

OGSE 100

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TOP 100
OGSE COMPANIES
IN MALAYSIA
FY2022

Featuring
Bursa Malaysia PLCT

BURSA
MALAYSIA 

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Cover Rationale



The cover design of MPRC's OGSE100 report adopts an illustrative approach, depicting oil and gas structures alongside a cluster of solar panels. This visual representation symbolises the evolving energy landscape and the opportunities -- and challenges -- that lie ahead.

This edition of OGSE100 also features the new logo for the publication, showing the forward-leaning typeface which symbolises the industry's progress as well as companies' race to the top of the OGSE100 ranking. The predominant use of blue hues is a nod to MPRC's corporate colour.

"Navigating New Horizons in the Energy Transition" serves as the report's overarching theme, encapsulating the landscape of the OGSE industry in 2022. Here, companies grapple with the urgent need for cost optimisation and the task of refining their business models to align with the energy transition.

About MPRC

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

MPRC also provides policy recommendations to the Government on the oil & gas and energy industries.

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 industry 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 emissions as early as 2050 as outlined by the Mid-Term Review, 12th Malaysia Plan, the National Energy Policy 2022-2040 (DTN), the National Energy Transition Roadmap (NETR) as well as the United Nations Sustainable Development Goals (UNSDG).

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

About OGSE100

This report provides information on the consolidated industry performance of OGSE companies registered in Malaysia based on their revenue, profit before tax (PBT), PBT margin and total non-current asset (TNCA). The companies were then ranked according to the top 100 by revenue.

The purpose of OGSE100 is to show the size and performance of Malaysia's 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 activities in Malaysia to those in the Southeast Asia (SEA) region using a small sample of publicly 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. This will enable mapping of the industry's growth and assist with planning of its continued development in line with national aspirations.

2,286

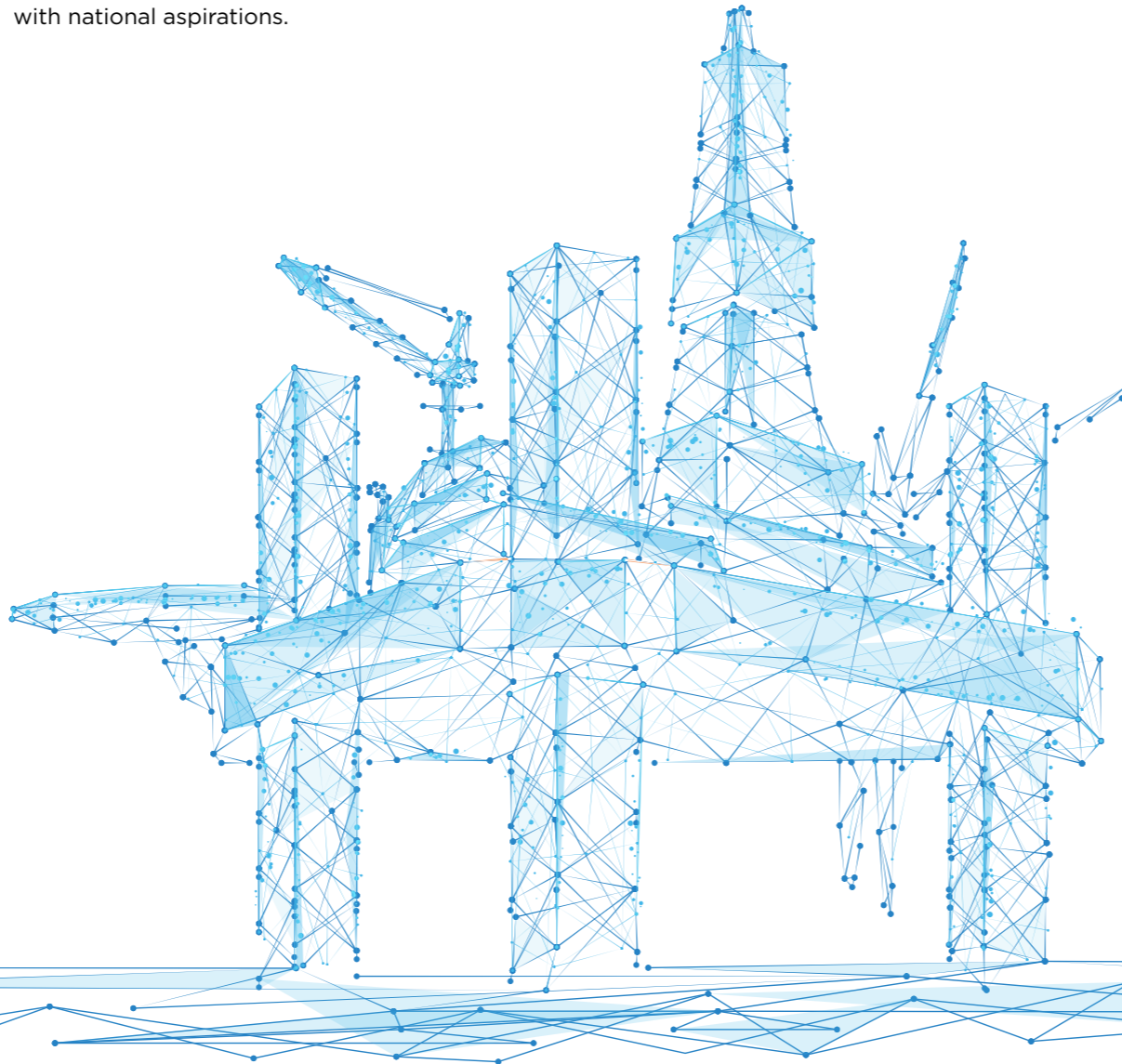
FINAL INDUSTRY POPULATION OF OGSE COMPANIES

1,945

SMALL AND MEDIUM-SIZED ENTERPRISES (SMEs)

241

NON-OGSE100 MID-TIER COMPANIES (MTCs)



Our Approach

This edition of OGSE100 covers financial results for the financial year ended 2022 (FY2022).

Our analyses for the OGSE100 are based on companies licensed in Malaysia whose primary business is related to the OGSE industry. As most of Malaysia's OGSE companies are not publicly listed (see information on Malaysia OGSE industry population in the subsequent sections), MPRC uses data available as of November 2023 from the Corporate and Business Information Data (CBID) of the Companies Commissions of Malaysia (SSM) as our primary data source to analyse the financial data of these privately-held non-public listed companies. However, the financial data available from SSM typically lag by a period of 1 year, accounting for the historical tendency of unlisted OGSE companies to defer the submission of annual reports – a trend consistently observed in our data collection practices. Through this practice, the purposeful 1-year delay enables MPRC to ensure the consolidation of a comprehensive data set for Malaysia's OGSE industry.

To avoid duplication of data, the OGSE100 also includes publicly listed companies (PLCs) on Bursa Malaysia and their associates. To ensure comparative analysis with unlisted OGSE companies, the evaluation of PLCs is also based on their consolidated financial results for FY2022.

Our analyses for FY2022 started with an initial dataset of 4,741 OGSE companies that had acquired Standardised Work & Equipment Categories (SWEC) licences issued by PETRONAS. The dataset was refined by applying our methodology (see pages 58-59), resulting in a final industry population of 2,286 OGSE companies. These companies were then further categorised into the 100 OGSE100 companies, 241 non-OGSE100 Mid-Tier Companies (MTCs) and 1,945 Small and Medium-sized Enterprises (SMEs) in accordance with the definition outlined by SME Corporation Malaysia.¹

Among the total of 241 MTCs, 12 companies were reclassified as MTCs for FY2022 from SMEs in the previous year, whereas 23 companies which had grown into MTCs in previous years reverted to SMEs. This reclassification was based on their financial results for 2 consecutive years, generally reporting revenues exceeding RM20 million and capped at RM500 million for MTCs and below RM20 million for SMEs. The shift in classification for the MTCs potentially reflects a recognition of sustained growth among these companies, particularly in the MTC category.

¹ SME definition: Sales < RM50 mil (Manufacturing) OR Sales < RM20 mil (Services and Other sectors)

Message from PRESIDENT/CEO



In the Name of Allah, the Most Gracious, the Most Merciful

Dear Valued Stakeholders,

It is with great pleasure that we share OGSE100 for the 2022 fiscal year, representing MPRC's 9th annual edition of this publication. We have continued to strive to deliver insights into the developments in Malaysia's OGSE industry to help paint a picture of its performance, even as the oil and gas and energy industries, which OGSE companies serve, evolves with new opportunities and challenges.

The past few years have remained volatile for the OGSE industry, as the COVID-19 pandemic created new challenges to the fragile recovery of the 2014/2015 oil price crash. The acceleration of the energy transition has presented additional hurdles to the industry. Nonetheless, there is no doubt that the aspiration for a low carbon future also creates new opportunities for growth and value creation for Malaysian OGSE companies, with a surge in new upstream projects within Malaysia and the broader Southeast Asian region, driven by enhanced investment flows and higher energy requirements.

MOHD YAZID JA'AFAR
PRESIDENT/CEO



FY2022 Performance Highlights

In FY2022, the Malaysian OGSE industry demonstrated commendable resilience and stability, recording a total revenue of RM72.7 billion. This marked the second consecutive year of robust growth, with a 7.0% year-on-year (y-o-y) increase compared to the RM67.9 billion recorded in 2021. A breakdown of the revenue composition revealed that OGSE100 contributed 73.5%, Non-OGSE100 Mid-Tier Companies (MTC) constituted 13.8%, and Small and Medium Enterprises (SMEs) accounted for 12.7% of the industry's overall revenue.

However, despite the higher revenue, the industry's profitability in FY2021 turned to a loss in FY2022, weighed down mainly by impairments made by several OGSE100 companies, in addition to lower margins. Excluding the impairments, the industry and OGSE100 would have made marginal profits in FY2022.

The performance of the industry and the OGSE100 in FY2022, therefore suggests further room for improvement in business models and cost optimisation, putting continued pressure on the OGSE industry even as it grapples with the evolving energy landscape which has forced the oil & gas and energy industries to re-look their ways of doing business.

Energy Transition Overview: Commitment to Sustainability

The significance of the energy transition on Malaysia's OGSE industry is underscored by the Malaysian government's recent policies: the National Energy Policy 2022-2040 (Dasar Tenaga Negara - DTN) launched in 2022 and the MADANI Economy Framework, National Energy Transition Roadmap (NETR), Hydrogen Economy and Technology Roadmap (HETR) and New Industrial Master Plan 2030 (NIMP 2030) launched in 2023. During the year, the government also introduced the Mid-Term Review of the 12th Malaysia Plan, which anchors Malaysia's economic development and reiterates the government's overall low-carbon goals.

The 28th United Nations Climate Change Conference (COP28) held in December 2023 also continued to emphasise a greener future and reduced methane emissions, driving the push towards renewable energy, particularly in developing regions.

The transition notwithstanding, we understand that fossil fuels will not be phased out entirely as we need to ensure energy security. Gas plays an important role as a transition fuel, underscoring the continued importance and relevance of oil and gas, albeit from cleaner sources. This, in turn, emphasises the continued role of the oil and gas supply chain made up of OGSE companies.

Nonetheless, with domestic policy and global standards geared towards sustainability, coupled with customer

expectations, regulatory requirements and pressure from investors on environmental factors, the OGSE industry must also face up to stricter sustainability requirements. To help the industry address these requirements, MPRC will introduce the National OGSE Sustainability Roadmap (NOS-R) in 2024, to be followed by the National OGSE Sustainability Framework (NOS-F), providing a strategic pathway for OGSE companies to effectively integrate sustainable practices into their businesses.

Looking Ahead: A Vision for a Competitive OGSE Industry

As we move forward, the OGSE industry's trajectory in 2024 and beyond hinges on our collective ability to navigate challenges, embrace sustainability and capitalise on emerging opportunities. For example, trade agreements such as the Regional Comprehensive Economic Partnership (RCEP), Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and Indo-Pacific Economic Framework (IPEF) present both avenues for growth and increased competition. The impact of free trade agreements, coupled with the evolving energy landscape, demands agility and innovation from OGSE companies.

In confronting this environment, I would like to emphasise MPRC's role as a trusted partner dedicated to fostering collaboration among OGSE industry stakeholders. We understand the importance of addressing today's market dynamics to maintain a robust and thriving ecosystem. In line with this, in 2024 we will embark on a Mid-Term Review of the National OGSE Industry Blueprint 2021-2030 (OGSE Blueprint). This review is crucial for ensuring the OGSE Blueprint's continued relevance and alignment with new policies and industry trends, while also integrating sustainability and energy transition. Our vision remains to develop a robust, resilient and globally-competitive Malaysian OGSE industry which contributes to the sustainable development of national priorities; and our pathway is clear: to navigate the changing tides collaboratively, reinforcing the OGSE industry's strength and market presence.

