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Opportunities for British companies in Burma's oil and gas sector

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UKTI in Burma

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Why the time is right to do business in oil and gas

Political and economic reforms

- New political reforms introduced in 2011 have seen sanctions lifted by the European Union and United States, allowing international players to re-enter the market.

Tenders announced

- In June 2014, the Government of Burma awarded 20 international companies preliminary rights to explore and produce offshore blocks, with exploration likely to start in October 2015. Licences for another further 50 offshore blocks are expected to be announced in 2015/16.

A hotspot for exploration

- Burma is one of world's hotspots for exploration: according to research firm IHS Global Insights, Burma is estimate to possess 3.2 billion barrels of oil and 18 trillion cubic feet (tcf) of natural gas reserves. Its unproven resources may be vastly greater.

Potentially valuable resources

- Burma's proven reserves are almost on a par with those in India, which possesses 5.7 billion barrels of oil and 18 trillion tcf of natural gas and is ranked 16th globally in terms of the value of its resources by British Petroleum's 2013 statistical review of world energy.

Limited local capacity

- At present, Burma's local capacity is limited, which means there is a demand for international suppliers across the entire supply chain.
- The Government of Burma is keen to work with responsible international businesses to ensure that international standards in health, safety and the environment are met.

Contents

History and overview of Burma's gas and oil sector

Burma is one of the world's oldest oil producers, having exported its first barrel more than 150 years ago. The UK's involvement in the sector dates back to 1886, when the Scottish owned Burmah Oil Company (BOC) became the first foreign oil company to drill in Burma. BOC – which in 2000 was acquired by BP – discovered the Yenangyaung field in 1887 and the Chauk field in 1902. BOC enjoyed a monopoly in the sector until 1901, when America's Standard Oil Company launched operations in Burma. Nonetheless, BOC continued to dominate the country's oil and gas sector until 1962, when the industry was nationalised after a socialist military regime came to power. The nationalised assets of Burmah Oil Company were amalgamated to state-owned Myanma Oil and Gas Enterprise (MOGE).

The regime assumed complete ownership of resources, with MOGE carrying out the vast majority of oil exploration and production. Private operators occasionally carried out projects under production sharing contracts – however a strict nationalistic policy and the lack of an appropriate legal framework resulted in an absence of foreign operators until very recently.

In addition to MOGE, the Ministry of Energy continues to oversee two other state-owned enterprises: Myanma Petrochemical Enterprise (MPE) and Myanma Petroleum Products Enterprise (MPPE). MPE is responsible for oil and gas exploration and production, as well as domestic gas transmission, while MPPE manages retail and wholesale distribution of petroleum products. These bodies are also responsible for issuing tenders to foreign companies. While there has been talk that these entities may become privatised in the future – and MPE announced in July that is seeking a foreign partner to launch a joint venture in a bid to privatise an oil refinery – no further information has been publicly disclosed. Nonetheless, the opportunity for a foreign firm to benefit from the sale of petroleum products for the first time is an indication that Burma is embarking on a new phase of managing its oil and gas resources.

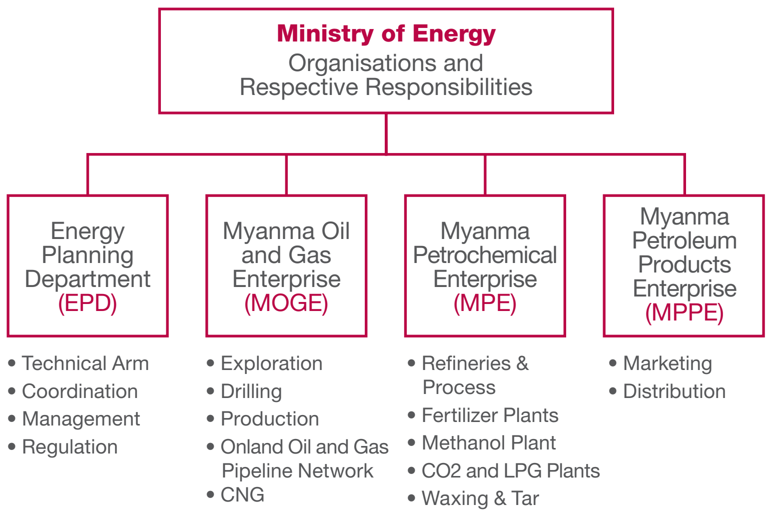
The first signs of change occurred in 1988, when a foreign investment law was passed and the government began to source technology and capital from foreign companies in a bid to revive its dwindling oil industry. According to the International Energy Agency (IEA), Burma's oil output per day comprises a mere 0.02 percent of the global total.

