

## Myanmar – Power is the key

Myanmar's emergence in the last 24 months as South-East Asia's most exciting business opportunity has rarely been out of the press. It has a large, youthful population, a strategically advantageous geographical location within the ASEAN community and, most importantly following decades of authoritarian rule, a renewed desire to undertake the political and economic reforms necessary to position itself as a key economy in the region.

Like any developing economy, one of the most important building blocks for Myanmar's economic development will be access to electricity. Without power, Myanmar's industry will not reach its full potential. In this article we outline some of the reasons why Myanmar's power sector has attracted the interest of the international project finance community and provide an overview of the key challenges that the power sector is facing.

### Opportunities

#### STRONG DEMAND AND POTENTIAL GROWTH

Presently, only 30% of Myanmar's population have access to electricity (with that percentage decreasing to around 6% in rural areas) and there were demonstrations last year in Yangon against rolling power cuts. Power cuts and brown-outs are an unfortunate feature of daily life, as anyone who has visited the city this year will be aware. The power sector is therefore a top priority for the government, and the latest announced goal is to increase capacity to 20,000MW by the year 2030 – a monumental plan given the current installed capacity of only 4,000MW.

The government also plans to revise the existing electricity law (dating from 1984, it was enacted during the years of isolation), and is working with the Asian Development Bank to understand the scope of this challenging task. The government is also in the

process of drafting a new energy policy, through the National Energy Management Committee.

In terms of fuel sources, gas-fired power projects have seen the most initial activity. The 120MW Ahlone power project, being developed by Toyo Thai, is one of the most progressed power projects involving international sponsors, with 80MW already being dispatched. Other significant projects under development include a 500MW gas-fired power project in Thakayta province, being developed by a South Korean consortium, and three locally developed power projects of 50MW each.

Myanmar also has significant hydropower potential of about 100,000MW, with around 40,000MW of hydropower having so far been identified for possible development. Hydropower projects have their own challenges, however, due to seasonality of power supply and significant resettlement issues. The distance of the hydropower resource from the main demand centre of Yangon is also an issue, with significant upgrading of the transmission network required to avoid substantial transmission losses. As such, there is a recognition by the government that hydropower (which currently accounts for the bulk of the country's base-load) may be better suited to peak load supply, with thermal power capacity being stepped up to provide base-load.

Other renewables could also play a significant role, particularly micro power projects for smaller off-grid systems in rural areas. Suitable sites for solar and biomass power projects have been identified throughout the country. However, a successful renewables sector typically requires a solid underlying regulatory framework, which Myanmar does not yet have – a feed-in tariff for example.

#### GOVERNMENT FUNDS LIMITED

Like many emerging markets, and indeed some more developed markets, government funds are currently over-stretched. There is simply not the cash available in the public purse to make the substantial investments required to upgrade Myanmar's power infrastructure in order to keep pace with its economic development. While government-to-government lending is filling the short-term gap, the private sector is going to have a significant role to play in injecting the necessary capital, and that will be by means of both private company investment as well as international bank funding. The most likely form of funding for the power sector is project finance, backed by multilaterals or export credit agencies. The question remains however, how great is the commercial lender appetite to provide project finance to Myanmar?

#### KEEN INTEREST FROM INTERNATIONAL BANKING SECTOR

In spite of the challenges, there is relatively strong interest from the international lending community in Myanmar; the challenge is to convert this interest into debt funding for suitable projects. Myanmar presents a new frontier market in the South-East Asia region for the international banks, especially as markets such as Thailand and the Philippines are increasingly dominated by strong local banks. The international banks know that the lender that takes a leading role in the first major power project financing in Myanmar will have a greater profile when the sector expands. Many of the key regional and international project finance banks have established representative offices in Yangon and a number of them now have a clear mandate to lend – provided it is to the right project.