In closing, I wish to commend the OGSE community for their extraordinary commitment and resilience in these demanding times. Our continued collaboration is key to redefining the energy landscape, ensuring that we are not just adapting to change, but shaping our own future of long-term stability, prosperity and sustainability.

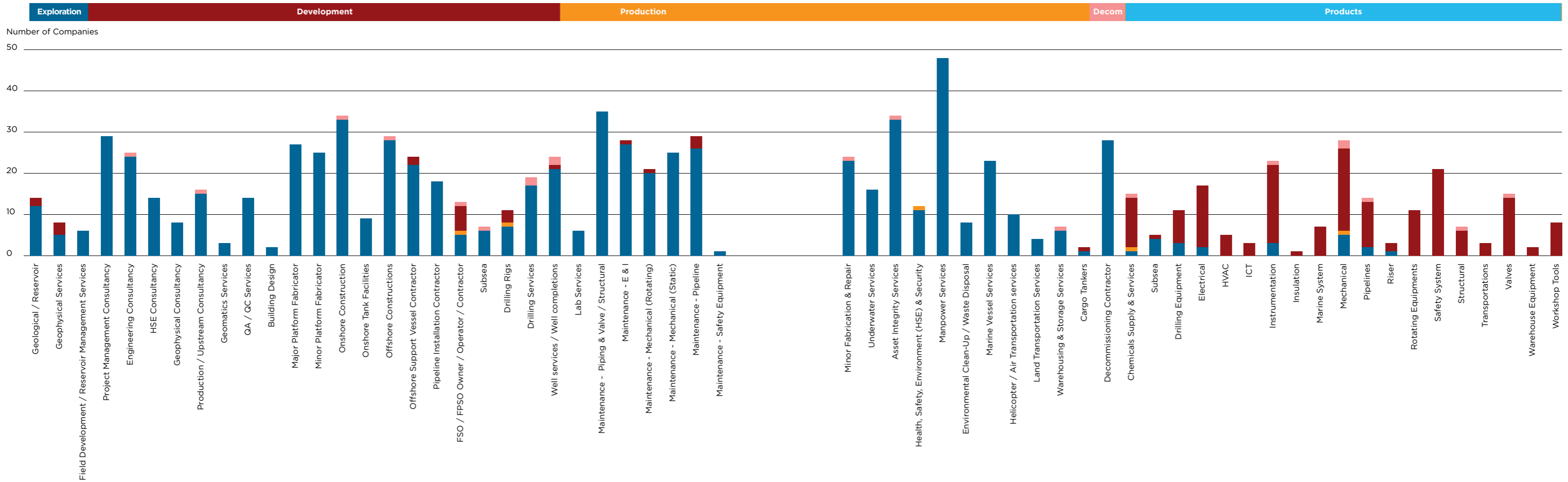
MOHD YAZID JA'AFAR
PRESIDENT/CEO

OGSE Rankings & Categories



OGSE Rankings & Categories (CONT'D)

Figure 1: OGSE Operating Segments



OGSE100 Services Modus Operandi & Products Modus Operandi

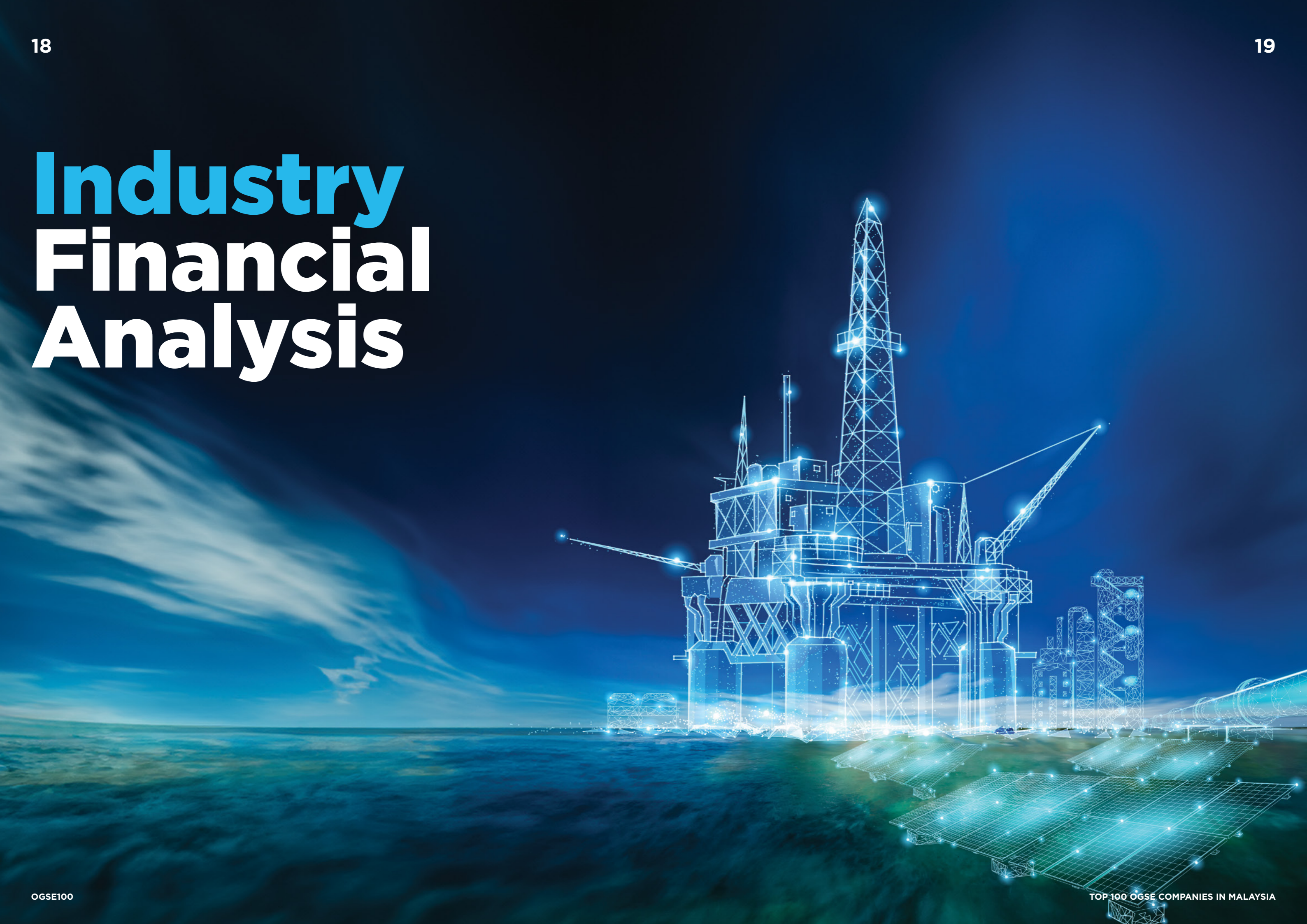
Group	Services Modus Operandi	Products Modus Operandi
●	Self-Operated, Rig Owner-Operator, Vessel Owner-Operator	Manufacturer, Fabricator
●	Rig Operator, Vessel Operator	Assembler, Chemical Blender, Packager, System Integrator
●	Agent	Dealer, Buying Arm
●	Others	Others

The OGSE value chain is categorised into 4 segments: Exploration, Development, Production and Decommissioning, each corresponding with the various phases of a project's life cycle. The segments are further classified into selected 42 service sub-segments and 19 product sub-segments based on PETRONAS' SWEC. The OGSE100 companies were then organised according to their corresponding operational sub-segments, as illustrated in Figure 1.

In FY2022, the OGSE100 companies continued to operate across all categories of the oil and gas services and products value chain, consistently exhibiting a higher level of value-added activities within the services categories. The degree of value-added activities of these companies is based on the logical grouping of their respective mode of operations, as shown in the table above.



