August 12, 2024

Maybank Investment Bank

Malaysia Oil & Gas

POSITIVE *[Unchanged]*

Uncertainty looms for local-centric upstream OGSE names?

Oil & Gas

Malaysia

POSITIVE sector weight maintained, but local-centric upstream OGSE players may see slower growth ahead

Over the past month, we met multiple companies (both listed and unlisted names). We flag that there is a possibility that many local-centric upstream OGSE names may see slower growth velocity/a reset in growth expectations in 2024-2025E. While we remain POSITIVE on the sector, we now favour: i) defensive midstream companies which will be unaffected; ii) OGSE names with regional exposure & capabilities. Top BUYs are Dialog & Velesto. We also U/G Wasco to BUY (from HOLD) as value has emerged.

Petros is now the sole gas aggregator in Sarawak

State-owned Petroleum Sarawak (Petros) has been officially appointed as the sole gas aggregator for the state of Sarawak, taking over from PETRONAS wef 1 Jul 2024. This marks a significant shift in the control of Sarawak's natural gas resources away from PETRONAS. This also means that Petros will be responsible for: i) buying gas from all upstream producers in Sarawak; ii) selling gas to all downstream buyers, including LNG processing plants; and iii) managing the distribution and supply of natural gas within Sarawak. We believe this transition of gas trading responsibilities could impact PETRONAS' revenue stream and free cash flows although we are unable to quantify the impact just yet.

If "capex deferrals" happen, who will be hit?

Quoting The Edge (link), PETRONAS and Petros are in discussions to achieve a "mutual resolution" out of this developing issue. We believe that a PETRONAS capex deferral is a possibility as a significant portion of its trading revenues have been lost. Consequently, further E&P works/ developing projects may be "deferred" until a resolution is mutually achieved between both parties. **Under a capex deferral scenario, we expect this to first impact OGSE names with exposure in the exploration sub-segment - before flowing to the development, production & decommissioning sub-segments. Affected in the former category are i) OSVs; ii) HUC; and iii) offshore fabrication** potentially impacting names like Dayang Enterprise, Perdana Petroleum, Icon Offshore, Sealink, Marine & General, Carimin, MMHE and Petra Energy. While most of these names are showing strong earnings momentum now, potentially lower PETRONAS capex spending could lead to reduced activities/demand/service providing rates, potentially as early as in 2H24-2025E – which will result in slower growth/a reset in growth expectations for these local-centric OGSE names in 2024-2025E.

Midstream & regional-exposed OGSE names preferred

Given this on-going development, we advise investors to choose more defensive and stable names in: i) the midstream space; and ii) OGSE names with regional exposure & capabilities like **Dialog** and **Wasco**. Meanwhile, we also U/G Wasco to BUY (from HOLD) with an unchanged TP of MYR1.55 based on 12x FY24E PER, with the stock now offering 32% potential upside.

Analyst

Jeremie Yap
(603) 2297 8688
jeremie.yap@maybank-ib.com

Abbreviation

HUC = Hook-up and Commissioning

OSV = Offshore Support Vessel

Other PLCs mentioned in this report

Dayang Enterprise (DEHB MK, Not Rated, CP: MYR2.72)
Carimin Petroleum (CARIP MK, Not Rated, CP: MYR0.875)
Malaysia Marine and Heavy Engineering (MMHE MK, Not Rated, CP: MYR0.42)
Petra Energy (PENB MK, Not Rated, CP: MYR0.1.50)
Perdana Petroleum (PETR MK, Not Rated, CP: MYR0.44)
Sealink International (SELI MK, Not Rated, CP: MYR0.38)
Marine & General (MARG MK, Not Rated, CP: MYR0.325)
Hengyuan Refining (HYR MK, Not Rated, CP: MYR2.40)
Petron Malaysia (PETRONM MK, Not Rated, CP: MYR4.44)
Lotte Chemical Titan (TTNP, SELL, TP: MYR0.94, CP: MYR0.96)
Petronas Chemicals (PCHEM, SELL, TP: MYR5.05, CP: MYR5.43)
Petronas Dagangan (PETD MK, Not Rated, CP: MYR17.78)
Reach Energy (REB MK, Not Rated, CP: MYR0.025)
Dagang NeXchange (DNEX MK, Not Rated, CP: MYR0.385)

Stock	Bloomberg code	Mkt cap (USD'm)	Rating	Price (LC)	TP (LC)	Upside (%)	P/E (x) 24E	P/E (x) 25E	P/B (x) 24E	P/B (x) 25E	Div yld (%) 24E	Div yld (%) 25E
MISC	MISC MK	8,630	Hold	8.55	8.13	(1)	15.7	14.6	1.0	0.9	4.2	4.2
Dialog Group	DLG MK	3,192	Buy	2.50	3.17	28	24.0	19.3	2.4	2.2	1.5	1.5
Yinson Holdings	YNS MK	1,728	Buy	2.40	4.78	99	8.2	7.6	1.4	1.2	0.8	1.7
Bumi Armada	BAB MK	670	Buy	0.50	0.66	31	3.5	4.7	0.5	0.4	0.0	0.0
Hibiscus Petroleu	HIBI MK	413	Hold	2.27	2.31	5	3.5	3.7	0.6	0.5	3.3	3.3
Velesto Energy	VEB MK	390	Buy	0.21	0.32	51	10.9	7.1	0.7	0.6	1.8	2.8
Wasco	WSC MK	209	Buy	1.19	1.55	30	9.2	8.8	1.1	1.0	0.0	0.0
Icon Offshore	ICON MK	141	Sell	1.00	0.49	(48)	130.6	24.4	1.6	1.5	2.0	2.0

