

January 5, 2023



Malaysia Oil & Gas

PETRONAS Activity Outlook (PAO) 2023-25

6th edition - A more optimistic 2023

PETRONAS generally met most of its activity expectations for 2022. Its latest 2023-25 PAO edition points to a more positive outlook, notably for its: (i) drilling, (ii) fabrication, (iii) OSV for drilling support, (iv) pipelines & (v) maintenance ops. Velesto, MMHE, Icon, Dialog & WSC (for which we have BUY calls on) are the main beneficiaries of this. Our other notable key BUYs in the sector are Yinson, BArmada and Hibiscus.

PAO 2022 report card - in retrospect

Looking back, PETRONAS' activities were in line with its 2022 aspiration. 5 segments: (i) drilling, (ii) plant turnaround, (iii) SURF, (iv) decommissioning and (v) offshore maintenance ops met its target. Meanwhile, 4 segments: (i) hook-up & commissioning (HUC), (ii) equipment & material (supply of line pipes), (iii) offshore installation and (iv) underwater services segments underperformed during the year, while the offshore fabrication and OSV, supporting production ops were the 2 key outperformers.

Potential beneficiaries in PAO 2023-25

Based on the latest PAO 2023-25 outlook, PETRONAS appears to paint a more positive picture. 5 segments (drilling, fabrication, OSV, pipelines and maintenance ops) are expected to see an increase in activities in 2023, a positive. We see Velesto, MMHE, Icon, Wah Seong and Dialog as key beneficiaries in these respective fields of PETRONAS' domestic activities over the next 3 years.

100 for 100

All in, we expect PETRONAS to meet our MYR100b core net profit estimate for 2022. Our USD100/bbl (dated Brent) oil price estimate for 2023 is unchanged, with upside bias. We do not rule out a higher oil price outlook in FY23 considering the continued tightness in the global supply market, due to the: (i) prolonged structural under-investment since 2015 and (ii) OPEC+'s discipline as a swing producer (to meet output and price expectations). Meanwhile, demand for oil is projected to pick up in 2023, fuelled by the re-opening of China's economy and increased flight travels worldwide. A widening imbalance will lead to a higher oil price scenario.

POSITIVE

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Stock	Bloomberg	Mkt cap	Rating	Price	TP	Upside	P/E	(x)	P/B	(x)	Div yl	d (%)
	code	(USD'm)		(LC)	(LC)	(%)	22E	23E	22E	23E	22E	23E
Dialog Group	DLG MK	3,088	Buy	2.41	4.90	103	23.7	22.5	2.2	2.3	1.6	1.7
Yinson Holdings	YNS MK	1,704	Buy	2.46	4.05	65	17.3	13.0	3.0	1.5	0.9	0.9
Bumi Armada	BAB MK	638	Buy	0.48	0.58	22	3.5	3.4	0.6	0.5	0.0	0.0
Hibiscus Petroleı	HIBI MK	493	Buy	1.08	1.90	76	6.0	4.0	0.9	0.7	2.0	0.0
Velesto Energy	VEB MK	289	Buy	0.16	0.22	42	nm	17.7	0.6	0.6	0.0	0.0
MMHE	MMHE MK	227	Buy	0.63	0.85	36	17.5	12.9	0.6	0.5	0.0	0.0
Sapura Energy	SAPE MK	163	Sell	0.05	0.03	(33)	nm	nm	2.8	nm	0.0	0.0
Wah Seong	WSC MK	113	Buy	0.64	1.20	88	7.8	5.4	0.8	0.7	0.0	0.0
Favelle Favco	FAVCO MK	92	Hold	1.72	1.70	(1)	8.7	6.9	0.8	0.7	49.4	1.7



PETRONAS Activity Outlook (PAO): '2023-25': By segment

(i) Offshore drilling

	2023	AO 2023-2 2024	.5 2025	Planned 20	Actual 22
Jackup rigs (JUs)	12	14	12	9	9
Tender-assisted (TADRs)	4	4	4	4	3
Hydraulic workover (HWUs)	8	7	6	5	6
Semi-submersible	2	3	3	3	2
	=====	=====	=====	=====	======
Total	26	28	25	21	20

