

# Why the time is right to do business in all and gas

#### Palitic II 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

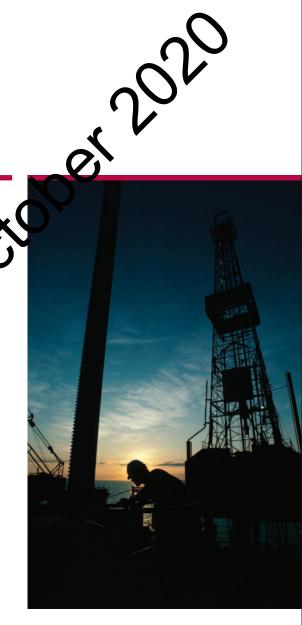
 Burma's proven reserves are almost on a par with those in India, which possesses 5.7 billion barrels of oil and 18 trillion tof of natural gas and is ranked 16th globally in terms of the value of its resources by British Petroleum's 2013 statistical review of world energy.

#### 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.

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### 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 field in 1902. BOC enjoyed a mono sector until 1901, when America's Sta Oil Company launched operations in Nonetheless, BOC continued to domin the country's oil and gas sector testil 1962, sed after a when the industry was na socialist military regime ame to power. The nationalised assets of Burn n Oil Company were amalgamated in state-owned Myanma Oil and Gas Ent MOGE).

The regime assected complete ownership of resources was MOGE carrying out the vast majority of all exploration and production. Brivite operators occasionally carried out reseas under production sharing contracts however a strict nationalistic policy and the tack 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.

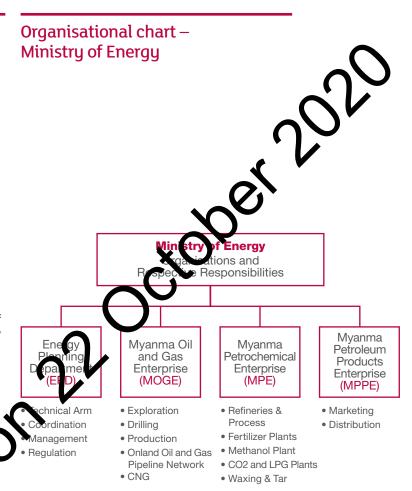


# Burma's oil and gas sector at a glance

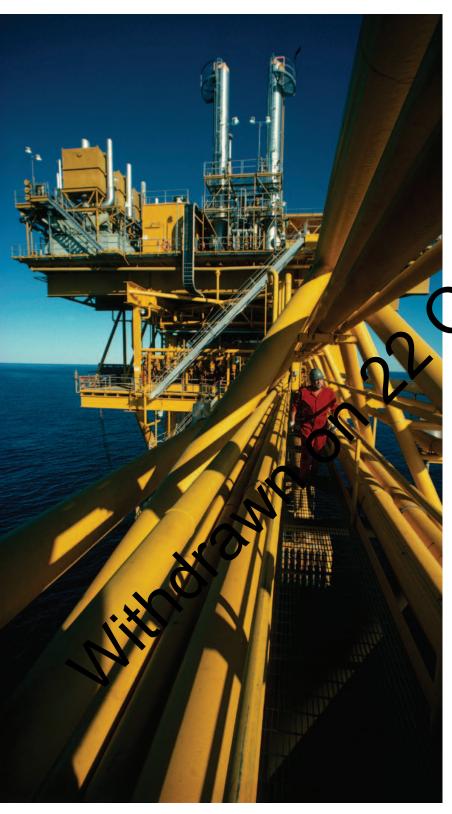
- Gas comprises 90 percent of total products and Burma is the 10th largest producer of natural gas globally – the bulk of which is exported to China and Thailand.
- Burma has estimated proven gas reserves of 10 trillion cubic feet and proven oil reserves of 50 million barrels, according to the US Energy 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 Evergy
  has indicated that potential assesses may
  be significantly higher, which doubt mean
  that the value of Borma's on and gas sector
  could potentially broat higher than current
  estimates.

#### UKCLTV

The tost of establishing an office in Range on 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



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 charities the provides a comparative illustration of Blazm's global standing in natural gas reserves. With proven reserves of 283.2 billion (n 3), Burma is ranked just below neighbouring that and 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 in corage to ensure fuel availability in the future and for the operation and extraction of or and gas from onshore and offs not field. The report found that since Burrya smarked on a series of political and economic eforms in 2011, many positive developments have occurred in the country's energy architecture.

However halse noted that while Burma posse seek ignificant natural gas reserves, there is nsufficient 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. "By ma's three ageing oil refineries, with still satil in rates as low as 41 percent, need in ent rehabilitation as well as technical ungrades to handle heavier crude oil."