1. The value chain, in a nutshell

Figure 1: Malaysia's Oil and Gas Sector Value Chain

Activities	Malaysian Listed Companies Involved
Upstream	
Drilling Rig	Velesto Energy, Sapura Energy
Hydraulic Workover Unit (HWU)	Velesto Energy, Uzma, T7 Global
Offshore Fabrication (WHP/CPP)	MMHE, Sapura Energy
FPSO	Bumi Armada, Yinson, MISC
MOPU	T7 Global
Offshore Support Vessel (OSV)	Perdana Petroleum, Dayang Enterprise, Icon Offshore, Petra Energy, Keyfield International, Sealink International, Marine & General
Hook-up and Commissioning (HUC)	Carimin Petroleum, Dayang Enterprise, Petra Energy
Maintenance, Construction and Modification (MCM)	Carimin Petroleum, Dayang Enterprise, Petra Energy
Plugging and Abandonment	Velesto Energy, Uzma, T7 Global
Pipeline Services	Wasco
Midstream	
LNG Shipping / Petroleum Tankers	MISC
Tank Terminals	Dialog
Gas Pipelines	Petronas Gas
Downstream	
Refining	Heng Yuan, Petron Malaysia
Petrochemicals	Lotte Chemical Titan, Petronas Chemicals
Downstream Plant Turnaround	Dialog
Marketing and Distribution	Petronas Dagangan

Source: Maybank IBG Research

The Oil and Gas industry comprises three main segments: upstream, midstream and downstream.

The **upstream segment** typically consists of companies involved in the **E&P** (exploration and production) of oil and gas. This involves the search for reservoirs for natural crude oil or natural gas fields to recover oil and gas.

Malaysian listed companies that are involved in E&P include: (i) Hibiscus Petroleum; (ii) Dagang Nexchange (via 90%-owned Ping Petroleum); (iii) Dialog Group; (iv) Sapura Energy (via its 50%-JV entity SapuraOMV); (v) Petra Energy; (vi) Reach Energy.

We highlight that E&P companies do not usually own all of their own equipment. For example, they contract out the drilling of wells to other companies – and these companies typically bill E&P companies based on the length of time they spend working for them. We call these players the Oil and Gas Services and Equipment (OGSE) players. These OGSE players do not generate revenue that is tied directly to oil and gas production volume but will indirectly benefit from the capex/opex spending of the pure-play E&P companies.

We classify upstream into four different sub-segments:

(i) **Exploration:** Exploration activities are processes and methods used to locate potential oil and gas drilling and extraction sites via three methods: (a) geophysical surveys; (b) geological surveys; (c) geochemical surveys.

(ii) **Development:** Involves the process of preparing an oil and gas field for production. This involves building the necessary infrastructure, such as wells, pipelines, and processing facilities. The development process begins with the creation of a field development plan. The field development plan outlines the steps that will be taken to prepare the field for production. This includes the selection of well locations, the design of the production system, and the construction of the necessary infrastructure. This infrastructure may include pipelines, processing facilities, and storage facilities. The infrastructure must be designed to handle the volume and quality of oil and gas that is expected to be produced from the field.

(iii) **Production:** The process of extracting oil and gas resources from the reservoir. As production begins, hydrocarbons extracted can now be sold commercially, making this the turning point for cash flow generation. However, we highlight that a typical hydrocarbon production profile can be broken down into three phases: (a) Build-up period – ramping up of production; (b) Plateau period – relatively stable production rate; and (c) Decline period – a natural decline in production rates due to shrinking reserves.

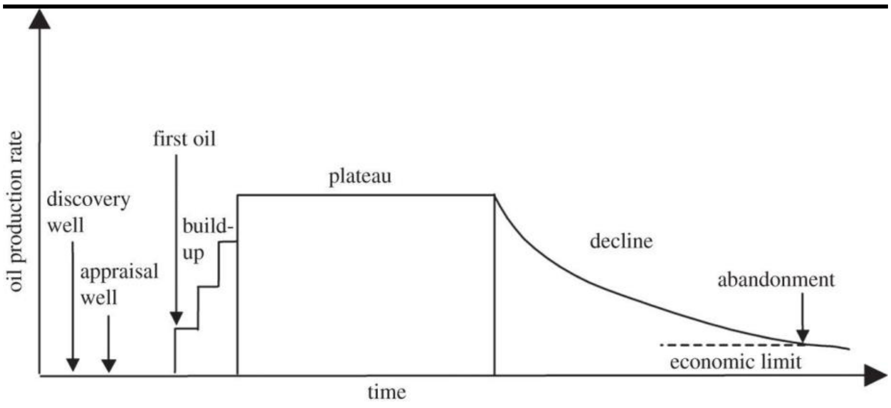
(iv) **Decommissioning:** The process of shutting down and removing all infrastructure associated with an oil and gas field once it has reached the end of its productive life. This process is essential to protect the environment to prevent oil and gas spills, groundwater contamination, and surface subsidence. Wells are plugged and abandoned to prevent oil and gas from leaking into the environment. This involves filling the wellbore with cement and placing a cap on the top of the well. Infrastructure and pipelines will also be dismantled and removed from the site.

Figure 2: OGSE subsegments throughout different activity phases

	Exploration	Development	Production	Decommissioning
Drilling Rig	✓	✓	✓	✓
Hydraulic Workover Unit (HWU)			✓	✓
Offshore Fabrication (WHP/CPP)		✓		
FPSO			✓	
Offshore Support Vessel (OSV)	✓	✓	✓	✓
Hook-up and Commissioning (HUC)		✓		
Maintenance, Construction and Modification (MCM)			✓	
Plugging and Abandonment				✓