Burma's oil and gas sector at a glance

- Gas comprises 90 percent of total products and Burma is the 10th largest producer of natural gas globally – the bulk of which is exported to China and Thailand.
- Burma has estimated proven gas reserves of 10 trillion cubic feet and proven oil reserves of 50 million barrels, according to the US Energy Information Administration.
- Burma's proven reserves are worth an estimated US$75 billion at current prices. This is a modest figure in comparison with global energy reserves. According to data from British Petroleum's 2013 statistical review of world energy, Algeria is ranked 18th with oil and gas reserves worth $3.4 trillion, while top-ranking Russia has reserves worth $40.7 trillion.
- However the Burmese Ministry of Energy has indicated that potential reserves may be significantly higher, which could mean that the value of Burma's oil and gas sector could potentially be far higher than current estimates.

UKTI TIP
The cost of establishing an office in Rangoon is relatively affordable and having a permanent presence will demonstrate a commitment to your customers and the Government of Burma. For more information, read UKTI's **Doing business in Burma: Burma trade and export guide**

Organisational chart – Ministry of Energy



The **National Energy Management Committee** was established in Burma in January 2013. It comprises MOGE, the Ministry of Energy and the 10 other government institutions involved in energy development and aims to streamline the country's national energy policy. It is chaired by the Minister of Energy, U Zay Yar Aung.

Burma's global standing in natural gas reserves

The chart below provides a comparative illustration of Burma's global standing in natural gas reserves. With proven reserves of 283.2 billion (m3), Burma is ranked just below neighbouring Thailand and is among the world's top fifth nations in terms of its proven reserves. It is important to remember that unproven reserves are believed to be vastly greater.

Ranking	Country	Proven reserves (m3)
1	Russia	48,700,000,000,000
2	Iran	33,600,000,000,000
3	Qatar	25,100,000,000,000
4	Turkmenistan	17,500,000,000,000
5	United States	9,460,000,000,000
6	Saudi Arabia	8,200,000,000,000
7	Venezuela	5,524,500,000,000
8	Nigeria	5,246,000,000,000
9	Algeria	4,502,000,000,000
10	Australia	4,300,000,000,000
11	Iraq	3,600,000,000,000
12	China	3,100,000,000,000
13	Indonesia	3,001,000,000,000
14	Kazakhstan	1,900,000,000,000
15	Malaysia	2,350,000,000,000
38	Thailand	342,000,000,000
40	United Kingdom	292,000,000,000
41	Burma	283,200,000,000
World		187,300,000,000,000

Source: CIA Factbook

According to data from the Ministry of Energy, Burma produced only 42 percent of gasoline and 11 percent of the diesel consumed in the 2013-14 fiscal year. The shortfall was met by importing 97 million gallons of gasoline and 330 million gallons of diesel – the majority of which was imported from Thailand and Singapore.

In recognition of the current and projected energy shortages Burma faces, the Government of Burma, the Asian Development Bank (ADB) and Accenture published a report titled **New Energy Architecture Myanmar.** The report analyses the challenges facing Burma's energy sector and assesses how future reforms and trends can be managed to support domestic energy demands as well as wider economic development.

The report also presents schemes for storage to ensure fuel availability in the future and for the operation and extraction of oil and gas from onshore and offshore fields. The report found that since Burma embarked on a series of political and economic reforms in 2011, many positive developments have occurred in the country's energy architecture.

However it also noted that while Burma possesses significant natural gas reserves, there is insufficient supply to meet local demand in the short term. This is due to the fact that until EU and US sanctions were lifted, Burma's government resorted to entering into contracts for the export of natural gas to Thailand and China as a means of raising capital. "Combined with historically poor maintenance and a lack of compression in gas pipelines, the existing gas-powered plants are old and operate at a significantly lower plant capacity and efficiency," states the report.