Source: PETRONAS

Our views:

Jackup rigs (JUs) & Hydraulic Workover (HWUs)

- **Performed to expectation in 2022.** PETRONAS generally met its drilling activities planned for 2022. This is not entirely unexpected, underpinned by higher capex, amid higher oil price (avg: USD100/bbl dated Brent).
- **Higher targets for 2023-25**. PETRONAS requires between 25 and 28 rigs during the period, of which JUs will make up half of that, annually.
 - ✓ Targets more JUs & HWUs in 2023. Under PAO 2023-25, PETRONAS requires 12 JUs and 8 HWUs in 2023, a 33% YoY increase over 2022.
- Velesto (VEB MK; BUY; TP: MYRO.22) is the key beneficiary of PETRONAS' JUs drilling activities in Malaysia, with six JUs and four HWUs at its disposal. We expect 2023 to be a very positive year for Velesto, fueled by higher utilization, DCRs and longer contract tenures. Also, we expect Velesto to financially turnaround this year.

(ii) Offshore fabrication

	P.	AO 2023-2	25	Planned Actual			
	2023 2024 2025				2022		
Offshore fabrication (by size)	8-10	6-10	1-6		5	7	
Light (<1k MT)					2	1	
- Low case	0	0	1				
- High case	1	4	4				
<u>Medium (1k - <7.5k MT)</u>					2	5	
- Low case	6	1	0				
- High case	6	2	0				
Heavy (>7.5k MT)					1	1	
- Low case	2	5	0				
- High case	3	5	2				

Source: PETRONAS



Our views:

- Ahead of target for 2022. 7 projects (1x light, 5x medium, 1x heavy structures) were carried out during the year vs. the planned 5. (pls. refer to earlier table).
- 8-10 structures planned for 2023. This comprises 0-1 light (<1k MT), 6 medium (1k-7.5k MT) and 2-3 heavy (>7.5k MT) structures.
 - √ 2023 is skewed towards heavier structures, comprising 1 CPP (>7.5k MT), 1 WHP heavy (>7.5k MT) and 6 WHP medium (1k-7.5k MT)
- 6-10 structures planned for 2024-25, based on the latest PAO. Overall, a busy period for the domestic fabricators.
- MMHE (MMHE MK; BUY; TP: MYR0.85) is likely to benefit from this
 development over its peers, such as SAPE (SAPE MK; SELL; TP:
 MYR0.03) due to its track record, capacity and engineering capability to
 take up more jobs.
 - Other PETRONAS-licensed fabricators, such as Muhibbah Engineering (MUHI MK; Not Rated) and Sarawak-based KKB Engineering (KKB MK; Not Rated) are also potential beneficiaries of PETRONAS' fixed structures play.
- Need to be competitive and eye overseas jobs. That said, there is a
 pressing need for domestic players to prospect for jobs overseas, and not
 be entirely dependent on local projects.

(iii) Floating structures fabrication

	P.	AO 2023-		Planned	Actual	
	2023	2023 2024 2025			2022	
FPSO/ FSO	0	1	1		1	0
- Low case	0	1	0			
- High case	0	1	1			

Source: PETRONAS

Our views:

- An uneventful 2022. No project was forthcoming in 2022. The much talked about FPSO Limbayong tender continued to see deferment for various reasons.
- 2023 to reflect 2022. No floater is planned for this year.
- 2024-25 will likely see one project annually, at best.
- MOPU's visibility is absent in this PAO. Unlike the previous PAO edition, no data is available for MOPU.
- Globally, the FPSO market continues to see a strong pick-up in activity due to the recovery in global capex cycle, on the back of a stronger oil market outlook and the stronger push for lower carbon emissions assets in lieu of the energy transition agenda.
- Yinson (YNS MK; BUY; TP: MYR4.05) and Bumi Armada (BAB MK; BUY;
 TP: MYR0.58) are our Key BUYs in this segment.