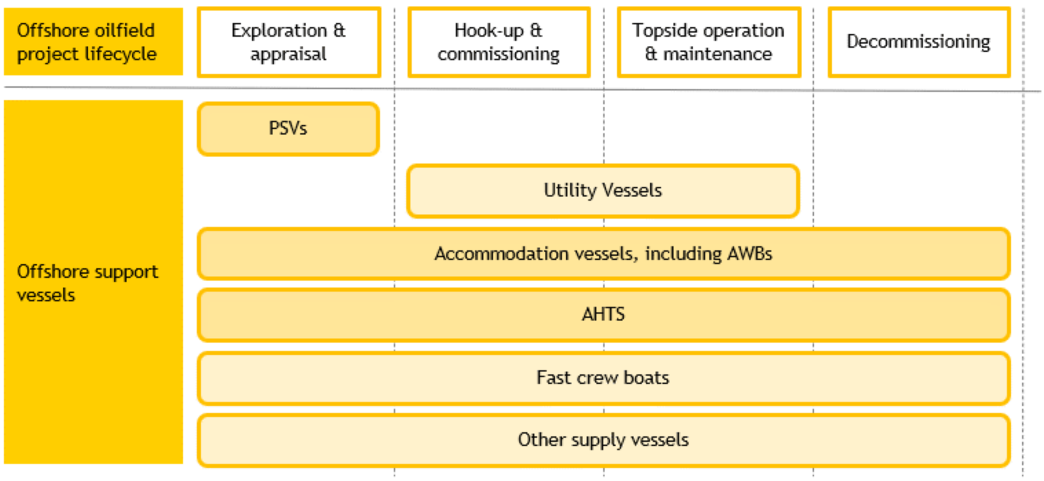
Source: Maybank IBG Research

Figure 3: Typical Oil and Gas Production Curve



Source: Royal Society Publishing

Figure 4: Types of OSVs used in different life cycles of an oilfield



Source: PROVIDENCE, Maybank IBG Research

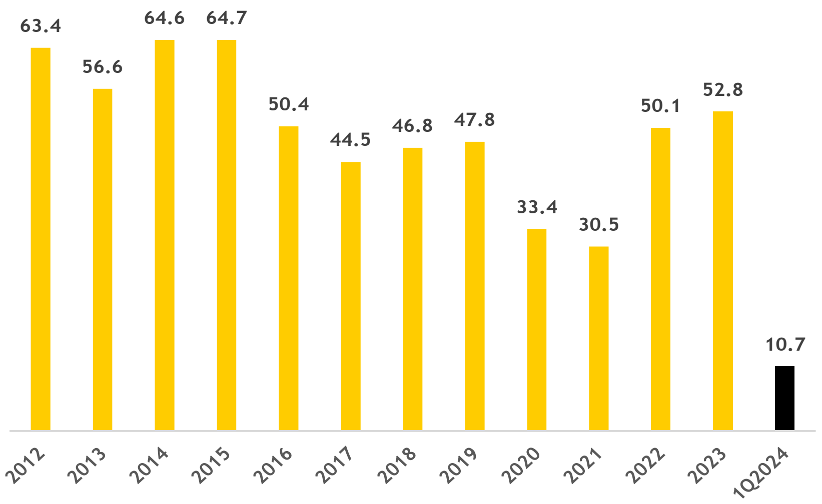
2. Midstream/downstream more resilient

As we have articulated, a potentially lower capex spending by PETRONAS could lead to reduced activities/demand/service providing rates, potentially as early as in 2025E – which will result in slower growth/a reset in growth expectations for local-centric OGSE names in 2024-2025E.

Meanwhile, we believe that the midstream & downstream segments will be more resilient and may not be affected should a lower capex spending scenario were to come into play.

3. Valuations – case study on the previous cycle

Figure 5: PETRONAS capex trend (2012-1Q24)

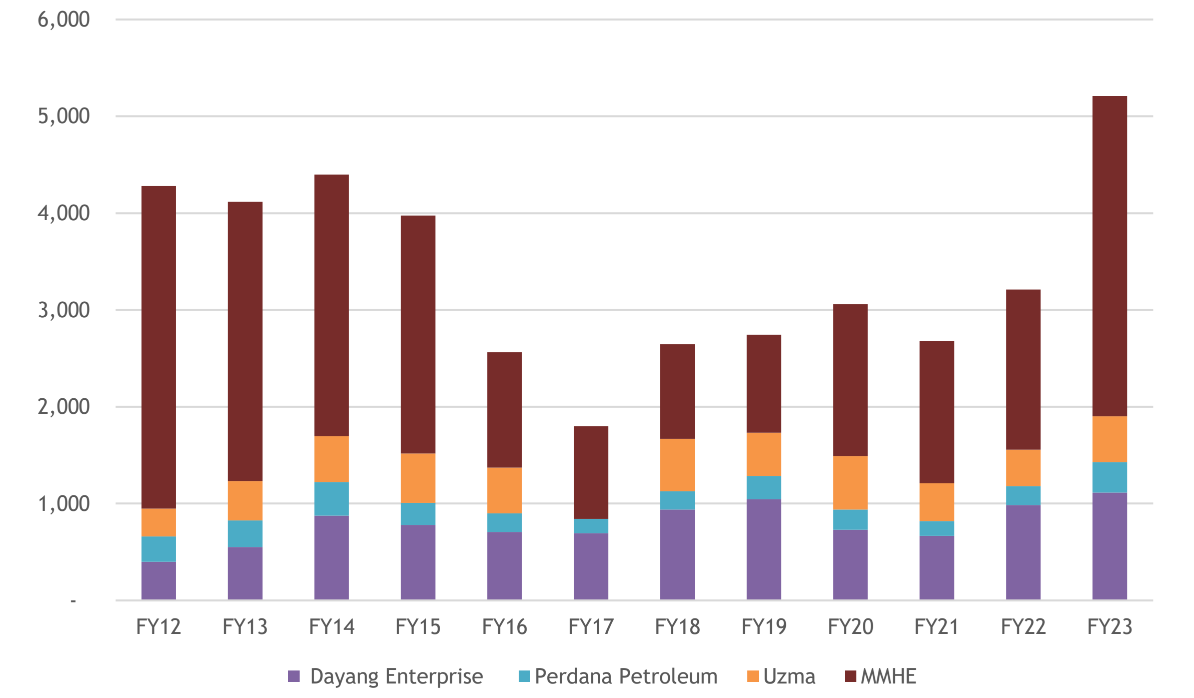


Source: PETRONAS, Maybank IBG Research

As shown in Figure 5 above and Figure 6 overleaf, local-centric OGSE players' revenues in the past (in this case - we chose Dayang Enterprise, Perdana Petroleum, Uzma and MMHE) were generally positively correlated with PETRONAS's capex spending. For instance, the aggregate OGSE players' revenue mirrored the fall in capex spending in 2016 and 2021.