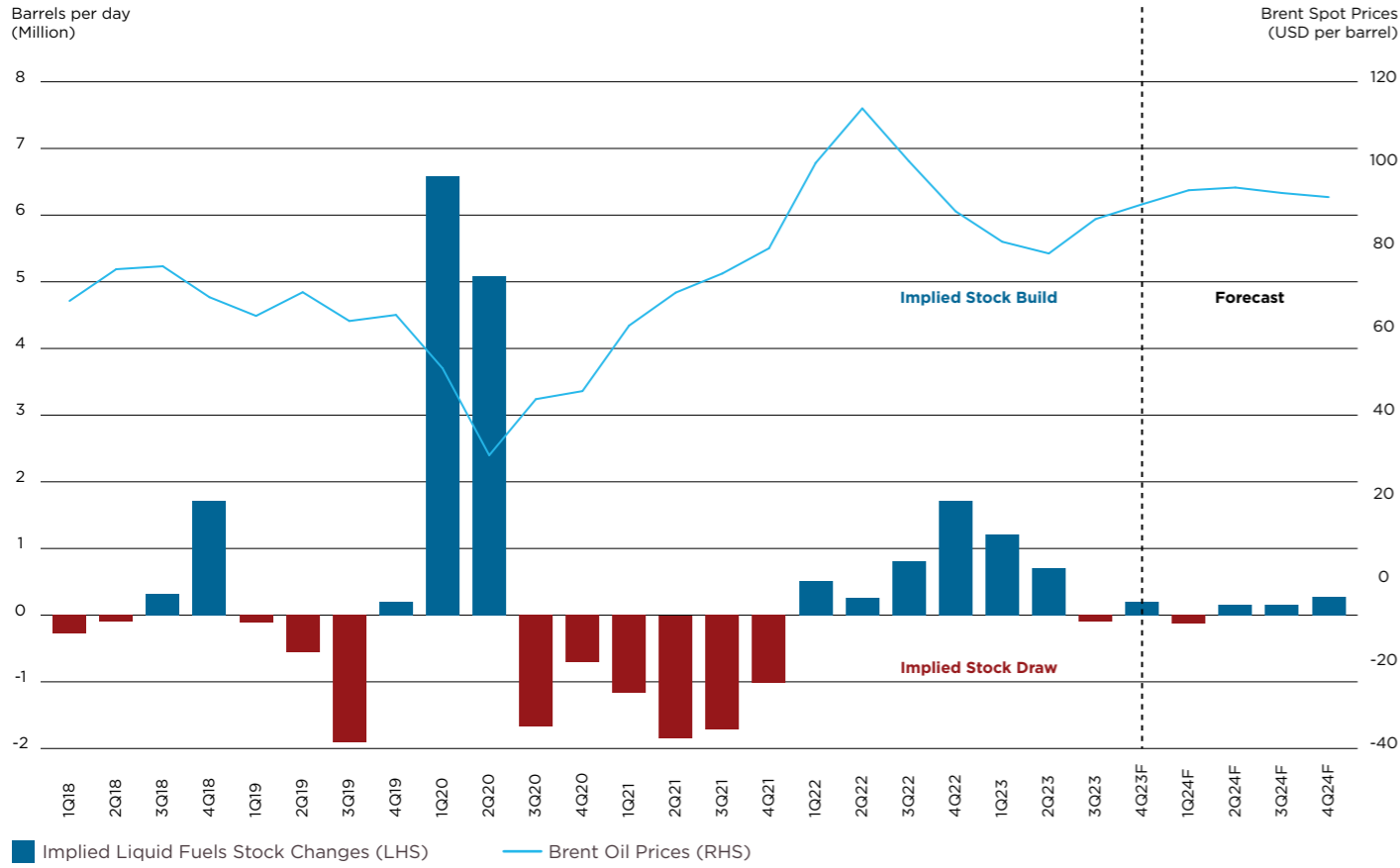
Industry Financial Analysis



Industry Financial Analysis

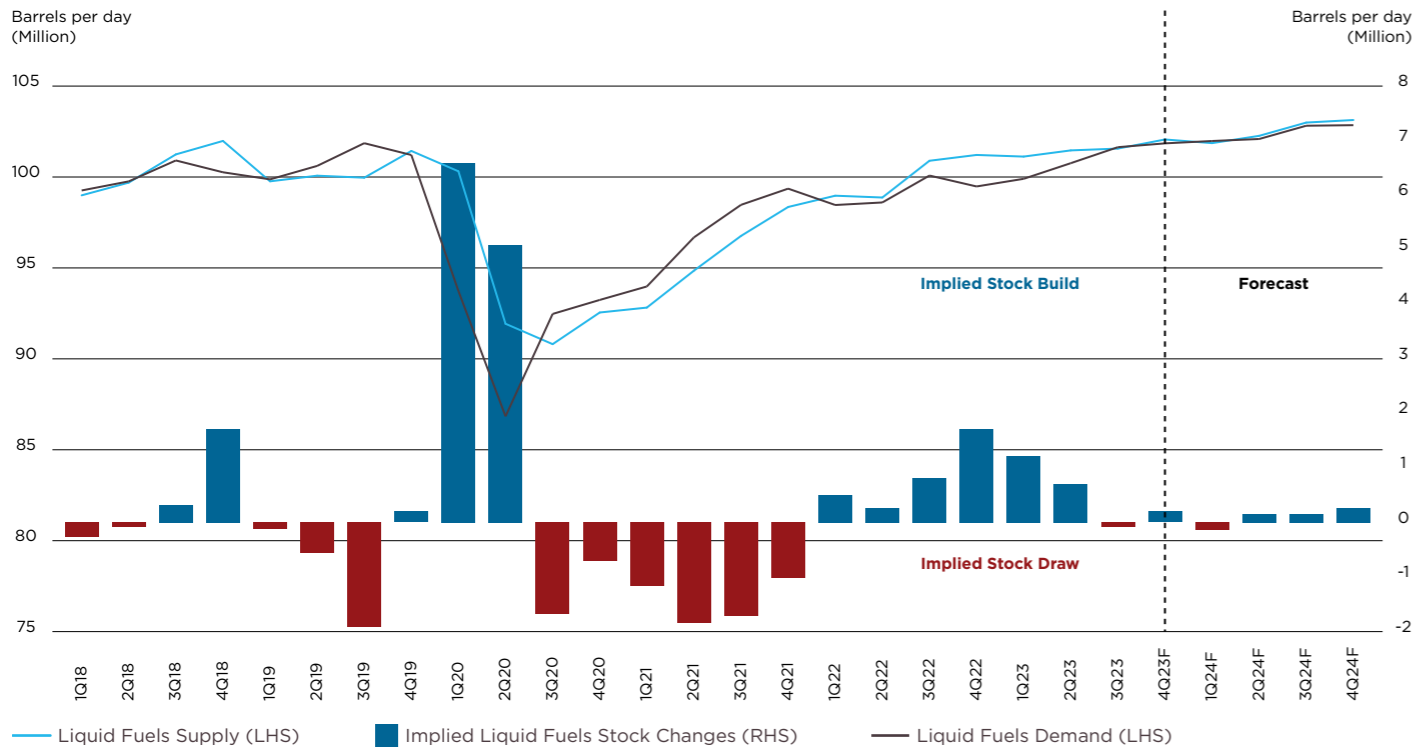
1. Upstream Oil & Gas Industry (The Movement)

Figure 2: Global Liquid Fuels Balances and Brent Spot Prices



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2023

Figure 3: Global Liquid Fuels Supply and Demand Balances



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2023

Annual average Brent Crude oil prices increased significantly by 46.6% to USD100.8 per barrel (/bbl) in 2022 from USD70.7/bbl in 2021. During the year, the Brent price reached its highest in 5 years at a monthly average of USD122.7/bbl in June 2022 and registered its lowest point for the year in December 2022, settling at an average of USD80.9/bbl.

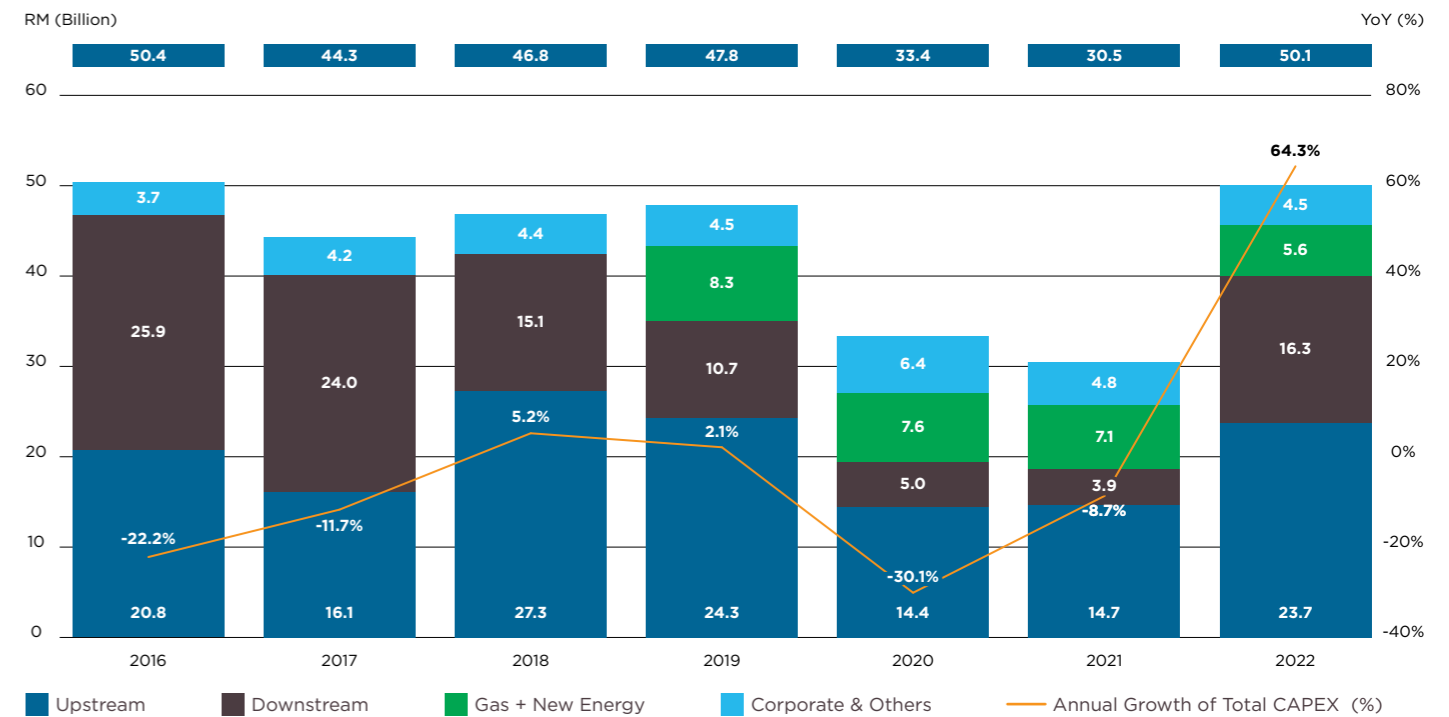
Oil prices held stronger in the first half of 2022 due to mounting concerns on future crude oil supply following the full-scale invasion of Ukraine by Russia in February 2022, combined with low global crude oil inventories. However, as the year went on, there was a gradual

decline in crude oil prices and weakened global oil demand as global economies became vigilant of an impending recession. China's Zero-COVID measures had also led to lower global petroleum demand, contributing to the overall decrease in the demand for crude oil.

Amid these market dynamics, crude oil supply increased in the second half of the year resulting from the U.S. and international Strategic Petroleum Reserve release programmes, which put downward pressure on prices.² On the final trading day of 2022, the price of Brent crude closed at USD82.8/bbl.

2. PETRONAS' CAPEX

Figure 4: PETRONAS CAPEX Trend



Source: PETRONAS Integrated Report 2022

PETRONAS spent RM50.1 billion in capital expenditure (Capex) in 2022, 64.3% higher from the previous year's RM30.5 billion. The increase accounted for 83.5% of PETRONAS' initially projected 2022 Capex of RM60.0 billion disclosed earlier in the year. Notably, the upstream and downstream segments made up a significant share of Capex, with RM23.7 billion (47.3%) and RM16.3 billion (32.5%) spent, respectively.

The higher Capex in 2022 was a strategic move to fortify the company for the resumption of business activities, previously dampened by COVID-19-induced movement restrictions. Moreover, a portion of the budget was spent for ventures in clean energy and non-hydrocarbon sectors.

Of the total Capex of RM50.1 billion, a substantial RM31.5 billion (62.9%) was spent on international investments,

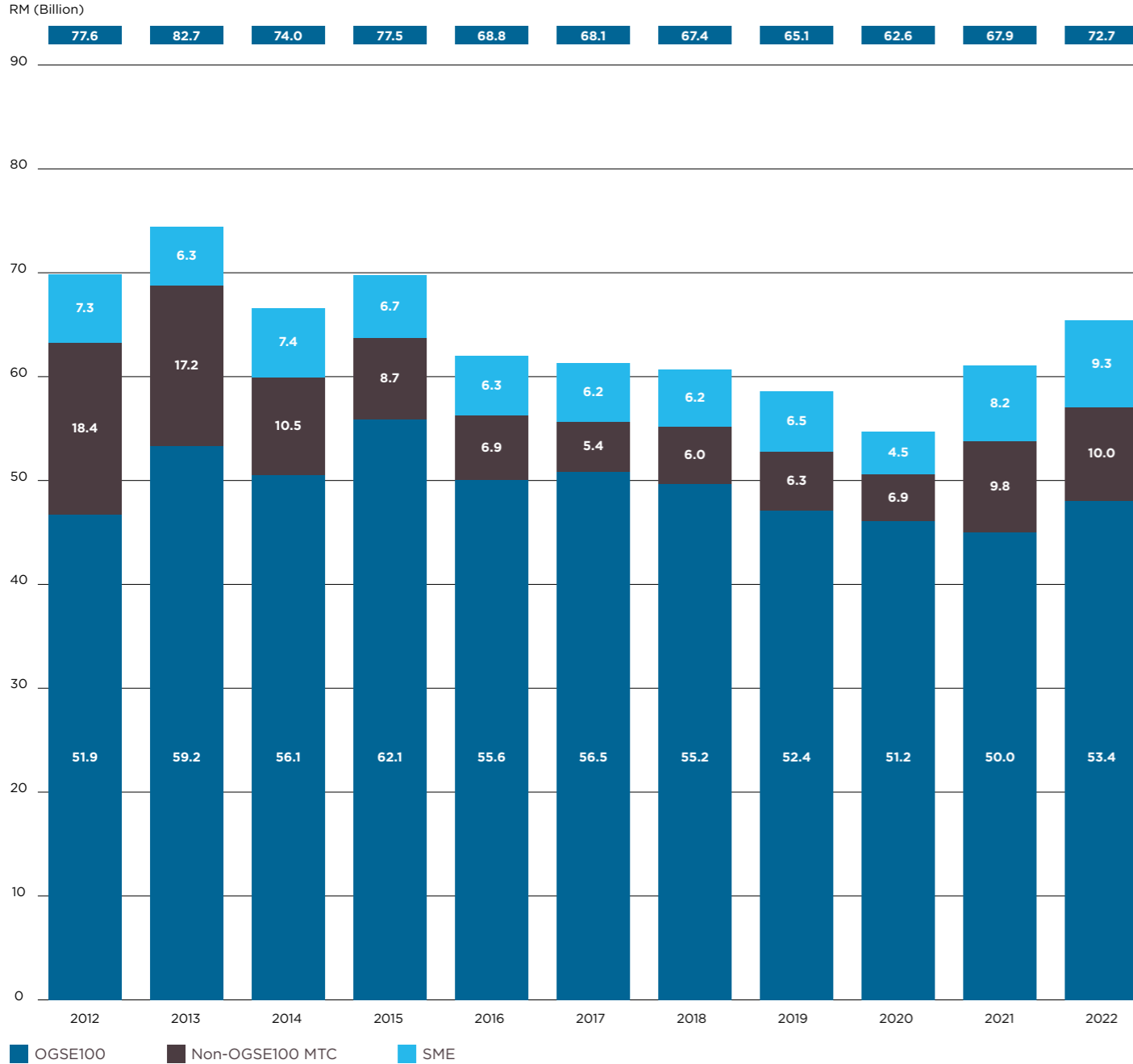
while RM18.6 billion was directed towards domestic ventures. International investments surged 24.0% and domestic investments doubled, representing significant growth from 2021. The upstream segment recorded the most pronounced increase, with international and domestic spending reaching RM10.5 billion and RM13.2 billion, respectively. Key destinations for international portfolio investments include Brazil, Canada, Iraq and Argentina.

However, investments in the Gas and New Energy and Corporate and Other segments, which together accounted for the remaining 20.2% of Capex, contracted by 21.1% and 6.3%, respectively, from 2021.