Similarly, the report states that: "Burma's three ageing oil refineries, with utilisation rates as low as 41 percent, need urgent rehabilitation as well as technical upgrades to handle heavier crude oil."

The need for improved infrastructure at Thanlyin Oil Refinery in Yangon Region and Chauk and Mann Thanpayarkan oil refineries in Magway region presents opportunities for foreign investment. Since 2012, the government has stated that it is particularly keen to privatise Thanlyin refinery, and that the preferred bidder would be a foreign rather than local company.

Quick facts about Thanlyin Oil Refinery

- It is the largest of Burma's three refineries.
- Unlike the other refineries, it has the capacity to store crude oil and condensate (229,600 million gallons), gasoline, jet fuel, diesel and LPG (5,500 tonnes).
- The facility also has 745 acres of land for future expansion.
- Media reports have stated that MPE is seeking out businesses that have experience owning and operating refineries, and also with experience in importing and distributing crude oil and petroleum products.

UKTI TIP
Find a trusted local partner or agent to support you. Joining the British Chamber of Commerce Myanmar may help you to establish a local network of contacts.
www.britishchambermyanmar.com

Recent licence awards

The government recognises its domestic capacity is limited and is therefore keen to attract greater foreign investment and technical assistance. Production-sharing contracts are increasingly awarded through licensing rounds as opposed to direct negotiations. The first licensing rounds for oil and natural gas fields took place in 2011 and during the past 12 months, the Government of Burma has awarded 16 onshore and 20 offshore blocks to foreign and domestic companies. The 20 offshore blocks comprise 10 that are deepwater and 10 which are shallow-water.

For onshore and shallow water blocks, potential bidders must cooperate with at least one Burmese-owned company which is registered with the Energy Planning Department. Bidders for deep water offshore blocks are not required to partner with a Burmese company.

UKTI TIP
MOGE does not have a specific website and much of the content on the Ministry of Energy's website is in Burmese. Tenders and sector updates in both English and Burmese are regularly posted on the Facebook page called "Myanma Oil & Gas Enterprise".

Onshore company activity

International companies operating onshore

Company name	Company base
Nobel Oil	Russia
CNOOC	China
SIPC Myanmar	China
North Petro-Chem	China
Goldpetrol	Indonesia
MPRL and E&P	British Virgin Islands
ESSAR	India
Snog, UPR	Singapore
EPI (Holding) Limited	Hong Kong
Geopetrol International	Switzerland
Petronas	Malaysia
Jubilant Oil and Gas Pvt	India
PTTEPI	Thailand
Istech Energy EP-5 Ltd	Singapore
Asia Orient International Limited	Hong Kong

Recent onshore energy block winners

Production sharing contracts		
Company name	**Country**	**Number of blocks**
ONGC Videsh	India	2
Eni	Italy	2
Petroleum Exploration	Pakistan	2
Brunei National Petroleum	Brunei	1
Petronas	Malaysia	1
Pacific Hunt Energy	Canada	2
CAOG S.a.r.l.	Luxembourg	1
JSOC Bashneft	Russia	1
PTTEP South Asia Ltd and Palang	Thailand	1
Sophon Offshore	Thailand	1

Petroleum Recovery Contracts		
MPRLE & P Pte	British Virgin Islands	2
Petronas	Malaysia	1

List of winners of 20 offshore energy blocks awarded in Burma

Shallow water blocks

Number	Block/Area	Company awarded	Country	Acreage (sq km)
1	A-4	BG Asia Pacific and Woodside Energy (Myanmar)	UK and Australia	2,200
2	A-5	Chevron (Unocal Myanmar Offshore Co. Ltd)	United States	10,600
3	A-7	BG Asia Pacific and Woodside Energy (Myanmar)	UK and Australia	8,220
4	M-4	Oil India Ltd, Mercator Petroleum Ltd and Oilmax Energy	India	N/A
5	M-7	ROC Oil and Tap Oil	Australia	13,000
6	M-8	Berlanga Holding	Netherlands	N/A
7	M-15	Transcontinental Group	Australia	N/A
8	M-17	Reliance Industries	India	27,600
9	M-18	Reliance Industries	India	N/A
10	YEB	Oil India Ltd, Mercator Petroleum Ltd and Oilmax Energy	India	N/A