Applying what we have observed in the past, we flag that there is a possibility that many local-centric upstream OGSE names may see slower growth/need a reset in growth expectations in 2024-2025E due to the ongoing industry development.

Figure 6: Local OGSE revenue trend (FY12-23)



Source: Maybank IBG Research

Relating to valuations, we chose Dayang Enterprise (DEHB MK) as our case study as the other names have significantly more volatile earnings and have taken on multiple corporate exercises over the past 15 years, which have significantly distorted their historical forward P/E band charts – making them inappropriate for our research purpose.

During the previous upcycle (2009-2014), after stripping out one-offs, we saw Dayang Enterprise trading between a 1 year forward P/E multiple range of 3.9x to as high as 16.4x (Figure 7). Throughout the 7-year horizon, the average mean 1-year forward multiple was 10.1x. Note that Dayang registered losses in 2017.

Figure 7: Historical 1-year forward P/E multiple for Dayang

Source: Bloomberg, Maybank IBG Research

Figure 8: OGSE peer valuation matrix

Company	FYE	Price 10-Aug-24 (Local Currency)	Mkt Cap (MYRm)	PER (x)			Div. Yld (%)	ROE (%)	PBV (x)	EV/EBITDA	NP Growth (%)	
				Actual	1 Yr Fwd	2 Yr Fwd	1 Yr Fwd	1 Yr Fwd	1 Yr Fwd	1 Yr Fwd	1 Yr Fwd	2 Yr Fwd
DAYANG ENTERPRISE HLDGS BHD	December	2.73	3,161	14.4	12.6	10.9	1.9	13.7	1.7	6.4	14.6	15.6
UZMA BHD	June	1.03	448	12.2	8.9	7.9	NA	8.2	0.6	5.6	37.4	12.2
VELESTO ENERGY BHD	December	0.22	1,766	17.7	11.0	8.8	1.9	6.2	0.7	4.2	61.4	25.5
MALAYSIA MARINE AND HEAVY EN	December	0.42	672	-1.4	16.2	16.9	2.4	3.6	0.5	6.4	-108.6	-4.0
T7 GLOBAL BHD	December	0.46	364	11.0	8.6	5.8	NA	12.2	0.9	11.3	27.9	48.2
ICON OFFSHORE BHD	December	1.02	635	130.8	75.1	21.5	1.0	1.2	0.2	9.4	74.0	250.3
KEYFIELD INTERNATIONAL BHD	December	2.47	1,980	18.8	14.3	10.6	1.4	22.3	308.8	NA	30.8	35.1
WASCO BHD	December	1.16	898	8.3	8.8	8.0	2.8	12.8	1.1	4.9	-5.5	9.1
Mkt. Cap Simple Avg.				**26.5**	**19.4**	**11.3**	**1.9**	**10.0**	**39.3**	**6.9**		

Source: Maybank IBG Research

As shown in the OGSE peer valuation matrix in Figure 8, consensus is generally forecasting a YoY net profit growth in FY25E (as reflected in lower 2 yr fwd PERs vs. 1 yr) for the upstream OSGE players, which we highlight may have downside risks in the event of a lower PETRONAS capex spending environment. We also do not discount the possibility of a sector de-rating should a development like this happen.

4. We upgrade Wasco to BUY; Dialog remains our sector top pick, followed by Velesto

Given this ongoing development, we advise investors to choose more defensive and stable names in: i) the midstream space; and ii) OGSE names with regional exposure & capabilities like Dialog and Wasco.

We believe that **Wasco** would only be minimally impacted as: i) PETRONAS jobs account for <2% of Wasco's outstanding orderbook of MYR3.1b as at end-Mar 2024; and ii) PETRONAS contributed < 1% of Wasco's FY23 total revenue. Following its recent share price weakness, we now upgrade Wasco to BUY (from HOLD) with an unchanged TP of MYR1.55 (based on 12x FY24E PER) as we see value emerging for the name. Wasco is only trading at 8.6x FY25E EPS.

Figure 9: Changes in stock ratings, TPs and valuation multiples

OGSE names	PER peg (x)		Target Price (MYR)		Stock Rating	
	Old	New	Old	New	Old	New
Wasco	12	12	1.55	1.55	HOLD	BUY

Source: Maybank IBG Research

Meanwhile, we reiterate **Dialog** as our sector top BUY. Dialog has strong operational/financial stability from its LT midstream tank terminal assets. We note that it has secured a renewal for its Master Service Agreement (3+2 years) from PETRONAS (for its plant maintenance segment) beginning Jul 2024 at significantly higher rates. Also, with the gradual phase out of loss-making legacy EPCC contracts by Jun 2024, the segment (EPCC) will be profitable beginning 1QFY25E as newer jobs are also signed at improved rates. Re-rating catalysts include: i) strong earnings growth delivery; ii) new tank terminal contracts in Pengerang. Our MYR3.17 TP is based on SOP.

We also reiterate **Velesto** as one of our top BUYs. With N2, N4, N6 and N8 already locked in under LT contracts, coupled with expectations of elevated DCR jobs for N3 and N5 soon, we forecast a strong EPS growth of 53% YoY in FY25E. Velesto currently trades at 7.3x FY25E PER and we view its risk-to-reward to be favourable given its strong growth prospects, scarcity premium of a local drilling rig operator and its regional capabilities. Our MYR0.32 TP is based on 13x PER on mid-FY25E EPS.