The need for improved infrastructure at Thanlyin Oil Refinery in Yangon Region and Chauk and Mann Thanlayarkan oil refineries in Magway region resides a sopportunities 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 2 months, the Government of Burma has awarded 16 onshore and 20 offshore blocks to preior 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 Ranning Department. Bidders for deep water offshore blocks are not required to partner with a surmese company.



MC GE 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".



#### Onshor company activity

#### International impanies operating onshore

mornal value of paraming charters			
C mpary name	Company base		
الكام	Russia		
Clooc	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 Eni Italy Petroleum Exploration Pakistan Brunei National Petroleum Brunei Petronas Malaysia Pacific Hunt Energy Canada CAOG S.a.r.I. Luxembourg JSOC Bashneft Russia PTTEP South Asia Ltd Thailand and Palang Sophon Offshore Thailand

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





# Acreage 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 ant 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 Paroleum Ltd and Oilmax Energy	India	N/A

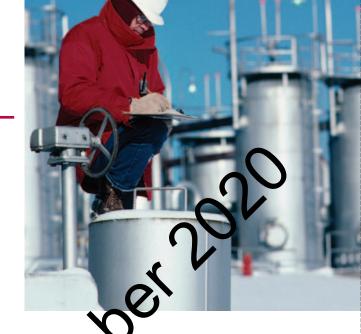
#### Deep water blocks

Book water blooks					
Number	Block/Area	Company as yrdex	Country	Acreage (sq km)	
1	AD-2	BG Asi Pa (fic and Woodside Energy (Myanmar)	UK and Australia	8,098	
2	AD-3	Oper Energy Pic	United Kingdom	10,000	
3	AD-5	BG As Pacific and Woodside Energy (Myanmar)	UK and Australia	10,560	
4	AD-9	Sell Myanmar Energy and MOECO	Netherlands	N/A	
5	AD-10	Statoil and Conoco Phillips	Norway and United States	9,000	
6	1D (1	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 recove 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 0,00% above 150,000 b/d, with the state's share of gas output ranging from 70% at 000,030 Mcf/d to 90% over 900,000 Mcf/d Signisture fees are negotiated by MOGE.

#### Shallow waters

The production spin ranges from 60-90 percent, depending on a soluction rates and well depths. Cost recovery with a re 50 percent in water depths of 600 lees as less and 60 percent above that.

Noice by MOGE will be entitled to a 15-25 percent than or any offshore or onshore block production.

#### centives

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.

#### Keyleyislation

- 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 a 36.3 percent of the country's total to investment. Through foreign inve explorations in oil and gas block Burma aims to bring foreign comp chnology, expertise and knowledg companies, while at time leveraging on the foreign coun financial capabilities.

The UK Gov sponsored a trade delegati a in July 2012 - which was st two decades and included the 1 omerates BP and Shell. Since shore 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 nemistry of Energy indicated that the rest bidding round for offshore oil and gas exploration blocks is likely to take place in 2015. (IK companies are well positioned for these twents: those interested should start in estigating opportunities now.

#### Supply chain opportunities

As Burna's all and gas sector grows there will be supply than opportunities for British companies in any 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



#### 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

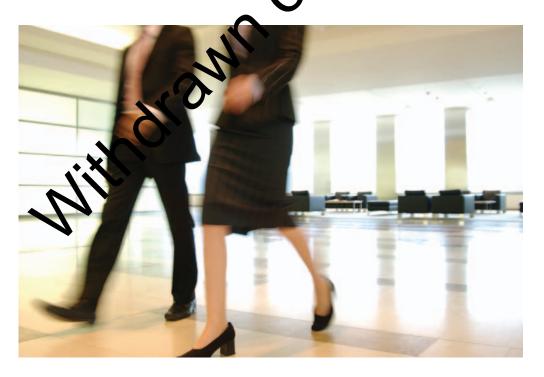


#### Burma: an EITI candidate country

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 Evina Sarma

Since January 2013, Depart of International Development (DFID) ha ted Burma's participation in EITLby roviding funding to the coordinating by the Myanmar Development P Institute (MRDI) and to strengthen civ ety's rule in ensuring y. It also provides funding to the transpa end arry out technical projects, such al assessments and a review of the e al framework as it relates to being current ompatible with EITI requirements, such as the closure of company ownership, contract erms, 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 Enter rise

Ministry of Electric Power

**Directorate Whyestment and Company Administration (DICA)** 

EITI in Burn a

rex Exergy Architecture Myanmar - ADB Report

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

**US Energy Information Administration – Myanmar** 



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