

SECTOR UPDATE

Oil & Gas – Malaysia

PAO In 2023: A Year Of Catch-up And Energy Transition

Local O&G activity may remain strong, especially large platforms and rigs, and sector valuations may have largely priced in strong rig/maintenance demand, with Velesto and MMHE (re-rated after CPP wins) as examples. We foresee future project decisions may not only require high O&G prices, but also the increasing importance of other factors like the returns of heavy capex green/carbon capture projects. We still see opportunities in FPSOs, ESG beneficiaries and recovery plays.

WHAT'S NEW

- Generally better outlook for local O&G activities, but ESG commitment is not to be underestimated. OPEC+ supply management will continue to support consensus oil price view of US\$93/bbl for 2023, with O&G prices to remain high. On top of this, making sense of ESG-related factors like the degree of maturity and returns of the carbon credit/trading markets, may be increasingly factored into the DCF of O&G projects. This is because the available carbon capture technologies are as costly as a CPP at the US\$162m-410m range, with payback periods of >8 years, based on an academic study on a local CPP.
- In comparison to previous Petronas Activity Outlook (PAO), PAO 2023-25 saw major demand upgrades to fabricate CPP platforms, underpinned by higher oil prices and energy transition (ie additional platforms for carbon capture). Petronas is also reviving floating project (FPSO) for Limbayong and Kelidang (Brunei) for 2024/25, and local drilling outlook also saw major upgrades. There are minor upgrades for maintenance demand like hookup and commissioning and associated services like OSV.
- O&G value chains benefit only if they are an ESG priority, as observed by cuts in local outlook for wellhead platforms and well P&A. The energy transition element in the new industry cycle is changing Petronas capex mix away from solely investing in local O&G projects. An example is its unit Gentari which will see increased allocation to 20% of group capex level, and likewise for other subsidiaries like MISC (more LNG/zero-emission fuel tankers), and Petronas Chemicals (more specialty chemicals and circular economy). Petronas itself is reportedly evaluating a US\$1.5b acquisition of Continuum Green Energy in India, with 4,000MW of solar and wind capacity, and a US\$10b LNG terminal in Argentina.

ACTION

- Maintain OVERWEIGHT on sector. In our view, with Velesto's current valuation mostly reflecting strong 2023 utilisation (after a major re-rating), O&G sector valuations may have also largely priced in stable local maintenance demand (to catch up on deferred works). The industry outlook will remain volatile, especially on Petronas' contract rate renegotiations for major local contract renewals in 2023, like Pan Malaysia MCM and underwater services, production chemicals and slicklines. Some O&G stocks may still trade at a discount if they find it increasingly challenging to build up ESG expertise and improvise cost structure.
- We still see pockets of opportunities, such as: a) FPSO stocks like Yinson, MISC and Bumi Armada benefitting from international capex demand, with Yinson remaining as our top pick (BUY/Target: RM4.45), for the best growth, delivery track record and ESG goals; b) ESG: trading upside if the following stocks secure greener projects, ie MMHE (offshore wind and green shipping retrofit works) and Bumi Armada (floating gas projects); c) Sapura Energy if it reverses its financial loss condition early (though not in the near-term horizon ie before May 23). While MMHE was the major winner behind the Rosmari-Majoram (RM) and Kasawari CPPs, Sapura Energy (as the only other large local yard peer) may emerge as a serious contender for PTTEP's Lang Lebah CPP (to be fabricated in 2024 horizon) as there are plans for its B14 field to be tied in to the Lang Lebah project.

