

OGSE 100



TOP 100
OGSE COMPANIES
IN MALAYSIA

FY2021

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Established in April 2011, Malaysia Petroleum Resources Corporation (MPRC) is an agency of the Ministry of Economy tasked with advancing Malaysia's Oil and Gas Services and Equipment (OGSE) sector. MPRC also provides policy recommendations to the Government in the oil, gas, and energy industry. As countries the world over, including Malaysia, embark on the energy transition, MPRC further advocates for OGSE companies to pivot towards cleaner and sustainable renewable energy as new areas for business growth.

Following the launch of the National OGSE Industry Blueprint (OGSE Blueprint) 2021-2030, MPRC serves as its custodian, coordinating and implementing its initiatives together with OGSE Blueprint partners. The OGSE Blueprint seeks to develop a robust, resilient, and globally competitive OGSE sector that contributes to sustainable national development in Malaysia.

MPRC's emphasis on the sustainability of the OGSE and energy industries is also aligned with Malaysia's national and global sustainability commitments. The commitments include the country's net zero carbon target by 2050 as outlined by the 12th Malaysia Plan, the National Energy Policy 2022-2040, as well as the United Nations Sustainable Development Goals (SDGs).

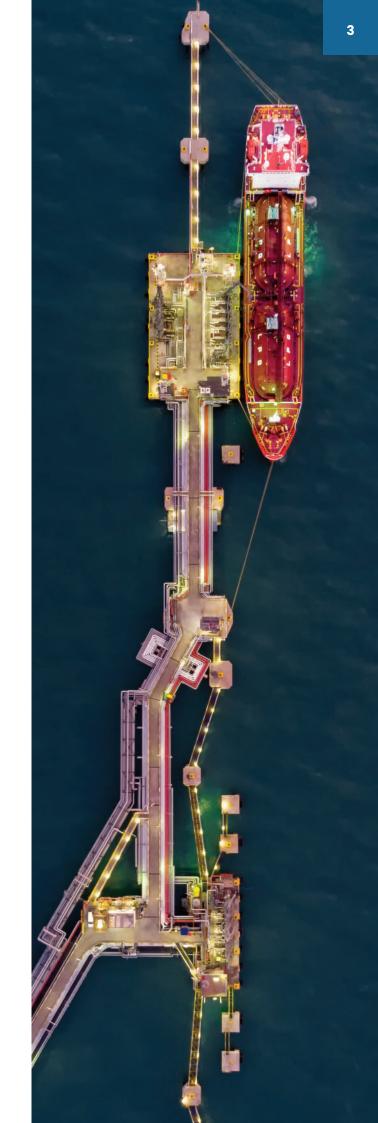
For more information, please visit www.mprc.gov.mv

ABOUT OGSE100

This report provides information on the consolidated industry performance of revenue, profit before tax (PBT), PBT margin and total fixed assets (TFA) for oil and gas services and equipment (OGSE) companies registered in Malaysia. The companies were then ranked according to the top 100 by revenue.

The purpose of OGSE100 is to show the size and performance of OGSE companies and serve as a reference point for industry players, potential investors and relevant stakeholders. OGSE companies are mapped based on the industry segments they are operating in, followed by the companies' financial information analysis. We also compare OGSE activity in Malaysia against the Southeast Asia (SEA) region using a small sample of public listed OGSE companies.

OGSE100 contains forward-looking statements based on assumptions, information and various perspectives provided to MPRC to give a holistic picture of the industry.



OUR APPROACH

Our analyses are based on companies licenced in Malaysia whose primary business is related to the OGSE industry. We also include listed companies with licenced subsidiaries or associates. These companies were evaluated based on their consolidated financial results for fiscal year (FY) 2021.

The Corporate and Business Information Data (CBID) of the Companies Commission of Malaysia (SSM) remained our primary data source, from which we obtained these companies' financial data. The analyses were based on the latest available data as of December 2022, which typically lags by a period of one year.

For FY2021, we started with an initial population of 4,754 OGSE companies that possess Standardised Work & Equipment Categories (SWEC) licences issued by PETRONAS. After applying our methodology (see page 46), we arrived at a final population of 2,376 OGSE companies. These companies were further categorised into the OGSE100 companies, 267 non-OGSE100 Mid-Tiers and 2,009 non-OGSE100 Small and Medium-sized Enterprises (SMEs) according to the definition outlined by SME Corporation Malaysia.

RESTATING FINANCIAL DATA FOR 2020

Due to the Movement Control Order (MCO), SSM granted an extension of time (EOT) for eligible companies in 2020 to extend the filing of their Financial Statements by 90 days. As a result, many companies' financial records were unavailable during the OGSE100 FY2020 data collection period in November 2021.

To provide a more accurate representation of the OGSE100 rankings for FY2020, we made a comparison with the OGSE100 rankings for FY2021. We identified 27 companies from the OGSE100 FY2021 rankings which were not listed in OGSE100 FY2020 and checked their FY2020 revenues. They were then compared against the revenue performance of companies in the original listing and subsequently re-ranked. The bottom 27 companies were removed from the revised OGSE100 listing for FY2020. These additions resulted in a new industry population of 1,355 companies for FY2020 (see Appendix on page 49).

This restatement exercise affected the revenue, profit before tax (PBT), PBT margin and total fixed assets (TFA). Subsequently, the comparative analysis in this report was carried out using the restated figures for FY2020.

Refer to Appendix (page 49) to learn more about the restated rankings for FY2020.

2,376

FINAL POPULATION OF OGSE COMPANIES

2,009

NON-OGSEIOO SMALL AND MEDIUMSIZED ENTERPRISES (SMES).

267
NON-OGSEI00 MID-TIERS



Message from President/CEO

Bismillahirahmanirrahim.

We are delighted to present the 8th edition of OGSE100 for the fiscal year 2021 (FY2021). With each new edition of the OGSE100, representing a roundup of the top 100 OGSE companies in Malaysia by revenue, we have continued to add value to our analysis of the nation's OGSE100 companies' performance to provide a meaningful perspective on developments, trends and the way forward for the industry.



2022 AT A GLANCE

By now, nearly 70% of the world's population has received at least one dose of the COVID-19 vaccine¹. While this progress has allowed markets and economies to reopen as countries transition to the endemic phase of the COVID-19 crisis, risks remain due to the emergence of new variants. Furthermore, persistent challenges caused by the ongoing Russia-Ukraine conflict, such as supply chain disruptions and rising inflation, have resulted in a global energy crisis.

Nevertheless, Malaysia's economy has demonstrated resilience amid a cautious recovery following the slowdown since the outbreak of COVID-19. After posting a contraction of 5.6% in GDP in 2020, followed by a growth of 3.1% in 2021, the country's GDP demonstrated a robust recovery in 2022 with an expansion of 8.7%, as recently announced by the Government.

Amidst these conditions, the OGSE industry is also confronted with the energy transition, which saw continued momentum in 2022. The National Energy Policy (*Dasar Tenaga Negara* - DTN) 2022-2040, launched in September 2022, reiterated Malaysia's commitments to the United Nations climate change goals, including reducing the emissions intensity of GDP by 45% in 2030 and achieving carbon neutrality by 2050.

With the DTN, the Malaysian Government aims to chart the path for the energy industry to catalyse investment and socioeconomic growth, and ensure energy security, affordability and environmental sustainability towards achieving energy and economic sustainability. On the industry side, PETRONAS, a cornerstone of the oil, gas and energy industries, has also announced its Net Zero Carbon Emissions by 2050 (NZCE 2050) and its energy transition pathway.

Against the backdrop of the energy transition and recovering economy, the OGSE industry is well-positioned to unlock new opportunities. As we head into 2023, global oil and gas demand has increased, which could result in more activities to service the upstream sector. These activities, in turn, are expected to create more opportunities at home and abroad for Malaysian OGSE companies.

However, uncertainties remain due to ongoing economic risks brought upon by geopolitical conditions. Furthermore, some OGSE companies are cautious about the implications of the energy transition on their business activities as well as the industry's ability to meet low carbon targets set by the Malaysian Government as well as customers such as PETRONAS.

¹ Mathieu, E., Ritchie, H., Ortiz-Ospina, E. et al. (2020) - "Coronavirus Pandemic (COVID-19)". Published on OurWorldInData.org. [Online Resource] https://ourworldindata.org/coronavirus

Additionally, the OGSE industry must contend with the continuously evolving business environment, which calls for greater cost efficiency, the need to offer integrated solutions and an enhancement of technical capability and innovation. Moreover, the industry is still just recovering from the COVID-19 pandemic.

PERFORMANCE HIGHLIGHTS IN 2021

As with previous editions of OGSE100, we continued to analyse the population of OGSE companies based on the latest available information from the Corporate and Business Information Data (CBID) of the Companies Commission of Malaysia (SSM) for the 2021 fiscal year.

For the period under review, we identified a larger OGSE industry population of 2,376 companies compared with FY2020, with 1,021 companies added to the FY2021 database. Of the additional 1,021 companies, 935 are SMEs.

As a result of the larger OGSE industry population, we observed an 8.4% growth, equivalent to RM5.3 billion, in revenue from the industry. The OGSE100 accounted for 74% of this revenue, followed by non-OGSE100 MidTiers (14%) and non-OGSE100 SMEs (12%).

However, the OGSE100 registered a 2% decline in revenue to RM50 billion from RM51.2 billion in FY2020. For the year under review, the OGSE100 was represented by 23 PLCs, accounting for 64% (RM31.8 billion) of the OGSE100 revenue, with the remaining accounted for by Mid-Tiers.

Many attributed the decline in revenue to the cessation of operations in the first half of 2021 due to the movement



control order (MCO), resulting in the deferment of activities. Companies also incurred higher costs to comply with COVID-19 restrictions.

Nonetheless, the OGSE100, which accounted for 90% of OGSE industry profit before tax (PBT) in FY2021, registered a 207.6% growth in profitability to RM3.7 billion from a loss of RM3.5 billion in FY2020. While this was partly due to the larger population of OGSE companies, the companies also attributed their better performance to factors such as higher execution of works, especially towards the later part of the year, sales of assets and diversification of their businesses.

Apart from revenue and profitability, other key highlights for FY2021 were improvements in profit margins and higher total fixed assets within the industry as well as the OGSE100. We believe these indicators point to the start of recovery for OGSE companies in 2021.

For further analysis of the OGSE industry and OGSE100 financial performance in FY2021, I invite you to read the remaining sections of this publication.



2023: WHAT'S NEXT FOR OGSE?



Despite a slowing global economy and trade, the Malaysian economy is expected to expand between 4% and 5% in 2023, underpinned by stable domestic demand, a thriving services sector, the deployment of new and continuing infrastructure projects with large multiplier effects, and stable exports². In tandem with this trajectory, 2023 is expected to remain a year of recovery for the oil and gas industry.

However, although more activities will be conducted, the benefits may not be felt immediately across the ecosystem. Updated contract rates to reflect the current operating environment, more integrated contracts and the transition towards new vessels call for OGSE companies in the supply chain to be more dynamic and agile to grab these opportunities. Overall, as OGSE companies focus on rebuilding, they must also strengthen their ability to provide niche services and integrated solutions, allowing them to compete locally and worldwide.

Amidst sustaining their recovery, OGSE companies would also need to take into account the complex and rapidly evolving energy landscape. The DTN and forthcoming Long-Term Low Emission Development Strategies (LT-LEDS) lay out the path for Malaysia's energy transition journey, providing GHG emissions reduction targets by industry, including oil and gas. OGSE companies will need to respond and act accordingly.

Bank Negara Malaysia (BNM) has also made it mandatory for financial institutions to implement the Task Force on Climate-related Financial Disclosures (TCFD) by 2024. Aimed at facilitating more informed financial and business decision-making to address climate-related risks and opportunities, financial institutions' adoption of TCFD would reverberate to OGSE companies as they, too, would need to integrate long-term sustainability practices and risk assessment to meet financial institutions' funding requirements. Failure to do so may negatively impact OGSE companies' access to financing. The enhanced financial disclosure requirements could further exacerbate existing tight conditions for capital, which is expected to remain a concern going forward.

Another key trend moving forward includes the impact of free trade agreements (FTAs), such as the Regional Comprehensive Economic Partnership (RCEP) and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). While FTAs aim to ease barriers to entry abroad, OGSE companies may also face stiffer competition at home. Hence, there is a need for OGSE companies to understand the implications and risks of FTAs to enable them to optimise the benefits of more open markets.

Moving forward, MPRC will continue to assist the industry in fostering the development of local OGSE businesses to compete in this complex landscape.

On behalf of MPRC, I would like to congratulate our industry players and stakeholders who rose to the challenge and remained resilient during the uncertainty created by the pandemic. We look forward to playing our role as a trusted partner, bridging the public and private sectors' interests within the OGSE space. We are optimistic that Malaysia's OGSE industry has started taking the right steps towards sustainable value creation.

Mohd Yazid Ja'afar

President/CEO MPRC

OGSE Rankings & Categories



OGSE Rankings & Categories

The top 100 OGSE Companies in 2021 showed that more companies were in a better position than the previous year, with 50 companies improving their rankings.

On the other hand, 25 companies, including Bumi Armada Berhad, Dialog Group Berhad and Dayang Enterprise Holdings Berhad, were ranked lower, while 13 companies maintained their positions.

Notably, there were 12 new entrants into OGSE100 for FY2021 (not part of the FY2020 listing), including Hi-Essence Cable Sendirian Berhad, Duta Marine Sendirian Berhad and RWNA Engineering Sendirian Berhad.

The OGSE100 companies based on their SWEC categories applicable in 2021 are shown in Figure 1.

