

OIL AND GAS INDUSTRY IN MALAYSIA

Petroleum Oil is formed more than 600 million years ago from pressure built on tiny dead living animals and plants (plankton) sank on seabed and through pressure from the top of the seabed.

THE ORIGIN OF OIL AND GAS INDUSTRY IN MALAYSIA

Our oil and gas industry in Malaysia has growth started following the formation of Petroleum Nasional Berhad (Petronas), a government entity owned by Ministry of Finance established in 1974. This is the result of Petroleum Development Act 1975 (PDA) that gazettes Petronas as the ownership of rights in oil and gas found in both offshore and onshore in Malaysia, taking the role as our national oil company. In return for the ownership and rights in petroleum resources, Petronas is to make cash payments to the federal government and the relevant state government.

Prior to the PDA, the ownership of oil and gas found in onshore and offshore belongs to state government. Petronas becomes a major source of government's annual revenue. Petronas contributes revenue to state and federal government in Malaysia for a sum of approximately RM 37 billion in 2016, collected in the form of dividends and taxes.

As a result of the PDA, we also see the development of the oil and gas industries in Malaysia in past four decades, which eventually give rise to many companies, covers a large range of both upstream to downstream of oil and gas industry, are listed in Bursa Malaysia, that with aggregate market capitalization of hundreds of billions in Ringgit Malaysia. Few Petronas' subsidiaries are also listed in Bursa Malaysia, namely Petronas Dagangan Bhd, Petronas Gas Bhd, Petronas Chemicals Group Bhd and MISC Bhd.

UPSTREAM, MIDSTREAM AND DOWNSTREAM

At the upstream, we have listed companies involved in exploration (i.e. finding petroleum oil) and exploitation such as Hibiscus Petroleum Bhd and UMW Oil & Gas Corp Bhd.

At the midstream and downstream, listed companies could be classified based their involvements in different areas such as

1. supporting the oil and gas industry such as provision of engineering and support services.
2. provision of transportation services in the form of vessels for transporting oil and petrochemicals.
3. refinery of crude oil to various oil products and retailers
4. manufacturing pipelines for transporting oil
5. petrochemical plants that produces various petrochemical components used in producing plastics, fertilizers, pesticides and many other industrial uses.

IN LOW CRUDE OIL PRICE ENVIRONMENT, IT IS NEGATIVE TO MIDSTREAM COMPANIES PROVIDING ENGINEERING SUPPORT AND PIPELINES. INSTEAD, COMPANIES IN REFINERIES MAINTAINS ITS POSITIVE PERFORMANCE

Tabulated below is an example of listed companies in Malaysia in various roles that are all within the oil and gas industry.

Once categorized, we can see that even though crude oil prices had been low for the past two years, the companies in refinery and retailing is performing well relative to the sectors that are

involved in upstream capital expenditure. In low crude oil prices environment, oil and gas companies are likely to defer capital expenditure plans.

Oil prices have been recovering in early of this year and recently has been trading in the range between USD 65 / barrel and USD 70 / barrel. Under this environment, more projects in upstream activities may be permitted but companies are expected to remain cautious and limited to simpler wells. Generally, we see that in past two years, companies in midstream, which include supporting engineering and pipeline, do not perform well.

| | Annual Revenue | Net Assets | Net Income / (Loss) | Market Capitalization as at 19 January 2018 | Closing Price as at 19 January 2018 | TWR from 3 January 2017 | Trading P/E | Trading P/B | Net Margin | Net Cash / (Borrowings) | Altman Z-Score | Average past 3 years annual dividend yield |
|--|----------------|-------------|---------------------|---|-------------------------------------|-------------------------|-------------|-------------|------------|-------------------------|----------------|--|
| | RM millions | RM millions | RM millions | RM millions | RM | % | | | % | RM millions | | % |
| Upstream | | | | | | | | | | | | |
| Oil Field Exploration | | | | | | | | | | | | |
| Hibiscus Petroleum Bhd | 265 | 742 | 37 | 1,532 | 1.06 | 144% | 43 | 2.1 | 14% | 55 | 2.6 | 0% |
| UMW Oil & Gas Corp. Bhd | 448 | 1,989 | (1,070) | 2,554 | 0.37 | -8% | Loss | 1.6 | -239% | (2,729) | (0.4) | 0% |
| Midstream and Downstream | | | | | | | | | | | | |
| Engineering Support | | | | | | | | | | | | |
| Scomi Group Bhd | 837 | 956 | (116) | 244 | 0.26 | 6% | Loss | 0.6 | -14% | (674) | 0.6 | 0% |
| Deleum Bhd | 565 | 338 | 29 | 436 | 1.09 | 11% | 15 | 1.4 | 5% | 50 | 2.9 | 4% |
| Barakah Offshore Petroleum Bhd | 447 | 278 | (139) | 256 | 0.31 | -53% | Loss | 0.9 | -31.0% | (123) | 1.1 | 0% |
| Offshore Shipping | | | | | | | | | | | | |
| MISC Bhd | 10,121 | 37,589 | 2,443 | 33,383 | 7.48 | 8% | 14 | 0.9 | 24% | (6,641) | 2.2 | 3% |
| Malaysia Marine and Heavy Engineering Holdings Bhd | 1,012 | 2,531 | (134) | 1,312 | 0.82 | -16% | Loss | 0.5 | -13% | 615 | 1.8 | |
| Yinson Holdings Bhd | 838 | 2,647 | 286 | 4,554 | 4.17 | 41% | 15 | 1.7 | 34% | (2,421) | 1.2 | |
| Refinery and Retailing | | | | | | | | | | | | |
| Petronas Dagangan Bhd | 25,893 | 5,963 | 1,522 | 24,439 | 24.60 | 6% | 23 | 4.1 | 6% | 3,408 | 7.8 | 3% |
| Petronas Gas Bhd | 4,660 | 12,536 | 1,771 | 36,000 | 18.20 | -11% | 20 | 2.9 | 38% | (568) | 5.9 | 3% |
| Gas Malaysia Bhd | 4,928 | 972 | 169 | 3,621 | 2.82 | 17% | 22 | 3.8 | 3% | 225 | 4.6 | 4% |
| Dialog Group Bhd | 3,518 | 3,480 | 450 | 14,949 | 2.65 | 71% | 32 | 4.4 | 13% | (285) | 3.7 | 1% |
| Petron Malaysia Refining & Marketing Bhd | 9,822 | 1,410 | 418 | 3,564 | 13.20 | 211% | 8 | 2.3 | 4% | 114 | 7.3 | 2% |
| Hengyuan Refining Co Bhd | 11,023 | 1,658 | 934 | 4,290 | 14.30 | 552% | 4 | 2.5 | 8% | (413) | 5.1 | 0% |
| Pipeline | | | | | | | | | | | | |
| Wah Seong Corp Bhd | 1,843 | 907 | (144) | 1,093 | 1.41 | 69% | Loss | 1.3 | -8% | (820) | 1.1 | 3% |
| Pantech Group Holdings Bhd | 560 | 547 | 43 | 480 | 0.65 | 46% | 11 | 0.9 | 8% | (115) | 2.9 | 4% |
| Petrochemical | | | | | | | | | | | | |
| Petronas Chemicals Group Bhd | 16,614 | 28,651 | 4,159 | 64,800 | 8.10 | 18% | 16 | 2.4 | 25% | 6,518 | 12.1 | 3% |