(iv) Offshore support vessels (OSVs)

OSV - Supports production ops	P.	AO 2023-2	5	Planned	Actual
	2023	2024	2025	20	22
- AHTS <100 MT)	24	25	24	25	32
- AHTS >100 MT)	1	1	1	0	1
- Fast crewboat	50	49	45	46	57
- PSV/ SSV	13	17	13	15	15
- Work boat/ barge	4	5	5	2	3
- GPV/ SBV	29	29	30	28	35
- LCT	17	14	14	13	20
- Utility vessel	9	6	7	9	3
	=====	=====	=====	=====	=====
Total	147	146	139	138	166

Our views (OSV - supports production ops):

- Outperformed in 2022, for the 2nd year in a row. 166 OSVs were chartered in 2022 vs. the planned 138 units, a positive in supporting brownfield activities. These are the producing fields, which enjoyed higher returns as a result of the strength of oil price in 2022.
- The improved strength came notably in the AHTS (<100 MT), fast crew boats, LCT and GPV segments, wherein domestic OSV operators, such as Icon Offshore (ICON MK; BUY; TP: MYR0.16) operate in.

OSVs - Supports drilling projects	F	PAO 2023-	25	Planned	Actual
	2023	2024	2025	20	22
- AHTS (<100 MT)	22	19	17	32	22
- AHTS (>100 MT)	50	50	53	57	50
- Fast crewboat	28	22	21	19	17
- PSV/ SSV	52	48	57	42	40
- Work boat/ work barge	45	36	31	38	35
- GPV/ SBV	2	4	4	3	2
- LCT	4	7	7	5	6
- Utility vessel	1	1	0	2	1
	=====	====	=====	=====	====
Total	204	187	190	198	173

Source: PETRONAS

Our views (OSV - supports drilling ops):

- Underperformed in 2022, for the 2nd consecutive year. Only met 87% of its objective in 2022, for only 173 OSVs was chartered in the year (vs. the planned 198 units).
- Consistent with the lower drilling activities. This is not a surprise, for these assets are directly tied to the lower drilling activities during the year. Only 20 drilling units were chartered in 2022 (vs. the planned 21 units), meeting just 95% of its expectation.
- Improved optimism in 2023. Based on PAO 2023-25, PETRONAS requires substantially higher 204 OSVs in 2023 (+18% YoY) for its drilling programs. The increased requirement would come mainly from the workboats/ barges and fast crewboat segments respectively.



 We see Icon Offshore (ICON MK; BUY; TP: MYR0.16), Alam Maritim (AMRB MK; Not Rated), Dayang Enterprise (DEHB MK; Not Rated) and Perdana Petroleum (PETR MK; Not Rated) as beneficiaries.

(v) Linepipes supply (km)

_		PAO 2023-2	5	Planned	Actual	
	2023	2024	2025	2022		
Carbon steel				301	204	
- Low case	245	170	0			
- High case	325	724	29			
Corrosion resistant alloy				20	20	
- Low case	0	0	0			
- High case	0	0	0			
<u>Flexible</u>				0	8	
- Low case	1	0	0			
- High case	22	0	0			
	======	======	======		======	
- Low case	246	170	0	321	232	
- High case	347	724	29			

Source: PETRONAS

Our views:

- **Below expectation in 2022.** The length of pipes being procured/ fabricated only met 72% of its original plan. That came notably from the carbon steel pipes (204km vs. 301km initially).
- Expectations for 2023-25.
 - ✓ Demand (carbon steel pipelines) will be around 245-325km in 2023, 170-724km in 2024 and 0-29km for 2025.
 - \checkmark As for CRA, there is either no target set for 2023-25 or zero demand for it.
 - ✓ Demand for flexible pipes is around 1-22km in 2023.
- Wah Seong (WSC MK; BUY; TP: MYR1.20) is a major beneficiary, for pipe coating works. It is the sole coater in MY now, following the exit of its peer Bredero Shaw in 2020.