GROUP	SE	RVIC	ES MODUS OPERANDI	PRODUCTS MODUS OPERANDI		FY2021		Ехр	lorati	tion Development											
			erated, Rig Owner Operator, Owner-Operator	Manufacturer, Fabricator						səo											
	+		<u> </u>	Assembler, Chemical Blender,						Servi											
	Rig	g Ope	erator, Vessel Operator	Packager, System Integrator						ment											
	Ag	jent		Dealer, Buying Arm						anage	ancy				Itancy						
Ranki	2020	Movement	c	ompany Name	Revenue (RM mil)	PBT Margin (%)	Total Fixed Assets (RM mil)	Geological / Reservoir	Geophysical Services	Field Development / Reservoir Management Services	Project Management Consultancy	Engineering Consultancy	HSE Consultancy	Geophysical Consultancy	Production / Upstream Consultancy	Geomatics Services	QA /QC Services	l Design	Major Platform Fabricator	Minor Platform Fabricator	Onshore Construction
5	50	Mov			Revenu	PBT Ma	Total Fi	Geologic	Geophys	Field Dev	Project	Enginee	HSE Cor	Geophys	Producti	Geomati	QA/QC	Building Design	Major PI	Minor PI	Onshore
1	1	=	MISC BERHAD		10,671.7	16.6	44,694.7														
2	2	=	SAPURA ENERGY BERHAD		5,347.8	-0.6	18,475.3														
3	3	=	YINSON HOLDINGS BERHAD		4,849.0	12.0	9,208.0														
4	NA		SERBA DINAMIK SENDIRIAN E	BERHAD	2,737.5	-7.5	1,439.1														
5	4	•	BUMI ARMADA BERHAD		2,162.6	30.9	10,160.4														
6	5	•	DIALOG GROUP BERHAD		1,609.9	37.0	5,796.1														
7	7	=	WAH SEONG CORPORATION	BERHAD	1,429.3	-7.0	1,221.1						Ш								
8	15	_	TUMPUAN MEGAH DEVELOP	MENT SENDIRIAN BERHAD	1,301.9	0.6	45.6														
9	9	=	MUHIBBAH ENGINEERING (M	I) BERHAD	1,003.7	1.6	1,842.2														
10	10	=	HALLIBURTON ENERGY SERV	/ICES (MALAYSIA) SENDIRIAN BERHAD	879.2	9.6	175.5														
11	11	=	SCHLUMBERGER WTA (MALA	AYSIA) SENDIRIAN BERHAD	734.3	-2.2	141.4						Ш								
12	14	_	GREEN AIM SENDIRIAN BERH	HAD	698.5	1.1	34.3														\perp
13	12	•	DAYANG ENTERPRISE HOLDII	NGS BERHAD	667.7	-61.4	1,552.0														
14	23	_	FMC WELLHEAD EQUIPMENT	SENDIRIAN BERHAD	635.2	0.6	114.2														
15	18	_	DELEUM BERHAD		558.4	5.8	195.9														_
16	13	•	WESTSTAR AVIATION SERVICE	ES SENDIRIAN BERHAD	540.2	2.5	1,786.2														
17	17	=	PANTECH GROUP HOLDINGS	BERHAD	486.3	7.4	349.9														
18	29	_	ASIAFLEX PRODUCTS SENDIF	RIAN BERHAD	389.2	19.7	225.9														
19	19	=	UZMA BERHAD		384.2	4.9	773.6														
20	20	=	VELESTO ENERGY BERHAD		377.5	-21.9	2,304.3														
21	26	_	SHOREFIELD SENDIRIAN BER	RHAD	376.4	1.2	81.3														
22	51	_	TOYO ENGINEERING & CONST	TRUCTION SENDIRIAN BERHAD	344.8	0.5	4.6														
23	27	_	ADVANCE GAS TURBINE SOLI	UTIONS SENDIRIAN BERHAD	340.2	14.7	0.0														
24	21	•	PETRA ENERGY BERHAD		322.3	7.0	242.9														
25	16	•	TECHNIP MARINE (M) SENDIF	RIAN BERHAD	321.8	21.2	0.8													\Box	
26	53	_	T7 GLOBAL BERHAD		305.5	6.2	473.6														
27	22	•	INTEGRATED PETROLEUM SE	ERVICES SENDIRIAN BERHAD	301.6	0.6	5.2														
28	48	_	ICON OFFSHORE BERHAD		300.6	14.3	793.0														_
29	25	•	BAKER HUGHES INTEQ (M) SI	ENDIRIAN BERHAD	284.1	4.2	0.9													\Box	
30	34	_	SKOSV SENDIRIAN BERHAD		280.8	0.8	0.0														_
31	35	_	E&P O&M SERVICES SENDIRIA	AN BERHAD	279.6	10.5	4.2													\perp	_
32	37	_	SANKYU (MALAYSIA) SENDIR	IAN BERHAD	277.3	9.6	55.1													_	_
33	28	•	SCOMI ENERGY SERVICES BE		239.7	-25.2	65.4													_	_
34	42	_		EMENT (MALAYSIA) SENDIRIAN BERHAD	233.9	13.3	16.0													_	
35	33	•	YOKOGAWA KONTROL (MALA	· · · · · · · · · · · · · · · · · · ·	227.0	12.7	4.6														-
36	36	=	TRANSWATER API SENDIRIAN		221.5	8.1	93.6														
37	43	_	ASIAN SUPPLY BASE SENDIRI		200.6	8.8	389.4													4	\perp
38	38	=	SOLAR ALERT SENDIRIAN BEI		197.1	12.5	59.8													_	\perp
39	77	_	AKER ENGINEERING MALAYS		192.3	-2.4	30.8													_	\perp
40	46	_	MARINE & GENERAL BERHAL		188.5	16.6	759.6													_	\perp
41	54	_	OCEANMIGHT SENDIRIAN BE	RHAD	176.4	6.6	1.9													_	\perp
12	52	_	DESTINI BERHAD		173.9	3.0	135.5													_	\perp
13	NA	-	HI-ESSENCE CABLE SENDIRIA		172.2	6.8	85.9													_	_
14	24	•	CARIMIN PETROLEUM BERHA		165.3	11.7	103.1														_
45	84	_	LABUAN SHIPYARD & ENGINE	EERING SENDIRIAN BERHAD	160.8	4.8	51.1													_	
16	32	•	E.A. TECHNIQUE (M) BERHAD		160.6	-93.1	425.9													_	4
47	56	_	PANGKALAN BEKALAN KEMA		157.8	22.3	0.0													_	\perp
48	62	_	WEATHERFORD (MALAYSIA)		156.2	3.1	11.7													_	\perp
49	80	_	HHA ASSOCIATES SENDIRIAN	BERHAD	150.4	6.8	29.5														
49 50	80 61	^	HHA ASSOCIATES SENDIRIAN BOUSTEAD HEAVY INDUSTRI		150.4 149.2	6.8	29.5 335.5														

Figure 1: OGSE100 Rankings and Categories

																								De	con	n																
	De	evelo	pme	ent																													Pr	odu	cts							
Offshore Support Vessel Contractor	Pipeline Installation Contractor		Subsea	Drilling Rigs	Drilling Services	Well services / Well completions	Lab Services	Maintenance - Piping & Valve / Structural	Maintenance - E & I	Maintenance - Mechanical (Rotating)	Maintenance - Mechanical (Static)	Maintenance - Pipeline	Maintenance - Safety Equipment	Minor Fabrication & Repair	Underwater Services	Asset Integrity Services	Health, Safety, Environment (HSE) & Security	Manpower Services	Environmental Clean-Up / Waste Disposal	Marine Vessel Services	Helicopter / Air Transportation Services	Land Transportation Services	Warehousing & Storage Services	Cargo Tankers	Decommissioning Contractor	Chemicals Supply & Services	Subsea	Drilling Equipment	Electrical	HVAC	ICT	Insulation	Marine System	Mechanical	Pipelines	Riser	Rotating Equipments	Safety System	Structural	Transportations	Valves	Warehouse Equipment
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GROUP	SE	RVIC	ES MODUS OPERANDI	PRODUCTS MODUS OPERANDI		FY2021		Ехр	lorati	on					Devel	opm				
			erated, Rig Owner Operator, Owner-Operator	Manufacturer, Fabricator						seo										
	Rig	ј Оре	rator, Vessel Operator	Assembler, Chemical Blender,						nt Serv										
	Λα	ont		Packager, System Integrator Dealer, Buying Arm						geme				l	5					
	Ay	ent		Dealer, Buying Airii			_			Mana	Itancy			4						
2021	5020 Single	Movement	Co	ompany Name	Revenue (RM mil)	PBT Margin (%)	Total Fixed Assets (RM mil)	Geological / Reservoir	Geophysical Services	Field Development / Reservoir Management Services	Project Management Consultancy	Engineering Consultancy	HSE Consultancy	December of the december of the contract of th	Geomatics Services	QA /QC Services	Building Design	Major Platform Fabricator	Minor Platform Fabricator	Onshore Construction
51	107		U B F MAINTENANCE SENDIR	IAN BERHAD	148.2	2.0	4.3													
52	30	•	BERLIAN MCDERMOTT SEND	IRIAN BERHAD	143.2	14.0	45.2													_
53	113		KEYFIELD OFFSHORE SENDIR		138.8	10.2	117.9					_								_
54	67		HELIOS PETROLEUM SENDIRI	IAN BERHAD	136.8	2.3	1.5													_
55	66		DYNAC SENDIRIAN BERHAD		135.2	2.0	85.1													
56	63		VANTAGE OILFIELD SOLUTION		134.3	0.6	14.6													_
57	57	=	JASA MERIN (MALAYSIA) SEN		128.7	57.0	583.3				_			\perp	1_	L				ᆜ
58	93		OCEANCARE CORPORATION S		127.4	6.8	5.9		Ш							+=				
59	47	•	AKER SOLUTIONS APAC SEND		127.3	17.0	5.4							\perp		Н				
60	117		OCEAN VANTAGE HOLDINGS		125.5	10.8	7,908.0						_	4						
61	58	_	SETEGAP VENTURES PETROL		124.1	10.9	121.7				_	_		\perp					_	ᆜ
62	72		LUBRICLEUM SENDIRIAN BER		121.9	0.9	8.3		\square			4		+						
63	NA		DUTA MARINE SENDIRIAN BE		120.0	10.2	63.6					_							ш	_
64	79		PETRO-PIPE (SABAH) SENDIR		117.7	13.1	63.9					_		_						_
65	NA		RWNA ENGINEERING SENDIR		117.7	1.7	52.5													
66	85		TRACTORS PETROLEUM SER		115.7	13.6	4.4					_								_
67	40	~	MKN ODYSSEY VENTURES SE		115.1	1.5	0.1					_		_	_				_	_
68	81		AWH INTERNATIONAL LOGIST		115.0	15.0	11.4	ш	Ш		_		_	-	_	-			_	
69	68	_	SEDIA TEGUH SENDIRIAN BER		114.8	1.7	1.3				_		_	+_		_				\dashv
70	69	•		ON (MALAYSIA) SENDIRIAN BERHAD	114.2	-0.7	15.9		Н		-			-	٠.				\dashv	_
71	187		FUGRO MALAYSIA MARINE SE		113.8	-2.4	15.1				_								-	
72	135		MARINE CREATION SENDIRIA		109.1	6.2	5.1				_		_	+	+	-			-	\dashv
73	96		BUREAU VERITAS (M) SENDIR		108.2	15.0	2.9						-	_	+					_
74	65	Y	MUSHTARI MAINTENANCE SE		107.3	8.7	20.6					\dashv		+						-
75	88		INTEGRATED LOGISTICS SOLU		106.0	7.1	178.5					\dashv		+		-				_
76	89	_	BWS ENGINEERING SENDIRIA		105.8	2.2	13.3					\dashv		+						
77	82		EXPRO OILFIELD SERVICES SE		105.4	-1.2	57.0 78.8							-	-					_
78	44	•	BARAKAH OFFSHORE PETRO		105.1	62.1														\rightarrow
79	165	▲	DINASTIA JATI SENDIRIAN BE		104.7	-1.8	105.0													\dashv
80	74 95		HEMAT MARINE SENDIRIAN E		104.4	1.5 2.7	0.9									-				_
82	39	^	EXECUTIVE OFFSHORE SERVI		104.2	2.6	193.9				-			+		-			-	-
83	90	<u> </u>	WEHAYA SENDIRIAN BERHAD		103.6	3.6	3.9													
84	NA	Ť	MULTIMODAL FREIGHT SEND		100.5	5.1	37.2					-		+						-
85	91		SUMISAUJANA SENDIRIAN BE		100.0	11.1	35.5		\vdash		+	\dashv	+	+	+				\dashv	+
86	NA			TRUCTION SENDIRIAN BERHAD	97.5	0.5	1.0		\vdash				+	+						
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88	120		BINTANG SUBSEA VENTURES	(M) SENDIRIAN BERHAD	95.1	1.9	12.1		H	\dashv		-	٦,	_		-				+
89	71	-	EP ENGINEERING SENDIRIAN	,	93.3	1.0	1.3		Ħ		-				_				\dashv	+
90	NA			NTENANCE SENDIRIAN BERHAD	93.1	13.2	29.1				_	_	7	+						
91	NA		TWO OFFSHORE MARINE SEN		90.5	5.2	144.2			\dashv	\dashv	\dashv		+					_	7
92	83	-	FPSO TECH SENDIRIAN BERH		90.2	-20.1	157.5			\dashv	+	\dashv		+						+
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			WELFIELD SERVICES SENDIRI	<u></u>	82.8	5.7	8.4		\vdash		-	-		-	_	-	1		\rightarrow	

Figure 1: OGSE100 Rankings and Categories

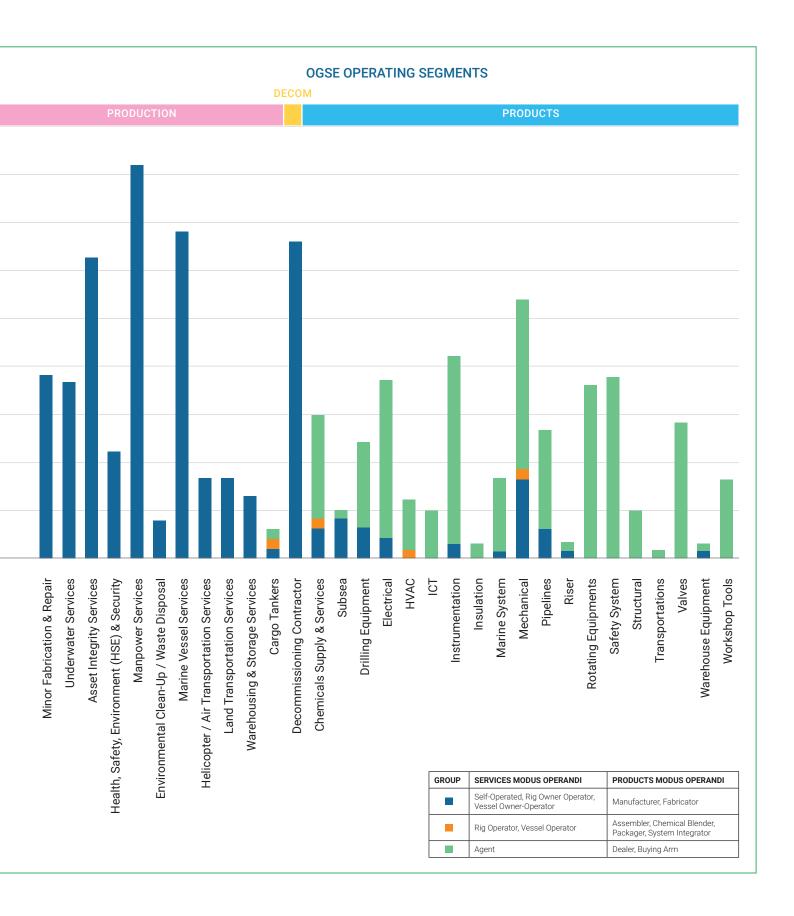
OOSE KANKII	OS & OATEOU		om
Development			Products
Offshore Constructions Offshore Support Vessel Contractor Pipeline Installation Contractor FSO / FPSO Owner / Operator / Contractor Subsea Drilling Rigs Drilling Services Well services / Well completions	Lab Services Maintenance - Piping & Valve / Structural Maintenance - E & I Maintenance - Mechanical (Rotating) Maintenance - Pipeline Maintenance - Pipeline Maintenance - Safety Equipment Minor Fabrication & Repair	Asset Integrity Ser Health, Safety, Env Manpower Service Environmental Cle Marine Vessel Sen Helicopter / Air Tra Land Transportatic Warehousing & St Carror Tankers	Chemicals Supply & Services Subsea Drilling Equipment Electrical HVAC ICT Instrumentation Insulation Marine System Mechanical Pipelines Riser Rotating Equipments Safety System Structural Transportations Valves Warehouse Equipment Workshop Tools
			•

Where Do OGSE100 Companies Operate



Figure 2: OGSE Operating Segments

WHERE DO OGSE100 COMPANIES OPERATE (CONT'D)



WHERE DO OGSE100 COMPANIES OPERATE (CONT'D)

The OGSE value chain is categorised into four segments: Exploration, Development, Production, and Decommissioning, each corresponding with the various phases of a project's life cycle. The segments were further divided into 42 service sub-segments and 19 product sub-segments based on PETRONAS' SWEC. The OGSE100 companies were then organised by their corresponding operating sub-segments, as shown in Figure 2.

