The Malaysian Oil & Gas Industry

Challenging times, but fundamentals intact

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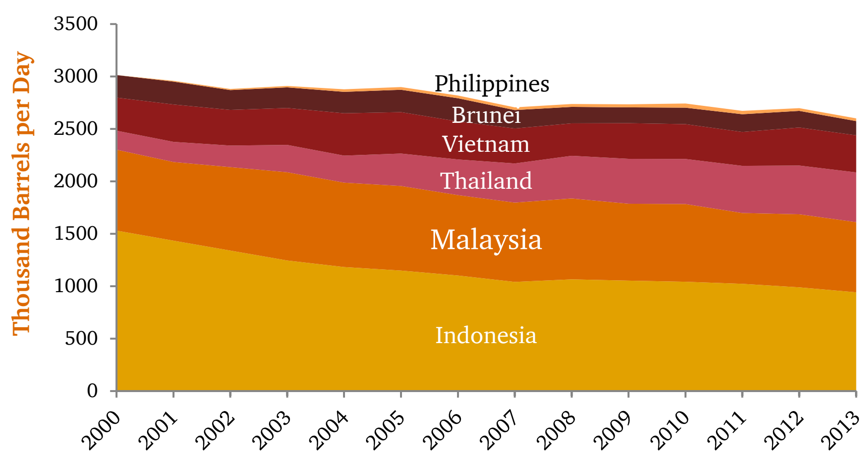
Overview

The Malaysian oil & gas industry faces one of its toughest periods in recent memory- reeling from a prolonged drop in oil prices, the industry must now collectively shape and execute a decisive and potentially transformative response.

Its national oil company Petroliam Nasional Berhad (PETRONAS) registered RM 21 billion of after tax profits on the back of RM 248 billion of revenues in 2015 - compared to the RM 48 billion of after tax profits from RM 329 billion of revenues chalked up in the prior year. It is clear that the prolonged lower oil prices has hit the company hard, but it is taking the necessary steps to manage the downturn.

In spite of the challenges presented by low oil prices, Malaysia remains one of South East Asia's most dynamic owner of oil & gas reserves. PETRONAS continues to retain its position as one of the world's largest- and most forward looking- producers of LNG. Together with a well-established industry ecosystem characterised by strong support from its auxiliary industry, Malaysia remains poised to continue exploiting its yet-to-be fully tapped deep-water potential, while also positioning itself as a producer of specialty chemicals with the Refinery and Petrochemical Integrated Development (RAPID) project gradually taking shape.

Chart 1: Production of Oil in South East Asia



Source: Malaysian Investment Development Authority (MIDA): Meet Malaysia: Investment Opportunities in Asia's Oil and Gas Hub (2013)

A long & illustrious history

Malaysia's first foray into oil & gas commenced over a century ago, with the first oil well being drilled by Shell in Sarawak, East Malaysia in 1910. The 1966 legislation which initially governed oil & gas activities in Malaysia, namely the Petroleum Mining Act saw Exxon and Shell being given rights to explore and produce rights in return for royalties and tax payments to the government.

However, the Government very quickly saw the strategic value of having more control over its hydrocarbon resources, so under the auspices of its New Economic Plan the Petroleum Development Act (PDA 1974) came into being. With this Act, a wholly owned government entity was formed with exclusive rights to all the oil & gas resources in Malaysia- and thus PETRONAS, was born.

Since then, PETRONAS has grown by leaps and bounds, growing beyond Malaysian borders and eventually evolving into the country's only Fortune 500 Company. On the back of a deliberate strategy to add value to national resources and carefully growing partnerships internationally, it now holds 23.2 billion barrels of oil equivalent (BOE) within the country, with a further 10 billion BOE abroad.

Globally, it remains one of the world's largest producers of LNG with over 30 million tonnes of LNG production registered in 2014.

Even after Malaysia's recent ratification for entry into the Trans - Pacific Partnership Agreement, it is envisaged that PETRONAS will largely retain its regulatory and licensing role as set out in PDA 1974. This augurs well for the country as it balances the need to promote liberalisation while maintaining the ability to develop its local industry.

To that end, it is worth noting that PETRONAS' growth and stature by and large has been matched by a maturing local industry- with over 4,000 oil & gas businesses including International Oil Companies, independents, service providers and equipment manufacturers operating locally. Malaysia has positioned itself strongly to support the needs of the oil & gas value chain domestically and regionally. This is largely in line with the country's aspirations to become a regional oil & gas hub.

This is a non-exhaustive list.

Source: Malaysian Investment Development Authority (MIDA): Meet Malaysia: Investment opportunities in Asia's oil and gas hub (2013)

Upstream: Still promising, but solutions will not be easy

The contribution of the oil & gas industry to the Malaysian economy is significant. In 2014, crude oil, condensates and gas constituted the second largest exports after electrical & electronic goods and contributed up to 20% to the country's gross domestic product (GDP) in recent years. In the 40 years following its incorporation, PETRONAS itself has contributed a staggering RM 881 billion to the government's coffers in the form of dividends, royalties, duties and taxes.

However, with prices falling over 60% from highs in 2014 and remaining range-bound between USD 35-45 per barrel as at time of writing, maintaining the momentum of upstream growth will be challenging. To contend with the prolonged downturn, in line with the efforts of its international peers PETRONAS announced earlier this year that it would aim to reduce both its CAPEX and OPEX undertakings by RM50 billion, with upwards of RM16 billion savings targeted to be realized in 2016 alone.