PEER COMPARISON

Company	Ticker	Rec	Share Price 3 Jan 23 (RM)	Target Price (RM)	Market Cap (RMm)	PE		P/B		Interest Cover		Net Debt to Equity		ROE	
						2022F	2023F	2022F	2023F	2022F	2023F	2022F	2023F	2022F	2023F
Bumi Armada	BAB MK	BUY	0.48	0.65	2,840.7	3.4	3.6	0.5	0.4	4.2	4.6	68.3	53.4	15.5	12.5
Dialog Group	DLG MK	BUY	2.40	2.35	13,824.3	29.4	24.3	2.9	2.7	14.9	16.9	8.7	9.7	10.2	11.3
Deleum	DLUM MK	HOLD	0.91	0.88	361.4	10.2	9.3	0.9	0.9	61.8	64.2	n.a	n.a	9.2	9.7
MISC	MISC MK	BUY	7.27	8.20	33,478.1	16.6	16.9	1.0	0.9	8.2	7.5	39.2	43.4	5.8	5.6
MMHE	MMHE MK	BUY	0.62	0.75	952.0	17.3	26.0	0.5	0.5	9.5	8.1	n.a	n.a	3.2	2.1
Petronas Dagangan	PETD MK	HOLD	22.24	22.90	22,849.4	28.3	25.0	4.0	3.9	n.a	n.a	n.a	n.a	14.1	15.8
Sapura Energy	SAPE MK	HOLD	0.04	0.05	559.3	(2.3)	(2.3)	(17.3)	(2.0)	1.3	0.9	n.a	n.a	n.a	n.a
Uzma	UZMA MK	BUY	0.53	0.67	184.8	7.5	6.6	0.4	0.4	4.1	4.4	58.8	66.3	4.3	5.3
Velesto Energy	VEB MK	BUY	0.15	0.17	1,232.3	10.6	20.2	0.7	0.6	18.8	24.2	5.8	n.a	6.4	3.2
Yinson Holdings	YNS MK	BUY	2.45	4.45	7,035.6	19.6	11.5	2.3	2.2	3.2	4.6	107.5	110.0	9.1	13.1

Source: Bloomberg

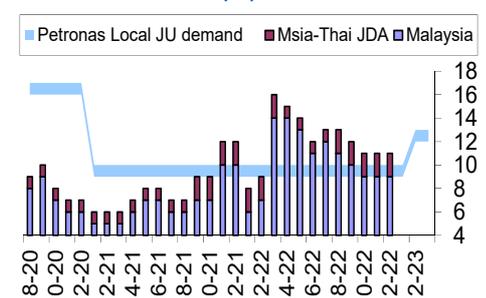
OVERWEIGHT  
(Maintained)

LOCAL WELLS TO BE DRILLED FOR 2023

• Exploration	25
• Appraisal	2
• Development	69
• Workover	21
• P&A	28

Source: PAO 2023-2025

MALAYSIA'S JACKUP (JU) RIG COUNT



Source: WestWood Global Rig Reports

SEGMENTS WITH UPGRADES IN OUTLOOK FOR 2022/23 HORIZON VS PREVIOUS PAO

Sub segments	Stocks
Central Processing Platform (CPP) – Major upgrades	MMHE, Sapura Energy
Jackup (JU) rigs and hydraulic workovers (HWU) – Major upgrade	JU – Velesto Energy HWU – Velesto, Uzma, Destini, T7Global
Hook up, commissioning (HUC) – Minor upgrades	Dayang, Carimin, Petra, Deleum, T7 Global
Offshore support vessels (OSV) – Minor upgrades	JU – Velesto Energy HWU – Velesto, Uzma, Destini, T7Global

Source: PAO 2023-2025, UOB KayHian

SEGMENTS WITH POORER OUTLOOK

Sub segments	Stocks
Wellhead Platforms (WHP) – Major downgrades	KKB Engineering, Muhibbah
Wells plug and abandonment (P&A) – Minor downgrade	Uzma, Velesto Energy, Destini, T7 Global

Source: PAO 2023-2025, UOB KayHian

ANALYST(S)