² U.S. Energy Information Administration (EIA)

3. Malaysia's OGSE Industry in Review

Figure 5: Industry Revenue



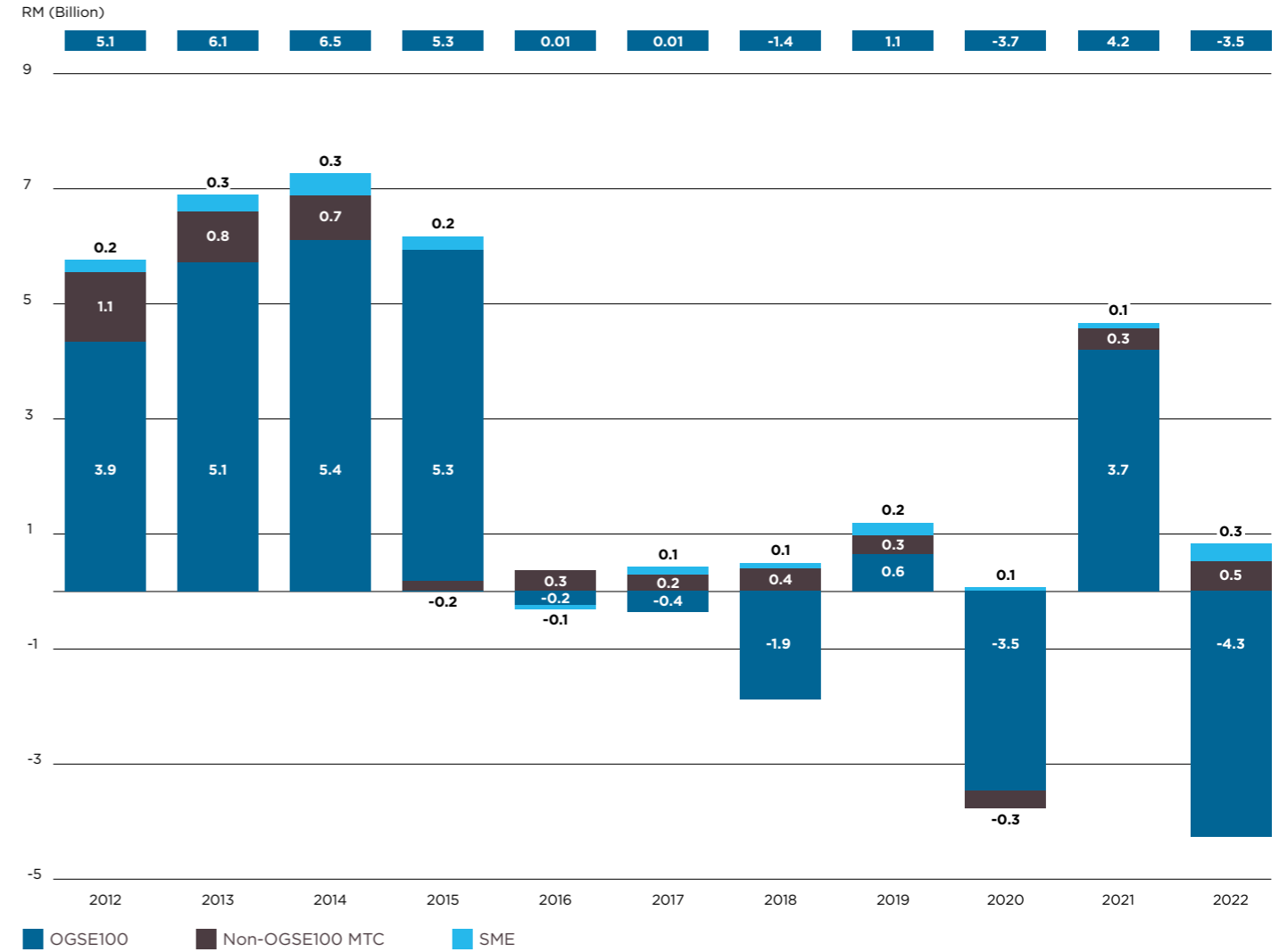
Source: SSM and OGSE Companies' Annual Reports

In FY2022, Malaysian OGSE industry recorded total revenue of RM72.7 billion. This marked its second consecutive year of stable revenue growth, increasing 7% y-o-y, from RM67.9 billion in 2021. A breakdown of the total revenue reveals that OGSE100 contributed 73.5%, non-OGSE100 MTCs constituted 13.8% and SMEs accounted for 12.7% of the overall industry revenue. Importantly, all categories experienced positive financial trajectories in FY2022. OGSE100 exhibited a notable 6.9% growth, non-OGSE100 MTCs recorded a 2.5% increase, and SMEs demonstrated 13.4% growth.

Delving deeper into the OGSE100 category, the segment was represented by 24 PLCs, accounting for 69.9%

(RM37.3 billion) of the OGSE100 revenue. Notably, the drilling segment of most players were positive, driven by higher average rig utilisation rate. Financial results from several PLCs indicated an ongoing upward momentum in exploration and development projects, with increased evaluation and sanctioning activities in FY2022. This positive trend was further supported by the award of several new contracts within the Malaysia OGSE industry. According to the PETRONAS Activity Outlook 2023-2025, PETRONAS successfully aligned with its planned drilling activities for 2022, targeting 21 rigs. The actual rig count reached 20 rigs, surpassing the 16 rigs recorded in 2021. This increase can be attributed to the recovery in oil prices and the easing of COVID-19 SOPs/directives.

Figure 6: Industry Profit Before Tax



Source: SSM and OGSE Companies' Annual Reports

The OGSE industry recorded a Loss Before Tax (LBT) of RM3.5 billion in FY2022, reflecting a significant -185.0% y-o-y decline from the PBT of RM4.2 billion in FY2021. Notably, the industry's LBT of RM3.5 billion includes impairment losses from several PLCs within the OGSE100, amounting to RM5.2 billion.

Excluding the impairment loss, the industry would have registered a PBT of RM1.7 billion, with OGSE100 reporting a PBT of RM974.4 million.

A closer look at the categories reveals OGSE100 as the primary contributor of the industry's losses in FY2022, recording LBT of RM4.3 billion - a stark plunge of -214.2% in profitability from FY2021. In contrast, non-OGSE100 MTCs demonstrated a positive trajectory, achieving a PBT of RM466.2 million, reflecting a robust y-o-y growth of 43.4%. Similarly, SMEs reported a PBT of RM263.9 million, representing a significant 179.4% y-o-y growth.

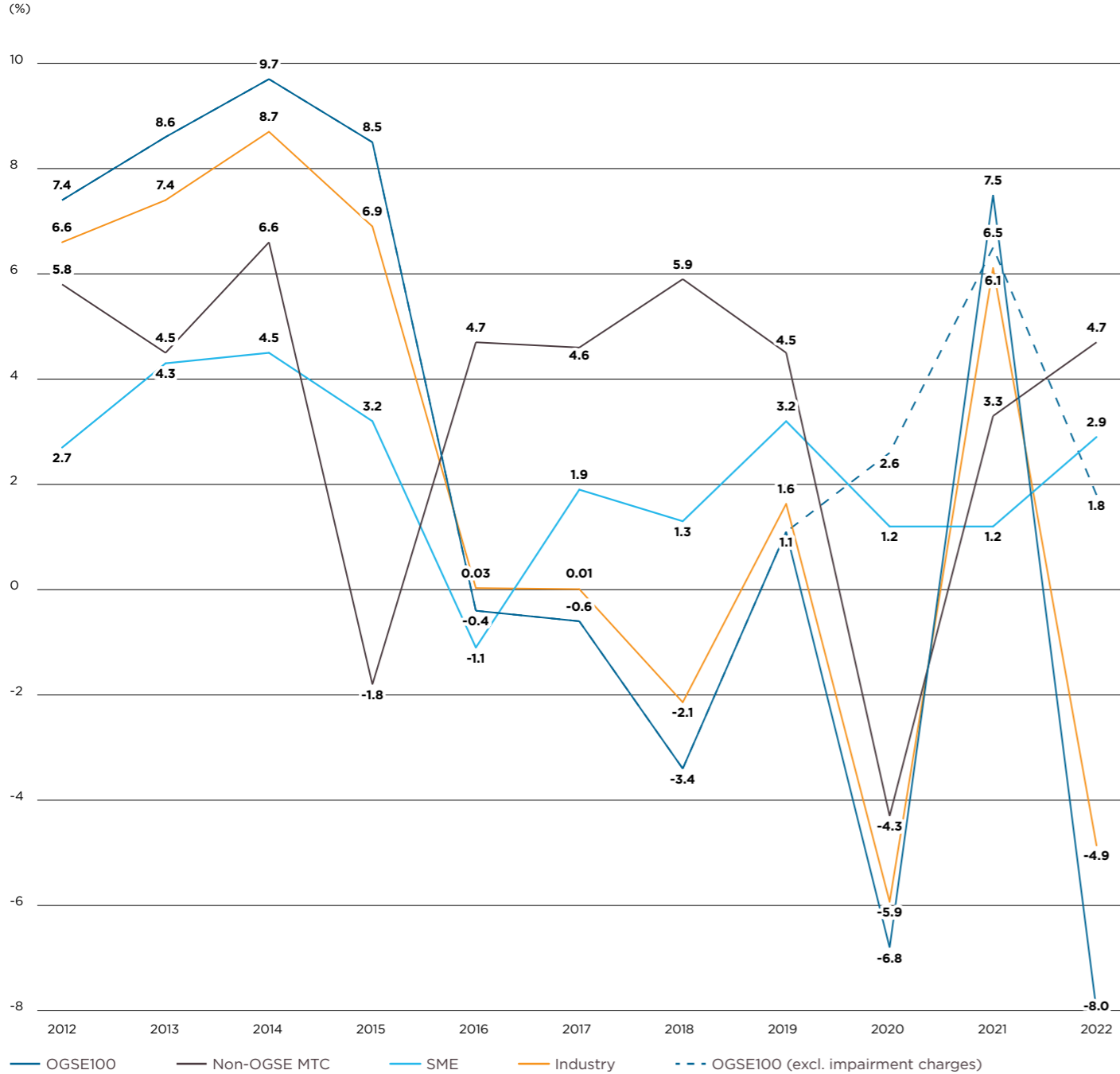
Of the 24 PLCs in the OGSE100, 6 incurred losses amounting to an overall LBT of RM10.2 billion. Sapura Energy Bhd, a significant OGSE player, had a total impairment loss of RM5.6 billion. Without these charges,

the group's LBT would have been reduced to RM3.3 billion. Importantly, for FY2022, LBT for Sapura Energy was from legacy projects in Engineering and Construction (E&C) and Operations and Maintenance (O&M). These losses were exacerbated by factors such as COVID-19-related costs, late delivery penalties, cost overruns and project de-scoping.

Apart from impairments, the OGSE100's performance in FY2022 was also impacted by factors such as lingering pandemic effects, fluctuating costs, unanticipated changes in scope of work and delays due to bad weather. Some companies also saw lower activity in the Offshore Installation and Construction (OIC) due to the pandemic and oil crisis, with some customers moving to more lucrative regions.

While the performance of the OGSE100 weighed down total industry results in FY2022, other categories did show more resilience. Non-OGSE100 MTCs demonstrated a positive trajectory, achieving a PBT of RM466.2 million, reflecting a robust y-o-y growth of 43.4%. Similarly, SMEs reported a PBT of RM263.9 million, representing a significant 179.4% y-o-y growth.