In FY2021, more than 30 companies in the OGSE100 mainly operated in the Offshore Construction, Maintenance (Piping and Valve/Structural), Maintenance (Electrical and Instrumentation), Asset Integrity

Services, Manpower Services, Marine Vessel Services and Decommissioning Contractor sub-segments.

The OGSE100 companies continued to exhibit higher value-added activities in the services category. The value-added activities were grouped according to their respective mode of operations, as shown in the following table:

GROUP	SERVICES MODUS OPERANDI	PRODUCTS MODUS OPERANDI
	Self-Operated, Rig Owner Operator, Vessel Owner-Operator	Manufacturer, Fabricator
	Rig Operator, Vessel Operator	Assembler, Chemical Blender, Packager, System Integrator
	Agent	Dealer, Buying Arm

Upstream Oil & Gas IndustryThe Movement

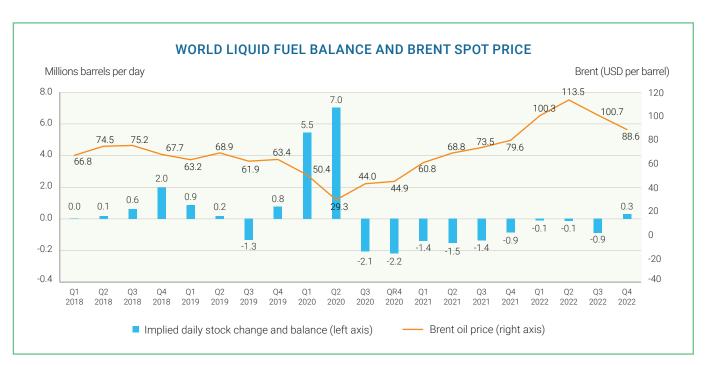


Figure 3: World Liquid Fuel Balance and Brent Spot Price

After global oil demand plunged in 2020 due to the COVID-19 pandemic, oil prices rose as economies and markets reopened from 2021. The upward trend also reduced surplus inventory built up from the previous year as global oil demand gradually improved.

In January 2021, the price of Brent crude oil stood at USD55 per barrel. It peaked at USD84 per barrel in October before declining slightly towards the end of the year due to the emergence of the Omicron coronavirus variant³.

³ Kelly, S. (2021, 20 December). Oil prices plunge as Omicron's rapid spread dims fuel demand outlook. Reuters. Retrieved from https://www.reuters.com/markets/commodities/oil-prices-drop-2-rapid-omicron-spread-dims-fuel-demand-outlook-2021-12-20/

PETRONAS' CAPEX

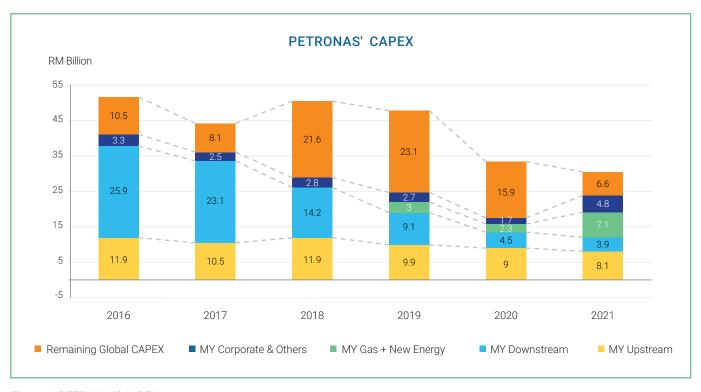


Figure 4: PETRONAS' CAPEX

In FY2021, PETRONAS recorded a total capital expenditure (CAPEX) of RM30.5 billion, down 9.5% from RM33.4 billion in the previous year. The amount was also 13% lower than the RM35 billion budget for CAPEX announced earlier in the year.

PETRONAS reduced its expenses in three out of five segments, namely Upstream, Downstream and Global. The most significant reduction of 58% was recorded in the Global segment, which decreased to RM6.6 billion from RM15.9 billion in the previous year. Investments were allocated to critical countries such as Argentina, Azerbaijan, Canada and Iraq.

The remaining two segments recorded an increase in spending by about three times. In the Gas and New Energy (GNE) segment, total investments increased to RM7.1 billion from RM2.3 billion. Similarly, PETRONAS increased corporate spending to RM4.8 billion from RM1.7 billion.



2021: Malaysia's OGSE Industry in Review

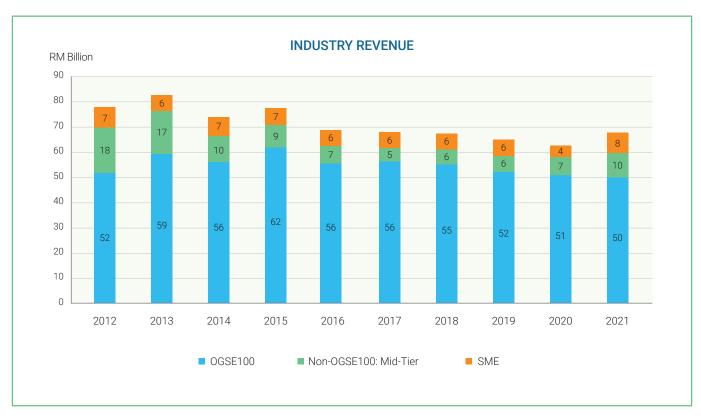


Figure 5: Industry Revenue

In FY2021, the OGSE industry recorded an 8% year-on-year (y-o-y) growth in revenue (RM62.6 billion to RM67.9 billion). The increase in revenue was expected following the addition of 1,021 companies to our OGSE population in FY2021. The OGSE100 accounted for around RM50 billion of industry revenue, reflecting a y-o-y contraction of 2% from RM51.2 billion in FY2020. The remainder of industry revenue was contributed by non-OGSE100 Mid-Tiers, which recorded a 41% y-o-y growth in revenue to RM9.8 billion, and SMEs, which recorded the largest y-o-y increase in revenue of 82% to RM8.2 billion from RM4.5 billion in FY2020.

For the year under review, the OGSE100 was represented by 23 PLCs, accounting for 64% (RM31.8 billion) of the OGSE100 revenue, with the remaining accounted for by Mid-Tiers.

According to information in the companies' annual reports, many of the OGSE100 PLCs attributed the decline in revenue to the cessation of operations in the first half of 2021 due to the movement control order (MCO), resulting in the deferment of activities. Furthermore, COVID-19 restrictions increased the cost of operations, with the additional costs not immediately recoverable as they were not covered by the original contracts.

In terms of revenue by geographic distribution, the 23 PLCs derived an average of 39% of their revenue from overseas operations, with seven companies recording more than 50% in revenue from their foreign businesses. The companies comprised Bumi Armada Berhad (93%), Yinson Holdings Berhad (93%), Scomi Energy Services Berhad (84%), Sapura Energy Berhad (62%), Wah Seong Corporation Berhad (62%), MISC Berhad (55%) and Dialog Group Berhad (52%).

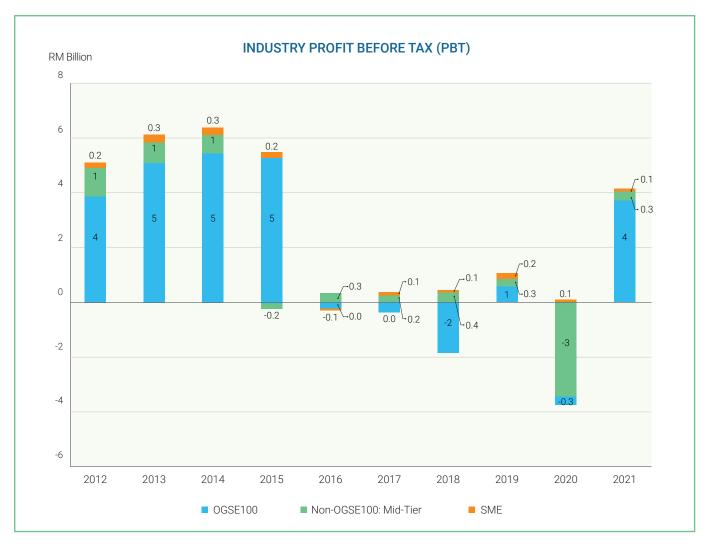


Figure 6: Industry PBT

The PBT for the OGSE industry returned to the black in FY2021, recording y-o-y growth in PBT of 212% to RM4.2 billion from losses of RM3.7 billion in FY2020, with 68% of the industry reporting profits. The OGSE100 and non-OGSE100 Mid-Tiers, which accounted for 90% and 8%, respectively, of industry PBT, recorded the highest and approximately the same PBT y-o-y growth of 208%.

During the year in review, the OGSE100 recorded a PBT of RM3.7 billion against losses of RM3.5 billion in FY2020, while non-OGSE100 Mid-Tiers reported RM325 million in PBT versus losses of RM301 million in FY2020. The SME segment, meanwhile, accounted for 2%, or RM95 million, of industry PBT, growing from PBT of RM56 million in FY2020.

Apart from the larger OGSE industry population in FY2021, the industry's profitability was attributed to factors such as higher execution of works related to engineering, procurement and construction (EPC), Integrated Well Services and Operation & Maintenance and sales of assets. Some companies focused on their core floating production and operations (FPO) business, while others diversified into new regions and business segments.

Meanwhile, analysis of the OGSE100 companies showed that 17 companies continued to record losses, citing high operating costs and impairment activities.

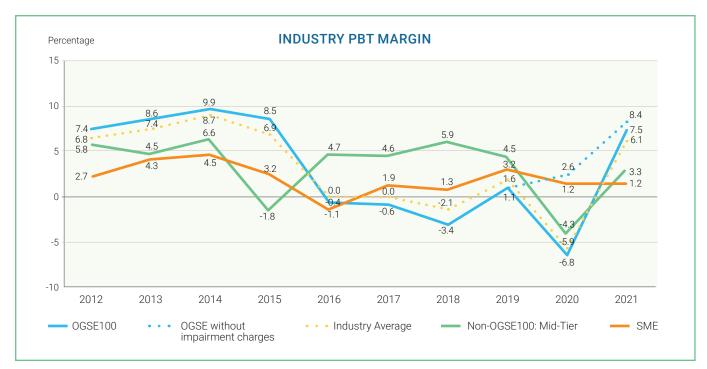
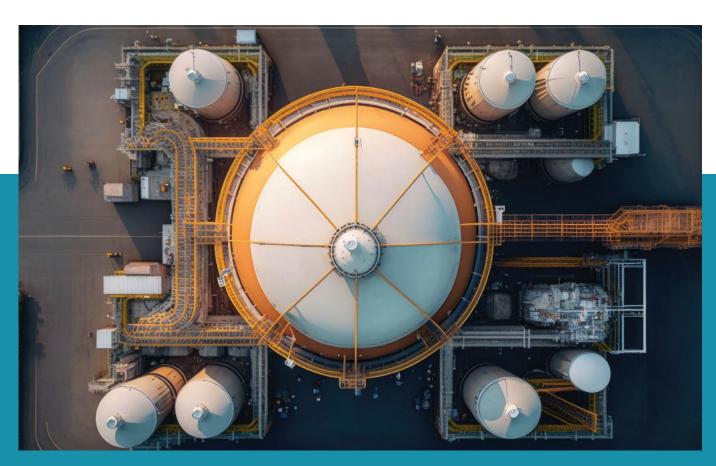


Figure 7: Industry PBT Margin

In FY2021, the industry's PBT margin improved significantly to 6.1% from a negative margin of 5.9% a year earlier. All categories recorded a significant increase in PBT margin except SMEs, which decreased slightly by 0.1%.

The higher PBT margin was in line with lower impairment charges of RM0.5 billion for the year compared to RM4 billion in the previous year.

The OGSE100 recorded a PBT margin of 7.5% in FY2021 compared to a negative margin of 6.8% in FY2020. The OGSE100's profit margin also surpassed the industry average PBT margin in FY2021 for the first time since FY2016, with the OGSE100 recording lower margins than the industry average during the five-year period.



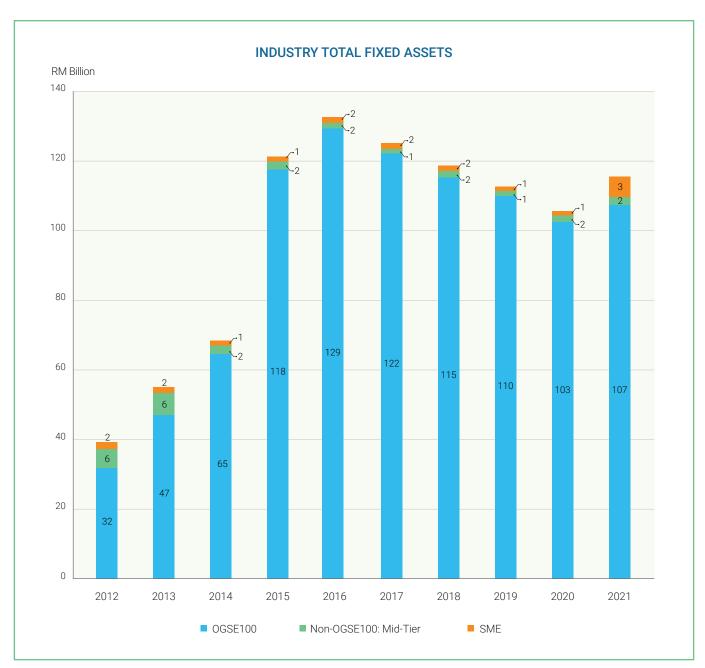


Figure 8: Total Fixed Assets

The industry's total fixed assets (TFA) increased to RM112 billion from RM106 billion, equivalent to a y-o-y growth of 7% in FY2021, ending a downward trend that started in 2016. The increase in TFA was mainly due to PLCs' acquisition of several key assets.