Figure 10: Changes in stock ratings, TPs and valuation multiples

	Rating	TP (MYR)	TP basis
MISC	HOLD	8.13	Sum of Parts (SOP)
Dialog Group	BUY	3.17	Sum of Parts (SOP)
Yinson	BUY	4.78	Sum of Parts (SOP)
Bumi Armada	BUY	0.66	Sum of Parts (SOP)
Hibiscus Petroleum	HOLD	2.31	Discounted Cash Flows (DCF)
Velesto Energy	BUY	0.32	13x mid-FY25E PER
Wasco	BUY	1.55	12x FY24E PER
Icon Offshore	SELL	0.49	12x FY25E PER

Source: Maybank IBG Research

Research Offices

ECONOMICS

Suhaimi ILIAS
Chief Economist
Malaysia | Philippines | Global
(603) 2297 8682
suhaimi_ilias@maybank-ib.com

CHUA Hak Bin
Regional Thematic Macroeconomist
(65) 6231 5830
chuahb@maybank.com

Dr Zamros DZULKAFLI
Malaysia | Philippines
(603) 2082 6818
zamros.d@maybank-ib.com

Erica TAY
China | Thailand
(65) 6231 5844
erica.tay@maybank.com

Brian LEE Shun Rong
Indonesia | Singapore | Vietnam
(65) 6231 5846
brian.lee1@maybank.com

Fatin Nabila MOHD ZAINI
(603) 2297 8685
fatinnabila.mohdzaini@maybank-ib.com

Luong Thu Huong
(65) 6231 8467
hana.thuhuong@maybank.com

LEE Jia Yu
(65) 6231 5843
jiayu.lee@maybank.com

FX

Saktiandi SUPAAT
Head of FX Research
(65) 6320 1379
saktiandi@maybank.com

Fiona LIM
(65) 6320 1374
fionalim@maybank.com

Alan LAU, CFA
(65) 6320 1378
alanlau@maybank.com

Shaun LIM
(65) 6320 1371
shaunlim@maybank.com

STRATEGY

Anand PATHMAKANTHAN
ASEAN
(603) 2297 8783
anand.pathmakanthan@maybank-ib.com

FIXED INCOME

Winson PHOON, FCA
Head of Fixed Income
(65) 6231 5831
winsonphoon@maybank.com

SE THO Mun Yi, CFA
(603) 2074 7606
munyi.st@maybank-ib.com

PORTFOLIO STRATEGY

ONG Seng Yeow
(65) 6231 5839
ongsengyeow@maybank.com

MIBG SUSTAINABILITY RESEARCH

Jigar SHAH
Head of Sustainability Research
(91) 22 4223 2632
jigars@maybank.com

Neerav DALAL
(91) 22 4223 2606
neerav@maybank.com

REGIONAL EQUITIES

Anand PATHMAKANTHAN
Head of Regional Equity Research
(603) 2297 8783
anand.pathmakanthan@maybank-ib.com

WONG Chew Hann, CA
Head of ASEAN Equity Research
(603) 2297 8686
wchewh@maybank-ib.com

MALAYSIA

WONG Chew Hann, CA *Head of Research*
(603) 2297 8686
wchewh@maybank-ib.com
• Equity Strategy
• Non-Bank Financials (stock exchange)
• Construction & Infrastructure

Anand PATHMAKANTHAN
(603) 2297 8783
anand.pathmakanthan@maybank-ib.com
• Equity Strategy

Desmond CH'NG, BFP, FCA
(603) 2297 8680
desmond.chng@maybank-ib.com
• Banking & Finance

ONG Chee Ting, CA
(603) 2297 8678
ct.ong@maybank-ib.com
• Plantations - Regional

YIN Shao Yang, CPA
(603) 2297 8916
samuel.y@maybank-ib.com
• Gaming – Regional
• Media • Aviation • Non-Bank Financials

TAN Chi Wei, CFA
(603) 2297 8690
chiwei.t@maybank-ib.com
• Power • Telcos

WONG Wei Sum, CFA
(603) 2297 8679
weisum@maybank-ib.com
• Property • Glove

Jade TAM
(603) 2297 8687
jade.tam@maybank-ib.com
• Consumer Staples & Discretionary

Nur Farah SYIFAA
(603) 2297 8675
nurfarahsyifaa.mohamadfuad@maybank-ib.com
• Renewable Energy • REITs

LOH Yan Jin
(603) 2297 8687
lohyanjin.loh@maybank-ib.com
• Ports • Automotive • Technology (EMS)

Jeremie YAP
(603) 2297 8688
jeremie.yap@maybank-ib.com
• Oil & Gas • Petrochemicals

Arvind JAYARATNAM
(603) 2297 8692
arvind.jayaratnam@maybank.com
• Technology (Semicon & Software)

TEE Sze Chiah *Head of Retail Research*
(603) 2082 6858
szechiah.t@maybank-ib.com
• Retail Research

Amirah AZMI
(603) 2082 8769
amirah.azmi@maybank-ib.com
• Retail Research

SINGAPORE

Thilan WICKRAMASINGHE *Head of Research*
(65) 6231 5840
thilanw@maybank.com
• Strategy • Consumer
• Banking & Finance - Regional

Eric ONG
(65) 6231 5849
ericong@maybank.com
• Healthcare • Transport • SMIDs

LI Jialin
(65) 6231 5845
jialin.li@maybank.com
• REITs

Jarick SEET
(65) 6231 5848
jarick.seet@maybank.com
• Technology

Krishna GUHA
(65) 6231 5842
krishna.guha@maybank.com
• REITs • Industrials

Hussaini SAIFEE
(65) 6231 5837
hussaini.saifee@maybank.com
• Telcos • Internet

PHILIPPINES

Kervin Laurence SISAYAN *Head of Research*
(63) 2 5322 5005
kervin.sisayan@maybank.com
• Strategy • Banking & Finance

Daphne SZE
(63) 2 5322 5008
daphne.sze@maybank.com
• Consumer

Raffy MENDOZA
(63) 2 5322 5010
joserafael.mendoza@maybank.com
• Property • REITs • Gaming

Michel ALONSO
(63) 2 5322 5007
michelxavier.alonso@maybank.com
• Conglomerates

Germaine GUINTO
(63) 2 5322 5006
germaine.guinto@maybank.com
• Utilities

THAILAND

Chak REUNGSINPINYA *Head of Research*
(66) 2658 5000 ext 1399
chak.reungsinpinya@maybank.com
• Strategy • Energy

Jesada TECHAHUSDIN, CFA
(66) 2658 5000 ext 1395
jesada.t@maybank.com
• Banking & Finance