(vi) Plant turnaround

	PAO 2023-25			Planned Actual		
	2023	2024	2025	20	22	
- PM, >350k man-hrs	2	4	3	2	2	
- SB/SK, >350k man-hrs	1	4	3	4	4	
- PM, <=350k man-hrs	1	1	0	1	1	
- SB/SK, <=350k man-hrs	0	0	0	0	0	
- PM, <=100k man-hrs	3	2	0	2	2	
- SB/SK, <=100k man-hrs	0	0	2	1	1	
	=====	=====	=====	=====	=====	
Total	7	11	8	10	10	

Source: PETRONAS

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Our views:

- Relatively met target for 2022.
- Lower YoY for 2023, higher YoY in 2024. The outlook represents the number of PETRONAS Operating Units (OPUs) to perform turnaround and excludes: (i) plants not operated by PETRONAS and (ii) Pengerang Refining and Petrochemical (PRefChem) respectively.
- Dialog (DLG MK; BUY; TP: MYR4.90) is a key beneficiary.

Others

(vii) Subsea structures

Subsea structures	P.	AO 2023-2	25	Planned Actual		
	2023 2024 2025			2022		
SURF (no. of projects)	2	0-2	0-2	1	1	
- Base case	2	0	0			
- High case	2	2	2			

Source: PETRONAS

(viii) Offshore installation

	P.	AO 2023-2	25	Planned Actual
	2023 2024 2025			2022
No. of lifts using heavy lift barges	5	10-12	7-19	11 8
- Base case	5	10	7	
- High case	5	12	19	

Source: PETRONAS

(ix) Offshore installation - using floatover barges

(No. of installation)	PAO 2023-25 2023 2024 2025				Planned Actual 2022		
- Base case	2	0	1		1	0	
- High case	2	0	1		1	0	

Source: PETRONAS

(x) Pipeline installation - pipelay

(No. of installation days)	P. 2023	AO 2023-2 2024	Planned Actua 2022	
- Base case	229	164	518	240 182
- High case	229	202	555	240 182

Source: PETRONAS

(xi) Hook-up and commissioning

(No. of man-hours; millions)	P	AO 2023-2	Planned	Actual		
	2023	2024	2	2022		
- Base case	5.0	3.1	4.5	4.5	3.4	
- High case	5.2	3.8	6.2	4.5	3.4	

Source: PETRONAS

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(xii) Decommissioning

(No. of wells)	P	PAO 2023-25				Actual
	2023	2024	2025		20	22
- Wells	28	32	43		31	30
- Pipeline	1	2	1		2	1
- FPSO/ FSO	1	2	0		NA	NA
- CPP	1	0	0		NA	NA
- WHP	1	1	1		2	0

Source: PETRONAS

(xiii) Offshore maintenance, construction & modification

(No. of man-hours; millions)	PAO 2023-25			Planned	Actual
	2023 2024 2025			20	22
- Base case	11.9	12.3	13.1	8.8	8.7

Source: PETRONAS

(xiv) Underwater services

(No. of wells)	PAO 2023-25 2023 2024 2025			Planned Actua 2022		
	2023	2024	2025		20	ZZ
- DP2 DS V (ROV & air diving system)	281	431	353		348	102
- DP2 DS V (built-in saturation dive)	178	438	341		161	269
- DP2 DS V (ROV intervention)	229	531	458		554	721
- DP2 DS V (ROV intervention)	281	431	353		348	102

Source: PETRONAS

(xv) Number of chemicals purchased

(No. of wells)	PAO 2023-25				Planned	Actual
	2023	2024	2025		2022	
- Catalyst	1.42	1.11	0.84		0.82	0.68
- Production chemicals	1	1	1		1.04	0.52
- Integrity chemicals	0.57	0.58	0.63		1.43	0.67
- Boiler & cooling water sys chemicals	2.55	2.55	2.55		NA	NA

Source: PETRONAS

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