#### PROFILE FOR EARLY MOVERS

The same early mover advantage is being pursued even more aggressively by international sponsors seeking to gain recognition with the various governmental and local players in the market, which is going to be key in getting deals done in Myanmar. Some companies are more cautious than others. Some will wait for opportunities to invest by acquiring shares in projects that the more bullish early movers have developed.

Chinese, Japanese, South Korean, Thai and Singaporean companies are looking at this market. China has dominated investment in Myanmar in recent years, particularly for cross-border

hydropower schemes. Although Myanmar appears to want to loosen its reliance on its powerful neighbour, Chinese investment and influence is likely to remain significant. Through institutions such as Japan International Cooperation Agency (JICA), the world's largest bilateral aid agency, Japan has been a key provider of development finance and capacity building assistance to Myanmar over the last 12 months, leaving the Japanese well-positioned with the government.

The South Koreans have also been key investors in the ASEAN region in recent years and are similarly intent on gaining a foothold in Myanmar. The Korean Development Bank is showing early interest, as have a number of South Korean power developers. However, at a government-to-government level, we are not seeing the same level of investment as that offered by the Japanese.

Thailand has a long history with Myanmar and, although geographically close, the relationship between the countries is also tinged with a healthy rivalry. Thailand's power sector is, however, one of the success stories of South-East Asia over the last 20 years. With Thai project finance banks eager to follow Thailand's increasingly internationally focused sponsors into the Myanmar market, the opportunities are there for Myanmar to benefit and learn from the Thai experience. Singapore, as South-East Asia's financial centre, is home to some ambitious developers and is also likely to play a key role, not least due to its favourable tax treaty with Myanmar.

#### MULTILATERAL/DEVELOPMENT FUNDING ASSISTANCE

Given the risks involved and Myanmar's early stage of development, multilateral and ECA development funding assistance is key. If there was ever a market that should attract development funding, Myanmar is that market. Institutions such as the World Bank, the IFC, and the Asian Development Bank all want to find opportunities to provide development assistance to the country. Various high-ranking delegations from these institutions have visited the country over the last 12 months to pledge support, which will be essential in ensuring the transition of the power sector to a model that is bankable.

## Challenges

While Myanmar has many of the raw ingredients for a burgeoning project finance market to supply it with the power it needs, there remain a number of issues that could act as a significant drag on such investment in the near-term.

### UNDERDEVELOPED DOCUMENTATION

The Myanmar power sector lacks a clear regulatory structure and supporting documentation. This is in contrast to the oil and gas sector, where the Ministry of Energy recently announced that 10 foreign companies have won exploration rights to 16 onshore oil and gas blocks. Importantly, the terms of the production-sharing contracts with the Myanmar Oil & Gas Enterprise are well known to the market.

However, with no historic track record of power purchase agreements, and no standard BOT contract, investors in the power sector and their lenders are negotiating projects on an ad hoc, bilateral basis. Each project has to discover and negotiate the government's position on key bankability points. The government recently tendered a gas-fired power project (with bids originally due by November 30 2013, but extended into December 2013), but it was notable that no power purchase agreement was issued as part of that tender process. Further, a number of the power purchase agreements contain two unusual features that are worth highlighting:

- i. A free power requirement, whereby a proportion of power (which may be up to 15%) is supplied to the offtaker, Myanmar Electric Power Enterprise (MEPE), for free; and
- ii. A free shares requirement, whereby equity (up to 15%) is gifted by developers to MEPE as a quasi royalty payment.

The application of these features varies from project to project, and given that these can have a significant impact on the internal rate of return for a project, it makes the comparison of tariffs across projects (or indeed between bid proposals) more difficult. On the positive side, it does appear that the government is at least willing to grant PPAs with terms long enough to allow project finance debt with typical tenors.

However, for the market to develop and inspire confidence in investors, there is a need for the government to begin to formulate standard and consistent positions and develop and implement a

more developed tender process, which would include the release of a "standard" (and well balanced) power purchase agreement and BOT contract to the market. The successful tendering of the telecommunications licences in Myanmar earlier this year was a good example of the international interest and confidence that can be generated by a well-run tender; a lesson then for the power sector.

