

## LESEDI AND LETSATSI – GIANT STEPS FOR SA PF

THE FINANCIAL CLOSE OF THE FIRST RENEWABLE ENERGY PROJECTS IN SOUTH AFRICA IS AN EVENT OF HISTORIC SIGNIFICANCE AND IS TRULY A WATERSHED MOMENT FOR THE SOUTH AFRICAN PROJECT FINANCE MARKET. IT SIGNALS A NEW ERA FOR PRIVATE SECTOR PARTICIPATION IN THE AFRICAN ENERGY SECTOR. BY **COENRAAD KRIGE**, MANAGING DIRECTOR, AND **NUNO GIL**, DEPUTY MANAGING DIRECTOR, **KENSANI EAGLESTONE CAPITAL ADVISORY**.

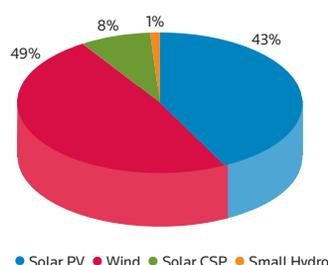
The South African government's signature of project agreements with the 28 successful projects with 1,416MW in total project capacity for this first round of the procurement process translates to a required investment of around R47bn, making it the first large-scale infrastructure procurement programme in the country to achieve financial close and commence construction.

South Africa aims to secure a total of 17.8GW or 42% of new generation capacity from renewables by 2030 in line with the country's long-term energy plan. To deliver on this plan, the Department of Energy (DOE) launched bidding under its Renewable Energy IPP Procurement (DOE REIPPP) programme on August 3 2011 to secure 3,725MW through five bidding windows.

The bidding window for the first round of the procurement programme closed on November 4 2011 with the Department of Energy reporting submissions by 53 IPPs. In early December 2011 the DOE announced 28 successful wind and solar IPPs representing a combined capacity of 1,426MW. The South African Government should be congratulated for implementing a competitive tariff bidding programme that enables the delivery of projects from bid to financial close within a 12-month period. Such an achievement is impressive even by world standards.

Subsequent to the first bidding window, on March 5 2012, bids for the second bidding window were received from 79 renewable IPPs. During May 2012 the DOE announced a further 19 projects, comprising 1,044MW, as preferred bidders with a target financial close date of March 31 2013.

**DIAGRAM 1 - TOTAL MW ALLOCATED TO PREFERRED BIDDERS BY TECHNOLOGY**



Early in 2011, in what was seemingly going to be a renewable energy feed in tariff (REFIT) market, the South African renewable programme was retitled REBID (a renewable energy bidding system) as the South African Government made its intention clear to base its programme on competitive tariff bidding; a message that was received with mixed emotions by the development community. This strategy has worked well for South Africa as there has been a rapid reduction in average offered tariffs between the first and second bidding windows, as shown in Table 1 below.

**TABLE 1 - TARIFFS ON OFFER**

Technology	Tariff Bid Window 2	Tariff Bid Window 1
	(Fully Indexed per MWh)	(Fully Indexed per MWh)
Wind	R 897	R 1,143
Solar PV	R 1,645	R 2,758
Solar CSP	R 2,512	R 2,686
Small Hydro	R 1,030	N/A

The questions that remains to be answered are by when will tariffs hit the floor and what will the floor be? Only time will tell but what we know for now is that the South African Government has succeeded in lowering the cost of renewable energy, which is especially important when low cost of power is a key driver of the country's economic growth path. At the current tariffs wind energy is already cost-competitive when compared with new build coal fired power stations in South Africa and is not subject to any future fuel price risk, a vital consideration in the current South African context where noises are being made to declare coal a "strategic national resource", which could enable the government to exert greater influence on the impact of rising coal prices on the cost of energy in Southern Africa.