Wasu MATTANAPOTCHANART
(66) 2658 5000 ext 1392
wasu.m@maybank.com
• Telcos • Technology • REITs • Property
• Consumer Discretionary

Surachai PRAMUALCHAROENKIT
(66) 2658 5000 ext 1470
surachai.p@maybank.com
• Auto • Conmat • Contractor • Steel

Suttatip PEERASUB
(66) 2658 5000 ext 1430
suttatip.p@maybank.com
• Food & Beverage • Commerce

Natchaphon RODJANAROWAN
(66) 2658 5000 ext 1393
natchaphon.rodjanarowan@maybank.com
• Utilities

Boonyakorn AMORNSANK
(66) 2658 5000 ext 1394
boonyakorn.amornsank@maybank.com
• Services

Nontapat SAHAKITPINYO
(66) 2658 5000 ext 2352
nontapat.sahakitpinyo@maybank.com
• Healthcare

INDONESIA

Jeffrosenberg CHENLIM *Head of Research*
(62) 21 8066 8680
jeffrosenberg.lim@maybank.com
• Strategy • Banking & Finance • Property

Willy GOUTAMA
(62) 21 8066 8688
willy.goutama@maybank.com
• Consumer

Etta Rusdiana PUTRA
(62) 21 8066 8683
etta.putra@maybank.com
• Telcos • Internet • Construction

William JEFFERSON
(62) 21 8066 8687
william.jefferson@maybank.com
• Property • Materials

Paulina MARGARETA
(62) 21 8066 8690
paulina.tjoa@maybank.com
• Autos

Jocelyn SANTOSO
(62) 21 8066 8689
jocelyn.santoso@maybank.com
• Consumer

Hasan BARAKWAN
(62) 21 8066 2694
hasan.barakwan@maybank.com
• Metals & Mining

Adi WICAKSONO
(62) 21 8066 8686
adi.wicaksono@maybank.com
• Plantations

Satriawan HARYONO, CEWA, CTA
(62) 21 8066 8682
satriawan@maybank.com
• Chartist

VIETNAM

Quan Trong Thanh *Head of Research*
(84 28) 44 555 888 ext 8184
thanh.quan@maybank.com
• Strategy • Banks

Hoang Huy, CFA
(84 28) 44 555 888 ext 8181
hoanghuy@maybank.com
• Strategy • Technology

Le Nguyen Nhat Chuyen
(84 28) 44 555 888 ext 8082
chuyen.le@maybank.com
• Oil & Gas • Logistics

Nguyen Thi Sony Tra Mi
(84 28) 44 555 888 ext 8084
trami.nguyen@maybank.com
• Consumer Discretionary

Tran Thi Thanh Nhan
(84 28) 44 555 888 ext 8088
nhan.tran@maybank.com
• Consumer Staples

Nguyen Le Tuan Loi
(84 28) 44 555 888 ext 8182
loi.nguyen@maybank.com
• Property

Nguyen Thanh Hai
(84 28) 44 555 888 ext 8081
thanhhai.nguyen@maybank.com
• Industrials

Nguyen Thanh Lam
(84 28) 44 555 888 ext 8086
thanhlam.nguyen@maybank.com
• Retail Research

APPENDIX I: TERMS FOR PROVISION OF REPORT, DISCLAIMERS AND DISCLOSURES

DISCLAIMERS

This research report is prepared for general circulation and for information purposes only and under no circumstances should it be considered or intended as an offer to sell or a solicitation of an offer to buy the securities referred to herein. Investors should note that values of such securities, if any, may fluctuate and that each security's price or value may rise or fall. Opinions or recommendations contained herein are in form of technical ratings and fundamental ratings. Technical ratings may differ from fundamental ratings as technical valuations apply different methodologies and are purely based on price and volume-related information extracted from the relevant jurisdiction's stock exchange in the equity analysis. Accordingly, investors' returns may be less than the original sum invested. Past performance is not necessarily a guide to future performance. This report is not intended to provide personal investment advice and does not take into account the specific investment objectives, the financial situation and the particular needs of persons who may receive or read this report. Investors should therefore seek financial, legal and other advice regarding the appropriateness of investing in any securities or the investment strategies discussed or recommended in this report.

The information contained herein has been obtained from sources believed to be reliable but such sources have not been independently verified by Maybank Investment Bank Berhad, its subsidiary and affiliates (collectively, "Maybank IBG") and consequently no representation is made as to the accuracy or completeness of this report by Maybank IBG and it should not be relied upon as such. Accordingly, Maybank IBG and its officers, directors, associates, connected parties and/or employees (collectively, "Representatives") shall not be liable for any direct, indirect or consequential losses or damages that may arise from the use or reliance of this report. Any information, opinions or recommendations contained herein are subject to change at any time, without prior notice.

This report may contain forward looking statements which are often but not always identified by the use of words such as "anticipate", "believe", "estimate", "intend", "plan", "expect", "forecast", "predict" and "project" and statements that an event or result "may", "will", "can", "should", "could" or "might" occur or be achieved and other similar expressions. Such forward looking statements are based on assumptions made and information currently available to us and are subject to certain risks and uncertainties that could cause the actual results to differ materially from those expressed in any forward looking statements. Readers are cautioned not to place undue relevance on these forward-looking statements. Maybank IBG expressly disclaims any obligation to update or revise any such forward looking statements to reflect new information, events or circumstances after the date of this publication or to reflect the occurrence of unanticipated events.

Maybank IBG and its officers, directors and employees, including persons involved in the preparation or issuance of this report, may, to the extent permitted by law, from time to time participate or invest in financing transactions with the issuer(s) of the securities mentioned in this report, perform services for or solicit business from such issuers, and/or have a position or holding, or other material interest, or effect transactions, in such securities or options thereon, or other investments related thereto. In addition, it may make markets in the securities mentioned in the material presented in this report. One or more directors, officers and/or employees of Maybank IBG may be a director of the issuers of the securities mentioned in this report to the extent permitted by law.

This report is prepared for the use of Maybank IBG's clients and may not be reproduced, altered in any way, transmitted to, copied or distributed to any other party in whole or in part in any form or manner without the prior express written consent of Maybank IBG and Maybank IBG and its Representatives accepts no liability whatsoever for the actions of third parties in this respect.