Kong Ho Meng  
+603 2147 1987  
homeng@uobkayhian.com

### TAKEAWAYS OF PAO 2023-25, AND COMPARISON TO THE PREVIOUS PAO(S)

Facts and comparison	2023-25	Actual, Jan till Nov 22	2022 – 24 (previous)	2021-23 (previous)	Actual Jan to Oct 2021	Comments
Wellhead platforms (WHP) first steel cuts (low to high case scenario)	8 in 2023/ 5-10 in 2024/ 1-6 in 2025	6 (5 medium-tonnage); above plan	5 in 2022/ 2-13 in 2023/ 7-12 in 2024	6 in 2021/ 1-3 in 2022/ 3-5 in 2023	5 (4 medium-tonnage); 1 deferred to 2022	WHP requirements continued to have huge adjustments across the PAO documents, factoring in oil price economics, potential tie-ins, technology (unmanned platforms) and carbon emissions. Smaller yards like KKB Engineering and Muhibbah to benefit more, vs SAPE/ MMHE.  <b>Stocks: KKB Engineering, Muhibbah, Sapura Energy, MMHE</b>
Central processing platforms (CPP) first steel cuts (low to high case scenario)	1 in 2023/ 1 in 2024/ 0-2 in 2025	1 (most likely Rosmari-Marjoram, by MMHE)	0 in 2022/ 0 in 2023/ 1 in 2024	1 in 2021/ 0 in 2022/ 1 in 2023	1 (most likely Jerun, by MMHE)	MMHE guided the RM4.5b Kasawari Carbon Capture CPP will see first steel cut by 2Q23. The 2024 event may most likely be PTT's Lang Lebah.  <b>Stocks: Sapura Energy, MMHE</b>
Decommissioning of wells, (low to high case scenario)	28 in 2023/ 32 in 2024/ 43 in 2025	30; lower vs plan by 1 well	31 in 2022/ 40 in 2023/ 50 in 2024	18 in 2021/ 24 in 2022/ 29 in 2023	13; lower vs plan, due to COVID-19 restriction	Surprisingly, well P&A demand for 2023/24 is cut vs the previous PAO, despite Petronas "ensuring all abandonment obligations will be met", possibly due to extending the production life at high oil prices.  <b>Stocks: Uzma, Velesto Energy, Destini, T7</b>
Decommissioning of platforms/subsea trees (low to high case scenario)	1 each in WHP, pipeline, FPSO and CPP in 2023/ 1 WHP, 2 FPSO and 2 pipes in 2024/ 1 each in WHP, pipeline in 2025	Only 1 pipeline was decommissioned vs the plan of 2	2 WHP and 2 pipelines in 2022/ 1 CPP in 2023/ 3 platforms in 2024	0 in 2021/ 3 in 2022/ 4 in 2023	Pipeline abandonment was executed as planned (3)	Aged/underperforming platforms like FPSO Bunga Kertas (which caused safety incidents) are most likely candidates for P&A, although Petronas is still exploring alternative (ie reuse/repurpose) options.  <b>Stocks: Sapura Energy, MMHE, Destini, Uzma, T7 Global, Dayang</b>
