BRAVE ENOUGH IN A NEW FRONTIER

THE FINANCIAL CLOSE OF THE FIRST GAS-FIRED POWER STATION IN MOZAMBIQUE HAS OPENED UP A FRESH FRONTIER FOR PROJECT FINANCE IN SOUTHERN AFRICA. BY COENRAAD KRIGE, MANAGING DIRECTOR OF EAGLESTONE CAPITAL ADVISORY.

Financial close of the project ushered in a new era for Mozambique as it takes the first steps towards gas to power beneficiation that could see the country becoming a power house in the Southern African region and deliver tangible economic benefits to its people from its natural gas resources. The fact that this is also Mozambique's first independent power producer makes the project it even more noteworthy.

Gigawatt achieved financial close on its 100MW gas-fired power station on May 30 2014. This marked the end of a lengthy development period for the US$210m project that commenced construction shortly after financial close.

Mozambique achieved its independence from Portugal in 1975. After a long period of civil war, peace came in 1992. Since then, the country has held four peaceful elections and over the last decade has delivered economic growth above 7% per annum.

The proportion of residents who have access to electricity in Mozambique is among the lowest in the region, with around 14%–15% of households connected to the national grid. The difference between urban and rural areas is great – Maputo Province has the highest degree of electrification with 31%, whereas Cabo Delgado in the north has the lowest with only 2.8%. Mozambique currently has approximately 2,430MW of installed generation capacity. This is dominated by the 2,075MW Cahora Bassa hydroelectric power station, with the balance of the installed capacity a mixture of smaller hydroelectric and liquid fuel plants.

A growing consumer base and the development of large projects in the mining, oil and gas and infrastructure sectors are the key driving forces behind increased electricity demand in Mozambique. At the same time there is a shortage of energy generation in the Southern African region, creating an opportunity for Mozambique not only to increase power generation for its own consumption but also for export to a power-hungry region.

Mozambique is blessed with vast natural resources including coal, gas and hydro, all of which could be exploited for energy generation. Mozambique, with 160TCF, has the fourth largest gas reserves globally and its prospects for coal-fired power are also strong, with three large coal deposits at Moatize-Minjova, Senangoe and Mucanha-Vuzi in the Tete province. Total coal reserves are estimated to be approximately 3bn tonnes.

With more than US$12bn of projects potentially in the development pipeline there is no reason why the Government of Mozambique would not achieve its 20% electrification target by 2020. One would expect that with the correct resolve this target will be easily exceeded and Mozambique will also be able to increase its power exports to its regional neighbours in the South African Power Pool, a regional necessity. The potential energy generation could reach up to 16GW over the next decade. Some of the key projects currently under development are listed in Figure 1.

The features of Mozambique that make it a potentially rich environment for independent power producers are as follows:

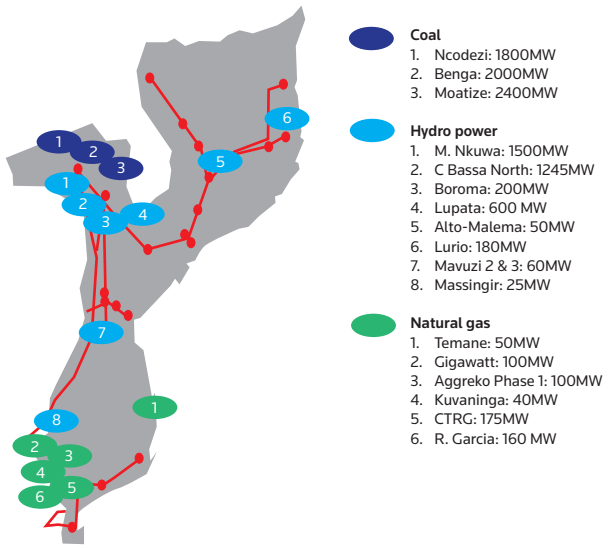
- Rich in natural resources including coal, gas and hydro;
- Mozambique is interconnected to South Africa and other regional neighbours (Zimbabwe and Swaziland);
- Mozambique's SAPP interconnection offers the opportunity to trade power regionally; and
- Mozambique is currently a net importer of power.