Another key characteristic of the DOE REIPPP programme is the "project readiness test", which is determined through projects having to meet a number of key qualifying criteria including the requirement to submit projects with fully underwritten finance structures, committed EPC and operations and maintenance contractors and

environmental licences. By achieving these qualifying criteria by bid submission projects can achieve financial close rapidly and it should guarantee the DOE a high financial close conversion rate that will maximise delivery of MWs into the grid, another important objective for the DOE.

In less than nine months this programme has delivered 47 successful wind, solar and hydro projects creating a R80bn renewable energy market in South Africa. If anything, this should get the attention of the international project finance and renewable energy players struggling in other more developed but depressed markets.

### Project description

SolarReserve, the Kensani Group and Intikon Energy on November 13 2012 reached financial close on the Lesedi and Letsatsi solar photovoltaic projects. The Lesedi and Letsatsi solar PV parks are just two of the 28 projects that were awarded preferred bidder status in December 2011 and are now achieving financial close during the month of November. These two projects represent 20% of the solar PV market in South Africa and, at 75MW each, are some of the largest solar projects in Africa, and are not insignificant even on a global scale.

The Lesedi and Letsatsi projects have been under development since 2010. The sites are on the grid, have an excellent solar resource and have no construction complexities. The projects are being developed by a consortium comprising:

- A South African empowerment infrastructure holding company, the Kensani Group;
- A California-based utility-scale solar developer, SolarReserve; and
- An Australian renewable energy developer, Intikon Energy.

Kensani Eaglestone Capital Advisory (KECA) – a joint venture between Kensani Capital and Eaglestone – acted as financial adviser to both project companies. Baker & McKenzie was legal adviser to the SPVs while Sgurr Energy acted as technical adviser – providing early-stage resource assessments – and AON provided insurance advice.

Construction of the facilities will be undertaken by a consortium led by ACS Cobra and that includes Madrid-based Gransolar and South Africa's Kensani Group under a turnkey fixed-price EPC contract. The construction team will also provide O&M services to the projects.

Upon completion, scheduled for early 2014, the projects will together provide more than 50,000 homes with renewable energy. Under the DOE REIPPP programme the buyer, Eskom, will purchase the power from the projects under a 20-year power purchase agreement after the 18-month construction period.

The 75MW Lesedi project is located in South Africa's Northern Cape while the 75MW Letsatsi is in the country's Free State province. Both projects will cover 150 hectares with approximately 277,000 solar PV panels delivering

circa 149GWh and 147GWh respectively into the grid per annum. Connectivity to the grid will be through a substation, to a 132kV distribution line on-site.

SolarReserve, the Kensani Group and Intikon Energy secured preferred bidder status in the second round of the DOE REIPPP for the Jasper Power project, an 88MW solar PV park situated on the same site as the Lesedi project. What makes this development globally unique is that once the site is completely built out it will include 168MW of the Lesedi and Jasper solar PV energy as well as a 100MW concentrated solar tower project, Redstone Power, currently being developed by SolarReserve, which is earmarked for bidding in round three during May 2013. As depicted in the diagram below, the three projects combined will utilise over 600 hectares of land to deliver solar power. This will truly be an achievement unprecedented in the international renewable market and with a total project financing in excess of R12bn, on an integrated basis, will become a case study for the future.

The agreements on these renewable energy projects are complex and multi-party, with implementation agreements signed by the South African government, PPAs by Eskom, economic development requirements and direct agreements turning what are, on the face of it, simple renewable energy deals into very complicated transactions.

Understanding the interaction between these agreements, the requirements in each of the agreements, how and which risks are transferred, various protections, remedies and default and/or penalty scenarios – all proved to be critical in negotiations with lenders. An example of this is the complete site risk transfer to the seller, with no time relief given for any discoveries including underground archaeological items. Careful consideration had to be given on how this risk is being managed between the seller and the EPC contractor and, secondly, how to price for an event that may or may not occur in the future. Given that competition for future bidding rounds will be fierce, understanding, managing and pricing risks like these could become a competitive advantage.

