

SECTOR UPDATE

Oil & Gas – Malaysia

FPSO Outlook Weighed Against Energy Transition

While the FPSO industry benefits from an all-time high backlog, we think players should sharpen their focus on decarbonisation/clean energy pathways, as we foresee diverging patterns in this “new field growth” depending on various factors. For example, it seems solar and wind will not be part of Bumi Armada and Yinson Production (the FPSO arm), even though wind is officially under SBM Offshore. MISC remains as a green transportation arm though it may surprise the industry with the ZEUS Power Station.

WHAT'S NEW

- FPSO-driven oil supply projected to grow about 60% from 2020, to 11m bpd** by 2030.** According to Rystad Energy, global oil supply from FPSO projects (including subsea tiebacks to the FPSOs) stood at around 7m bpd in 2020. South America, led by Brazil, dominates the market at about 40%, with Africa being the second largest at around 30%.
- ESG elements not to be ignored.** Despite FPSOs having a small share of global oil supply, Rystad estimates that the segment’s carbon emissions may surge from 38m tonnes in 2023, to 50m tonnes by 2030 if left unchecked. Almost all major FPSO players are determined to have global stockpile of Scope 1, 2 and 3 emissions. However, it is possible that each FPSO player may champion one (or an integrated form) decarbonisation technology, depending on various factors including their clients’ preferences. In this case, we foresee a divergence in how the FPSO contractors rebrand themselves in the net-zero 2050 era. This is especially so for Yinson, as it pursues to unlock its FPSO unit (Yinson Production) and is also growing its solar and wind business (Yinson RE).
- Small speed bumps in Brazil FPSOs’ first oil due to regulatory delay.** The FPSO Atlanta was guided to reach first oil by Aug 24 by both Yinson and Brava Energy (a newly merged entity of Enauta and 3R). However, the nation’s environmental agency IBAMA, of which its operating licence is a must have for any O&G platform to start, had been involved in a prolonged protest with the government over certain disputes, delaying many of Petrobras’ O&G projects. Likewise, Brava Energy announced only in early-Sep 24 the IBAMA operating licence was given, and the FPSO is now pending small outstanding matters. We would not be surprised if FPSO Maria Quitéria (which was completed five months earlier than Petrobras scheduled, to Sep 24 first oil target), and MISC’s FPSO Mero-3 (first oil target guidance was changed from 2 Aug to Sep 24) suffer from similar licensing delays.

ACTION

- Retain MARKET WEIGHT.** The sector’s trading and earnings outperformance up till 1H24 was justified due to rising vessel rates, and catch-up in volume of work for maintenance and production enhancement. We continue to believe the catalysts are mostly priced in, while execution risks alongside transition will still prevail, especially with the local sector risks surrounding the Petronas-Petros saga, and Brazil FPSO hiccups.

PEER COMPARISON

Company	Ticker	Rec	Share Price	Target	Market	P/E		P/B		Interest Cover		Net Debt to Equity		ROE	
			18 Sep 24 (RM)	Price (RM)	Cap (RMm)	2024F (x)	2025F (x)	2024F (x)	2025F (x)	2024F (x)	2025F (x)	2024F (%)	2025F (%)	2024F (%)	2025F (%)
Bumi Armada	BAB MK	HOLD	0.48	0.55	2,904.7	3.6	4.6	0.5	0.4	4.5	4.1	47.2	41.9	12.9	9.5
Dialog Group	DLG MK	BUY	2.14	3.10	12,082.4	21.0	20.1	2.3	2.1	14.5	12.7	5.2	3.8	10.6	11.0
Deleum	DLUM MK	HOLD	1.39	1.25	558.0	12.1	11.3	1.3	1.3	195.0	112.8	n.a	n.a	11.3	11.5
MISC	MISC MK	BUY	8.11	10.10	36,210.0	14.3	13.2	0.9	0.9	7.4	7.8	27.7	25.1	n.a	n.a
MMHE	MMHE MK	BUY	0.45	0.70	728.0	10.5	21.1	0.5	0.5	10.6	8.7	n.a	n.a	6.4	5.4
Petronas Dagangan	PETD MK	HOLD	19.26	17.50	19,134.2	20.6	19.7	3.4	3.4	88.6	70.2	n.a	n.a	16.7	17.2
Sapura Energy	SAPE MK	HOLD	0.04	0.06	735.0	(1.7)	(5.0)	(0.9)	(0.2)	0.7	1.0	n.a	n.a	n.a	n.a
Uzma	UZMA MK	BUY	0.95	1.30	415.7	9.1	7.2	0.7	0.6	5.1	4.5	47.0	57.1	7.8	7.4
Velesto Energy	VEB MK	BUY	0.19	0.25	1,602.0	10.6	12.6	0.8	0.7	46.5	25.5	n.a	n.a	7.4	6.1
Yinson Holdings	YNS MK	BUY	2.82	3.90	8,356.5	12.7	10.0	1.7	1.5	2.7	2.9	212.6	219.1	10.3	12.4