Figure 7: PBT Margin (%)

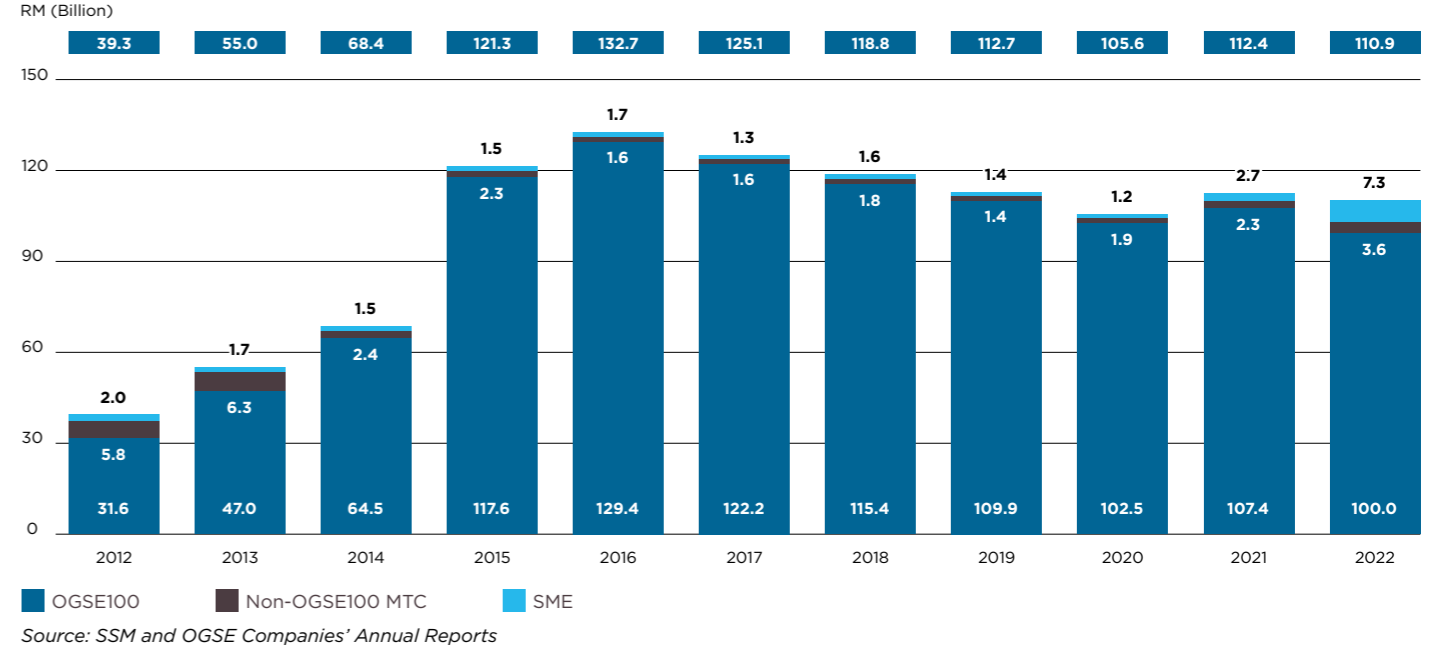


Source: OGSE Companies' Annual Report for FY2022

In FY2022, the OGSE industry recorded a negative growth margin of -4.9% against the PBT margin of 6.1% observed a year earlier. Excluding the impairment loss within the OGSE100, the industry would have recorded a PBT margin of 2.3%, while the OGSE100 segment itself would have registered a PBT margin of 1.8%. However, other segments recorded a higher PBT margin, with non-OGSE100 MTCs outperforming all segments with a PBT margin of 4.7% and SMEs recording a 2.9% PBT margin for the year under review. Analysis of financial results from various PLCs revealed that despite improved revenue in the upstream segment, overall PBT margins were thinning. As noted in their financial reports, this trend was attributed to an escalation in operating costs and operational overheads.



Figure 8: Total Non-Current Assets (RM Billion)

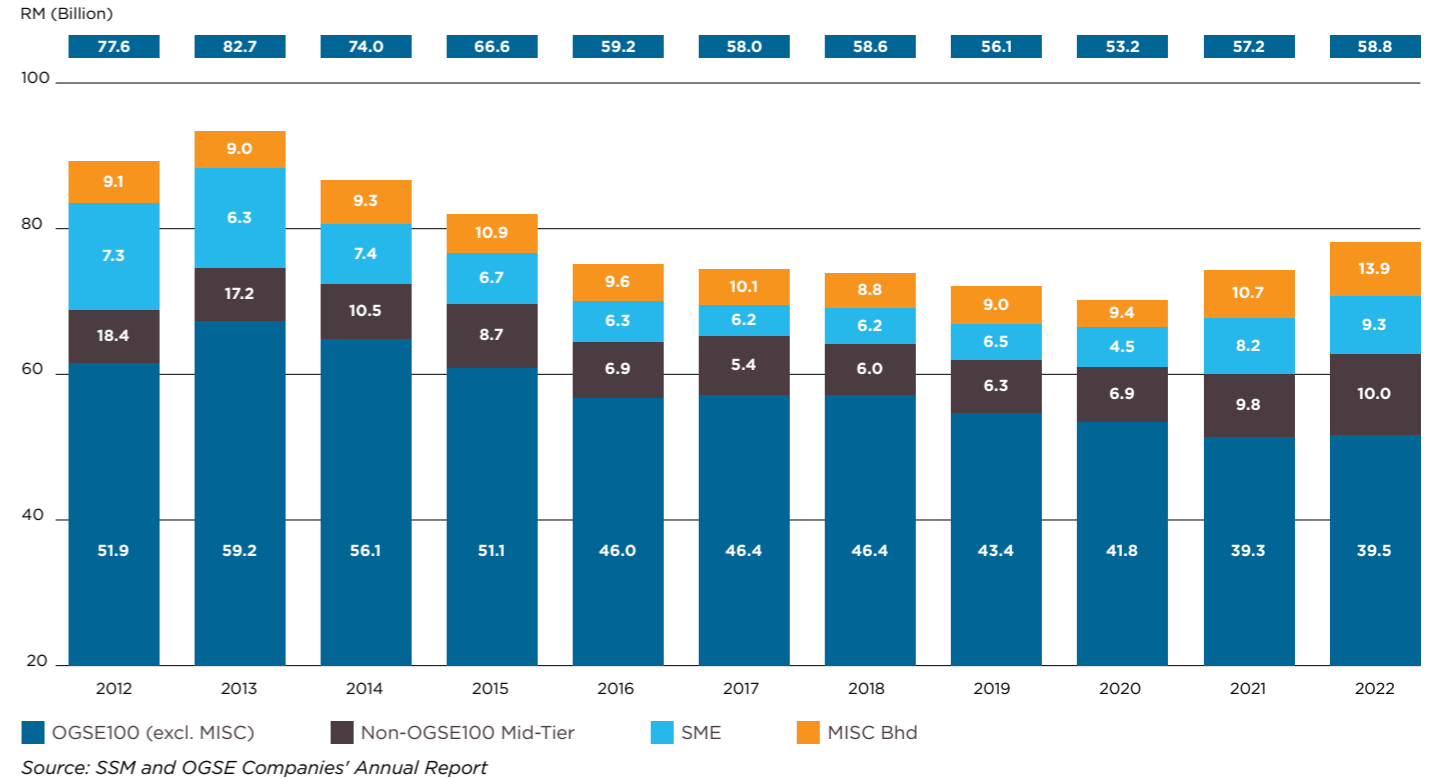


The industry's total non-current assets decreased to approximately RM110.9 billion from RM112.4 billion, equivalent to a y-o-y decline of -2.0% in FY2022. Of the

RM110.9 billion total non-current assets, OGSE100 companies constituted approximately 95.5%, equivalent to around RM100 billion.

4. Malaysia's OGSE Sector in Review, Without MISC Bhd

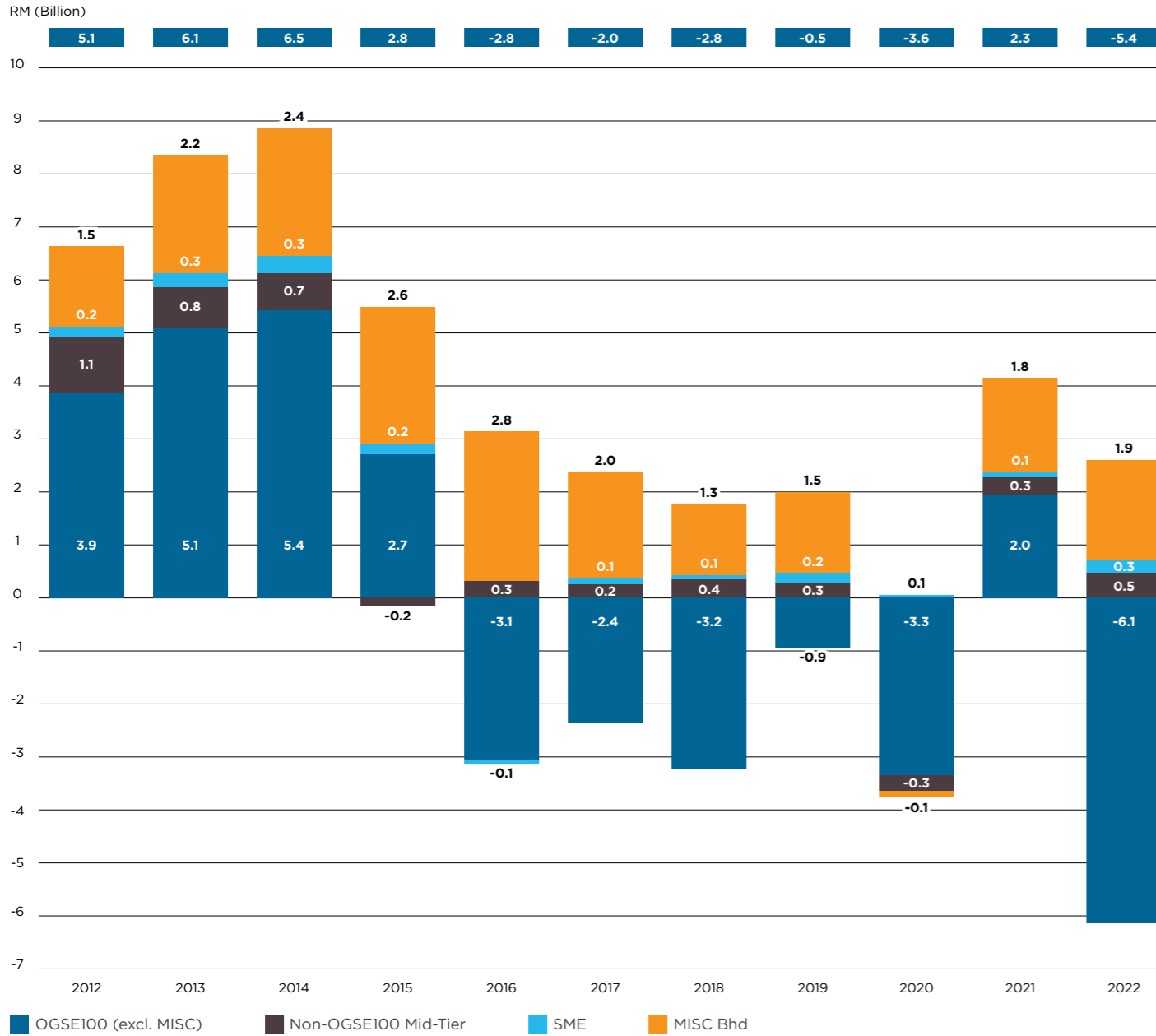
Figure 9: Industry Revenue Without MISC (RM Billion)



We continued to analyse the performance of OGSE100 without MISC Bhd due to its sustained status as a large and significant contributor to the industry, particularly in the context of the OGSE100's performance. The exclusion aims to ensure a more equitable and accurate

representation of the local OGSE industry's performance. During the year, industry revenue without MISC grew by 2.8% y-o-y (RM57.2 billion to RM58.8 billion). Meanwhile, OGSE100 revenue without MISC increased marginally by 0.6% (RM39.3 billion to RM39.5 billion).