The economic development requirements included in the programme are an important bidding driver and a possible differentiating factor for projects. The key components of the economic development criteria include job creation, local manufacturing content and Black



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Economic Empowerment (BEE) participation in the project, construction and operations.

The South African Government puts a huge emphasis on these commitments and the importance of economic development to the government is reflected by the 30% weighting allocated in the competitive evaluation of projects. The remaining 70% of the weighting in the evaluation is allocated to price. It is, therefore, imperative when structuring projects to spend sufficient time in developing detailed economic development plans that will not only meet the required targets but exceed current government expectations. It could make the difference between winning and losing in the competitive process.

In support of its economic development commitments the projects jointly will create approximately 600 construction jobs and 100 permanent operational jobs. The two projects will provide rural development programmes, skills and technology transfer and education enhancement. The two projects combined are expected to generate an additional 2,640 indirect and induced jobs across the supply chain during the construction phase and 140 new indirect and induced jobs during operations. These projects are not only ground-breaking in size and scale but offer extensive downstream opportunities for the upliftment of South African rural communities and job-creating opportunities.

**Financing**

The maturity and the depth of the Southern African project finance market is exemplified

by the financial closure of the Lesedi and Letsatsi solar PV projects. At just over R5.15bn in combined size it represents one of the largest project financings on the African continent.

The financial structure of the Lesedi and Letsatsi projects, with a net gearing ratio of 75%, is conservatively geared in line with international experience and the security structure underpinning the power purchase agreement. This security structure includes limited support from the South African Government through signature of the implementation agreement for Eskom’s financial obligations under the power purchase agreement, but with no compensation for seller or force majeure default. In addition, there is a financing direct agreement between the project lenders, DOE and Eskom that manages the lenders’ rights in terms of the PPA and connection agreements. The projects have a typical limited recourse project finance structure as depicted in the structure diagram below, Figure 1.

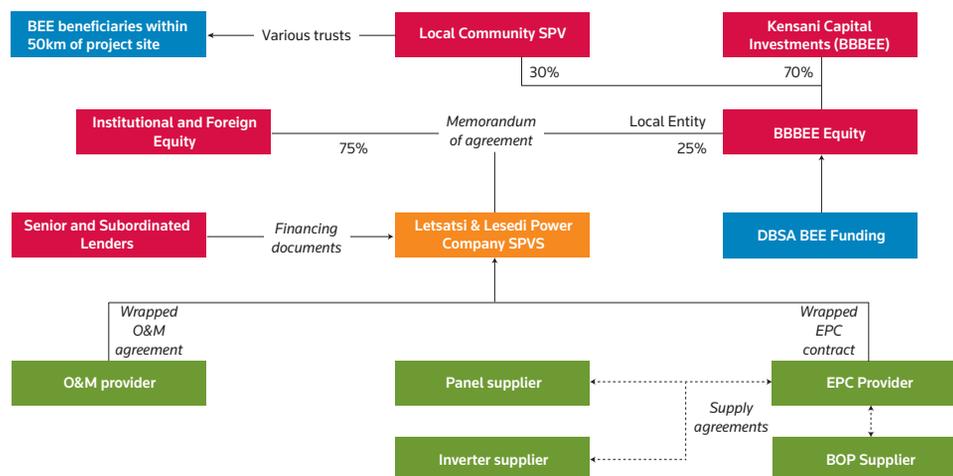
The funding structure for each project comprises:

- R640m of share capital;
- R1.8bn of senior loan funding;
- R100m of preference share funding; and
- R150m of empowerment equity funding.

The total R3.8bn debt requirement on the projects was taken on by just three financial institutions, demonstrating the level of lender confidence in the deals. The senior loan funding was structured with a tenor of 18.5 years utilising a sculpted capital redemption profile. The cover ratios are strong for solar PV parks with a minimum ADSCR and LLCR in excess of 1.55 and 2.00 respectively for both projects. The preference share funding is a quasi-equity instrument that enables higher gearing, delivering an enhanced equity return to ordinary shareholders. The preference shares are fully subordinated to the senior loan funding and rank just ahead of ordinary equity.