Source: Bloomberg, UOB Kay Hian

MARKET WEIGHT
(Maintained)

* FPSO = Floating, Production, Offloading and Storage
 ** BPD = barrel of oil per day
 *** CCS = Carbon Capture and Sequestration

FPSO PLAYERS

	Today	By 2050 (Net Zero Era)
Yinson Production	FPSOs	Floating Ammonia, Gas CCS***
As reference, Yinson RE	Solar Wind	Both offshore and onshore, Battery,
Bumi Armada	FPSO FSRU	CCS or FSCIU FLNG or Ammonia Digital Twin, erm AI
MISC, transportation arm of Petronas	Gas/ LNG Petroleum FPSO MMHE	Dual-fuel vessel Ammonia vessel ZEUS **** CCS or FCSU
SBM Offshore, True Blue Transition and deepwater expert	FPSO	CCS Floating wind Potential/Early stage : Ammonia, Hydrogen, Lithium, Robotics

Note: ZEUS= Zero Emission Power Energy Systems, MISC and Aker Solutions have jointly assess and demonstrate two North American emission-free power projects utilising Clean Energy Systems’ proven Oxy-Fuel burner technology. The technology can meaningfully reduce or eliminate oil field operations’ GHG emissions and convert stranded and contaminated natural gas feedstocks into emission-free power with 100% CO2 capture.
 Source: Various

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- **Top pick: MISC (BUY/Target: RM10.10)** is still an underappreciated stock relative to the theme of global vessel shortage, and is trading at P/B discount to other crude tanker peers when long-term crude tanker demand is resilient. MISC is also a beneficiary of more LNG newbuild demand (especially by Qatar). We also see potential rerating for Yinson once the Brazil FPSOs have safely achieved first oil, opening doors for the eventual unlocking/IPO of Yinson Production, at a value of >US\$3b consistent with our SOTP. On an ESG perspective, Yinson Production's long-term value should provide more upside in our view, and depend on how it gains lucrative non-FPSO projects like floating ammonia and gas.

ESSENTIALS

- **FPSO-driven oil supply projected to grow about 60% from 2020, to 11m bpd** by 2030.** According to Rystad Energy, global oil supply from FPSO projects (including subsea tiebacks to the FPSOs), stood at around 7m bpd to RM99b. South America, led by Brazil, dominates the market at about 40%, with Africa being the second largest at around 30% of global FPSO driven oil supply. Yinson's market intelligence study appears to be consistent with Rystad's, as it expects South America and Africa to sanction 24 and 13 new FPSOs respectively out of a total of 60 in 2024-28. Rystad estimated in 2023 that this represents a capex size of about US\$36b and US\$17b in South America and Africa respectively.
- **Key FPSO hotspots in Africa.** Africa's security threats were the main cause for the falling oil supply from around 10m bpd in 2010 to about 6.6m bpd in 2023. However, production recovery is now observed in Nigeria (which is rectifying its security issues) and Angola (which has been providing tax incentives and boosting new independent operators, after it quit OPEC+). Notable new Angolan FPSOs include Azule Energy's Agogo in Block 15 and Palas, Astrea and Juno Oil (PAJ) in Block 31, and TotalEnergies' Kaminho in Block 21 and Chissonga in Block 16. Another hotspot region is Ghana, which houses Eni's Offshore Cape Three Points project and the upcoming FPSO Pecan.
- **Shift in FPSO contracting strategies induced by changing market conditions.** China dominated the consolidation of most of the FPSO fabrication phase, with around 73% of platforms having their hull being fabricated in China, vs 52% in 2018. On top of this limited yard space and inflation, scarce competition among a growing project pipeline has led FPSO contractors to record their highest level of backlog (except for Bumi Armada), which inflated dayrate for leasing opportunities. Some counterparties like Petronas and Petrobras have adapted contracting strategies and opt for owned unit, or risk and investment sharing, in order to avoid delays and seek lower cost.
- **Quick updates on Yinson RE.** Since 7 Jun 23 when Yinson RE planted a wind monitoring mast on a farmland near Pahiatua, we believe the company have submitted a fast-track application to the New Zealand Environmental Protection Authority (EPA) for the Pahiatua Wind project in the Tararua district, either in Apr 24 or by its Aug 24 target. We believe Pahiatua may be the most likely project to be viable next after the 97MW Matarani (Peru) solar project, which is now close to completion. However, we were unable to locate any of Pahiatua's application on the EPA website. On Yinson RE's website, it stated the likely capacity of the wind farm to be from 32MW to 56MW. On another source by Eccelerate, it was proposed that 11 turbines (or 40MW) will be used as a maximum.