However, these features do not necessarily make the country a land of milk and honey, one needs to have more of an in-depth look into some of the challenges that will need to be overcome in pursuit of becoming a serious exporter of power. These challenges include the country's ability to attract capital (domestic and foreign), the lack of liquidity in the domestic banking system, political stability and financial sustainability of the national power utility Electricidade de Moçambique EP (EdM).

Mozambique currently has a transmission capacity of more than 1,850MW (1,400MW from the south to SADC region and 450MW through Zimbabwe), which has allowed the implementation of various projects and enabled the transmission of power to other SADC countries, particularly to South Africa – the largest regional consumer.

Even though Mozambique's SAPP interconnection offers the opportunity to trade power regionally, the HVDC line, which runs

FIGURE 1 - NEW ENERGY GENERATION PROJECTS (COAL, HYDRO AND NATURAL GAS)



Source: EDM

from Cahora Bassa to South Africa, is nearing capacity, which is putting a damper on project development in the Zambezi valley situated in the north of Mozambique, where most of the natural resources are located.

EdM hopes to unlock this bottleneck through the Centre South transmission back bone project, known as the Regional Transportation Energy Centre South Project (STE), which is designed to connect Tete Province with Maputo and to facilitate the export of power to South Africa. The STE project comprises the design, construction and financing of a line of high voltage alternative line (HVAC) of 400kV and a high voltage direct line (HVDC) of 500kV over a total distance of 2,550km of transmission line and eight new substations at an approximate cost of US$1.8bn. The successful and timely delivery of this project is an imperative to facilitating private sector investment in the Mozambique power sector.

It should be said that in the regional context, growing the Mozambique energy sector is very much a necessity and as such neighbouring countries including South Africa, Namibia, Botswana and Zimbabwe have vested interests in seeing mega power generation projects in Mozambique coming to fruition.

None of the challenges being faced in the energy sector in Mozambique are insurmountable, and with the collective effort of all the stakeholders in the region it is entirely possible that Mozambique could become a power generation giant in Southern Africa. Failure is not an option.

Project description

Gigawatt, on Friday May 30 2014, reached financial close on the 100MW gas-fired power station in Mozambique. This is the first gas-fired power station to achieve financial close in Mozambique by an independent power producer and the largest project financing in the Mozambique power sector to-date – two major achievements that should be celebrated.

The power station is located in the Gigawatt Power Park at Ressano Garcia in Mozambique close to the main transmission line that connects South Africa with Mozambique.

The project was developed by a local Mozambique company, Gigawatt, which holds a gas power generation concession from the Mozambique Government that has been sub-conceded, since 2012, for temporary power to Mozambique, South Africa and Namibia. Eaglestone Capital Advisory acted as financial adviser to Gigawatt. Bowman Gilfillan was legal adviser to the project and AON provided insurance advice.

Construction of the facility will be undertaken by a consortium consisting of South Africa-based WBHO and international Parsons Brinkerhoff. A joint venture between TSK ElectrónicaY Electricidad and Energy Experts Now will provide O&M services to the project. The facility is a significant step forward in the supply of cheap and clean energy to homes and industry in Mozambique using Mozambique's gas reserves, and upon completion, scheduled for Q4 2015, the project will provide more than 850m kWh of energy to Mozambique per annum. Gigawatt has signed a long-term power purchase agreement with Mozambique's state power company, Electricidade de Moçambique EP, which will purchase all of the power from the project for a 15-year period.