Rand Merchant Bank – a division of First Rand Bank – acted as mandated lead arranger and

**FIGURE 1 - PROJECT STRUCTURE**



bookrunner on the debt financing and also met all sub-debt requirements. Old Mutual Specialised Finance (OMSFIN) and the Development Bank of South Africa (DBSA) were the other two institutions participating in the senior loan funding. The financing structure also includes a hedging strategy to address both interest rate and exchange rate risk. Interest rate risk has been mitigated through medium-term rolling interest rate swaps while there were also FX hedging arrangements to hedge the US dollar portion of the EPC contract, which equates to 65% of the total contract price with the remaining 35% being denominated in rand.

One of the more challenging aspects of the project funding related to raising the 25% empowerment equity funding, which is a unique characteristic of funding infrastructure projects in South Africa. This tranche of funding was provided by the Development Bank of Southern Africa. Under this funding mechanism the DBSA provides up to 90% of the required empowerment equity. The funding instrument has a flexible repayment profile enabling long-term sustainable value to be delivered to the empowerment shareholders. The intricacies of the empowerment funding revolved around developing an acceptable security structure that accommodated both the requirements of the DBSA and that of the project lenders.

Given the infancy of the renewable sector in South Africa, the process proved to be a rapid object lesson for the whole lending community. There were various challenges that were successfully overcome by the lending market to close the first round projects. Some of these included:

- Understanding the various technology risks;
- The deteriorating creditworthiness of EPC contractors and long-term warranty suppliers;
- Managing potential induced degradation risk in PV panels;
- P50 vs P90 resource analysis;
- Foreign exchange risk;
- Maintenance reserving requirements
- Back-to-back obligations for the EPC provider arising from the transfer of risk determined by both the implementation agreement and the PPA; and
- Syndication risk owing to the sheer volume of debt.

International precedent and conservatism ruled the day when most of these issues were considered. This is understandable given that this is a new sector in South Africa. As the road becomes well-trodden we are likely to see increased creativity, greater risk appetite and lower margins that will make projects more competitive.

The R640m of equity required for each project was provided by the IDEAS Fund – managed by Old Mutual Investment Group – alongside CGL-Poly Energy Holdings and the development consortium members, Kensani, SolarReserve and

Intikon Energy. The shareholding structure shows strong South African investor participation, which was another qualifying criterion of the programme.

### The future

The South African Government has shown its commitment to the development of a green economy, participation by IPPs in the South African power sector and the delivery of a sustainable renewable energy industry in South Africa. The DOE has made its intentions clear that this will be a rolling procurement programme to procure on an annual basis renewable energy as set out in the long-term energy plan, meaning 18.7GW by 2030. It is expected that the government will stay the course as long as its objectives of low cost energy, job creation, economic development and the establishment of a sustainable local renewable industry are being achieved. Now that the ideological barrier to private sector participation has finally been crossed, it is now up to IPPs to deliver and prove to the government that the private sector is a worthy and capable partner. If at any time, now is not the time to fail.

There is finally light at the end of decade long tunnel. With other energy procurement programmes for base load power and co-generation on the horizon the Southern African power market may just prove to be a rising star. This market activity should whet the appetite of seasoned renewable energy investors and power companies across the globe, especially where other markets are struggling to gain momentum in the face of the global economic downturn and deteriorating first world country economies.

The significance of recent events in the South African energy sector should not be underplayed. It could just be the much needed catalyst that will set the South African project finance and infrastructure markets on fire. There is hope that the renewable energy programme's success will spill over into other much needed infrastructure sectors, especially social infrastructure where the country is in much need of hospitals and schools. We believe that the programme has produced enough of a critical mass to develop, in time, a secondary market and an associated refinancing culture. It could just be the time for project financiers and infrastructure players to come and explore Southern Africa. It may just deliver more than a very good holiday! ■



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