No. of offshore support vessels (OSV) p.a. (low to high case scenario)	94-96 AHTS (70-72 for drilling projects) 65-70 PSV 66-78 FCB 36-49 Workboat/ Barge	166, higher vs 138 plan for production, as additional vessels were required  173, lower vs 198 plan for drilling, due to deferment	109-114 AHTS (83-87 for drilling projects) 43-57 PSV 55-76 FCB 36-42 Workboat/ Barge	82-98 AHTS (61-78 for drilling projects) 45-69 PSV 30-33 FCB 30-39 Workboat/ Barge	151, higher vs 131 plan for production support;  138, lower vs 172 plan for drilling support	Implementation of unmanned platforms may reduce OSV demand for production support, at 147/ 146/ 139 in the next three years.  Demand for drilling support is 204/ 187/ 190 in the next three years, in tandem with high drilling demand.  <b>Stocks: Perdana Petroleum, Icon Offshore, Sealink, Marine &amp; General, Alam Maritim, Petra Energy</b>
Jackup (JU), tender (TADR) rigs each. (low to high case scenario)	2023/ 2024/ 2025: JU: 12/ 14/ 12 TADR: 4/ 4/ 4	JU: 9/ TADR: 3; JU rig count is in line with plan by Oct 22	2022/ 2023/ 2024: JU: 9/ 9/ 16 TADR: 4/ 4/ 3	2021/ 2022/ 2023: JU: 10/ 7/ 10 TADR: 4/ 5/ 4	JU: 9/ TADR: 3; Below 2020/ 2021 plan	High regional rig demand in tandem with tightening rig market supply (due to Middle East rig acquisition activities) underpins the positive outlook for JU rig utilisation.  <b>Stocks: Velesto Energy (JU rig), Sapura Energy (tender/ TADR rig)</b>
Man-hours in millions (m),  Topside maintenance or maintenance, construction and modification (MCM),  Hookup and commissioning (HUC)	2023/ 2024/ 2025: HUC: 5.0-5.2m/ 3.1-3.8m/ 4.5-.6.2m MCM: 11.9m/ 12.3m/ 13.1m	HUC: 3.4m man hours, much lower vs plan  MCM: 8.7m man hours – below plan due to lingering COVID-19 impact on manpower planning	2022/ 2023/ 2024: HUC: 6.3-6.6m/ 4.5-5.4m/ 2.9-4.1m MCM: 11.5m / 11.4m/ 11.8m	2021/ 2022/ 2023: HUC: 3.5m/ 4.7-5.3m/ 3.3-5.2m MCM: 10.1/ 11.5m/ 10.0m	HUC: 4.7m man hours, above 2021 plan on acceleration of activities;  MCM: 8.5m man hours, due to rationalisation	HUC: Contrary to the previous PAO when 2022 was expected to be the peak HUC activity, many works were deferred to 2023, and Petronas now expects activity to potentially peak in 2025. MCM: 2022 still saw works being deferred due to manpower issues. The increasing demand until 2025 underpins critical needs for maintenance.  <b>Stocks: Dayang, Carimin, Petra Energy, Deleum, Sapura, T7 Global</b>
Downstream, no of plant turnarounds	7 in 2023/ 11 in 2024/ 8 in 2025	10; Sabah/ Sarawak major turnarounds: 4 Peninsular major turnarounds: 2	11 in 2022/ 9 in 2023/ 9 in 2024	11 in 2021/ 7 in 2022/ 8 in 2023	10; Sabah/ Sarawak major turnarounds was 5; Peninsular was 1	Major turnarounds (involving >350k man hours) for Sabah/Sarawak are planned for 1/4/3 for 2023/24/25. For Peninsular, major turnarounds are expected to be 2/4/3 for all three years. Turnaround increases in 2024 as it includes PRefChem.  <b>Stocks: Dialog, MMHE, Deleum, Frontken</b>