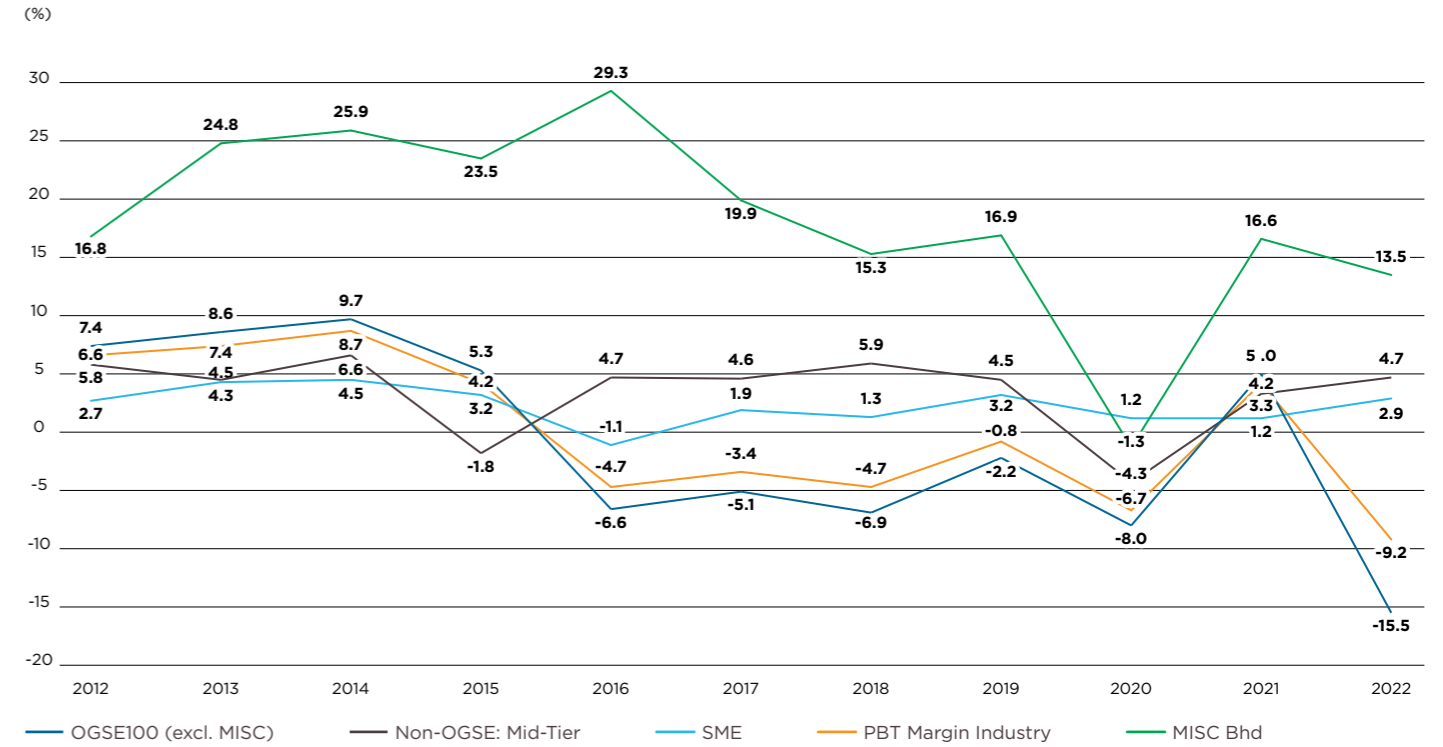
Figure 10: Industry Profit Before Tax Without MISC



Industry PBT without MISC recorded a significant y-o-y plunge of -413.5%, translating into a RM6.1 billion loss from a RM2.0 billion profit in FY2021. Taking into account a RM5.8 billion impairment loss (after excluding the impairment gain from MISC, which amounted to RM566.7 million), the industry PBT without MISC came in at approximately RM400 million. This is 76.4% lower than the industry impairment-adjusted PBT of RM1.7 billion.

MISC consistently contributed positively to the overall industry's PBT, with an increase in 2020 and maintaining a substantial figure in 2021. When excluding PBT contributions from MISC, the industry PBT exhibited a recovery in 2021, but the momentum reversed in 2022. These trends demonstrate the industry's volatility and the diverse performance within different categories.

Figure 11: Industry Profit Margin Without MISC

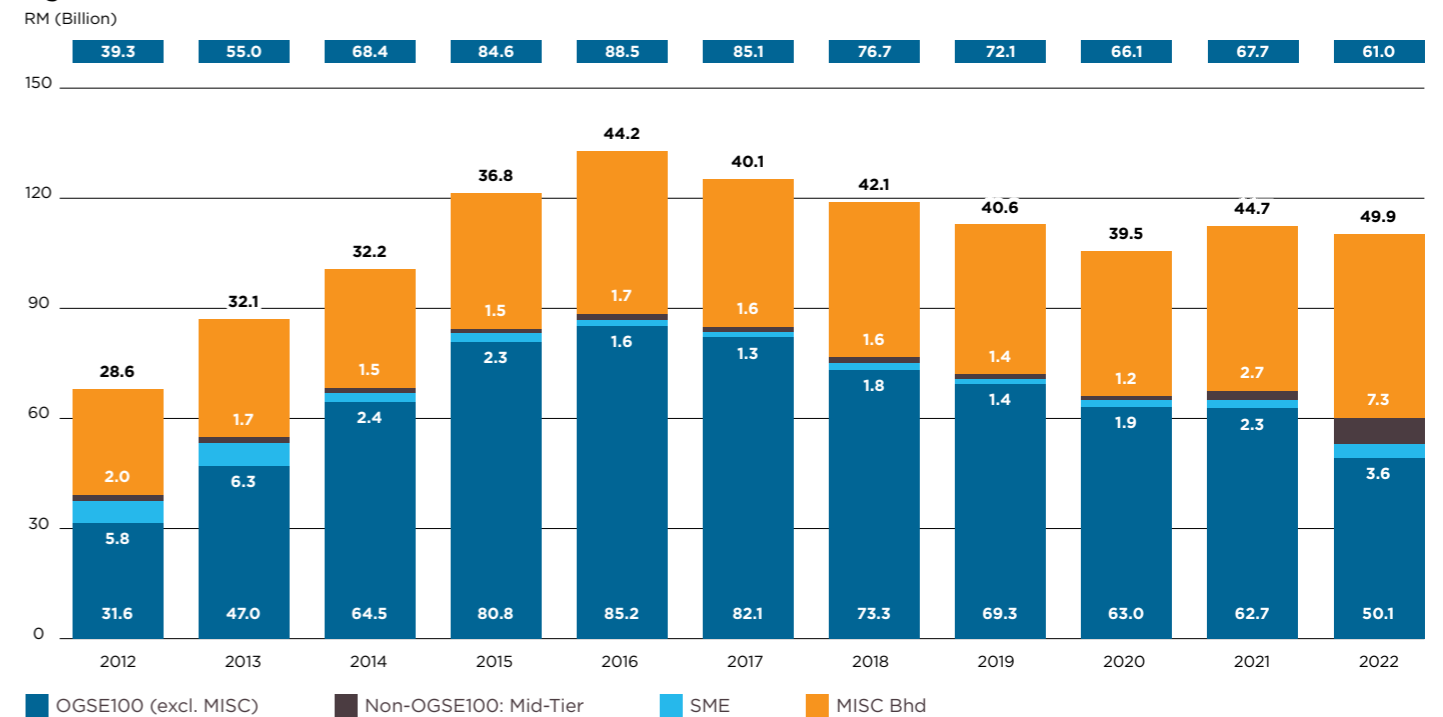


Source: SSM and OGSE Companies' Annual Reports

The industry's profit margin excluding MISC, experienced a substantial decline, falling to -9.2% in FY2022 from a positive margin of 4.2% in FY2021. Factors such as economic conditions, market dynamics and global

events likely contributed to the challenging landscape. These conditions highlight the industry's vulnerability to external shocks, cyclical and the need for adaptability to navigate through dynamic and uncertain environments.

Figure 12: Total Non-Current Assets Without MISC



Source: SSM and OGSE Companies' Annual Reports

Excluding MISC, the Malaysian domestic OGSE industry reported total non-current assets value of RM61 billion in FY2022, marking an -9.9% decline from 2021. Of the total non-current assets, OGSE100 companies (excluding

MISC) constituted approximately 82.1%, amounting to around RM50.1 billion of the total non-current assets, implying the significance of OGSE100 companies in contributing to the industry's overall asset base.

Regional Rankings

Figure 13: Regional Rankings (By Energy Revenue)

Rank	OGSE Company	HQ Country	Revenue 2022 (million USD) ²
1	Keppel ¹	Singapore	1415
2	Sembcorp Marine ¹	Singapore	1339
3	Yinson	Malaysia	1179
4	MISC	Malaysia	971
5	Sapura Energy	Malaysia	922
6	Elnusa	Indonesia	662
7	Dialog	Malaysia	547
8	Bumi Armada	Malaysia	534
9	Dayang Enterprise Holdings	Malaysia	464
10	PTSC	Vietnam	427
11	VietSovPetro	Vietnam	392
12	MMHE	Malaysia	331
13	Serba Dinamik	Malaysia	312
14	Rubicon Offshore	Singapore	284
15	Pacc Offshore (POSH)	Singapore	253
16	Mermaid Maritime	Thailand	241
17	Dyna-Mac	Singapore	178
18	Nam Cheong	Malaysia	141
19	Wah Seong	Malaysia	137
20	Petra Energy	Malaysia	137

Source : Rystad Energy
 Note : (1) Sembcorp and Keppel O&M merged in 2023; (2) Only includes revenue from energy industry; Source: Rystad Energy research and analysis; Rystad Energy Service Supply Cube

The OGSE industry in Southeast Asia is marked by a diverse landscape of companies, each contributing uniquely to the sector's dynamics. A comprehensive analysis of the top 20 companies across Malaysia, Singapore, Vietnam, Indonesia, and Thailand reveals notable variations in both the number of companies and their respective contributions to the regional total revenue.

Malaysia dominates the regional OGSE landscape with 11 companies, constituting more than half (52%) of the total revenue USD5.7 billion. This is indicative of Malaysia's robust OGSE industry, characterised by a diverse range of companies contributing significantly to the country's economy prosperity. The high number of companies suggests a competitive and vibrant industry within the nation.

Following closely behind Malaysia, Singapore boasts 5 OGSE companies, contributing 32% to the total revenue. Despite having fewer companies than Malaysia, Singapore's revenue share highlights the financial strength and efficiency of its OGSE industry. Singapore's strategic location and business-friendly environment continue to attract global players, solidifying its position as a key player in the regional industry.

Vietnam's OGSE industry is represented by 2 companies, contributing 8% to the regional revenue. While the number of companies is relatively modest compared to Malaysia and Singapore, the revenue share underscores the importance of these companies in the regional context. Vietnam's emerging presence in the OGSE industry reflects its commitment to harnessing its energy resources for economic growth.

As shown in Figure 13, Indonesia contributes 6% to the regional total revenue. Although Indonesia has a limited number of companies, the substantial revenue share emphasises the companies' significant impact on the industry. Indonesia's strategic positioning in the regional energy market ensures its role remains vital to the OGSE industry.

Thailand rounds off the list with 1 OGSE company, contributing 2% to the total revenue. While the revenue share is comparatively smaller, Thailand's presence is integral to the broader regional dynamics. Although modest, the country's OGSE industry offers unique opportunities and perspectives within the industry.

The distribution of companies and revenue across these 5 nations reflects Southeast Asia's dynamic and evolving OGSE landscape. Malaysia and Singapore emerged as powerhouses, with a majority of the companies and revenue share indicating their advanced capabilities and established industry presence. While having fewer companies, Vietnam, Indonesia, and Thailand showcase their significance through substantial revenue contributions, highlighting their strategic positions in the regional energy market.

As the OGSE industry continues to grow and adapt to global energy trends, collaboration and knowledge-sharing among these nations will be crucial. It is anticipated that further exploration and development in OGSE capabilities across these countries will drive economic growth and contribute to the region's energy security and sustainability.



Sustainability in OGSE



Sustainability in OGSE



Sustainable Corporate Practices: A Holistic Approach to Environmental, Social and Governance Responsibility

Section A: Summary of OGSE100 companies reporting on Sustainability (Large, Mid-Tier, SMEs)

	Number of Companies		
	Reporting	Indicators	Target Setting
Total companies (100 companies)			
Large	11(11%)	11(11%)	7(7%)
Mid-Tier	77(77%)	13(13%)	3(3%)
SME	NA	NA	NA
Total PLCs (24 companies - a subset of OGSE100)			
Large	11(43%)	11(46%)	7(29%)
Mid-Tier	13(54%)	13(54%)	3(13%)

Corporate sustainability has gained momentum in recent years, reflecting a growing recognition of the need for businesses to integrate Environmental, Social, and Governance (ESG) considerations into their operations.

In the fiscal year 2022, there has been a notable improvement in the number of companies actively engaging in sustainability reporting, a reflection of a collective commitment to transparency and responsible business practices. 88 companies have embraced sustainability reporting, an increase from the 81 companies that published such reporting during the preceding fiscal year. This upward trajectory is indicative of a broader acknowledgement within the corporate sphere of the importance of sustainability in today's global landscape.

Among the 88 reporting companies, a noteworthy breakdown reveals that 11 are large companies, while the majority, constituting 77, fall into the mid-tier company classification. This distribution highlights that sustainability reporting is not exclusive to large corporations, with mid-tier companies actively participating in this vital practice.

Further categorisation demonstrates that 24 of the 88 reporting companies are PLCs, with 11 falling under the category of large companies and 13



88

companies reporting on sustainability in FY2022 compared to 81 in FY2021

NOTE: Sustainability reporting involves a company's ESG implementation, including policies, governance, stakeholder mapping, materiality assessment etc. Companies will progress to include indicators in their reporting with advanced reporting including targets for each indicator.