It is important to note that the OGSE100 owns 96% of the industry's TFA and in turn, 40% of OGSE100's TFA is owned by MISC Berhad (MISC). The OGSE100 recorded a growth of 5% from (RM103 billion to RM107 billion). As stated in MISC's 2021 annual report, MISC was actively

involved in various projects. The increase in assets was due to several factors, including recognising contract assets related to the company's floating production storage and offloading (FPSO) units and CAPEX incurred during the financial year.

The highest y-o-y growth in industry TFA was recorded by SMEs, accounting for a 121% y-o-y increase to RM2.7 billion from RM1.2 billion in FY2020, followed by non-OGSE100 Mid-Tiers at 25% (RM1.9 billion to RM2.3 billion).

2021: Malaysia's OGSE Industry in Review, without MISC Berhad

With MISC maintaining its position as a large and significant contributor to the industry and OGSE100's performance, we have also conducted our industry analysis to exclude MISC for FY2021 to get a fairer representation of the local OGSE performance in FY2021.

For context, against the industry, MISC accounted for 16% (RM10.7 billion) of revenue, 43% (RM1.8 billion) of PBT and 40% (RM44.7 billion) of TFA.

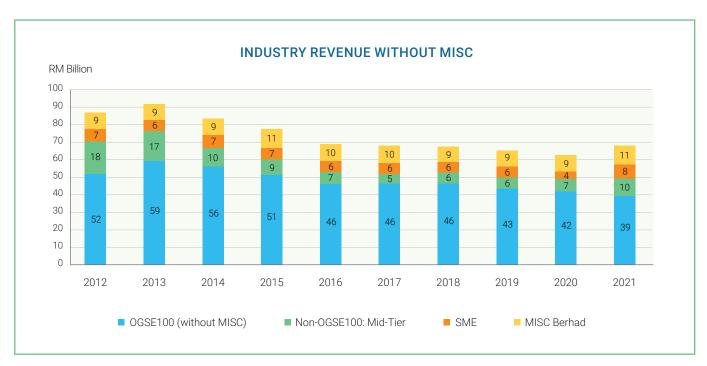


Figure 9: Industry Revenue without MISC

During the year, industry revenue without MISC grew by 7.5% y-o-y (RM53 billion to RM57 billion). This growth is slightly lower than the 8% recorded by the total industry revenue, as mentioned in the previous chapter.

Meanwhile, OGSE100 revenue without MISC fell slightly by 6% (RM41.8 billion to RM39.3 billion). The decline is higher than the 2% drop recorded by the OGSE100.

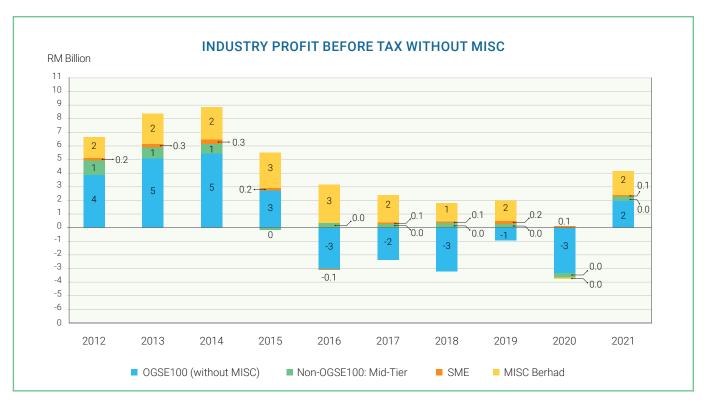


Figure 10: Industry PBT without MISC

The industry PBT without MISC recorded a y-o-y improvement of 166% (RM3.6 billion loss to RM2.4 billion profit) compared with the 212% y-o-y growth in PBT registered by the industry.

Following several consecutive losses since 2016, the OGSE100 without MISC posted a y-o-y growth in PBT of 159% (RM3.3 billion loss to RM2 billion profit), compared to the OGSE100 y-o-y PBT growth of 208%.

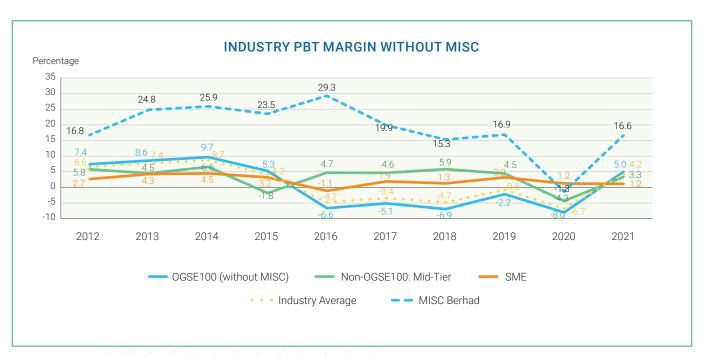


Figure 11: Industry PBT Margin without MISC

The industry's PBT margin without MISC significantly improved y-o-y, from negative 6.7% to a positive margin of 4.2%, which was 1.9% lower than the overall industry's PBT margin.

The PBT margin for the OGSE100 without MISC improved to 5% in FY2021, compared to negative 8% a year earlier. However, the increase was 2.5% lower than the PBT margin of the OGSE100 of 7.5%.

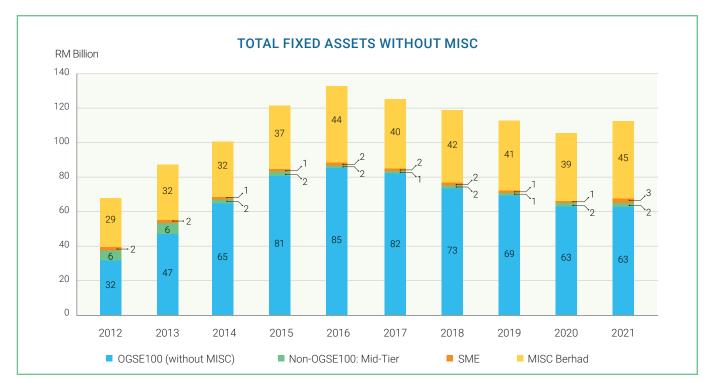


Figure 12: Total Fixed Assets without MISC

In FY2021, the industry total fixed assets (TFA) without MISC registered a marginal y-o-y growth of 2% (RM66.1 billion to RM67.7 billion) compared to a 7% increment recorded by the industry.

However, the OGSE100 TFA without MISC saw a 0.6% decline (RM63.0 billion to RM62.7 billion) compared to a 5% increase of TFA by OGSE100. This reduction is not unexpected, given that MISC accounts for 40% of the OGSE100's TFA.



Regional Rankings of OGSE Companies

We grouped the top public listed OGSE companies in SEA based on their FY2021 financial results to conduct a comparative assessment of the performance of Malaysian OGSE companies against their regional peers.

Based on their revenue performance⁴, 10 Malaysian OGSE companies ranked in the top 20 in the SEA region in FY2021, compared to nine in the previous year.

THE MALAYSIAN OGSE COMPANIES IN THE RANKING ARE:

01	MISC Berhad	06	Wah Seong Corporation Berhad
02	Sapura Energy Berhad	07	Serba Dinamik Holdings Berhad
03	Yinson Holdings Berhad	80	Muhibbah Engineering (M) Berhad
04	Dialog Group Berhad	09	Pantech Group Holdings Berhad
05	Bumi Armada Berhad	10	Dayang Enterprise Holdings Berhad

The other companies listed are from Singapore (4), Indonesia (2), Thailand (1) and Vietnam (3).



No.	COMPANY NAME	LOCATION	FY2020 REVENUE (USD Million)	FY2021 REVENUE (USD Million)	GROWTH
1	KEPPEL CORP LTD	Singapore	4,935	6,420	30%
2	MISC BERHAD	Malaysia	2,238	2,577	15%
3	SAPURA ENERGY BERHAD	Malaysia	1,535	990	-36%
4	YINSON HOLDINGS BERHAD	Malaysia	605	871	44%
5	PETROVIETNAM TECHNICAL SERVICES CORP	Vietnam	625	620	-1%
6	PT ELNUSA TBK	Indonesia	528	569	8%
7	DIALOG GROUP BERHAD	Malaysia	548	560	2%
8	BUMI ARMADA BERHAD	Malaysia	557	522	-6%
9	BOUSTEAD SINGAPORE LTD	Singapore	174	470	170%
10	PT PETROSEA TBK	Indonesia	341	416	22%
11	WAH SEONG CORP BERHAD	Malaysia	338	345	2%
12	SERBA DINAMIK HOLDINGS BERHAD	Malaysia	*Not Available	326	NA
13	PEC LTD.	Singapore	366	319	-13%
14	MUHIBBAH ENGINEERING (M) BERHAD	Malaysia	288	242	-16%
15	TTCL PUBLIC CO LTD	Thailand	204	199	-3%
16	PANTECH GROUP HOLDINGS BERHAD	Malaysia	145	181	25%
17	PETROVIETNAM DRILLING AND WELL SERVICES CORP	Vietnam	225	174	-22%
18	LILAMA CORP	Vietnam	262	167	-36%
19	DYNA-MAC HOLDINGS LTD	Singapore	63	164	160%
20	DAYANG ENTERPRISE HOLDINGS BERHAD	Malaysia	174	161	-7%

Note:

Singaporean companies continued to lead revenue in the region at about USD7.4 billion, accounting for about 45% of the regional revenue of USD16.3 billion. In particular, Keppel's offshore and marine business won SGD3.5 billion in new orders in FY2021, a significant portion of which is associated with the P-78 FPSO contract with Petrobras for the installation at the Búzios field in Santos Basin, Brazil⁵.

Malaysian companies accounted for the second-largest share of regional revenue, with a 42% share or USD6.8

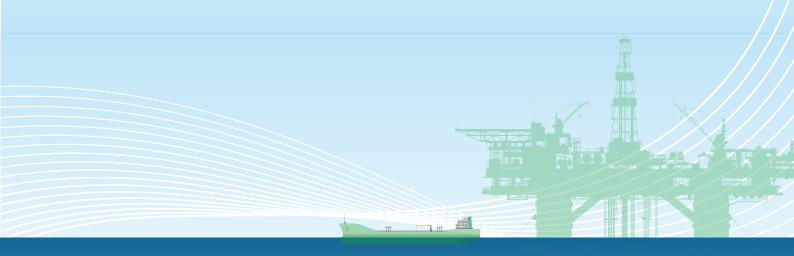
billion (up 12% from FY2020). New additions were Serba Dinamik Holdings Berhad, Yinson Holdings Berhad and Pantech Group Holdings Berhad. In contrast, KNM Group Berhad and Scomi Energy Services Berhad fell out of the top 20 SEA rankings in FY2021.

Indonesia (USD984.7 million) and Vietnam (USD961.4 million) made up 6% of regional revenue, respectively, while Thailand accounted for the remaining 1% (USD198.7 million).

^{*} The FY2020 Financial Statements for Serba Dinamik Holdings Berhad was not available at the point of reporting in 2020.

⁵ Petrobras awards \$2.3BN contract to Keppel to build Búzios' P-78 FPSO. NS Energy. (2021, 11 May). Retrieved from https://www.nsenergybusiness.com/news/petrobras-p-78-fpso-contract-keppel/

Sustainability in OGSE





OVERVIEW

Governments and corporations the world over have committed to the sustainability agenda, anchored on targets from the United Nations (UN) Climate Change Conference and the UN Sustainable Development Goals (SDGs). In line with this commitment, Malaysia has pledged targets to reduce economy-wide carbon intensity (against GDP) by 45% unconditionally by 2030 and achieve net zero carbon emissions by 2050. The country's commitments have also been formalised and reiterated in the 12th Malaysia Plan 2021-2025 and National Energy Policy 2022-2040.

In tandem with Malaysia's national sustainability aspirations, more concerted actions can be seen across regulators as well as the private and public sectors to encourage the adoption of sustainability standards for companies.

As part of this effort, Bank Negara Malaysia (BNM) published the Climate Change and Principle-based Taxonomy (CCPT) in 2021, a standard framework for financial institutions to classify climate and risk-related exposures as well as evaluate the economic operations of financial institutions (FIs)⁶.

BNM has further mandated that financial institutions fully align with the Task Force on Climate-Related Financial Disclosures (TCFD) requirements in 2024. The mandate will require OGSE companies to comply with the recommendations set out by TCFD, as the

recommendations will be part of the funding criteria set out by financial institutions.

The TCFD disclosure aims to improve listed issuers' sustainability practises and reporting⁷. Other widely accepted sustainability reporting frameworks and standards include the UN SDGs, Global Reporting Initiative (GRI), the Bursa Market Listing Requirements, and the FTSE4Good Index Series.

For listing requirements on the Main Market and ACE Market, Bursa Malaysia Berhad (Bursa Malaysia) stipulated the following disclosure criteria: (1) a common set of prescribed sustainability matters and indicators that are deemed material for all listed issuers; (2) climate change-related disclosures that are aligned with TCFD recommendations; (3) minimum of three financial years' data for each reported indicator, corresponding targets, and a summary of performance; and (4) a statement indicating if the Sustainability Statement has been assessed by internal auditors or externally verified⁸.

The year under review saw 65% of PLCs in OGSE100 evaluating the materiality of ESG issues in relation to the company's strategy. Companies that provided comprehensive sustainability reporting were MISC Berhad, Icon Offshore Berhad, and Bumi Armada Berhad, which reported the tracking and progress of sustainability efforts and indicated targets to achieve.