\*Note: Blue highlights refer to activity outlook that is UPGRADED vs the previous outlook

\*\*Note: Red highlights refer to activity outlook that is DOWNGRADED vs the previous outlook

Source: Petronas, UOB Kay Hian

## Disclosures/Disclaimers

This report is prepared by UOB Kay Hian Private Limited ("UOBKH"), which is a holder of a capital markets services licence and an exempt financial adviser in Singapore.

This report is provided for information only and is not an offer or a solicitation to deal in securities or to enter into any legal relations, nor an advice or a recommendation with respect to such securities.

**This report is prepared for general circulation.** It does not have regard to the specific investment objectives, financial situation and the particular needs of any recipient hereof. Advice should be sought from a financial adviser regarding the suitability of the investment product, taking into account the specific investment objectives, financial situation or particular needs of any person in receipt of the recommendation, before the person makes a commitment to purchase the investment product.

This report is confidential. This report may not be published, circulated, reproduced or distributed in whole or in part by any recipient of this report to any other person without the prior written consent of UOBKH. This report is not directed to or intended for distribution to or use by any person or any entity who is a citizen or resident of or located in any locality, state, country or any other jurisdiction as UOBKH may determine in its absolute discretion, where the distribution, publication, availability or use of this report would be contrary to applicable law or would subject UOBKH and its connected persons (as defined in the Financial Advisers Act, Chapter 110 of Singapore) to any registration, licensing or other requirements within such jurisdiction.

The information or views in the report ("Information") has been obtained or derived from sources believed by UOBKH to be reliable. However, UOBKH makes no representation as to the accuracy or completeness of such sources or the Information and UOBKH accepts no liability whatsoever for any loss or damage arising from the use of or reliance on the Information. UOBKH and its connected persons may have issued other reports expressing views different from the Information and all views expressed in all reports of UOBKH and its connected persons are subject to change without notice. UOBKH reserves the right to act upon or use the Information at any time, including before its publication herein.

Except as otherwise indicated below, (1) UOBKH, its connected persons and its officers, employees and representatives may, to the extent permitted by law, transact with, perform or provide broking, underwriting, corporate finance-related or other services for or solicit business from, the subject corporation(s) referred to in this report; (2) UOBKH, its connected persons and its officers, employees and representatives may also, to the extent permitted by law, transact with, perform or provide broking or other services for or solicit business from, other persons in respect of dealings in the securities referred to in this report or other investments related thereto; (3) the officers, employees and representatives of UOBKH may also serve on the board of directors or in trustee positions with the subject corporation(s) referred to in this report. (All of the foregoing is hereafter referred to as the "Subject Business"); and (4) UOBKH may otherwise have an interest (including a proprietary interest) in the subject corporation(s) referred to in this report.

As of the date of this report, no analyst responsible for any of the content in this report has any proprietary position or material interest in the securities of the corporation(s) which are referred to in the content they respectively author or are otherwise responsible for.

**IMPORTANT DISCLOSURES FOR U.S. PERSONS**

This research report was prepared by UOBKH, a company authorized, as noted above, to engage in securities activities in Singapore. UOBKH is not a registered broker-dealer in the United States and, therefore, is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. This research report is provided for distribution by UOBKH (whether directly or through its US registered broker dealer affiliate named below) to "major U.S. institutional investors" in reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"). All US persons that receive this document by way of distribution from or which they regard as being from UOBKH by their acceptance thereof represent and agree that they are a major institutional investor and understand the risks involved in executing transactions in securities.

Any U.S. recipient of this research report wishing to effect any transaction to buy or sell securities or related financial instruments based on the information provided in this research report should do so only through UOB Kay Hian (U.S.) Inc ("UOBKHUS"), a registered broker-dealer in the United States. Under no circumstances should any recipient of this research report effect any transaction to buy or sell securities or related financial instruments through UOBKH.

UOBKHUS accepts responsibility for the contents of this research report, subject to the terms set out below, to the extent that it is delivered to and intended to be received by a U.S. person other than a major U.S. institutional investor.

The analyst whose name appears in this research report is not registered or qualified as a research analyst with the Financial Industry Regulatory Authority ("FINRA") and may not be an associated person of UOBKHUS and, therefore, may not be subject to applicable restrictions under FINRA Rules on communications with a subject company, public appearances and trading securities held by a research analyst account.

### Analyst Certification/Regulation AC

Each research analyst of UOBKH who produced this report hereby certifies that (1) the views expressed in this report accurately reflect his/her personal views about all of the subject corporation(s) and securities in this report; (2) the report was produced independently by him/her; (3) he/she does not carry out, whether for himself/herself or on behalf of UOBKH or any other person, any of the Subject Business involving any of the subject corporation(s) or securities referred to in this report; and (4) he/she has not received and will not receive any compensation that is directly or indirectly related or linked to the recommendations or views expressed in this report or to any sales, trading, dealing or corporate finance advisory services or transaction in respect of the securities in this report. However, the compensation received by each such research analyst is based upon various factors, including UOBKH's total revenues, a portion of which are generated from UOBKH's business of dealing in securities.