24

companies reported specific indicators



10

companies reported specific targets

classified as mid-tier companies. This distribution emphasises the widespread recognition of the importance of sustainability reporting across various sectors, irrespective of their size and public listing status.

While the number of companies engaged in sustainability reporting is encouraging, the depth of reporting is equally significant. Of the 88 companies, 24 have reported specific indicators (or metrics), indicating a commitment to quantifiable and measurable indicators of sustainability performance. Among these, 10 companies have gone further by establishing clear targets and emphasising the integration of sustainability goals into their corporate strategic frameworks.

A select group of companies has set the standard for comprehensive sustainability reporting. DIALOG, Deleum, MISC, Carimin, Velesto, Yinson, Wasco and Bumi Armada stand out for their commitment to transparency and accountability. These companies have reported on their sustainability activities and outlined specific targets with corresponding achievements. By providing a detailed account of their progress, these companies serve as exemplars for others in the corporate landscape, demonstrating the value of robust sustainability reporting practices.

Section B: Summary of Sustainability standards/ frameworks adopted by OGSE100 companies

Standards / Frameworks	Number of Companies		
	Large	Mid-Tier	Total
Bursa Listing Requirements	7	8	15
UNSDG	8	6	14
GRI	6	7	13
FTSE4GOOD	4	2	6
TCFD	3	1	4
SASB	1	0	1

As for the reporting, the most commonly referenced standards and frameworks include the Bursa Listing Requirements, the UNSDG, and the Global Reporting Initiative (GRI), while less commonly cited standards and frameworks include FTSE4GOOD, the Task Force on Climate-related Financial Disclosures (TCFD), and the Sustainability Accounting Standards Board (SASB).

The Bursa Listing Requirements, a key reference point for companies listed on the Bursa Malaysia stock exchange, provide guidelines for reporting on sustainability efforts. This local framework ensures that companies adhere to standards relevant to the Malaysian business context.

FTSE4GOOD, a sustainability index developed by the London Stock Exchange, is designed to identify companies that meet globally recognised ESG criteria. While less commonly referenced, it serves as a valuable benchmark for companies striving to demonstrate their commitment to sustainable practices.

The TCFD focuses on climate-related risks and opportunities. Although not as widely adopted, TCFD provides a structured framework for companies to disclose information related to climate resilience and mitigation strategies.

An interesting trend observed is that most companies do not limit themselves to a single standard or framework for sustainability reporting. Instead, they often reference multiple standards concurrently, tailoring their reporting to address diverse aspects of sustainability. For instance, some companies may integrate Bursa Listing Requirements, GRI, and TCFD in their reporting, demonstrating a nuanced and comprehensive approach to addressing local and global sustainability considerations.

Section C: Summary of common ESG Topics & Indicators among OGSE100 companies

Themes	Common Topics	Examples of Indicators & Targets
1 Environmental	Water management	• Rainwater harvesting (cubic metre of water)
	Waste management	• Disposal of hazardous waste (metric tonne) [target: maintain MHB 4R Rate at >97% yearly]
	Energy efficiency	• Installation of solar panels at manufacturing facilities (million kilowatt-hours) • Installation of LED lights (million kilowatt-hours)
	GHG emissions	• GHG emissions based on the Greenhouse Gas Protocol of Carbon Dioxide equivalent (tonne of CO2 equivalent) [target: 15% reduction by 2026]
	Biodiversity	• Mangrove planting
2 Social	Diversity & inclusion	• Age composition • Gender distribution • Ethnic/Nationality distribution • New employee hires • Employee turnover
	Safety of employees & occupational safety	• Fatality rate [target: 0] • Loss Time Injury [target: 0]
	Training of employees	• Training hours for management and workforce [target: 100% employees] • Training hours by type of training
	Community engagement	• The amount of contribution for Corporate Social Responsibility (CSR) programmes
	Talent retention	• Training • Work-life balance initiatives • Community involvement opportunities
3 Governance	Anti Bribery & Corruption	• Anti-Corruption Act 2009
	Business Strategies & Ethics	• Code of Conduct and Business Ethics
	Economic Impact & Performance	• Financial Key Performance Indicators
	Procurement Practices & Supply Chain Management	• Procurement practices • Sustainability Committee
	Corporate Governance	• Board Audit Committee • Gender composition on Board

Environmental: The top 5 recurring topics for most companies in their sustainability initiatives revolve around water management, waste management, energy efficiency, greenhouse gas (GHG) emissions, and biodiversity conservation.

Water Management:

Many forward-thinking companies have implemented rainwater harvesting systems to alleviate the pressure on local water sources. In addition, businesses are now diligently reporting on their water consumption, offering transparency and accountability. This shift in focus is an acknowledgement of water's importance and the need to manage it sustainably.



5 Top Common Environmental Topics:

- Water Management
- Waste Management
- Energy Efficiency
- GHG Emissions
- Biodiversity

Waste Management:

Efforts to minimise waste generation have gained momentum, with companies actively advocating for the reduction of paper and plastic use. Digitalisation initiatives further promote a paperless work environment. Moreover, a commitment to reusing and recycling items has become standard practice. Companies now provide detailed reports on various waste streams, including scheduled, recycled, and general waste, and address critical issues such as oil spills.

Energy Efficiency:

Addressing energy consumption is a key aspect of corporate sustainability. Companies are actively promoting conservative electricity use in offices, coupled with reporting mechanisms to track electricity consumption and energy intensity. The adoption of energy-efficient practices is becoming commonplace, reflecting a commitment to reducing the carbon footprint associated with energy consumption.

GHG Emissions:

Tracking and managing GHG emissions have gained traction, guided by frameworks such as the Greenhouse Gas Protocol. Companies are not only monitoring the absolute amount of GHG emitted but also making comparisons to previous years. Reporting typically encompasses scope 1 and scope 2 emissions, with some companies taking a more comprehensive approach by including scope 3 emissions. Carbon intensity metrics, such as emissions per unit of revenue or man-days, further emphasise a commitment to reducing overall emissions.

Biodiversity Conservation:

Recognising the impact of business operations on ecosystems, companies are engaging in biodiversity conservation initiatives. Beach clean-up campaigns, turtle release programmes, and mangrove planting projects are becoming integral components of CSR efforts. These initiatives not only contribute to the preservation of biodiversity but also enhance a company's reputation as an environmentally responsible entity.

Social: The social aspect of corporate responsibility has emerged as a defining factor for organisational success. The top 5 recurring topics are diversity and inclusion, ensuring the safety of employees, investing in talent retention and training and engaging with local communities.

Diversity & Inclusion:

One of the key elements of social responsibility is fostering diversity and inclusion within the workforce. Companies are increasingly recognising the value of a diverse team that reflects a variety of perspectives and experiences. Indicators such as workforce composition by gender, age, employment status, and ethnicity are closely monitored. Embracing diversity promotes a more equitable workplace and enhances innovation and creativity.

Safety of Employees & Occupational Safety:

Ensuring the safety of employees is critical for socially responsible businesses. Companies are adopting indicators such as Lost Time Incidents (LTI), Lost Time Injury Frequency (LTIF), and tracking near-miss incidents to gauge their safety performance. A commitment to reducing fatalities is critical in creating



5 Top Common Social Topics:

- Diversity & Inclusion
- Occupational Safety
- Talent Retention
- Training
- Community Engagement

a secure work environment.

Talent Retention:

Recognising the significance of employee loyalty, companies are implementing strategies to retain valuable talent. Awards and recognitions for long-time serving employees motivate individuals and foster a sense of belonging and commitment. By acknowledging and celebrating employee milestones, organisations reinforce the idea that each member is an integral part of the corporate family.

Training of Employees:

Investing in the continuous development of employees is a cornerstone of socially responsible businesses. Companies measure their commitment to employee growth through indicators such as the number of training hours, the cost of training, and the increase in training numbers year on year. This commitment not only enhances the skills and capabilities of the workforce but also contributes to the overall professional development of individuals.

Community Engagement:

Social responsibility extends beyond the workplace, and companies are actively engaging with local communities. This is demonstrated through various initiatives such as donations, outreach programmes, and the establishment of natural disaster funds. By actively participating in community development, companies contribute to society's overall well-being and build meaningful relationships with the communities in which they operate.

Governance: Several key themes, such as anti-bribery and corruption, business strategies and ethics, economic impact and performance, procurement practices and supply chain management, and gender composition in the boardroom, stand as crucial pillars in shaping the ethical landscape of corporations.

Anti-Bribery & Corruption:

Anti-bribery and corruption efforts have become imperative for businesses worldwide to comply with legal frameworks and uphold ethical standards. The Anti-Corruption Act of 2009 serves as a regulatory foundation, guiding companies to maintain integrity and prevent corrupt practices. An effective anti-corruption strategy safeguards the organisation from legal repercussions and fosters a culture of trust and accountability.

Business Strategies & Ethics:

The alignment of business strategies with ethical principles is fundamental for sustained success. A well-defined Code of Conduct and Business Ethics serves as a moral compass, outlining the expected behaviour of employees, management, and stakeholders. Businesses that integrate ethical considerations into their strategic decision-making processes enhance their reputation and build enduring relationships with customers and partners based on trust and reliability.

Economic Impact & Performance:

The economic impact of business operations extends beyond financial success and encompasses broader societal implications. Financial Key Performance



Indicators (KPIs) are crucial metrics that gauge economic performance, reflecting a company's ability to generate value for its stakeholders. Ethical financial practices contribute to sustainable growth and solidify a company's commitment to responsible business conduct.

Procurement Practices & Supply Chain Management:

Ethical procurement practices and sustainable supply chain management are vital components of corporate responsibility. Companies are increasingly recognising the importance of transparent and ethical procurement processes, ensuring fair dealings with suppliers. The establishment of a Sustainability Committee underscores a commitment to incorporating ESG considerations into procurement decisions, contributing to sustainable and responsible business practices.

Corporate Governance:

Promoting gender diversity in corporate leadership is critical towards fostering inclusive and ethical governance. The Board Audit Committee plays a pivotal role in overseeing the integrity of financial reporting and ethical business practices. Additionally, efforts to ensure gender composition on the board are essential for creating diverse perspectives and eliminating gender bias in decision-making processes. Companies that actively pursue gender equality in leadership positions adhere to ethical principles and benefit from a broader range of perspectives that can drive innovation and success.

NOTE:

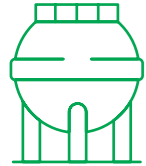
It is essential to note that the sustainability reporting of each company was meticulously gathered from their annual reports, a pertinent source for publicly listed entities, and their respective websites.

Top 5 Common Governance Topics:

- Anti-Bribery
- Business Strategy
- Economic Impacts
- Procurement & Supply Chain
- Corporate Governance

Environment

Water management



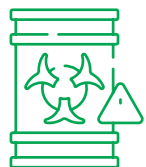
21%

5 out of 24 companies involved in rainwater harvesting

50%

12 out of 24 companies that reported and advocated for water conservation

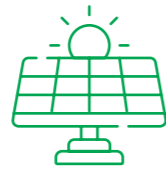
Waste



21%

5 out of 24 companies that practised disposal of hazardous wastes through licensed contractors by the DOE

Energy Efficiency



12.5%

3 out of 24 companies that installed photovoltaic (PV) panels at shipyard/manufacturing facilities

Governance

95.8%

23 out of 24 companies where the BOD/Management serves as the advocate/champion for sustainability



20.8%

5 out of 24 companies with at least 30% women on its BOD

Stock Code	Company Name	Sector	FTSE4Good Bursa Malaysia Index	ESG Grading		Remarks against Dec 2022
				ESG Grading Band	ESG Grading Percentile	
5210	BUMI ARMADA BERHAD	Energy	Yes	★★★★	Top 25%	Remained
5132	DELEUM BHD	Energy	Yes	★★★★	Top 25%	Remained
5243	VELESTO ENERGY BERHAD	Energy	Yes	★★★★	Top 25%	Improved from ★★★
5142	WASCO BERHAD (Changed name effective from 31 May 2023 from Wah Seong Corporation Berhad)	Energy		★★★★	Top 25%	New
7277	DIALOG GROUP BHD	Energy	Yes	★★★	Top 26%-50%	Remained
5255	ICON OFFSHORE BERHAD	Energy		★★★	Top 26%-50%	Remained
5186	MALAYSIA MARINE AND HEAVY ENGINEERING BHD	Energy	Yes	★★★	Top 26%-50%	Drop From ★★★★
7293	YINSONG HOLDING BHD	Energy	Yes	★★★	Top 26%-50%	Drop From ★★★★
5257	CARIMIN PETROLEUM BERHAD	Energy		★★	Top 51%-75%	Drop From ★★★
5071	COASTAL CONTRACTS BHD	Energy		★	Bottom 25%	New
5141	DAYANG ENTERPRISE HOLDINGS BHD	Energy		★	Bottom 25%	Drop From ★★
7108	PERDANA PETROLEUM BERHAD	Energy		★	Bottom 25%	New
7250	UZMA BHD	Energy		★	Bottom 25%	Remained

The FTSE4Good Sustainability Index, administered by FTSE Russell, serves as a benchmark for assessing the ESG practices of companies globally. The performance of OGSE companies within this index reveals important trends and shifts in sustainability measures over the 12-month period from December 2022 to December 2023.