Tabulated by Asia Equity Research

MID STREAM – ENGINEERING SUPPORT

Companies in this sector engages in onshore and offshore contracting works supporting oil and gas mining activities, pipeline commissioning, fabrication and other related activities.

Example of companies in this sector are Scomi Group Bhd, Deleum Bhd and Barakah Offshore Petroleum Bhd. Both **Scomi Group Bhd** and **Barakh Offshore Petroleum Bhd** are registering losses and both companies valuation at this moment is above its fair price. However, **Deleum Bhd** reported profit and it is fairly priced at this moment.

MID STREAM – OFFSHORE SHIPPING

Companies in this sector owns tanker fleets for transporting LNG and petroleum and derived its revenue stream by providing charter services to petroleum companies. Typically, companies in this segment has higher borrowings and its Altman Z-Score is generally lower due to increased borrowings which translates to higher cash flow / financing risk.

Due to charter rates are generally quoted in USD and with the expectation of strengthening of Ringgit, this may translate to lower earnings.

MISC Bhd

Petronas owns 62.6% of MISC Bhd, which is the shipping arm of Petronas. MISC is the largest listed company by market capitalization that operates vessels for transporting LNG, petroleum and chemical products.

Malaysian Marine and Heavy Engineering Bhd (“MMHE”)

Petronas owns 41.6 % of MMHE. The company is involved in building offshore applications structures for oil and gas. It is also involved in vessels maintenance and repair. It reported a loss of RM 134 million in FYE 2016.

MID STREAM –REFINERY AND RETAILING

Neutral view

Petronas Gas Berhad

Petronas owns 60.6% of Petronas Gas Bhd. The company is involved in gas processing, gas transportation, power generations and regasification, i.e. converting LNG into gas.

The company reports a healthy net margin annually, with an annual margin of at least 30% annually, for the past ten 10 years. It has a constant dividend payout of 70% annually. Presently, its P/E is trading at 20 times and P/B at 2.9 times.

Petronas Dagangan Bhd

Petronas owns 69.9% of Petronas Dagangan Bhd. The company is involved in the distribution of retail trading of petroleum finished products at its more than one thousand stations wide spread in Malaysia. The company operates a two-model system whereby the retail stores are either owned by company or owned by dealers. Substantially, are operated by the company.

The company has an annual dividend yield of approximately 3% with a net cash of approximately RM 3.4 billion.

Gas Malaysia Bhd

MMC Corporation Bhd owns 30.9% of Gas Malaysia Bhd. Petronas Gas Bhd owns 14.9% of Gas Malaysia Bhd. The company is involved in selling, marketing and distributing natural gas, through its own gas pipeline.

Company's net margin has been declining from an evaluation period of past five years. Its latest reported annual net margin is approximately 3.4%. It has a constant dividend payout of 95% annually from the past years.

Presently, its P/E is trading at 22 times and P/B at 3.8 times. Its dividend yield has been decreasing indicating that the present share price is relatively on the high side.

Dialog Group Bhd ("Dialog")

Its core business income is in the business providing building storage terminals for petroleum and petrochemical players. The storage terminals are operating at Kertih in Trengganu, Tanjung Langsat in Johor and Pengerang in Johor. All these storage terminals are jointly owned by Dialog and other shareholders.

Dialog's present P/E trading at 32 times, seems to be higher than its past two years average P/E at 28 times.

Positive view

Petron Malaysia Refining & Marketing Bhd

Company reports an average annual net margin of 1.4% for the past ten 10 years. The highest net margin is reported in current financial year of 4.2%. The company does not has an observable constant dividend payout as excess cash may be used for expansion of refining capacity and petrol station refurbishments.

Presently, its P/E is trading at 8 times and P/B at 2.3 times

It has a cash balance of RM 114 million with no borrowings and high Altman Z-Score of 7.4

END

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