Reports are distributed in the respective countries by the respective entities and are subject to the additional restrictions listed in the following table.

General	This report is not intended for distribution, publication to or use by any person or entity who is a citizen or resident of or located in any country or jurisdiction where the distribution, publication or use of this report would be contrary to applicable law or regulation.
Hong Kong	This report is distributed in Hong Kong by UOB Kay Hian (Hong Kong) Limited ("UOBKHHK"), which is regulated by the Securities and Futures Commission of Hong Kong. Neither the analyst(s) preparing this report nor his associate, has trading and financial interest and relevant relationship specified under Para. 16.4 of Code of Conduct in the listed corporation covered in this report. UOBKHHK does not have financial interests and business relationship specified under Para. 16.5 of Code of Conduct with the listed corporation covered in this report. Where the report is distributed in Hong Kong and contains research analyses or reports from a foreign research house, please note: (i) recipients of the analyses or reports are to contact UOBKHHK (and not the relevant foreign research house) in Hong Kong in respect of any matters arising from, or in connection with, the analysis or report; and (ii) to the extent that the analyses or reports are delivered to and intended to be received by any person in Hong Kong who is not a professional investor, or institutional investor, UOBKHHK accepts legal responsibility for the contents of the analyses or reports only to the extent required by law.
Indonesia	This report is distributed in Indonesia by PT UOB Kay Hian Sekuritas, which is regulated by Financial Services Authority of Indonesia ("OJK"). Where the report is distributed in Indonesia and contains research analyses or reports from a foreign research house, please note recipients of the analyses or reports are to contact PT UOBKH (and not the relevant foreign research house) in Indonesia in respect of any matters arising from, or in connection with, the analysis or report.
Malaysia	Where the report is distributed in Malaysia and contains research analyses or reports from a foreign research house, the recipients of the analyses or reports are to contact UOBKHM (and not the relevant foreign research house) in Malaysia, at +603-21471988, in respect of any matters arising from, or in connection with, the analysis or report as UOBKHM is the registered person under CMSA to distribute any research analyses in Malaysia.
Singapore	This report is distributed in Singapore by UOB Kay Hian Private Limited ("UOBKH"), which is a holder of a capital markets services licence and an exempt financial adviser regulated by the Monetary Authority of Singapore. Where the report is distributed in Singapore and contains research analyses or reports from a foreign research house, please note: (i) recipients of the analyses or reports are to contact UOBKH (and not the relevant foreign research house) in Singapore in respect of any matters arising from, or in connection with, the analysis or report; and (ii) to the extent that the analyses or reports are delivered to and intended to be received by any person in Singapore who is not an accredited investor, expert investor or institutional investor, UOBKH accepts legal responsibility for the contents of the analyses or reports only to the extent required by law.
Thailand	This report is distributed in Thailand by UOB Kay Hian Securities (Thailand) Public Company Limited, which is regulated by the Securities and Exchange Commission of Thailand.
United Kingdom	This report is being distributed in the UK by UOB Kay Hian (U.K.) Limited, which is an authorised person in the meaning of the Financial Services and Markets Act and is regulated by The Financial Conduct Authority. Research distributed in the UK is intended only for institutional clients.
United States of America ('U.S.')	This report cannot be distributed into the U.S. or to any U.S. person or entity except in compliance with applicable U.S. laws and regulations. It is being distributed in the U.S. by UOB Kay Hian (US) Inc, which accepts responsibility for its contents. Any U.S. person or entity receiving this report and wishing to effect transactions in any securities referred to in the report should contact UOB Kay Hian (US) Inc. directly.

Copyright 2023, UOB Kay Hian Pte Ltd. All rights reserved.

<http://research.uobkayhian.com>

RCB Regn. No. 197000447W