⁶ Joint Statement by Bank Negara Malaysia and Securities Commission Malaysia: Updates at the 8th Joint Committee on Climate Change (JC3) Meeting. Bank Negara Malaysia (2022), Retrieved from https://www.bnm.gov.my/-/jc3-8th-meeting-en

⁷ Task Force On Climate-Related Financial Disclosures (TCFD) Application Guide For Malaysian Financial Institutions. JC3 (2022). Retrieved from https://www.bnm.gov.my/documents/20124/3770663/TCFD_Application_Guide.pdf

⁸ Listing criteria. Bursa Malaysia. (n.d.). Retrieved from https://www.bursamalaysia.com/listing/get_listed/listing_criteria

OGSE **INDUSTRY**

SUSTAINABILITY REPORTING OVERVIEW



OGSE100 POPULATION



(81/100 companies) reported sustainability practices 58 Non-PLCs

Note:

PLCs: Public-Listed Companies

23 PLCs REPORTING ON SUSTAINABILITY FROM OGSE 100

% (8/23 companies)



5 % (15/23 companies)



OGSE PLCs reported current progress toward their long-term target

OGSE PLCs reported future targets without disclosing current progress Overall, 81% of OGSE100 companies have shown some indication of implementing social or environmental sustainability practices. The companies' commitment to Environmental, Social and Governance (ESG) practices as well as engagements in renewable energy projects, were derived from each company's website. Of the 23 PLCs mentioned, nearly 35%, or 8 PLCs, have reported

progress toward their long-term target. By contrast, 65% reported their future targets without including their progress towards realising them.

While much remains to be done, OGSE companies are seen to take a proactive approach to implementing actionable sustainability initiatives for the long term.

FTSE4GOOD BURSA MALAYSIA (F4GBM) INDEX⁹

OGSE performance in sustainability can also be viewed from the FTSE4Good Index Series, a well-defined ESG benchmark used by market participants as a robust indicator of socially responsible investments. Developed by the FTSE Group, the FTSE4Good Index Series are a set of responsible investment indices leveraged from the FTSE Russell methodology to facilitate investors seeking companies that meet globally recognised corporate responsibility and sustainability standards.

FTSE Russell conducts its ESG ratings for PLCs twice a year. According to the FTSE Russell ESG Ratings Methodology, ratings are undertaken among FTSE Russell-evaluated PLCs in FBM EMAS. In the outcome, the companies were classified as Top 25% (4 stars), Top 26%-50% (3 stars), Top 51%-75% (2 stars), and Bottom 25% (1 star).

To assess the ESG performance of OGSE companies, we reviewed FTSE Russell's ratings from its December 2022 rating cycle to identify any PLCs from the OGSE100 FY2021. It was found that 10 of the 23 PLCs in the OGSE100 were included.

The ESG ratings of the 10 PLCs are as follows:

COMPANY NAME	PERCENTILE	STARS
MALAYSIA MARINE AND HEAVY ENGINEERING BERHAD	Top 25%	4
YINSON HOLDINGS BERHAD	Top 25%	4
BUMI ARMADA BERHAD	Top 25%	4
DELEUM BERHAD	Top 25%	4
DIALOG GROUP BERHAD	Top 26-50%	3
VELESTO ENERGY BERHAD	Top 26-50%	3
CARIMIN PETROLEUM BERHAD	Top 26-50%	3
ICON OFFSHORE BERHAD	Top 26-50%	3
DAYANG ENTERPRISE HOLDINGS BERHAD	Top 51-75%	2
UZMA BERHAD	Bottom 25%	1

Notes:

- 1. According to Bursa Malaysia, all PLCs on the Main and ACE Markets in Malaysia will automatically have an environmental, social and governance (ESG) score by FTSE Russell (a subsidiary of the London Stock Exchange Group).
- 2. The FTSE's ESG ratings measure a company's exposure to and management of ESG issues. It looks at three pillars, i.e. Environment, Social and Governance, with 14 themes covering more than 300 indicators.
- 3. A team of data analysts from the London Stock Exchange Group (LSEG) assesses the PLCs in relation to the themes.
- 4. The PLCs are scored on how well they manage the issues related to the relevant themes. The ratings are displayed in quintiles to enable investors to identify companies that score highly on FTSE Russell's ESG ratings.
- 5. PLCs are assessed on their ESG performance once a year, either in June or December. Subsequently, the assessment results are announced in the third week of June or December.
- 6. The ESG score is provided for free by Bursa Malaysia.

⁹ FTSE4Good Bursa Malaysia (F4GBM) index. Bursa Malaysia. (n.d.). Retrieved from https://www.bursamalaysia.com/trade/our_products_services/indices/ftse4good-bursa-malaysia-f4gbm-index

SUSTAINABILITY REPORTING ANALYSIS



Environment

35 % (8/23 companies)

Companies reported on their GHG emissions by disclosing their data of scope 1 and scope 2 of GHG emissions

Water Management



26 % (6/23 companies)

Companies involved in rainwater harvesting

52 % (12/23 companies)

Companies reported and advocated for water conservation

Waste



57 % (13/23 companies)

Companies practiced disposal of hazardous wastes through licensed contractors by the Department of Environment

Energy Efficiency



35 % (8/23 companies)

Companies installed photovoltaic (PV) panels at shipyard/ manufacturing facilities



Social



Companies reported at least one woman on their Board of Directors (BOD)

100% (23/23 companies)



Companies indicated its workforce composition by gender, age, employment status, ethnicity, local vs foreign

65% (15/23 companies)



Companies that have indicators such as Lost-Time Injury (LTI), nearmiss incidents or fatalities

57 % (13/23 companies)



Companies measured its training hours and costs

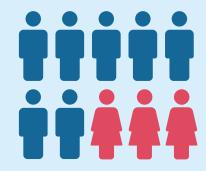
100% (23/23 companies)



Companies engaged with its communities



Governance



26 % (6/23 companies)

Companies with at least 30% women on its BOD



83 % (19/23 companies)

Companies with the BOD as the sustainability champion In addition to the F4GBM Index, we also reviewed the sustainability disclosures of the 23 PLCs in the OGSE100 to assess the progress of their sustainability indicators, as published in their annual reports. We assessed the activities in the three key sustainability areas of Environment, Social and Governance (ESG).



Environment

35% of the 23 PLCs have reported their progress towards their long-term climate change target and disclosed their Scope 1* and Scope 2** greenhouse gas (GHG) emissions. Among the PLCs, Velesto Energy Berhad and Wah Seong Corporation Berhad's targets are aligned with the Paris Agreement goal of Net Zero Carbon Emissions by 2050.

Recurring themes observed for most companies included initiatives for water management, waste management, energy conservation as well as land, air and water pollution. In particular, MISC Berhad provided a year-by-year overview of its sustainability efforts and was among the earliest companies (2012) to adopt and develop a sustainability framework.

Note

- * Scope 1 refers to direct emissions from assets and sources owned or controlled by the company.
- ** Scope 2 refers to indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company.

The following is an overview of the measures and steps taken by OGSE companies to address environmental concerns:

Water Management

26% of companies incorporated rainwater harvesting into their water conservation efforts, and 52% of companies reported and advocated for conserving water usage among employees.

Waste

All oil and gas companies implemented waste management initiatives to minimise waste, such as paper and plastic, by digitalising their operations and reusing or recycling used items. Moreover, 57% of the companies disposed of hazardous wastes through contractors licensed by the Department of Environment (DOE).

Energy Efficiency

Many oil and gas companies made efforts to conserve electricity consumption in their offices; for example, 35% of companies installed photovoltaic (PV) panels at shipyards and manufacturing facilities.

Vessel Emissions

Companies regularly maintained vessels to avoid leakages or pollution per the requirements of the International Convention for the Prevention of Pollution from Ships (MARPOL). Moreover, companies conducted preliminary risk assessments before vessel construction, and 30% of companies tracked their oil spill count.

Biodiversity

Dialog Group Berhad organised a beach clean-up initiative. MISC Berhad and Bumi Armada Berhad, on the other hand, participated in turtle conservation programmes.



Social

The main themes under social factors mentioned by most OGSE companies are listed below:

Diversity and Inclusion

Composition of the workforce by gender, age, employment status, ethnicity, local/foreign (100%)

Safety of Employees and Occupational Safety

Have indicators such as LTI, near-miss incidents, and fatalities (65%)

Training of Employees

Measured by the number of hours and cost of training (57%) and numbers increased year on year

Community Engagement

This activity was demonstrated by donations, outreach programmes, and natural disaster fund (100%)

Local Sourcing for Talents and Vendors

Enriching the local economy (70%)



Governance

Overall, PLCs implemented initiatives to improve governance at work, such as diversification in the Board and establishment of oversight committees to discuss sustainability matters, including risks and opportunities.

Women in the Boardroom

The year under review saw nearly 87% (20 out of 23) of OGSE PLCs reporting at least one woman on their Board of Directors. Meanwhile, 26% of the PLCs reported at least 30% women participation on their Board of Directors. The achievements mark modest progress toward gender diversity within PLCs in the OGSE industry.

Listed below are the OGSE companies mentioned:

- MISC Berhad
- Yinson Holdings Berhad
- Dialog Group Berhad
- Pantech Group Holdings Berhad
- Velesto Energy Berhad
- Boustead Heavy Industries Corporation Berhad

Sustainability Steering Committee

A central criterion for championing the sustainability agenda is the existence of Board oversight over sustainability-related matters. The Board steers the company's direction regarding its targets and projections for environmental and social issues in the short and long-run.

In addition, 83% of the OGSE100 PLCs have the Board as a direct oversight, with it being held accountable for sustainability matters. Thus indicating that companies are prioritising their sustainability goals.

With this premise, OGSE companies are bringing sustainability and ESG priorities into decision-making, growth strategies, risk management and more. These initiatives are in compliance with the principles of good governance from the Malaysian Code of Corporate Governance (MCCG): (1) board leadership and effectiveness; (2) effective audit and risk management as well as integrity in corporate reporting; and (3) meaningful relationships with stakeholders. The Board is positioned as the driver and champion of the mentioned values to drive long-term shareholder value-creation and ultimately safeguard stakeholders' interests.

LIST OF THEMES & ACTIVITIES OF 23 PLCs IN OGSE100 SUSTAINABILITY CRITERIA

This is a listing of activities/items that 23 PLCs in the OGSE100 reported on ESG. The table depicts the themes presented by OGSE companies in their respective annual reports in FY2021. As these companies would be preparing their FY2022 annual reports at the time of the publication of OGSE100 FY2021, we note that these companies may have progressed in disclosing their ESG practices in the past year.

The table also focuses only on the environmental and social aspects, as the governance element has been extensively covered as part of Bursa Malaysia's listing requirements and the MCCG. For further details, kindly contact the respective Investor Relations Department of the companies or refer to the relevant annual reports.

NO.	COMPANY NAME	ESG/ EES	ENVIRONMENT	SOCIAL
1	BARAKAH OFFSHORE PETROLEUM BERHAD	EES	Energy consumption-selection of vessel based on criteria to maximise cost efficiency Water consumption-vessel with sewage water treatment plants Waste management-licensed contractors for disposal based on criteria of waste	Employee retention Diversity and equal opportunity - gender, age, and training Community engagement Training and education Occupational health and safety
2	BOUSTEAD HEAVY INDUSTRIES CORPORATION BERHAD	EES	Material and waste management Water and effluent discharge management Hazardous gas emissions and energy management	Occupational health and safety Impact of pandemic Employee training, education, and development Labour practices and human rights Community contributions and development Innovation, research and development
3	BUMI ARMADA BERHAD	ESG	Environmental management Spill management GHG reduction Biodiversity	Health, safety, security, environment & quality Integrated management system Corporate HSEEQ policies Operational excellence Health and safety Process safety COVID-19 management Embarking on digital HSSEQ Oyber security risk management in safety Security
4	CARIMIN PETROLEUM BERHAD	EES	Environmental compliance	Community engagement Employee diversity Cyber security Talent retention & development Customer satisfaction/quality Occupational health & safety Business ethics & anti-corruption
5	DAYANG ENTERPRISE HOLDINGS BERHAD	EES	Vessel emission reduction Water conservation Energy management Waste reduction Storage and collection of recyclables	Safety Quality Workplace Safe and healthy workplace practices Leadership & commitment Management review for HSSE policies & procedures
6	DELEUM BERHAD	EES	Environment management Environmental regulations and compliance Waste management Utilising cleaner technologies Water management Energy efficiency	Human capital management Diversity within our workforce Employee training and development Employee engagement Safety practices, procedures and processes Group QHSE governance HSE assurance and management review process Occupational safety and health (OSH) safety training sessions OSH-related initiatives Safety performance Community outreach practices
7	DESTINI BERHAD	EES	Operations Waste management Water and energy saving initiatives	Succession planning Safe workplace Talent motivation and skill development Corporate social responsibility

LIST OF THEMES & ACTIVITIES OF 23 PLCs IN OGSE100 SUSTAINABILITY CRITERIA (CONT'D)

NO.	COMPANY NAME	ESG/ EES	ENVIRONMENT	SOCIAL
8	DIALOG GROUP BERHAD	EES	Energy consumption Greenhouse gas emissions Biodiversity Water consumption Waste management Prevention of air pollution Prevention of pollution of soil water	Health, safety & environment policy and guidelines Occupational safety COVID-19 response Employee health and wellbeing Employee management Local hiring Diversity Conducive workplace Employee share option scheme Whistleblowing Training Career development Corporate social responsibility HSE accomplishments
9	E.A. TECHNIQUE (M) BERHAD		Climate change Emissions and energy efficiency management Natural resource management Waste management	 Occupational health & safety Performance review of employees Management trainee programme Training and development Community outreach
10	ICON OFFSHORE BERHAD	EES	Fuel management Waste management and recycling Climate change Environmental non-compliance	 HSE excellence HSE initiatives COVID-19 prevention Talent management and development Corporate social responsibility
11	MARINE & GENERAL BERHAD	EES	Environmental compliance Energy efficiency Effluents and waste management	Employment Employment diversity and equal opportunity Occupational safety and health Local community
12	MISC BERHAD	ESG	Climate change Ocean health Digitalisation and innovation	 Skilled workforce Diversity and inclusion Employee engagement Health and safety Business knowledge and expertise Customer satisfaction Values and governance
13	MUHIBBAH ENGINEERING (M) BERHAD	ESG	Air emissions Biodiversity Energy and water consumption Hazardous waste management Regulatory compliance	Contractor management Contribution to society Customer satisfaction Ethics and integrity Employee wellbeing Human rights and labour practices Occupational health and safety Quality control Talent retention Training and development
14	OCEAN VANTAGE HOLDINGS BERHAD	EES	Sustainability management (environment)	Sustainability management (social)
15	PANTECH GROUP HOLDINGS BERHAD	EES	Energy Water Waste and effluents Materials Emissions Environmental compliance Transport	Employment Labour practices Occupational safety and health Training and education Diversity and equal opportunities Grievance mechanism Anti-corruption/bribery Social compliance Local communities
16	PETRA ENERGY BERHAD	ESG	Climate change Electricity consumption Diesel consumption Water consumption Waste management	Occupational, health & safety Diversity & equal opportunity Training & education Corporate social responsibility

