the ability to raise the profile of the project is also helpful in



Community engagement is required to be culturally sensitive and appropriate, in order to avoid unintended consequences.”

frank manner allowed for the necessary changes being brought to bear on the contracts and the ultimate success of the project.

Engaging with the wrong members or structures in a community, engaging too often or not frequently enough, and changes to the political structures are regular challenges for project developers in SSA. Community engagement is also required to be culturally sensitive and appropriate, in order to avoid unintended consequences. From our Kenyan experience, changes in the local governance and political structures in 2013 meant that local government stakeholders engaged during the project development phase were replaced with new officials who were not adequately informed about the project at the time of project implementation, which may have led to additional hurdles needing to be cleared with local government officials and the local communities. Furthermore, understanding and respecting cultural norms is critical; elders and chiefs are typically consulted on project matters as the head of the communities and households. However in certain communities it is only acceptable for the household head to express an opinion, hence his family may not be afforded an opportunity to participate in a meaningful way. In such circumstances it is important to engage affected youth separately to ensure they are afforded an opportunity to represent their interests. This is particularly the case in the family unit where the head of the household receives

ensuring that the project receives the necessary attention and support from government.

Furthermore, it is critical to ensure that there is alignment of interest between local partners and international equity investors, particularly when the project is under pressure. In AIIM's experience, a local partner may have a variety of interests beyond the project in which you are jointly invested, which may be dependent on maintaining relationships with government or other stakeholders, resulting in differing priorities and divergent views. This can be problematic when needing to enforce contractual remedies against government.

POST FINANCIAL CLOSE CHALLENGES AND LESSONS LEARNT

• GETTING THE CONTRACTOR TO SITE

The achievement of financial close is a major milestone in the life of an infrastructure project, which typically signals the start of a multi-year construction process, often in remote or challenging environments. Completion of the construction works within the negotiated project schedule is the best outcome for both the

investors and the contractor, by avoiding claims against delay liquidated damages, loss of revenue and additional costs, such as interest during construction. Mobilisation of the contractor to site and commencement of construction according to the project schedule is key to keeping the schedule on track. Before a contractor can mobilise to site, there are several activities that must be completed with respect to health and safety, and local employment requirements, among others. From our experience, international EPC contractors who have not partnered with local contractors or are undertaking work in a new jurisdiction require a longer period of time to mobilise to site, which is typically not factored into their project schedule. The additional mobilisation time is spent modifying their existing plans and programme to be compliant with the local country requirements. AIIM's preference is to ensure that the EPC contractor is either established/experienced in the relevant jurisdiction, or has partnered with a local contractor, for a more efficient construction process. Alternatively, ensure that the project schedule includes additional time for site mobilisation. This has been particularly evident in the South African renewable energy market, where many international EPC contractors have entered the South African market, with varying outcomes and levels of performance.

• ASSEMBLE THE BEST MINDS TO DELIVER A PROJECT

All of the investments we make are via dedicated stand-alone special purpose vehicles (SPV) established to deliver a single project. AIIM is regularly faced with the dilemma of when to recruit key staff for the project SPV. The lenders typically require a resourcing plan and comfort that the key staff such as a chief executive officer, chief financial officer and chief technical officer will be identified and employed by the time the project achieves financial close and funds are disbursed. However, it can be challenging to attract key staff to a project SPV prior to financial close, given the level of uncertainty in an employment contract at that point in time. AIIM has applied three models to overcome this challenge; namely early recruitment underwritten by one of the shareholders, longer-term secondment of shareholder staff to the project SPV and temporary step-in to executive roles.

In our experience, the best model is early recruitment, as it provides an opportunity for the key staff to immerse themselves in the project prior to financial close and are fully prepared to run the project SPV following financial close. This does however require one of the shareholders to underwrite the employment contract for a reasonable period of time, to ensure that the key staff are not left exposed should the project not achieve financial close. An alternative to this model is the secondment of key staff into the project SPV, from the shareholders. This works particularly well for the power utility-type investors with specialist resources, geared towards project secondments. The last model is for the shareholders to provide resources on a short term basis

(one to three months) to step into the running of the project SPV and to hand over SPV operations to the key staff, once appointed. No matter which model is chosen, it is important to appropriately resource the project SPV as soon as possible, to ensure it is able to function and does not hamper or delay the implementation of the construction schedule.

• DEVELOP A GOOD WORKING RELATIONSHIP WITH THE EPC CONTRACTOR

The construction of a large scale, complex infrastructure project is always challenging, and is never without unexpected hurdles. The EPC contractor has typically agreed to a fixed price, fixed schedule project, and assures the quality of work is to the agreed standard. Clarifications may however arise regarding the scope of work or the project schedule. While the legal agreements between the EPC contractor and the project SPV seek to contract for a variety of outcomes, having a good relationship with the EPC contractor cannot be overlooked to unlock potential disputes, before having to revert to contractual remedies and measures. On our South African and Kenyan projects, having a good relationship with the key decision makers within the EPC contractor allowed for the shareholders to apply pressure at the right times to minimise project schedule delays, accelerate components of the work (such as turbine erection) and to work collaboratively on resolving on-site issues when they arose, rather than reverting to the contractual remedies immediately.

CONCLUSIONS

Infrastructure investments by independent power producers in SSA are not easy, with the hurdles dependent on the type of project and jurisdiction. There are a set of key challenges that will arise on most projects, which in our experience, can often be mitigated.

Large infrastructure developments typically require more time than initially anticipated to achieve full bankability status. As part of the development process, identification and engagement with key stakeholders is a critical success factor, and stakeholders must be mapped and managed appropriately. Selection of a strong local partner is also a key factor for success but requires an alignment of interests between all parties to ensure a productive relationship.

During the construction phase of a project, mobilising the EPC contractor to site per the project schedule is helpful if project delays are to be avoided. International contractors teaming up with a local contractor may be the best solution to this challenge. Securing the project SPV resources to deliver the project as soon as possible should also minimise construction delays. Lastly, develop a strong working relationship with the EPC contractor, to assist in resolving minor disputes amicably, before reverting to contractual remedies and protections. ■