### SECURITY OF OFFTAKE

Another key concern is the security of the offtake of the power by MEPE, which is the counterparty to the PPA. MEPE does not yet have a lengthy track-record of offtake payments that investors or their lenders can take comfort from, unlike for example, the Electricity Authority of Thailand (EGAT). It is well known by the project finance community that during the Asian financial crisis at the end of the 1990s, EGAT was careful to ensure that it complied with all of its payment obligations.

Importantly, MEPE is having to pay more for generation of power than the price at which it sells that power to customers – the tariff to end-consumers is in fact one of the lowest in South-East Asia. Therefore, a government subsidy to MEPE is essential. Such subsidy arrangement is far from unique in Asia, but structuring power projects to provide comfort to lenders on MEPE credit risk through extended political risk insurance will be a key requirement for commercial lender participation in the power sector. We believe that this is where multilateral agencies such as the IFC and the ADB or export credit agencies such as NEXI and K-sure will be essential for successful financings.

### GAS SUPPLY

The practical key challenge facing the power sector in Myanmar is a lack of gas. While Myanmar enjoys significant reserves of gas, a large proportion of that gas is already contractually committed to Thailand and China. These arrangements were made at a time when Myanmar did not have the need for such gas domestically. The shortage of gas will remain an issue for gas-fired projects until new gas fields come on stream, with the timing for that new gas recently being revised by the government from 2016 to 2018 at the earliest. The quantities that may come on stream remain uncertain however.

There is talk of an LNG receiving terminal for gas imports, but the likelihood of such an ambitious plan

materialising any time soon appears remote. Coal will be seen as the cheapest alternative source of fuel to plug the gap created by the lack of gas, but reliance on domestic coal supplies may not be viable in the short term, with the main reserves in remote areas, and as much of the coal is sub-bituminous or lignite, it is less suitable for power generation.

The government has indicated that it is prepared to allow coal imports, but this decision will be accompanied by public environmental concerns; the government has shown a willingness in the past to cancel large-scale coal plants for public policy reasons. However, with the efficiency of coal-fired generation having increased in recent years, coal is likely to have an important part to play in the sector, especially as it would displace significant diesel generation.

Myanmar also has significant hydropower potential, and observers are comparing Myanmar with the position of Laos a decade or so ago, with many of the factors that led to Laos' success as an exporter of hydropower to neighbouring countries also present in Myanmar. However, export of power on a large scale will again depend on convincing the public that such export is in Myanmar's best interests, when the need for power at home is so great, and so pressing.

#### LENDER SECURITY

The extent of the collateral available to lenders is also a key concern in Myanmar. Although existing law provides that a range of security interests are available, there are limited examples of these being used in practice. Importantly, Myanmar law does not allow foreign lenders to take security over immovable property, and this is where experienced international and local counsel can combine to advise on a robust security structure to satisfy international lenders.

#### FINANCIAL SYSTEM

Myanmar's financial system is under-developed. The granting of independence to the Myanmar Central Bank in July this year was an important step, with the accepted view being that this should lead to greater international openness and transparency, and therefore, increased investor confidence. The new law allows the central bank to provide loans to the government, but only with parliamentary approval. Previously, the central bank was effectively obliged to finance the government by lending money

to it, with corresponding inflation the predictable result. However, the new law does not contain regulations on the formation of joint ventures between foreign banks and local banks (contrary to what a number of observers had expected). Until such joint ventures are facilitated, Myanmar's local banking sector is going to lag behind those of its neighbours.

#### LEGAL SYSTEM

A gradual upgrading of Myanmar's legal system will also be necessary to attract significant project finance. Myanmar's legal framework is based on a combination of laws from different periods of its history, which exist alongside a common-law style judicial system. The laws are in many cases outdated or untested, and confidence in the judicial system is coming from a low base.