LIST OF THEMES & ACTIVITIES OF 23 PLCs IN OGSE100 SUSTAINABILITY CRITERIA (CONT'D)

NO.	COMPANY NAME	ESG/ EES	ENVIRONMENT	SOCIAL
17	SAPURA ENERGY BERHAD	EES	Spills management Hazardous waste management Environmental training Plastic waste reduction	Workforce health and safety Emergency preparedness Workforce Diversity and inclusion Talent management Employee engagement Corporate social responsibility Community development
18	SCOMI ENERGY SERVICES BERHAD	ESG	Environmental, social and governance	Environmental, social and governance
19	T7 GLOBAL BERHAD	EES	Quality, health, safety and environmental policies and procedures	Code of conduct and ethics Industrial related policies and procedures Quality, health, safety and environmental policies and procedures
20	UZMA BERHAD	EES	Energy management Employee awareness programme Renewable energy Paper management Water management Waste management	Health & safety performance Employee engagement Employee recognition Employee diversity Employee performance management Training and development Internships Grievance mechanisms Employee benefits and compensation Vendor development programme Customer programmes and surveys CSR activities
21	VELESTO ENERGY BERHAD	ESG	Biodiversity Climate change Energy consumption GHG emissions Impact of climate change on group operations Spills management Wastewater Waste management Water consumption Environmental spills Decommissioning	COVID-19 prevention Group workforce Workforce diversity and equal opportunity employment Reskilling and upskilling opportunities Youth unemployment initiatives, apprenticeships, or graduate placements Staff remuneration & benefits Approved applications for maternity leave and return to work rates Minimum wage compliance Employee appraisals Statutory contributions to employees retirement / pension savings Employee engagement – communication Learning and development Talent management and succession planning Freedom of association Grievance procedures Corporate social responsibility Quality, health, safety & environment
22	WAH SEONG CORPORATION BERHAD	EES	• Net zero	Diversity and inclusion Gender equality Health, safety and environment Workplace conditions Training and development Mental health and wellbeing Corporate social responsibility Syber security & data protection Business continuity
23	YINSON HOLDINGS BERHAD	ESG	Carbon emissions management Material management Pollution management Waste management Energy management Biodiversity management Water management	Operational health & safety Antidiscrimination Workforce diversity Community engagement Employee rights & benefits Training & development Customer engagement Child & forced labour

Industry Outlook



Industry Outlook

YEAR 2022: POST-COVID RECOVERY

2022 was a rough year for many, particularly due to the rapid spread of two new COVID-19 variants, Omicron and Delta, amidst a global energy crisis fuelled by the Russia-Ukraine conflict. The consequences of the two variants, along with the geopolitical conflict, will carry on into 2023, where it is projected that economic growth will be moderate. The World Economic Forum expects a downturn in the global economy to 2.7% in 2023, in tandem with a slowdown to 1.1% among advanced economies. Emerging markets and developing economies are expected to grow 3.7% in 2023¹⁰.

On the contrary, Malaysia's GDP in 2022 grew remarkably at 8.7%, the highest annual growth recorded within the period of 22 years (2000: 8.9%) amidst challenging external conditions. This solid growth was mainly driven by the Construction sector that grew by 10.1%, followed by the Service sector and the Mining & Quarrying sector with 8.9% and 6.8% growth respectively¹¹. The International Monetary Fund (IMF) projects that Malaysia's growth in 2023 would range between 5.1% and 5.4%, and the country's GDP would rank third in Southeast Asia, after Indonesia and Thailand¹². However, the Ministry of Finance of Malaysia's (MOF) forecast for 2023 is a moderate growth of 4% to 5%¹³.

Unfortunately, the Russia-Ukraine War has caused Europe to experience an unprecedented energy crisis, with gas prices fluctuating and peaking at USD50 per MMBtu in August 2022. Rystad Energy also found that the significant decrease in nuclear and hydroelectric output contributed to Europe's energy crisis¹⁴. To address the worsened market situation, policies are being enacted to revise the gas pricing system, such as stockpiling liquefied natural gas (LNG) and natural gas. These measures would help mitigate the rising costs of natural gas and power on consumers and businesses as the demand for coal escalates.



¹⁰ Global inflation will fall in 2023 and 2024 amid subpar economic growth. WEF (2023). Retrieved from https://www.imf.org/en/Publications/WEO/Issues/2023/01/31/world-economic-outlook-update-january-2023

¹¹ Malaysia Economic Performance Fourth Quarter 2022. DOSM (2022). Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=100&bul_id=RkhsOGEwclM4T1UxZ1Vmb0pwL1JIQT09&menu_id=TE5CRUZCblh4ZTZMODZlbmk2aWRRQT09

¹² GDP. IMF (2022). Retrieved from https://www.imf.org/external/datamapper/NGDPD@WEO/0EMDC/ADVEC/WEOWORLD

¹³ Ministry of Finance Malaysia (2022), Economic Outlook 2023. https://budget.mof.gov.my/pdf/2023/economy/economy-2023.pdf

¹⁴ Energy crisis: The beginning of the end for gas-fired power in Europe. Rystad Energy. (2022). Retrieved from https://www.rystadenergy.com/news/energy-crisis-the-beginning-of-the-end-for-gas-fired-power-in-europe https://www.rystadenergy.com/news/energy-crisis-the-beginning-of-the-end-for-gas-fired-power-in-europe

INTERNATIONAL OUTLOOK

The three Rs (Russia, China Risk, and Recession) will dominate the global oil and gas industry in 2023¹⁵. The European Union's (EU) ban on Russian crude oil and the G7's price cap to stabilise global energy prices will reduce pipeline flow. The EU embargo, which restricts the maritime transport of Russian crude oil (from 5 December 2022) and petroleum products (from 5 February 2023) to third-world countries, foregoes 1.1 million barrels of crude oil and petroleum products per day from Russia¹⁵. The EU also entered into an agreement with the United States in 2022, where, due to the price advantage and the flexibility of the contract, 15 billion cubic metres of liquefied natural gas (LNG) will be exported to Europe to minimise reliance on Russian energy supplies¹⁶. However, seaborne exports are anticipated to expand as Russia shifts its oil exports to other nations, exacerbating Europe's energy crisis and dragging down its economy¹⁵.

The China Risk will be mitigated as the country eases its COVID-19 policies, leading to a rebound in oil demand as the need for transportation and flight services will grow in the second half of 2023. Recession is also expected to hit various countries due to skyrocketing inflation and sluggish economic development, but Governments will enforce tight fiscal policies to ease the slowdown. Considering measures set to counter the recession and the growing need for oil in China, the second half of 2023 will witness a recovery in global oil demand¹⁵.

Despite the various challenges the global oil industry may face, oil demand will persist in the long run. OPEC forecasts that worldwide oil consumption will grow to 23% by 2045, with oil continuing to capture the greatest share at 110 mbpd, an increase from 97 mbpd in 2021¹⁶. The higher demand is despite a high annual growth rate of 7.1% for renewable energy. Moreover, Dutch TTF and Asian spot gas prices will remain premium over Henry Hub or Oil Indexed LNG¹⁷.

To accommodate rising gas demand and secure energy supplies, Europe is constructing more than 20 regasification facilities. Data also shows it attempting to grasp control of the spot market to close supply gaps, with Europe controlling 70% of the spot market in 2022, followed by Indonesia at 22% and China at 12%¹⁷. In 2023, however, it is predicted that Europe and China will compete to gain control of the spot market.

The global upstream output is forecasted to expand by 3.1% in 2023¹⁸. In total, 831 oil and gas production facilities are expected to begin operations between 2022 and 2026¹⁸. Asia is expected to produce the bulk of projects, followed by Europe and Africa. This positive trajectory provides leading PLCs in Malaysia, such as MISC Berhad, Sapura Energy Berhad, Yinson Holdings Berhad, Bumi Armada Berhad, and Dialog Group Berhad, more opportunities to increase their footprint in international upstream projects.

As for the total share price for oil field providers, a positive upward trend was reported from November 2021 to October 2022, particularly for asset-heavy offshore vessels and driller businesses¹⁵. Other contributors to the rise in share price include the growing demand for rigs and vessels worldwide.

The global oil and gas industry is expected to grow by 9% to USD545 billion in 2023 from USD500 million in 2022, with additional capacity in Uzbekistan, Iran and Russia¹⁷. Europe's surge in demand for LNG and regasification will also drive the growth of midstream oil and gas by 32% in 2023¹⁷. Due to market forces, it is clear that the global energy supply chain is anticipated to expand. Although a decline in margin is expected for the first half of 2023, the second half will observe a greater recovery as inventory is depleted¹⁷.



¹⁵ Tonhaugen, Bjørnar (2022). Oil market update and oil price outlook. What will 2023 likely look like?. [PowerPoint Slides]. Retrieved from https://www.rystadenergy.com/rystad-talks-what-s-up-what-s-down-and-what-s-next-in-2023

¹⁶ 2022 World Oil Outlook 2045. OPEC (2022). Retrieved from https://woo.opec.org/pdf-download/

¹⁷ Knutsson, Sindre and Nan, Xi (2022). Hit the Gas! What will 2023 gas and LNG markets look like? Can 2023 be worse? [PowerPoint Slides]. Retrieved from https://www.rystadenergy.com/rystad-talks-what-s-up-what-s-down-and-what-s-next-in-2023

¹⁸ GlobalData's Intelligence Centre: Southeast Asia Region Top 30 OGSE Companies by FY2021 Revenue

OGSE INDUSTRY OUTLOOK

The OGSE industry is expected to continue to be in recovery mode in 2023. While more activities will be seen, these may not be felt directly across the ecosystem. One area where the industry can expect an increase in activities is the subsurface segment¹⁹. The rig count is expected to be on an upward trend compared to the last two years, but some of these could be contributed by work originally planned for execution in 2022 and 2021.

The increase in activities will be seen locally, regionally and globally. However, the increase in activities could result in more challenging market conditions as some assets were disposed of during the pandemic, leading to a smaller pool of assets against strong demand. These conditions will benefit OGSE companies with assets through higher rates.

Continuous investment in the Exploration and Development phase is also a positive sign as it could result in more sustainable production in the next few years¹⁹.

For Greenfield development, most projects are expected to be in the Engineering stage in 2023, with some commencing fabrication in the later part of the year¹⁹. However, the number of fabrication and construction work projected for this year may not be sufficient to cater to the total domestic capability of our fabrication yards, which could result in an outflow of trained personnel to other industries or outside Malaysia. With less fabrication and construction work, it is expected that there would be a lower requirement for vessels and companies supporting the Transportation & Installation phase.

Similarly, the lower expected number of Heavy Lift activities this year from last year could lead those operating in this segment to rely on activities in the region to maintain a healthy utilisation, while the support vessels segment could offset the lower activities with work in Brownfield development and Offshore Maintenance, Construction and Modification.

Since activities in Malaysia are predominantly offshore, support vessels have a crucial role to play across the entire value chain from exploration, development, and production up to decommissioning¹⁹. With a fleet profile of ageing offshore vessels, the potential extension of

asset life for qualified offshore vessels beyond 15 years would greatly assist with the work requirements while the industry transitions towards newer and greener vessels.

In addition to the asset life extension for qualified vessels, contracts which reflect a more current operating environment are expected to assist OGSE companies in their recovery from the challenges they have been facing, which started even before the pandemic period.

Since the typical vessel construction duration is between 18 and 24 months, it will take a while for the ageing fleet to be replaced²⁰. All these will take place while key stakeholders are putting in continuous effort in the ecosystem to ensure healthy asset utilisation while balancing poor fuel consumption and higher maintenance requirements for the ageing fleet. Adding to the challenge for OGSE companies, some are running on a rate that does not reflect the current oil price and operating condition.

As activities continue to accelerate gradually, the industry will also need to build up its talent pool. While some of the talent needs can be resolved via third-party service providers, the growing demand for experienced, trained personnel could still result in a shortage. Furthermore, the increase in regional and global activities could result in an outflow of trained personnel.

Interest rates are also expected to continue tightening in response to persistent inflationary pressures. The higher interest rate will impact the cost of financing and doing business. While companies with contracts awarded in 2022 may be able to reflect the higher costs in their rates, those still operating on rates secured in the last few years when the cost of financing was much lower could be negatively impacted.

Finally, OGSE companies in Malaysia must continue building and strengthening their capability and offering niche solutions to increase their competitiveness. Areas in which companies should focus include technology and innovation as well as the provision of integrated solutions.



¹⁹ Petronas Activity Outlook (PAO) 2023-2025. PETRONAS (2022). Retrieved from https://www.petronas.com/sites/default/files/uploads/content/2023/PETRONAS%20Activity%20Outlook%202023-2025.pdf

²⁰ AMIM applaud decision by Petronas to renew the ageing fleet of offshore support vessels (OSVs). Malaysiakini. (2021, 23 March). Retrieved from https://www.malaysiakini.com/advertorial/567797

SPECIAL FEATURE:

Sustaining Recovery Amidst Evolving Energy Landscape

Special Feature: Sustaining Recovery Amidst Evolving Energy Landscape

ADAPTING TO THE ENERGY TRANSITION AGENDA

Now more than ever, the OGSE industry must redefine itself to meet demand from both local and international markets. The OGSE companies must be more agile and adaptable to the changing business climate. In this regard, greener, cleaner energy sources in a circular economy are expected to shape the future of energy. Malaysia's energy transition plan targets for 50% of the future energy mix to consist of new energy (or alternative energy) and renewable energy (RE)²¹.

In response to the current landscape, key operators, including PETRONAS, Shell and PTTEP, have diversified their business offerings into new energy and RE. For example, PETRONAS has established a clean energy solutions provider, Gentari Sendirian Berhad (Gentari), and invested in the Kasawari CO2 Sequestration (CCS) project²².

In line with this shifting operating landscape, the OGSE industry will need to explore opportunities in energy support services – providing supporting services (e.g., maintenance) to energy producers – or expand capabilities into power generation in the future to avoid being left behind amid the traditional oil & gas industry's business trajectory. This trend can already be seen among a rising number of OGSE companies which are expanding beyond conventional oil and gas, forming new partnerships with New Energy companies to increase their market share in the energy sector²³.

SUSTAINABILITY AS CRITERIA FOR FUNDING

With mounting pressures from the energy transition due to the urgent need for climate action, it is imperative for the OGSE industry to make ESG commitments and sustainability reporting a keystone in their operations and value chains.

In 2021, Bank Negara Malaysia (BNM) published the Climate Change and Principle-based Taxonomy (CCPT), a guideline for Financial Institutions to categorise climate and risk-related exposures, including among their customers. As set out by the CCPT, companies without a sustainability mitigation strategy will fall under the 'Watchlist' category and may be subject to stricter lending conditions such as shorter loan tenures, smaller loan limits or even loan rejections²⁴.