FPSO OPPORTUNITIES



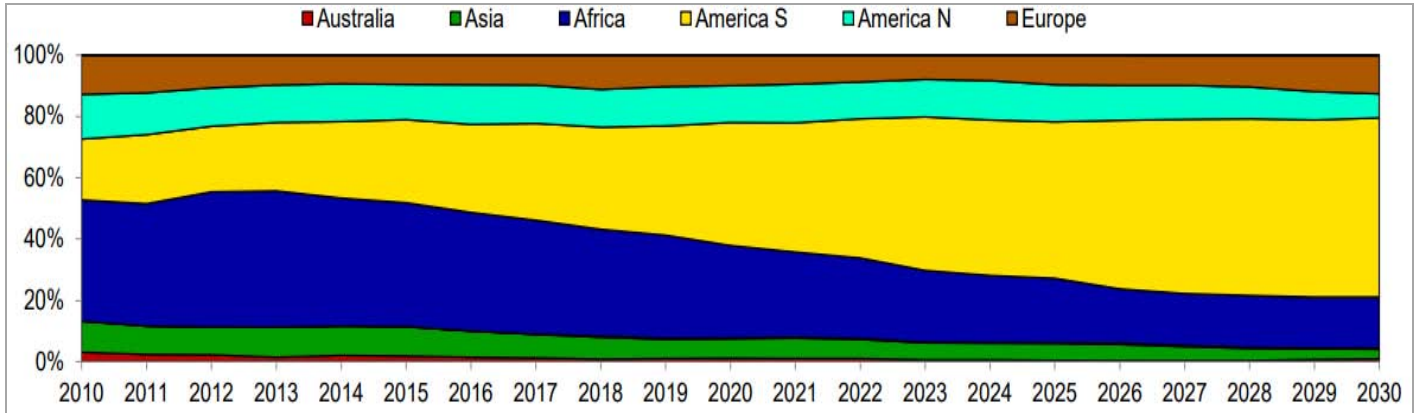
Source: Yinson

PAHIATUA WIND LAYOUT



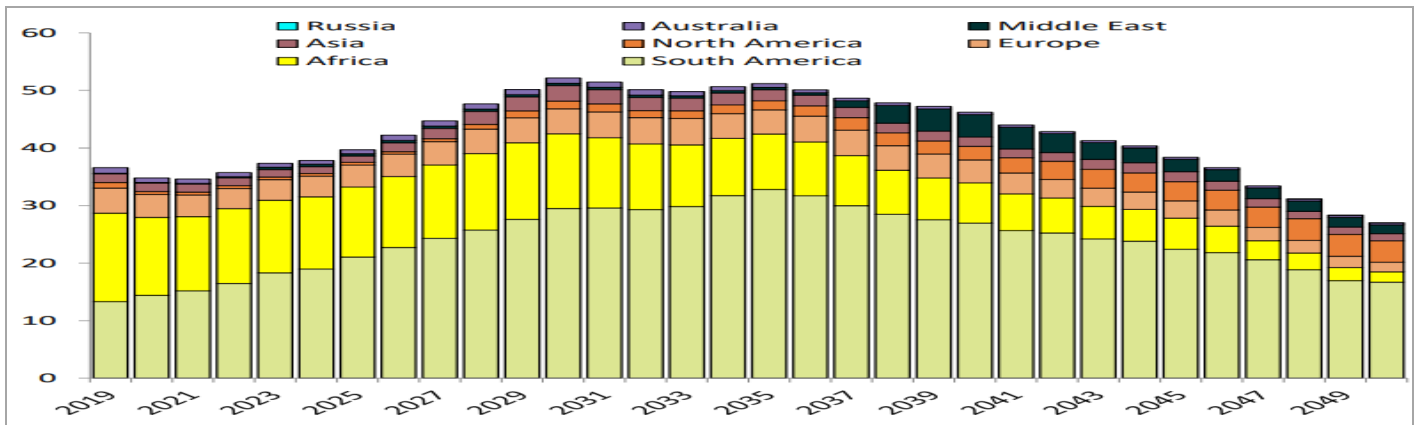
Source: Yinson Renewables New Zealand

BRAZIL'S CONTRIBUTION TO GLOBAL FPSO SUPPLY IS EXPECTED TO GROW EXPONENTIALLY, FOLLOWED BY AFRICA



Source: Rystad Energy March 2024 Presentation, Titled "FPSO Driven Supply - Where does Africa Fit into the Global Context?"

EMISSIONS FROM FPSO O&G FIELDS, BY COUNTRY



Source: Rystad Energy March 2024 Presentation, Titled "FPSO Driven Supply - Where does Africa Fit into the Global Context?"

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