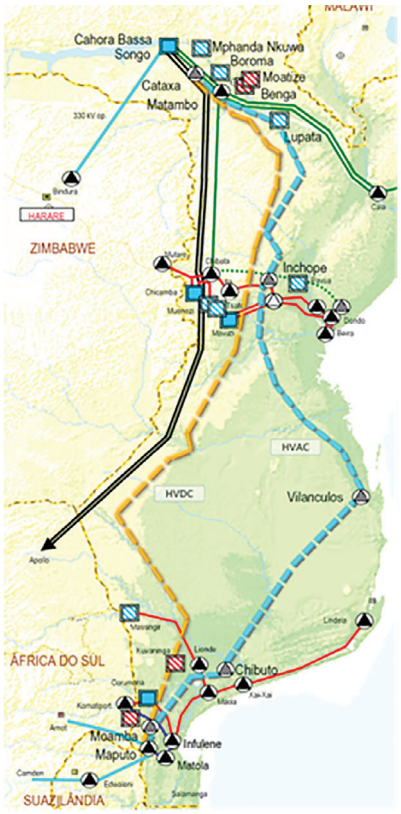
The gas supply for the project will be provided by a local Mozambique gas distribution company, Matola Gas Company SA (MGC) under a long-term gas supply agreement. The gas will come from the Panda Temani gas fields and is being transported through the 865km 26-inch diameter Republic of Mozambique Pipeline Investment Company (Rompco), gas pipeline running from Panda Temani gas, the gas fields in Mozambique and Sasol's plant in Secunda, South Africa. The gas tap of point is on the project site and gas is already flowing to a temporary 240MW gas-fired power station that has secured short-term power supply contracts with South Africa, Namibia and EdM. Once the permanent 100MW power station is operational the current 240MW temporary plant will be de-commissioned.

Financing

The pioneering spirit of the Southern African project finance market is evidenced through the financing of the Gigawatt project; at circa

Construction of the facility will be undertaken by a consortium of South Africa-based WBHO and international firm Parsons Brinkerhoff

FIGURE 2 - THE STE PROJECT



- The STE project will be implemented in two distinct stages, being estimated to increase the installed capacity located between 2,225 MW and 3,850 MW. The project will involve a total investment of US$1.8bn through the implementation of two transmission lines:

- Line of High Voltage Alternative Line (HVAC) 400 kV (shown to the right on the map):
  - **Total capacity:** 900 MW, and can reach 1,200MW by the installing of compensation equipment
  - **Substations:** 5, located in Muamba, Chibuto, Vilanculos, and Inchope Cataxa
  - **Estimated total investment:** US$95m

- Line of High Voltage Direct Line (HVDC) 500 kV (shown to the left on the map):
  - **Total capacity:** 1,325MW, and can reach 2,650 MW
  - **Substations:** 2, located in Maputo and Matambo
  - **Estimated total investment:** US$849m

US$210m it represents one of the largest project financings in Mozambique.

The financial structure of the project, with a net gearing ratio of 80%, is aggressively geared in line with international experience and the security structure underpinning the power purchase agreement and concession. The Mozambique Government through signature of the concession contract provides a level of support for EdM's financial obligations under the power purchase agreement, delivering a typical IPP limited-recourse project finance structure as set out in Figure 3.

The funding structure for the project is summarised in the table below:

- US$40m of equity and privilege shares;
- US$159m of senior loan funding; and
- US$11m of sub debt funding.

The total US$170m debt requirement on the project was taken on by Standard Bank South Africa with the aim to sell down a portion of its exposure post-financial close. The senior loan funding was 100% US dollar-denominated and structured with a tenor of 12 years utilising a sculpted capital redemption profile. The cover ratios are robust for a gas-fired power station in Mozambique, with a minimum senior ADSCR and LLCR in excess of 1.5x and 1.65x respectively (average senior ADSCR in excess of 1.65x, and average senior LLCR in excess of 2.5x). The total ADSCR and LLCR are also robust, being in excess of 1.4x and 1.50x respectively.

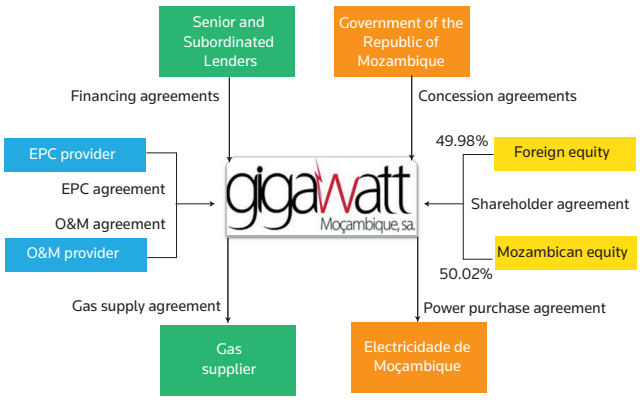
Standard Bank acted as mandated lead arranger and underwriter on the debt financing, and also met all sub-debt requirements. Standard Bank Mozambique has also been appointed as the primary account bank for Gigawatt. Trinity International LLP acted as lender's legal counsel while Mott MacDonald was the lender's technical adviser – Marsh signed off on insurance matters.