BNM has also mandated financial institutions to implement and be fully aligned with the Task Force on Climate-Related Financial Disclosures (TCFD) by 2024²⁴. Similarly, Bursa Malaysia requires OGSE PLCs in the Main Market to implement TCFD by 2025, while companies in the ACE Market have a longer timeline to be implemented in stages from 2025²⁵.



 $^{^{21}\} National\ Energy\ Policy\ (2022-2040).\ EPU\ (2022).\ Retrieved\ from\ https://www.epu.gov.my/sites/default/files/2022-09/National%20Energy%20\ Policy_2022_2040.pdf$

²² Petronas Activity Outlook (PAO) 2023-2025. PETRONAS (2022). Retrieved from https://www.petronas.com/sites/default/files/uploads/content/2023/PETRONAS%20Activity%20Outlook%20203-2025.pdf

²³ Tonhaugen, Bjørnar (2022). Oil market update and oil price outlook. What will 2023 likely look like?. [PowerPoint Slides]. Retrieved from https://www.rystadenergy.com/rystad-talks-what-s-up-what-s-down-and-what-s-next-in-2023

 $^{^{24}} Task\ Force\ On\ Climate-Related\ Financial\ Disclosures\ (TCFD)\ Application\ Guide\ For\ Malaysian\ Financial\ Institutions.\ JC3\ (2022).\ Retrieved\ from\ https://www.bnm.gov.my/documents/20124/3770663/TCFD_Application_Guide.pdf$

²⁵ Mathieu, E., Ritchie, H., Ortiz-Ospina, E. et al. (2020) - "Coronavirus Pandemic (COVID-19)". Published on OurWorldInData.org. [Online Resource] https://ourworldindata.org/coronavirus

SUSTAINABILITY AS CRITERIA FOR FUNDING (CONT'D)

Against the backdrop of stricter sustainability disclosure, OGSE SMEs are particularly vulnerable as they face challenges balancing business survival in the post-COVID-19 landscape. These challenges have led them to prioritise their working capital needs over adopting and reporting on their sustainability practices, which are an additional cost to the business. However, as their customers will need to comply with the disclosure requirements, which include climate exposures via their vendors, which, in turn, include the OGSE SMEs, it will become imperative for these SMEs to also comply with sustainability disclosures.

Overall, the OGSE industry will need to embrace the sustainability agenda and implement significant changes not only to comply with industry requirements but also to ensure the industry remains relevant amid the energy transition and achieves long-term sustainability.

BARRIERS TO ENTRY TO COMPETE IN THE INTERNATIONAL MARKET

In global markets, OGSE exporters will experience greater pressure to comply with the Carbon Border Adjustment Mechanism (CBAM) – a tariff placed on specific product groups that are carbon intensive²⁶. With CBAM legislated under the European Union (EU) Green Deal, OGSE companies must disclose emissions from imports and report the carbon pricing used in manufacturing their products.

Put into context, Malaysian players are at risk of increasing costs due to penalties for non-compliance as the EU may enforce stricter levels of disclosures in the future²⁶. Similarly, high costs associated with green compliance may lead to SMEs losing market access in the long run.

CARBON EMISSION ABATEMENT MECHANISM

Addressing climate change and its impacts requires the combined efforts of industry players coupled with technologies and mechanisms to reduce carbon emissions, meeting the anticipated Long-term Low Emissions Development Strategies (LT-LEDS) target. In light of this, the Bursa Carbon Exchange (BCX) was launched in December 2022 by the Ministry of Finance (MOF), the Ministry of Natural Resources, Environment and Climate Change, and Bursa Malaysia²⁷.

With its launch, the carbon market will provide a financial incentive for initiatives which avoid or reduce carbon emissions and is anticipated to boost the competitiveness of Malaysian enterprises' products and exports. This incentive would also assist Malaysian businesses in complying with the CBAM, which imposes extra tariffs on carbon-intensive items.

In establishing Malaysia's green economy, companies are encouraged to diversify into low-carbon solutions that are technology-based and nature-based. To add, the BCX will provide exclusive access to over 900 publicly traded companies and is the world's first ESG-and Shariah-compliant carbon exchange²⁷. The BCX's inaugural trade through an auction facilitates price discovery, provides the reference price for carbon credits and gives a tangible price signal to potential users.

Meanwhile, the Malaysian Government is currently assessing plans to introduce a carbon tax^{28} . Upon implementation, regulators will set a fixed limit on the amount of CO_2 emitted. Against the backdrop of low-carbon economies and measures, companies will likely struggle to balance operating and compliance costs.



²⁶ SECURING OUR FUTURE: NET ZERO PATHWAYS FOR MALAYSIA. BCG (2021). Retrieved from https://web-assets.bcg.com/78/bc/0e381d8a4cdba6b318d544fca374/bcg-wwf-net-zero-pathway.pdf

²⁷ BURSA MALAYSIA LAUNCHES A VOLUNTARY CARBON MARKET EXCHANGE. BursaMalaysia (2022). Retrieved from ttps://www.bursamalaysia.com/bm/about_bursa/media_centre/bursa-malaysia-launches-a-voluntary-carbon-market-exchange

²⁸ Ministry of Finance Malaysia (2022), Economic Outlook 2023. https://budget.mof.gov.my/pdf/2023/economy/economy-2023.pdf

INCREASED COMPETITION IN AN OPEN, COMPETITIVE & VOLATILE LANDSCAPE

With the ratification of trade agreements, the future of the OGSE industry will be uniquely challenging and uncertain, but with a greater number of opportunities. Recently, Malaysia ratified two trade agreements: the Regional Comprehensive Economic Partnership (RCEP) on 18 March 2022²⁹ and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) on 30 September 2022. The CPTPP allows for free trade access between 11 participating nations.

Under the CPTPP, PETRONAS can provide domestic preferential treatment in upstream activities of up to 70% of its budget for purchasing products and services (except for 12 liberalised goods and services), which will progressively decline to 40% by the sixth year of its entry into force (EIP)³⁰.

More importantly, the Labour and Environment chapter of the CPTPP highlights the importance of complying with each member country's internationally recognised rights and regulations³⁰. Consequently, an awareness of the compliance standards is necessary for OGSE companies exporting equipment and services. Illequipped companies will face challenges to compete and comply with those standards.

OGSE ENERGY TRANSITION PATHWAYS & SUPPORT

With the intention of advancing the energy transition agenda, the Government has demonstrated a greater commitment to collaboration. To exemplify, clear, long-term visions and coordinated action plans were established to better respond to megatrends and capitalise on opportunities.

In line with this, the National Energy Policy (DTN) introduced by the Malaysian Government outlined the enhancement of the OGSE industry in Strategic Thrust 3: Enhance energy sector contribution towards environmental sustainability³¹.

NATIONAL ENERGY POLICY 2022-2040 (DASAR TENAGA NEGARA - DTN)



*Please refer to Dasar Tenaga Negara 2022-2040



AATEGY SO

Promote the use of clean fuels in industries and determine GHG emissions reduction targets in the energy sector.

Encourage businesses to implement carbon footprint accounting, reporting and certification, as well as access to RE.



ACTION PLAN

C1

C3

Enhance environmental sustainability by focusing on high GHG emission areas

Determine and enforce energy sector GHG emission reduction targets <u>C2</u>

Enhance carbon footprint accounting, reporting & certification in businesses

<u>C4</u>

Enhance platform for businesses to access RE in line with ESG trends targets



²⁹ RCEP comes into force for Malaysia on 18 March, 2022 – MITI. MITI (2022). Retrieved from https://www.mida.gov.my/mida-news/rcep-comes-into-force-for-malaysia-on-march-18-2022-miti/

³⁰ Cost-Benefit Analysis on the Potential Impacts of the CPTPP on the Malaysian Economy and Key Economic Sectors. MITI (2022). Retrieved from https://fta.miti.gov.my/miti-fta/resources/CPTPPA/25072022_CPTPP_Cost_Benefit_Analysis_Final_Report_-_for_publication.pdf

³¹ National Energy Policy (2022-2040). EPU (2022). Retrieved from https://www.epu.gov.my/sites/default/files/2022-09/National%20Energy%20 Policy_2022_2040.pdf

Likewise, PETRONAS has introduced its Net Zero Carbon Emissions by 2050 (NZCE 2050), a growth plan focused on supporting decarbonising activities and tapping into greener energy sources³². Specific emission reduction targets have been set for its integrated energy portfolio:



PETRONAS (NZCE 2050) EMISSION REDUCTION TARGETS

2024

Cap GHG emissions at 49.5 million tonnes of carbon dioxide equivalent (MtCO2e)

for Scope 1 and Scope 2 emissions in Malaysia

2025

50% reduction in methane emissions from PETRONAS group's natural gas value chain operations 2030

70% reduction in methane
emissions from PETRONAS
group's natural gas value chain
operations & 25% reduction
in GHG emissions from
PETRONAS group

Aligning with PETRONAS' NZCE 2050, the OGSE industry is presented with opportunities for developing new businesses focusing on decarbonisation³². In an effort to achieve the set targets, PETRONAS intends to explore areas such as zero routine flarings and venting, energy efficiency, electrification, and carbon capture & storage. PETRONAS also organised the 'Race2Decarbonise' challenge, which is open to OGSE players offering innovative solutions and ideas for decarbonisation³².

Government support includes tax incentives for companies implementing internal decarbonisation programmes using advanced carbon-reduction solutions and technologies. Moreover, OGSE companies can recoup CAPEX through the MIDA Green Investment Tax Allowance programme for green assets³³. Under the MIDA Green Income Tax Exemption programme, OGSE companies are eligible for tax exemptions for 70% of statutory income for authorised green services (for three years) and solar leasing services (up to 10 years). BNM has also allocated RM1 billion to the low carbon transition facility (LCTF), a funding facility facilitating SMEs' implementation of sustainable practices³⁴.

Apart from funding, an essential element is capacity building. Through the Action Centre for Sustainable SMEs (ACCESS) platform, SME Corporation Malaysia can offer financial assistance to SMEs participating in the Sustainability Training & Development Programme³⁵. The programme participants are eligible for a grant to enhance their sustainability capacities.

To this end, MPRC plays a central role in ensuring the competitiveness of the OGSE industry both locally and internationally. The National OGSE Industry Blueprint 2021-2030 initiatives should be re-evaluated hereafter, considering the recent pressures influencing the OGSE industry landscape. With the growing global momentum for a net-zero carbon future, sustainability efforts and low-carbon technologies are gaining traction in the OGSE industry. Despite the slow uptake, government support and collaboration are highly instrumental in accelerating the transition and spurring climate action goals.

³² PETRONAS Announces Pathway to Net Zero. PETRONAS (2022). Retrieved from https://www.petronas.com/media/media-releases/petronas-announces-pathway-net-zero

³³ Incentives For New Investments. MIDA (2022). Retrieved from https://www.mida.gov.my/setting-up-content/incentives/

³⁴ BNM's Fund for SMEs: Low Carbon Transition Facility (LCTF). BNM (2021). Retrieved from https://www.bnm.gov.my/documents/20124/2294076/lctf2022_en_broc.pdf

³⁵ SMECorp, Action Centre for Sustainable SMEs (ACCESS). Retrieved from https://www.smecorp.gov.my/index.php/en/programmes1/2015-12-21-09-53-14/action-centre-for-sustainable-smes-access

Methodology

Population Sampling

The OGSE100 rankings analysis was initiated with a list obtained from PETRONAS, consisting of 4,754 companies with SWEC licences. We removed 953 companies from the list identified as PETRONAS subsidiaries, non-oil and gas companies and non-corporate entities (such as architect firms), leaving **3,801** for the next step in this methodology.



Data Acquisition

The next step involved obtaining companies' financial data from SSM. We requested SSM to provide the financial data of the 3,801 companies identified during the Population Sampling. However, data from only 2,686 companies were available. Then, we added 23 PLCs, leading to a new population of 2,707.

Data Processing

We mapped the 2,707 companies with the subsidiary listing in FY2021 obtained from SSM to identify their parent company. This exercise led to the removal of 56 subsidiary companies attached to 45 parent companies. Removing the subsidiaries is to avoid double-counting, once on the subsidiary's books and again on the parent's books.

Next, we removed four (4) PETRONAS-related companies, followed by 207 companies validated against the PETRONAS SWEC that oil and gas were not part of their core operations.

Then, we removed another 42 companies with only agents as their mode of operations under the SWEC. As such, the population size was down to 2,398 companies.

From here on, we ranked the companies based on their revenue, of which we identified the top 150 companies. At this point, we performed another round of company validation through online checking and referenced several industry players to determine if their core operations involved oil and gas. This exercise led to the elimination of another 22 companies, arriving at the final industry population sample of 2,376.

Finally, the industry population of 2,376 formed our analysis's baseline population, which we derived the OGSE100 rankings from.

Publication

We went through the copywriting, design, approval and printing phases before the OGSE100 FY2021 Report was made available for circulation.

Cover Rationale

The cover design for MPRC's OGSE100 report takes an illustrative approach. With the Kuala Lumpur skyline in the background, wonderfully representing Malaysia, the cover focuses on a typical OGSE industry scene in vector form. However, the oil well creatively expands into a leaf form.

This composition translates the report's theme of "Sustaining Recovery Amidst Evolving Energy Landscape." This theme reflects the conditions seen in the OGSE industry in 2021, where OGSE companies demonstrated a gradual recovery from the headwinds of recent years, but must remain responsive to emerging opportunities and challenges.