Deep water blocks

Number	Block/Area	Company awarded	Country	Acreage (sq km)
1	AD-2	BG Asia Pacific and Woodside Energy (Myanmar)	UK and Australia	8,098
2	AD-3	Ophir Energy Pic	United Kingdom	10,000
3	AD-5	BG Asia Pacific and Woodside Energy (Myanmar)	UK and Australia	10,560
4	AD-9	Shell Myanmar Energy and MOECO	Netherlands	N/A
5	AD-10	Statoil and Conoco Phillips	Norway and United States	9,000
6	AD-11	Shell Myanmar Energy and MOECO	Netherlands	N/A
7	MD-2	Eni Myanmar	Italy	N/A
8	MD-4	Eni Myanmar	Italy	N/A
9	MD-5	Shell Myanmar Energy and MOECO	Netherlands	N/A
10	YWB	Total E&P Myanmar	France	N/A

Source: Ministry of Energy

The tenders were announced on 26 March 2014.

How do offshore PSCs work in Burma?

Burma's deepwater offshore PSCs offer an exploration period of three years, with a possible one or two year extension and a 20-year development period. Royalties recently increased to 12.5 percent from 10 percent and cost recovery limits of 40-50 percent. The royalty payable for onshore production is also 12.5 percent.

Deepwater oil

The government's share will range from 70 percent if output is 50,000 b/d or less to 90% above 150,000 b/d, with the state's share of gas output ranging from 70% at 300,000 Mcf/d to 90% over 900,000 Mcf/d. Signature fees are negotiated by MOGE.

Shallow waters

The production split ranges from 60-90 percent, depending on production rates and well depths. Cost recovery limits are 50 percent in water depths of 600 feet or less and 60 percent above that.

Typically MOGE will be entitled to a 15-25 percent share of any offshore or onshore block production.

Incentives

Imports of equipment and materials and on oil and gas exports are exempt from duties and income tax is set at a rate of 30 percent, with a three year holiday for oil companies.

For onshore production, this translates to 20 percent of oil or 25 percent of gas from the contractor's share of profit production, which is to be sold to the local market at 90 percent of fair market rates.

UKTI TIP
With the international hub of Bangkok just a 90 minute flight from Rangoon, leveraging existing relationships in the region is logistically straightforward and likely to deliver benefits for your business.

Key legislation

- The Oilfields Act (1918)
- The Oilfields Rules (1936)
- The Petroleum Act (1934)
- The Petroleum Rules (1937)
- The Essential Supplies and Services and Act (1947)
- The Oilfields (Labour and Welfare Act) (1951)
- The Petroleum Resources (Development Regulation Act (1957)
- The Law Amending the Petroleum Resources (Development Regulation) Act (1969)
- The Myanmar Petroleum concession Rules (1962)

The nine laws listed above are largely based on British Law Codes of the pre-independence Indian statutes and mostly deal with rights characterised as concessions. Although the terms and conditions of PSCs largely govern operations, the Oilfields (Labour and Welfare) Act 1951 remains highly relevant to contractors and service companies.

There are several other laws that play a role in governing the oil and gas sector – though in practice, investors generally enter into PSCs, Performance Compensation Contracts (PCCs), IPRs, Improvement of Marginal Recovery Agreements and Reactivation Agreements. So long as a conflict with an existing law does not exist, the terms and conditions of such contracts will govern the process.

The Myanmar Arbitration Act (1944) is relevant should contractual disputes arise over onshore blocks.

For offshore block related disputes, arbitration is undertaken according to UNCITRAL Arbitration Rules.

Where are the opportunities?

Burma has enormous economic potential based on its strategic location, size and stock of natural resources. Yet despite possessing some 10 trillion cubic feet of proven natural gas reserves and 50 million barrels of crude oil, both onshore and offshore exploration has been limited. The government has become increasingly keen to attract further foreign investment, with the energy and mining sectors among the top seven priorities for achieving an 8 percent increase in GDP. Furthermore, foreign investment regulations have been relaxed to encourage FDI – and as a result, Burma's oil and gas sector had received over US$14.3 billion in FDI by the end of the third quarter of the 2014/15 financial year. FDI in oil and gas currently accounts for about 36.3 percent of the country's total foreign investment. Through foreign investments and explorations in oil and gas blocks bids, Burma aims to bring foreign companies' technology, expertise and knowledge to the local companies, while at the same time leveraging on the foreign counterparts' financial capabilities.