The financing structure also included 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 complex FX hedging arrangements to hedge multiple currencies including euros, South African rand and Meticais payments of the EPC Contract, in the ratio of 22% rand, 72% euros, 2% Meticais and the remaining 4% in US dollars.

Given that this was the first IPP project in Mozambique and at US$210m one of the largest project financings in the history of Mozambique. all project participants had to break new ground and overcome major hurdles on the road to financial close. This required an in-depth understanding of all the project risks, some real creativity and sometimes just a pragmatic approach to find solutions to some challenging project finance issues. Some of these issues included:

- Mozambique country risk;
- Bankability of the PPA and EdM;

FIGURE 3 - GIGATWATT PROJECT CONTRACT STRUCTURE



- Structuring the concession contract;
- Long-term gas resource and transport risk;
- Managing the offshore and onshore security requirements from the lenders;
- Foreign exchange risk;
- Managing the multi-party risk allocation between the EPC provider, equipment supplier, long-term operator, Gigawatt, gas provider, EdM and the Mozambique Government; and
- Securing long-term political risk insurance to match debt and equity tenors.

Not surprisingly, international and South African precedents were the order of the day when most of these issues were negotiated. This is understandable given that this is the first project financed gas-fired power station in Mozambique with most of the financing coming from the South African market. What was even more impressive was that all the project agreements and the whole financing package were put in place in less than 12 months. This is a fantastic achievement, when compared with project finance transactions globally.

One of the more challenging aspects of the financing structure related to structuring the funding to facilitate majority Mozambique shareholding participation in a market with very little local capital and liquidity. This was achieved through using privilege shares as part of the equity funding. The privilege share is a quasi-equity instrument that results in higher gearing delivering an enhanced equity return to ordinary shareholders and also facilitates meaningful Mozambique shareholder participation in the project. The project is more than 50% owned by a consortium of Mozambique shareholders. The shares are fully subordinated to the senior loan funding and rank just ahead of ordinary equity.

The US$40m of equity required for the project was provided by a consortium of Mozambique shareholders, Gigajoule Power (Pty) Ltd, Old Mutual Life Assurance Company (South Africa) Ltd and WBHO Construction (Pty) Ltd. The shareholding structure shows that strong Mozambique shareholder participation is an important imperative when doing business in Mozambique.

Both the debt and equity will benefit from long-term political risk insurance.

The future

The Mozambique Government has shown its commitment to the development of the energy sector in Mozambique and most importantly the beneficiation of its gas resources locally to deliver economic growth to the Mozambique economy. The Mozambique Government has made its intentions clear that the country's natural resources would be exploited to benefit the people of Mozambique.

The success of Gigawatt has established an international accepted project finance framework for energy projects in Mozambique and in conjunction with the Mozambique Government's commitment the potential for project finance in Mozambique could be exponential, especially in light of the country's short-term fiscal limitations. In addition to Gigawatt there are more than 200MW of just gas-fired power projects expected to achieve financial close this year, which means that Mozambique has joined the power party in the South of Africa.

This ground-breaking project financing in Mozambique should attract the attention of seasoned project financiers across the globe, especially as it is further evidence that African countries are slowly starting to embrace the fiscal discipline, financial transparency and accountability that project finance installs. Deal flow from the energy and transport sectors is likely to blaze a trail across the continent, as the push for economic growth and self-sustainability continues.

The Mozambique energy sector is on the cusp of unprecedented growth. However, given the country risk profile of Mozambique and the challenges faced by the energy sector in the region, it will require a regional perspective, a pioneering spirit, some patience and loads of courage. However, those who are able to stay the course are likely to be richly awarded as the Mozambique energy sector takes off over the next decade.

When the renewable energy sector in South Africa opened up in 2011, the sceptics in the project finance world were occupying spectators' seats and directing affairs from the side lines. Today, the debate still continues around the longevity, sustainability and the risk/reward trade-off in the South African energy market. Maybe it will be different for Mozambique, or maybe not, only time will tell.

Until then, the courageous in the project finance world are pioneering through the countryside of Mozambique looking to revolutionise the Southern Africa energy landscape. Are you brave enough? ■