### Conclusion – Cautious optimism

The Myanmar power sector represents a significant investment opportunity. There has been considerable hype and exuberance that did not take adequate account of the numerous difficulties to be overcome, but the extent of the potential upside for those that "get it right" is considerable.

The government is keen to build its internal capacity, and has the opportunity to learn from the experiences of its neighbouring countries in developing its power sector. In addition, the appetite is there in a project finance lending community that has seen fewer opportunities come to market in South-East Asia in 2013 than might have been hoped for.

Given the challenges outlined above, and the Myanmar elections in 2015, we do not expect to see any sudden proliferation of major power project financings in Myanmar in the short-term. But for those willing to stay the course, the hope is that Myanmar's power sector will live up to its potential and provide the energy necessary for Myanmar to thrive.

---

This article was first published in *PFI Yearbook 2014*, a publication of Thomson Reuters.

## Contact Us

For inquiries related to this Legal Update, please contact the following persons or your usual contacts with our firm.

### **Nathan Dodd**

Partner

T: +65 6327 0235

E: [nathan.dodd@mayerbrownjmsm.com](mailto:nathan.dodd@mayerbrownjmsm.com)

### **Ben Thompson**

Consultant

T: +65 6327 0247

E: [ben.thompson@mayerbrownjmsm.com](mailto:ben.thompson@mayerbrownjmsm.com)

---

Mayer Brown JSM is part of Mayer Brown, a global legal services organisation advising many of the world's largest companies, including a significant portion of the Fortune 100, FTSE 100, DAX and Hang Seng Index companies and more than half of the world's largest banks. Our legal services include banking and finance; corporate and securities; litigation and dispute resolution; antitrust and competition; employment and benefits; environmental; financial services regulatory & enforcement; government and global trade; intellectual property; real estate; tax; restructuring, bankruptcy and insolvency; and wealth management.

OFFICE LOCATIONS      AMERICAS: Charlotte, Chicago, Houston, Los Angeles, New York, Palo Alto, Washington DC  
ASIA: Bangkok, Beijing, Guangzhou, Hanoi, Ho Chi Minh City, Hong Kong, Shanghai, Singapore  
EUROPE: Brussels, Düsseldorf, Frankfurt, London, Paris  
TAUIL& CHEQUER ADVOGADOS in association with Mayer Brown LLP: São Paulo, Rio de Janeiro

Please visit [www.mayerbrownjmsm.com](http://www.mayerbrownjmsm.com) for comprehensive contact information for all our offices.

This publication provides information and comments on legal issues and developments of interest to our clients and friends. The foregoing is intended to provide a general guide to the subject matter and is not intended to provide legal advice or be a substitute for specific advice concerning individual situations. Readers should seek legal advice before taking any action with respect to the matters discussed herein. Please also read the Mayer Brown JSM legal publications [Disclaimer](#). A list of the partners of Mayer Brown JSM may be inspected on our website [www.mayerbrownjmsm.com](http://www.mayerbrownjmsm.com) or provided to you on request.

Mayer Brown is a global legal services provider comprising legal practices that are separate entities (the "Mayer Brown Practices"). The Mayer Brown Practices are: Mayer Brown LLP and Mayer Brown Europe - Brussels LLP, both limited liability partnerships established in Illinois USA; Mayer Brown International LLP, a limited liability partnership incorporated in England and Wales (authorised and regulated by the Solicitors Regulation Authority and registered in England and Wales number OC303359); Mayer Brown, a SELAS established in France; Mayer Brown JSM, a Hong Kong partnership and its associated entities in Asia; and Tauil & Chequer Advogados, a Brazilian law partnership with which Mayer Brown is associated. "Mayer Brown" and the Mayer Brown logo are the trademarks of the Mayer Brown Practices in their respective jurisdictions.