In the context of its domestic upstream activities which spans 101 Production Sharing Contracts (PSCs) and 6 Risk Sharing Contracts (RSCs), this will put further pressure on Malaysia's three-pronged approach to unlock reserves:

1. **Monetise marginal fields** - via the introduction of RSCs, Malaysia had hoped to unlock almost 0.6 billion BOEs spread across over 100 marginal fields; however with a breakeven cost of USD 55 this approach is now facing tremendous challenges.
2. **Tap under-explored deep-water potential** - with circa 7 billion BOE of yet-to- be discovered resources, and only 50% found by oil & gas players to date, the promise of deep-water plays is self-evident. Once again, pressure to reduce costs in the current environment may see the fruition of this strategy being delayed.
3. **Intensify EOR** - with 14 identified oilfields where Enhanced Oil Recovery or EOR could be implemented, the promise of unlocking anywhere between 0.8 to 1 billion BOE is compelling. As with the first two approaches, the ability to undertake this effort will likely come under scrutiny in the current price environment as the first 10 EOR projects alone will call for upwards of USD 14 billion to execute.

Upstream: Still promising, but solutions will not be easy

The low price environment has recently compelled a consortium of Dialog, ROC Oil Ltd and Petronas Carigali Sdn Bhd, to review their options for the Balai Cluster RSC which had an estimated development cost of USD 900 million. Having yielded two fields which achieved first oil production, we noted that based on press reports the partners deemed the continuation of the project had become financially unfeasible due to the low crude oil price environment. To a large extent, this development was not unexpected, given the high operating cost for marginal fields.

PETRONAS itself has not been spared the effects of the current low price environment. After its successful pioneering efforts to develop PFLNG1, the first Floating LNG facility in the world (which has- at time of writing- set sail to the Kanowit cluster and is expected to commence operations later this year) its Upstream business has indicated that its second Floating LNG project may be deferred.

Given the foregoing, it is likely that any providers of innovative low-cost solutions to monetise reserves would see themselves presenting an attractive offering, as Malaysia continues to work towards maintaining production levels. In 2014, 1,658 k BOE/day production was achieved domestically, and the expectation is that similar levels need to at least be sustained going forward to meet energy demand.

Mid & Downstream: Still compelling

Being strategically located along one of the world's busiest shipping lanes and within close proximity to an international trading hub, Malaysia's Pengerang Integrated Petroleum Complex in Southern Johor is positioned to rival Singapore's capabilities in the downstream sector. Driving this effort are 2 catalytic developments which deserve specific mention, namely Dialog Group's Pengerang Independent Deepwater Petroleum Terminal (PIDPT) and PETRONAS' Pengerang Integrated Complex (PIC).

These projects which are part of Malaysia's Economic Transformation Programme are part of a new integrated complex which seeks to eventually position Malaysia as a major regional petrochemicals player. Dialog Group remains on track to build Phase 2 of PIDPT, capitalising on the potential growth of RAPID. It has now commenced engineering procurement and construction (EPCC) works on the RM 6.3 billion Phase 2 which is a dedicated industrial tank terminal catering to the RAPID complex with progressive completion in 2018 to 2019.

PETRONAS' RAPID which now expects to commence operations by late 2019, has not escaped the current low price environment unscathed. The project, consisting of a 300,000-barrels-per-day refinery and petrochemical complex with a combined chemical output capacity of 7.7 million metric tons per year of various products, was envisaged to produce differentiated and specialty chemicals. In mid- 2015 it was announced that PETRONAS would conduct rebidding to secure better prices, while depressed oil prices also prompted re-phasing of some of its petrochemical projects involving phenolic chains.

In spite of these challenges, PETRONAS and its listed subsidiary Petronas Chemicals Group (PCG) appear to remain committed to delivering on the promise of a gradual shift to producing specialty chemicals, which would present opportunities for partnerships into higher value-adding chemicals ventures in the future.

Support Services: A potential beneficiary, further consolidation imminent

The pressure to reduce costs may benefit Malaysia with multinational oil services companies pulling staff out of neighbouring Singapore . To this end, recent press reports point to Kuala Lumpur benefiting from the relocation of sizable players including McDermott, Technip, and Subsea 7.

Driven by lower real estate costs - which in turn reduces expenditure on commercial property and staff housing- Malaysia is now seen to be a compelling location. Over and above that however, engineering companies cite the advantage of being closer to customers, namely Malaysia's oil & gas sector.

While hard hit, the Malaysian oil & gas services sector has –to date- not yet seen cuts as severe as seen with its southern neighbours. Keppel Corporation, the world's biggest manufacturer of jack-up rigs, cut 17 per cent, or about 6,000, of its global workforce last year. Its rival Sembcorp Marine, which reported a net loss of SGD 290 million (USD211 million) for 2015, let go between 3,000 and 4,000 workers in 2015, mostly foreign nationals employed by subcontractors.

Despite this encouraging shift of service providers into Malaysia, there continues to be repeated calls for the multitude of O&G local service companies and 8 fabrication yards in the country to amalgamate in order to emerge stronger to compete, as the pervasive view is that both the fabricators and service providers remain fragmented and congested at a time when scale and cost competitiveness is needed most.

This comes as Malaysia's prospective entry into the Trans-Pacific Partnership Agreement will see 12 service sectors being liberalised, with PETRONAS also committed to eventually cap preferential treatment for domestic providers to only 40% of annual budgeted expenditure. The implications of these converging patterns are important- Malaysia' s local oil & gas service players must scale up and shape up, or risk eventually being shipped out.

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