This report is not directed to or intended for distribution to or use by any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation. This report is for distribution only under such circumstances as may be permitted by applicable law. The securities described herein may not be eligible for sale in all jurisdictions or to certain categories of investors. Without prejudice to the foregoing, the reader is to note that additional disclaimers, warnings or qualifications may apply based on geographical location of the person or entity receiving this report.

Malaysia

Opinions or recommendations contained herein are in the form of technical ratings and fundamental ratings. Technical ratings may differ from fundamental ratings as technical valuations apply different methodologies and are purely based on price and volume-related information extracted from Bursa Malaysia Securities Berhad in the equity analysis.

Singapore

This report has been produced as of the date hereof and the information herein may be subject to change. Maybank Research Pte. Ltd. ("MRPL") in Singapore has no obligation to update such information for any recipient. For distribution in Singapore, recipients of this report are to contact MRPL in Singapore in respect of any matters arising from, or in connection with, this report. If the recipient of this report is not an accredited investor, expert investor or institutional investor (as defined under Section 4A of the Singapore Securities and Futures Act 2001), MRPL shall be legally liable for the contents of this report.

Thailand

Except as specifically permitted, no part of this presentation may be reproduced or distributed in any manner without the prior written permission of Maybank Securities (Thailand) Public Company Limited. Maybank Securities (Thailand) Public Company Limited ("MST") accepts no liability whatsoever for the actions of third parties in this respect.

Due to different characteristics, objectives and strategies of institutional and retail investors, the research products of MST Institutional and Retail Research departments may differ in either recommendation or target price, or both. MST reserves the rights to disseminate MST Retail Research reports to institutional investors who have requested to receive it. If you are an authorised recipient, you hereby tacitly acknowledge that the research reports from MST Retail Research are first produced in Thai and there is a time lag in the release of the translated English version.

The disclosure of the survey result of the Thai Institute of Directors Association ("IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an evaluation of operation and is not based on inside information. The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey may be changed after that date. MST does not confirm nor certify the accuracy of such survey result.

The disclosure of the Anti-Corruption Progress Indicators of a listed company on the Stock Exchange of Thailand, which is assessed by Thaipat Institute, is made in order to comply with the policy and sustainable development plan for the listed companies of the Office of the Securities and Exchange Commission. Thaipat Institute made this assessment based on the information received from the listed company, as stipulated in the form for the assessment of Anti-corruption which refers to the Annual Registration Statement (Form 56-1), Annual Report (Form 56-2), or other relevant documents or reports of such listed company. The assessment result is therefore made from the perspective of Thaipat Institute that is a third party. It is not an assessment of operation and is not based on any inside information. Since this assessment is only the assessment result as of the date appearing in the assessment result, it may be changed after that date or when there is any change to the relevant information. Nevertheless, MST does not confirm, verify, or certify the accuracy and completeness of the assessment result.

US

This third-party research report is distributed in the United States ("US") to Major US Institutional Investors (as defined in Rule 15a-6 under the Securities Exchange Act of 1934, as amended) only by Wedbush Securities Inc. ("Wedbush"), a broker-dealer registered in the US (registered under Section 15 of the Securities Exchange Act of 1934, as amended). All responsibility for the distribution of this report by Wedbush in the US shall be borne by Wedbush. This report is not directed at you if Wedbush is prohibited or restricted by any legislation or regulation in any jurisdiction from making it available to you. You should satisfy yourself before reading it that Wedbush is permitted to provide research material concerning investments to you under relevant legislation and regulations. All U.S. persons receiving and/or accessing this report and wishing to effect transactions in any security mentioned within must do so with: Wedbush Securities Inc. 1000 Wilshire Blvd, Los Angeles, California 90017, +1 (646) 604-4232 and not with the issuer of this report.

UK

This document is being distributed by Maybank Securities (London) Ltd ("MSUK") which is authorized and regulated, by the Financial Conduct Authority and is for Informational Purposes only. This document is not intended for distribution to anyone defined as a Retail Client under the Financial Services and Markets Act 2000 within the UK. Any inclusion of a third party link is for the recipients convenience only, and that the firm does not take any responsibility for its comments or accuracy, and that access to such links is at the individuals own risk. Nothing in this report should be considered as constituting legal, accounting or tax advice, and that for accurate guidance recipients should consult with their own independent tax advisers.

DISCLOSURES

Legal Entities Disclosures

Malaysia: This report is issued and distributed in Malaysia by Maybank Investment Bank Berhad (15938- H) which is a Participating Organization of Bursa Malaysia Berhad and a holder of Capital Markets and Services License issued by the Securities Commission in Malaysia. **Singapore:** This report is distributed in Singapore by MRPL (Co. Reg No 198700034E) which is regulated by the Monetary Authority of Singapore. **Indonesia:** PT Maybank Sekuritas Indonesia ("PTMSI") (Reg. No. KEP-251/PM/1992) is a member of the Indonesia Stock Exchange and is regulated by the Financial Services Authority (Indonesia). **Thailand:** MST (Reg. No.0107545000314) is a member of the Stock Exchange of Thailand and is regulated by the Ministry of Finance and the Securities and Exchange Commission. **Philippines:** Maybank Securities Inc (Reg. No.01-2004-00019) is a member of the Philippines Stock Exchange and is regulated by the Securities and Exchange Commission. **Vietnam:** Maybank Securities Limited (License Number: 117/GP-UBCK) is licensed under the State Securities Commission of Vietnam. **Hong Kong:** MIB Securities (Hong Kong) Limited (Central Entity No AAD284) is regulated by the Securities and Futures Commission. **India:** MIB Securities India Private Limited ("MIBSI") is a participant of the National Stock Exchange of India Limited and the Bombay Stock Exchange and is regulated by Securities and Exchange Board of India ("SEBI") (Reg. No. INZ000010538). MIBSI is also registered with SEBI as Category 1 Merchant Banker (Reg. No. INM 000011708) and as Research Analyst (Reg No: INH000000057). **UK:** Maybank Securities (London) Ltd (Reg No 2377538) is authorized and regulated by the Financial Conduct Authority.