Glossary

BCX	Bursa Carbon Exchange	LNG	Liquefied Natural Gas
CAPEX	Capital Expenditure	LTI	Lost Time Injury
CBAM	Carbon Border Adjustment Mechanism	LT-LEDS	Long-term Low Emissions Development
CBID	Corporate and Business Information Data		Strategy
CCPT	Climate Change and Principle-based Taxonomy	MATRADE	Malaysia External Trade Development
CCS	Carbon Capture and Storage		Corporation
CPTPP	Comprehensive and Progressive Agreement for	MCCG	Malaysian Code of Corporate Governance
	Trans-Pacific Partnership	MCM	Maintenance, Construction & Modification
DOE	Department of Environment	MOF	Ministry of Finance
DTN	Dasar Tenaga Negara	OGSE	Oil & Gas Services and Equipment
EES	Economic, Environmental and Social	OPEC	Organisation of the Petroleum Exporting
EOT	Extension of Time		Countries
EPCIC	Engineering, Procurement, Construction,	PBT	Profit Before Tax
	Installation, and Commissioning	PLC	Public Listed Company
EPU	Economic Planning Unit	SEA	Southeast Asia
ESG	Environmental, Social and Governance	SME	Small and Medium-sized Enterprise
FPS0	Floating Production Storage & Offloading	SSM	Companies Commission of Malaysia
GHG	Greenhouse Gas	SWEC	Standard Work & Equipment Categories
HWU	Hydraulic Workover Unit	TCFD	Task Force on Climate-Related Financial
IMF	International Monetary Fund		Disclosures
KASA	Ministry of Natural Resources, Environment and	TFA	Total Fixed Asset
	Climate Change (NRECC)	TTF	Title Transfer Facility
LCTF	Low Carbon Transition Facility		

Appendix

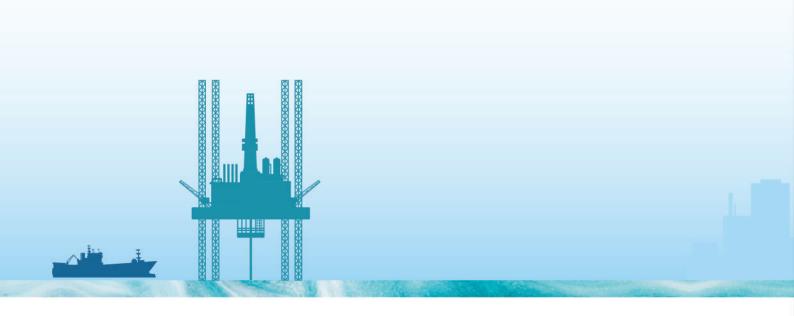
RESTATED FY2020 RANKINGS

ORIGINAL 2020	RESTATED RANK	COMPANY NAME	REVENUE (RM Million)	PBT (RM Million)	TFA (RM Million)	TYPE
1	1	MISC BERHAD	9,401	-124	39,463	Old
2	2	SAPURA ENERGY BERHAD	6,449	-4,552	18,766	Old
3	3	YINSON HOLDINGS BERHAD	2,519	331	7,321	Old
4	4	BUMI ARMADA BERHAD	2,340	128	10,803	Old
5	5	DIALOG GROUP BERHAD	2,303	747	4,697	Old
6	6	TECHNIP GEOPRODUCTION (M) SENDIRIAN BERHAD	1,953	2	135	Old
7	7	WAH SEONG CORPORATION BERHAD	1,409	-268	1,266	Old
8	8	KNM GROUP BERHAD	1,343	75	2,886	Old
9	9	MUHIBBAH ENGINEERING (M) BERHAD	1,200	-56	1,875	Old
10	10	HALLIBURTON ENERGY SERVICES (MALAYSIA) SENDIRIAN BERHAD	1,069	22	202	Old
				56		
NA 11	11	SCHLUMBERGER WTA (MALAYSIA) SENDIRIAN BERHAD	837		110	New
11	12	DAYANG ENTERPRISE HOLDINGS BERHAD	731	88	1,980	Old
NA	13	WESTSTAR AVIATION SERVICES SENDIRIAN BERHAD	664	42	2	New
NA	14	GREEN AIM SENDIRIAN BERHAD	647	7	38	New
12	15	TUMPUAN MEGAH DEVELOPMENT SENDIRIAN BERHAD	645	4	43	Old
NA	16	TECHNIP MARINE (M) SENDIRIAN BERHAD	603	84	35	New
13	17	PANTECH GROUP HOLDINGS BERHAD	603	46	354	Old
14	18	DELEUM BERHAD	592	27	221	Old
15	19	UZMA BERHAD	552	-10	773	Old
16	20	VELESTO ENERGY BERHAD	547	-477	2,733	Old
17	21	PETRA ENERGY BERHAD	422	23	293	Old
18	22	INTEGRATED PETROLEUM SERVICES SENDIRIAN BERHAD	386	3	4	Old
19	23	FMC WELLHEAD EQUIPMENT SENDIRIAN BERHAD	378	-10	116	Old
20	24	CARIMIN PETROLEUM BERHAD	374	18	111	Old
NA	25	BAKER HUGHES INTEQ (M) SENDIRIAN BERHAD	366	-70	0.09	New
21	26	SHOREFIELD SENDIRIAN BERHAD	346	35	108	Old
22	27	ADVANCE GAS TURBINE SOLUTIONS SENDIRIAN BERHAD	329	61	0.2	Old
23	28	SCOMI ENERGY SERVICES BERHAD	327	-180	299	Old
24	29	ASIAFLEX PRODUCTS SENDIRIAN BERHAD	312	0.06	244	Old
NA	30	BERLIAN MCDERMOTT SENDIRIAN BERHAD	309	22	54	New
25	31	EASTERN PACIFIC INDUSTRIAL CORPORATION BERHAD	306	19	1,077	Old
NA	32	E.A. TECHNIQUE (M) BERHAD	303	119	599	New
26	33	YOKOGAWA KONTROL (MALAYSIA) SENDIRIAN BERHAD	296	41	4	Old
NA	34	SKOSV SENDIRIAN BERHAD	295	1	0.03	New
27	35	E&P O&M SERVICES SENDIRIAN BERHAD	294	32	6	Old
28	36	TRANSWATER API SENDIRIAN BERHAD	286	6	100	Old
29	37	SANKYU (MALAYSIA) SENDIRIAN BERHAD	285	26	59	Old
30	38	SOLAR ALERT SENDIRIAN BERHAD	278	40	57	Old
31	39	EXECUTIVE OFFSHORE SERVICES SENDIRIAN BERHAD	278	-7	122	Old
32	40	MKN ODYSSEY VENTURES SENDIRIAN BERHAD	273	5	0.1	Old
33	41	ALAM MARITIM RESOURCES BERHAD	255	-120	263	Old
34	42	EMERSON PROCESS MANAGEMENT (MALAYSIA) SENDIRIAN BERHAD	255	38	18	Old
35	43	ASIAN SUPPLY BASE SDN.BERHAD	221	33	387	Old
36	44	BARAKAH OFFSHORE PETROLEUM BERHAD	221	20	86	Old
37	45	DAYA MATERIALS BERHAD	215	-60	43	Old
38	46	MARINE & GENERAL BERHAD	214	-66		Old
39	47	AKER SOLUTIONS APAC SENDIRIAN BERHAD	213	-00	833	Old
40	48	ICON OFFSHORE BERHAD	212	45	651	Old
41	49	KUALITI ALAM SENDIRIAN BERHAD	212	35	241	Old
42	50	PUNJ LLOYD SENDIRIAN BERHAD	208	163	1	Old
NA	51	TOYO ENGINEERING & CONSTRUCTION SENDIRIAN BERHAD	207	-27	7	New
43	52	DESTINI BERHAD	190	-193	157	Old
44	53	T7 GLOBAL BERHAD	189	7	291	Old
45	54	OCEANMIGHT SENDIRIAN BERHAD	173	25	3	Old
46	55	VSD AUTOMATION SENDIRIAN BERHAD	169	24	9	Old
NA	56	PANGKALAN BEKALAN KEMAMAN SENDIRIAN BERHAD	166	39	408	New
NA	57	JASA MERIN (MALAYSIA) SENDIRIAN BERHAD	162	-57	638	New
47	58	SETEGAP VENTURES PETROLEUM SENDIRIAN BERHAD	158	29	103	Old
NA	59	DOWELL SCHLUMBERGER (MALAYSIA) SENDIRIAN BERHAD	148	-11	46	New
48	60	ALMITRA ENERGY SERVICES SENDIRIAN BERHAD	147	2	0.1	Old
49	61	BOUSTEAD HEAVY INDUSTRIES CORPORATION BERHAD	145	-33	135	Old
NA	62	WEATHERFORD (MALAYSIA) SENDIRIAN BERHAD	142	-29	27	New
NA	63	VANTAGE OILFIELD SOLUTIONS SENDIRIAN BERHAD	141	7	15	New
50	64	PETRONNIC SENDIRIAN BERHAD	136	1	1	Old
	T		100	. ' 1	' '	

RESTATED FY2020 RANKINGS (CONT'D)

ORIGINAL 2020	RESTATED RANK	COMPANY NAME	REVENUE (RM Million)	PBT (RM Million)	TFA (RM Million)	TYPE
NA	65	MUSHTARI MAINTENANCE SERVICES SENDIRIAN BERHAD	127	24	19	New
51	66	DYNAC SENDIRIAN BERHAD	126	2	94	Old
NA	67	HELIOS PETROLEUM SENDIRIAN BERHAD	126	1	1	New
NA	68	SEDIA TEGUH SENDIRIAN BERHAD	124	6	0.4	New
NA	69	PETROTECHNICAL INSPECTION (MALAYSIA) SENDIRIAN BERHAD	123	-0.07	20	New
52	70	EWT TRANSFORMER SENDIRIAN BERHAD	119	18	15	Old
53	71	EP ENGINEERING SENDIRIAN BERHAD	116	2	1	Old
54	72	LUBRICLEUM SENDIRIAN BERHAD	115	1	8	Old
55	73	ESSTAR VISION SENDIRIAN BERHAD	115	2	15	Old
56	74	HEMAT MARINE SENDIRIAN BERHAD	114	-1	1	Old
57	75	BELATI OILFIELD SENDIRIAN BERHAD	112	-1	-	Old
58	76	SYNERGY MARINE (M) SENDIRIAN BERHAD	109	9	7	Old
59 60	77 78	AKER ENGINEERING MALAYSIA SENDIRIAN BERHAD ORKIM MARINE SENDIRIAN BERHAD	109	-18 6	39 49	Old
NA	79	PETRO-PIPE (SABAH) SENDIRIAN BERHAD	109	5	64	New
NA NA	80	HHA ASSOCIATES SENDIRIAN BERHAD	107	17	31	New
NA	81	AWH INTERNATIONAL LOGISTICS SENDIRIAN BERHAD	107	15	11	New
NA	82	EXPRO OILFIELD SERVICES SENDIRIAN BERHAD	105	12	50	New
NA	83	FPSO TECH SENDIRIAN BERHAD	105	13	43	New
NA	84	LABUAN SHIPYARD & ENGINEERING SENDIRIAN BERHAD	103	7	55	New
61	85	TRACTORS PETROLEUM SERVICES SENDIRIAN BERHAD	102	18	6	Old
62	86	ALKAHFI LESTARI OIL & GAS SENDIRIAN BERHAD	102	1	26	Old
63	87	ENRA KIMIA SENDIRIAN BERHAD	101	10	19	Old
NA	88	INTEGRATED LOGISTICS SOLUTIONS SENDIRIAN BERHAD	101	2	180	New
64	89	BWS ENGINEERING SENDIRIAN BERHAD	101	-0.4	13	Old
NA	90	WEHAYA SENDIRIAN BERHAD	101	3	2	New
65	91	SUMISAUJANA SENDIRIAN BERHAD	99	20	20	Old
66	92	VELOSI (M) SENDIRIAN BERHAD	99	1	5	Old
67	93 94	OCEANCARE CORPORATION SENDIRIAN BERHAD	98	7 2	7 2	Old
69	95	SIME DARBY ENERGY SOLUTIONS SENDIRIAN BERHAD CEKAP TECHNICAL SERVICES SENDIRIAN BERHAD	97	1	1	Old
70	96	BUREAU VERITAS (M) SENDIRIAN BERHAD	93	7	3	Old
71	97	TMM ENGINEERING SERVICES SENDIRIAN BERHAD	93	25	18	Old
72	98	BINTANG SAMUDERA SENDIRIAN BERHAD	92	52	104	Old
73	99	MTC ENGINEERING SENDIRIAN BERHAD	91	13	189	Old
NA	100	DUTA MARINE SENDIRIAN BERHAD	88	9	59	New
74	101	SBN INDUSTRIES SENDIRIAN BERHAD	87	-0.2	10	Old
75	102	ARMADA BAIDURI SENDIRIAN BERHAD	87	0.3	2	Old
76	103	ICE PETROLEUM ENGINEERING SENDIRIAN BERHAD	87	-22	7	Old
77	104	RESERVOIR LINK SENDIRIAN BERHAD	86	18	29	Old
78	105	PIONEER ENGINEERING SENDIRIAN BERHAD	86	0.5	33	Old
79	106	UMW INDUSTRIAL POWER SERVICES SENDIRIAN BERHAD	86	5	3	Old
80	107	U B F MAINTENANCE SENDIRIAN BERHAD	85		4	Old
81	108	INDKOM ENGINEERING SENDIRIAN BERHAD MULTIMODAL FREIGHT SENDIRIAN BERHAD	85	21 5	11 44	Old
NA 82	109	WZS MISI SETIA SENDIRIAN BERHAD	82 81	2	13	New
83	110	ENPROSERVE (M) SENDIRIAN BERHAD	80	4	26	Old
84	111	MAN ENERGY SOLUTIONS MALAYSIA ES SENDIRIAN BERHAD	80	14	3	Old
NA		RWNA ENGINEERING SENDIRIAN BERHAD	80	5	57	New
85	112	REDTECH OFFSHORE SENDIRIAN BERHAD	80	2	0.2	Old
86	113	KEYFIELD OFFSHORE SENDIRIAN BERHAD	75	18	87	Old
87	114	PERISAI PETROLEUM TEKNOLOGI BERHAD	74	-662	290	Old
88	115	TRISYSTEMS ENGINEERING SENDIRIAN BERHAD	74	13	17	Old
89	116	MICROSITE ENTERPRISE SENDIRIAN BERHAD	74	-2	15	Old
90	117	OCEAN VANTAGE HOLDINGS BERHAD	74	10	8	Old
91	118	DIMENSION BID (M) SENDIRIAN BERHAD	74	-13	23	Old
92	119	AWORLDTEC ENGINEERING SENDIRIAN BERHAD	74	1	2	Old
93	120	BINTANG SUBSEA VENTURES (M) SENDIRIAN BERHAD	73	1	2	Old
94	121	PENAGA DRESSER SENDIRIAN BERHAD	72	21	5	Old
95	122	AIR ENERGY CONSULTING (MALAYSIA) SENDIRIAN BERHAD	70	2	0.1	Old
96 97	123	SWIS RESOURCES SENDIRIAN BERHAD	70	0.2	20	Old
98	124 125	MIR VALVE SENDIRIAN BERHAD HYPERWAVE SYSTEMS ENGINEERING SENDIRIAN BERHAD	66	0.2	6 20	Old
98	125	MATCO (MALAYSIA) SENDIRIAN BERHAD	65	11	19	Old
100	127	DNV GL MALAYSIA SENDIRIAN BERHAD	64	9	0.4	Old
		GERBANG TIMUR JAYA CONSTRUCTION SENDIRIAN BERHAD	64	0.1	1	New
NA				1 0.1		-
NA NA		R.M. LEOPAD SENDIRIAN BERHAD	64	-23	19	New
			64 54	-23 -26	19 161	New New
NA		R.M. LEOPAD SENDIRIAN BERHAD	-			





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