The UK Government sponsored a trade delegation to Burma in July 2012 – which was the first in almost two decades and included British conglomerates BP and Shell. Since then, onshore and offshore license awards have brought success for a number of British companies, both large and small. The UK's North Sea expertise is well respected in Burma and there will be supply chain opportunities for British companies, particularly for those with experience in Southeast Asia. The Government of Burma is keen to open up trade and investment opportunities to a more diverse range of countries and is striving to promote responsible investment, which adds further leverage to the prospects for British companies to invest in Burma.

In March 2014, a statement by the Ministry of Energy indicated that the next bidding round for offshore oil and gas exploration blocks is likely to take place in 2015. UK companies are well positioned for these awards: those interested should start investigating opportunities now.

Supply chain opportunities

As Burma's oil and gas sector grows there will be supply chain opportunities for British companies in many different areas. This is for three main reasons:

1. At present, there is a lack of local capacity in terms of skilled personnel.
2. Burma's government and business community is keen to diversity their commercial partners.
3. Many international energy companies with a presence in Burma wish to work with trusted partners.

The opportunities are broad-ranging and include the following:

- Infrastructure and equipment
- Security
- Risk analysis
- Training and skills accreditation
- Legal and professional services
- Health and safety analysis
- Environmental and social impact assessment consultancy services

British companies are well positioned in a number of these areas, due to having well-established business relationships and global reputations.

UKTI TIP
To do business in Burma's energy sector, companies must engage with MOGE – either your local partner or UKTI can help with this.

Responsible business

UKTI encourages British businesses in Burma to conduct trade and investment responsibly. This is particularly relevant in the extractives sector as the risks are higher. A report published by the Myanmar Centre for Responsible Business (MCRB) in September, titled **Myanmar Oil and Gas – A Sector-Wide Impact Assessment (SWIA)** provides sound advice in this regard. Below are some of MCRB's top tips:

Recommendations for Investors

- Undertake comprehensive due diligence on companies and their portfolios
- Engage with investee companies to ensure they meet international standards on responsible business
- Ensure that companies doing business in the oil and gas sector publish robust reports on how risks are managed and assess the impact of their investments and operations

Recommendations for Companies

- Adopt a policy commitment to responsible business conduct and human rights
- Commit to applying international standards of responsible business conduct in the absence of developed national legal frameworks
- Take local complexities and legacies into account when assessing the impacts operations may have
- Integrate issues relating ethnic conflict into all phases of operations
- Communicate with stakeholders, particularly workers and communities, to build understanding and demonstrate transparency and accountability

Burma: an EITI candidate country

In December 2012, Burmese President Thein Sein announced that his government sought to join the Extractive Industries Transparency Initiative (EITI) to encourage responsible investment and ensure that the extraction of natural resources would not adversely affect the environment and local communities.
On July 2, Burma was admitted as an EITI candidate country. It has joined a global EITI pool of 17 candidate countries and 29 others deemed compliant. A decision on Burma's bid to be EITI compliant will be announced at the start of 2017.

The UK's involvement with EITI in Burma

Since January 2013, Department of International Development (DFID) has supported Burma's participation in EITI by providing funding to the coordinating office run by the Myanmar Development Resource Institute (MRDI) and to strengthen civil society's rule in ensuring transparency. It also provides funding to the World Bank to carry out technical projects, such as institutional assessments and a review of the current legal framework as it relates to being compatible with EITI requirements, such as the disclosure of company ownership, contract terms, state-owned extractive industries, and the allocation of resource revenues.

Useful websites and further reading

British Embassy Rangoon foreign travel advice

UKTI

UKTI Rangoon

Ministry of Energy

Ministry of Energy's Facebook page

Myanma Oil and Gas Enterprise

Ministry of Electric Power

Directorate of Investment and Company Administration (DICA)

EITI in Burma

New Energy Architecture Myanmar – ADB Report

Myanmar Oil & Gas Sector-Wide Impact Assessment (SWIA)

US Energy Information Administration – Myanmar

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