Disclosure of Interest

Malaysia: Maybank IBG and its Representatives may from time to time have positions or be materially interested in the securities referred to herein and may further act as market maker or may have assumed an underwriting commitment or deal with such securities and may also perform or seek to perform investment banking services, advisory and other services for or relating to those companies.

Singapore: As of 12 August 2024, Maybank Research Pte. Ltd. and the covering analyst do not have any interest in any companies recommended in this research report.

Thailand: MST may have a business relationship with or may possibly be an issuer of derivative warrants on the securities /companies mentioned in the research report. Therefore, Investors should exercise their own judgment before making any investment decisions. MST, its associates, directors, connected parties and/or employees may from time to time have interests and/or underwriting commitments in the securities mentioned in this report.

Hong Kong: As of 12 August 2024, MIB Securities (Hong Kong) Limited and the authoring analyst do not have any interest in any companies recommended in this research report.

India: As of 12 August 2024, and at the end of the month immediately preceding the date of publication of the research report, MIBSI, authoring analyst or their associate / relative does not hold any financial interest or any actual or beneficial ownership in any shares or having any conflict of interest in the subject companies except as otherwise disclosed in the research report.

In the past twelve months MIBSI and authoring analyst or their associate did not receive any compensation or other benefits from the subject companies or third party in connection with the research report on any account what so ever except as otherwise disclosed in the research report.

Maybank IBG may have, within the last three years, served as manager or co-manager of a public offering of securities for, or currently may make a primary market in issues of, any or all of the entities mentioned in this report or may be providing, or have provided within the previous 12 months, significant advice or investment services in relation to the investment concerned or a related investment and may receive compensation for the services provided from the companies covered in this report.

OTHERS

Analyst Certification of Independence

The views expressed in this research report accurately reflect the analyst's personal views about any and all of the subject securities or issuers; and no part of the research analyst's compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in the report.

Reminder

Structured securities are complex instruments, typically involve a high degree of risk and are intended for sale only to sophisticated investors who are capable of understanding and assuming the risks involved. The market value of any structured security may be affected by changes in economic, financial and political factors (including, but not limited to, spot and forward interest and exchange rates), time to maturity, market conditions and volatility and the credit quality of any issuer or reference issuer. Any investor interested in purchasing a structured product should conduct its own analysis of the product and consult with its own professional advisers as to the risks involved in making such a purchase.

Definition of Ratings

Maybank IBG Research uses the following rating system

BUY	Return is expected to be above 10% in the next 12 months (including dividends)
HOLD	Return is expected to be between 0% to 10% in the next 12 months (including dividends)
SELL	Return is expected to be below 0% in the next 12 months (including dividends)

Applicability of Ratings

The respective analyst maintains a coverage universe of stocks, the list of which may be adjusted according to needs. Investment ratings are only applicable to the stocks which form part of the coverage universe. Reports on companies which are not part of the coverage do not carry investment ratings as we do not actively follow developments in these companies.

Malaysia

Maybank Investment Bank Berhad
(A Participating Organisation of
Bursa Malaysia Securities Berhad)
33rd Floor, Menara Maybank,
100 Jalan Tun Perak,
50050 Kuala Lumpur
Tel: (603) 2059 1888;
Fax: (603) 2078 4194

Stockbroking Business:
Level 8, Tower C, Dataran Maybank,
No.1, Jalan Maarof
59000 Kuala Lumpur
Tel: (603) 2297 8888
Fax: (603) 2282 5136

Singapore

Maybank Securities Pte Ltd
Maybank Research Pte Ltd
50 North Canal Road
Singapore 059304

Tel: (65) 6336 9090

London

Maybank Securities (London) Ltd
PNB House
77 Queen Victoria Street
London EC4V 4AY, UK

Tel: (44) 20 7332 0221
Fax: (44) 20 7332 0302

Hong Kong

MIB Securities (Hong Kong) Limited
28/F, Lee Garden Three,
1 Sunning Road, Causeway Bay,
Hong Kong

Tel: (852) 2268 0800
Fax: (852) 2877 0104

Indonesia

PT Maybank Sekuritas Indonesia
Sentral Senayan III, 22nd Floor
Jl. Asia Afrika No. 8
Gelora Bung Karno, Senayan
Jakarta 10270, Indonesia

Tel: (62) 21 2557 1188
Fax: (62) 21 2557 1189

India

MIB Securities India Pte Ltd
1101, 11th floor, A Wing, Kanakia
Wall Street, Chakala, Andheri -
Kurla Road, Andheri East,
Mumbai City - 400 093, India

Tel: (91) 22 6623 2600
Fax: (91) 22 6623 2604

Philippines

Maybank Securities Inc
17/F, Tower One & Exchange
Plaza
Ayala Triangle, Ayala Avenue
Makati City, Philippines 1200

Tel: (63) 2 8849 8888
Fax: (63) 2 8848 5738

Thailand

Maybank Securities (Thailand) PCL
999/9 The Offices at Central World,
20th - 21st Floor,
Rama 1 Road Pathumwan,
Bangkok 10330, Thailand

Tel: (66) 2 658 6817 (sales)
Tel: (66) 2 658 6801 (research)

Vietnam

Maybank Securities Limited
Floor 10, Pearl 5 Tower,
5 Le Quy Don Street,
Vo Thi Sau Ward, District 3
Ho Chi Minh City, Vietnam

Tel : (84) 28 44 555 888
Fax : (84) 28 38 271 030

Sales Trading

Indonesia
Helen Widjaja
helen.widjaja@maybank.com
Tel: (62) 21 2557 1188

London
Greg Smith
gsmith@maybank.com
Tel: (44) 207 332 0221

Philippines
Keith Roy
keith_roy@maybank.com
Tel: (63) 2 5322 3184

India
Sanjay Makhija
sanjaymakhija@maybank.com
Tel: (91) 22 6623 2629

www.maybank.com/investment-banking
www.maybank-keresearch.com