The number of OGSE companies being graded has increased from 10 in December 2022 to 13 in December 2023 with 6 of them made it to the FTSE4Good Sustainability Index compared to 4 in the same corresponding period. The 2 new entrants are Malaysia Marine and Heavy Engineering Berhad and Bumi Armada Berhad. This indicates a positive trend, reflecting a growing recognition and incorporation of sustainability practices within the OGSE industry.

As for the ESG grading, the 3 new entrants are Wasco Berhad (Changed name effective from 31 May 2023 from Wah Seong Corporation Berhad), Coastal Contracts Berhad and Perdana Petroleum Berhad.

The number of companies with a 4-star rating remained consistent at 4 in December 2022 and June 2023. This indicates a sustained commitment to high ESG standards among a substantial proportion of OGSE companies.

The distribution of star ratings reveals a diverse landscape, with companies performing at different levels. Notably, a portion of companies improved their ratings (1 company), while others (4 companies) faced challenges in maintaining their sustainability standards.

The FTSE4Good Bursa Malaysia Index's assessment of OGSE companies demonstrates an evolving commitment to sustainability within the sector. It is crucial for OGSE companies to continually adapt and improve their ESG practices to align with evolving global sustainability standards, ensuring long-term resilience and positive contributions to environmental and social responsibility.

LIST OF 24 PLCs (OGSE100) COMPANIES REPORTING ON SUSTAINABILITY

Company Name	ESG/ EESG/ EES	Environment	Social	Governance	Standards/ Frameworks	Methane Focus	Report Metrics & Targets
1 ALAM MARITIM RESOURCES BHD	EES	<ul style="list-style-type: none"> Quality & Health, Safety, Security & Environment ("QHSSE") Waste Management & Pollution Prevention Management & Development 	<ul style="list-style-type: none"> Talent Management & Development Corporate Social Responsibility ("CSR") Organisational Culture Development 		<ul style="list-style-type: none"> Bursa Securities Berhad ("Bursa Securities") Main Market Listing Requirement ("MMLR") Practice Bursa Malaysia Corporate Governance Guide (3rd Edition) Bursa Malaysia Sustainability Reporting Guide (2nd Edition) 	NA	Metrics
2 BUMI ARMADA BHD	ESG	<ul style="list-style-type: none"> Water Use & Conservation Biodiversity Waste Management Pollution Management GHG Emissions 	<ul style="list-style-type: none"> Health & Safety Human & Labour Rights Talent Development Diversity & Inclusion 	<ul style="list-style-type: none"> Good Corporate Governance Risk Management 	<ul style="list-style-type: none"> Global Reporting Initiative (GRI) Standards 2021 Bursa Securities MMLR 	YES	Metrics & Targets
3 CARIMIN PETROLEUM BHD	EES	<ul style="list-style-type: none"> Environmental Protection 	<ul style="list-style-type: none"> Talent Retention & Development Occupational Health & Safety Employee Welfare Customer Satisfaction Community Engagement Human & Labour Rights Risk Management Governance, Compliance & Ethics 	<ul style="list-style-type: none"> Business Strategy & Performance Supply Chain Digitalisation 	<ul style="list-style-type: none"> Principal Guideline: Bursa Malaysia Sustainability Reporting Guide (2nd Edition) Malaysian Code of Corporate Governance (MCCG) Reference Guideline: Global Reporting Initiative (GRI) Standards: Core Option 	NA	Metrics & Targets
4 E.A TECHNIQUE (M) BERHAD	EES	<ul style="list-style-type: none"> Carbon Emissions Waste Management Water Management 	<ul style="list-style-type: none"> Occupational Health & Safety Community Outreach Training & Development 	<ul style="list-style-type: none"> Anti-Bribery Policy Code of Ethics Whistleblowing Policy 	<ul style="list-style-type: none"> Bursa Securities MMLR Sustainability reporting guide and toolkits 3rd edition issued by Bursa Malaysia 	NA	Metrics

Company Name	ESG/ EESG/ EES	Environment	Social	Governance	Standards/ Frameworks	Methane Focus	Report Metrics & Targets
5 DAYANG ENTERPRISE HOLDINGS BHD	ESG	<ul style="list-style-type: none"> Monitoring Vessel Emission Storage & Collection of Recyclables 	<ul style="list-style-type: none"> Building A Sustainable Workplace Employee Engagement Occupational, Health & Safety Building A Sustainable Employee Development Contribution Towards Better Communities 	<ul style="list-style-type: none"> Board Charter Terms Of Reference - Audit Committee Terms Of Reference- Joint Remuneration & Nomination Committee Whistleblowing Policy Anti-Bribery & Corruption Policy Fit & Proper Policy 	<ul style="list-style-type: none"> Bursa Securities MMLR Sustainability reporting guide and toolkits 3rd edition issued by Bursa Malaysia GRI Standards 	NA	Metrics
6 DELEUM BHD	EESG	<ul style="list-style-type: none"> Carbon Emissions GHG Intensity Energy Efficiency Energy Intensity Practising Climate Change Risk Management Water Management Waste Management 	<ul style="list-style-type: none"> Focus On Local Talent Remuneration & Rewards Welfare For Employees Talent Management Health & Safety Management Community Outreach Employee Volunteerism 	<ul style="list-style-type: none"> Board Diversity Anti-Corruption Strengthening Ethics & Integrity Cyber & Information Security 	<ul style="list-style-type: none"> Task Force on Climate-Related Financial Disclosures ("TCFD") GRI Standards 	YES	Metrics & Targets
7 DESTINI BHD	EES	<ul style="list-style-type: none"> Operations Waste Management Energy & Water Conservation 	<ul style="list-style-type: none"> Succession Planning Safe Workplace Talent Motivation & Skill Development Social Responsibility 	<ul style="list-style-type: none"> Shareholders Customer & Products Customer Satisfaction Business Model & Planning Suppliers 	<ul style="list-style-type: none"> Bursa Securities MMLR Corporate Governance Guide by Bursa Malaysia Securities Berhad Companies Act 2016 Malaysian Code on Corporate Governance International/ Malaysian Financial Reporting Standards International Integrated Reporting Framework GRI Standards 	NA	Metrics

LIST OF 24 PLCs (OGSE100) COMPANIES REPORTING ON SUSTAINABILITY (CONT'D)

Company Name	ESG/ EESG/ EES	Environment	Social	Governance	Standards/ Frameworks	Methane Focus	Report Metrics & Targets
8 DIALOG GROUP BHD	ESG	<ul style="list-style-type: none"> Climate Change Strategy Waste & Effluent Management Water Management Air Emissions Biodiversity 	<ul style="list-style-type: none"> Occupational Safety & Health Human Capital Management Community Engagement Labour Standards Supply Chain Management 	<ul style="list-style-type: none"> Economic Performance Corporate Governance Anti-Bribery & Corruption Policy Business Ethic Risk Management Tax Transparency 	<ul style="list-style-type: none"> GRI Standards TCFD 	YES	Metrics & Targets
9 ICON OFFSHORE BHD	ESG	<ul style="list-style-type: none"> Climate Change Air Emissions Waste & Pollution Management Biodiversity Water Management 	<ul style="list-style-type: none"> OSH Talent Attraction & Retention Diversity & Inclusion Human Rights Community Engagement 	<ul style="list-style-type: none"> Business Ethics Economic Impact 	<ul style="list-style-type: none"> Bursa Securities MMLR GRI Standards 2021 United Nations Sustainable Development Goals ("UNSDGs") FTSE4Good Sustainability Index 	NA	Metrics & Targets
10 KNM GROUP BHD	EES	<ul style="list-style-type: none"> Resources Efficiency Waste And Resources Management 	<ul style="list-style-type: none"> Health & Safety Workplace Ethics And Business Conducts Human Capital Development Employees' Share Option Scheme ("ESOS") 		NA	NA	NA
11 MARINE & GENERAL BHD	EES	<ul style="list-style-type: none"> Energy Efficiency Effluents And Waste Management Environmental Compliance 	<ul style="list-style-type: none"> Employment Employment Diversity and Equal Opportunity Occupational Safety and Health Local Community 	<ul style="list-style-type: none"> Procurement Practice Anti-Corruption 	<ul style="list-style-type: none"> GRI Standards Bursa Securities MMLR Sustainability Reporting Guide, 2nd Edition ("SRG") 	NA	Metrics

Company Name	ESG/ EESG/ EES	Environment	Social	Governance	Standards/ Frameworks	Methane Focus	Report Metrics & Targets
12 MISC BHD	ESG	<ul style="list-style-type: none"> Climate Change Energy Management Waste Management Water Management Ocean Health & Air Emissions Natural Resource Use 	<ul style="list-style-type: none"> Health & Safety Security Talent Attraction Diversity And Inclusion Community Investment 	<ul style="list-style-type: none"> Values, Governance, And Business Ethics Human Rights Cybersecurity Sustainable Supply Chain 	<ul style="list-style-type: none"> GRI Standards Sustainability Accounting Standards Board (SASB) TCFD 	YES	Metrics & Targets
13 MUHIBBAH ENGINEERING (M) BHD	EES	<ul style="list-style-type: none"> Regulatory Compliance Environment Protection Hazardous Waste Management Energy & Water Consumption Air Emissions Biodiversity 	<ul style="list-style-type: none"> Contractor Management Customer Satisfaction Quality Control Occupational Health & Safety Ethics & Integrity Training & Development Talent Retention Human Rights & Labour Practices Employee Wellbeing Contribution To Society 	<ul style="list-style-type: none"> Corporate Governance & Transparency Financial Performance Risk Management Supply Chain Management Investor Relations Global Pandemic/ Endemic 	<ul style="list-style-type: none"> Bursa Malaysia Securities Berhad's Sustainability Reporting Guide GRI 4.0 Sustainability Reporting Guidelines 	NA	Metrics
14 OCEAN VANTAGE HOLDINGS BHD	EESG	<ul style="list-style-type: none"> Air & Water Pollution Industrial Waste Natural Resources Exhaustion 	<ul style="list-style-type: none"> Health & Safety Employee Recognition Diversity & Inclusion Training & Development Employee & Community Engagement Talent Retention Anti-Bribery Anti-Corruption Business Ethics Employee Performance Management Employee Benefits Compensation Vendor & Customer Programmes 	<ul style="list-style-type: none"> Supply Chain Management Business Strategies Procurement Practices Cost Saving Project Execution Delivery Management Indirect Economic Contributions Code Of Conduct and Ethics Employee Handbook Anti-Bribery and Corruption Policy A Whistleblowing Policy 	<ul style="list-style-type: none"> Sustainability Reporting Guide and Toolkits issued by Bursa Securities 	NA	Metrics

LIST OF 24 PLCs (OGSE100) COMPANIES REPORTING ON SUSTAINABILITY (CONT'D)

Company Name	ESG/ EESG/ EES	Environment	Social	Governance	Standards/ Frameworks	Methane Focus	Report Metrics & Targets
15 PETRA ENERGY BHD	ESG	<ul style="list-style-type: none"> Ecological Impacts Water Consumption Waste Management Energy Management 	<ul style="list-style-type: none"> Occupational Health & Safety Diversity & Equal Opportunity Corporate Social Responsibility Training & Education 	<ul style="list-style-type: none"> Anti-Corruption Economic Performance Regulatory Compliance and Risk Management Procurement Practice 	<ul style="list-style-type: none"> GRI Standards 	NA	Metrics
16 SAPURA ENERGY BHD	EES	<ul style="list-style-type: none"> Ensuring No Harm to Our People and Environment 	<ul style="list-style-type: none"> Nurturing People and Developing Talent 	<ul style="list-style-type: none"> Ensuring Business Sustainability 	<ul style="list-style-type: none"> Bursa Malaysia's Sustainability Reporting Guide Security Commission's 2021 update of the Malaysian Code on Corporate Governance 	NA	NA
17 T7 GLOBAL BHD	ESG	<ul style="list-style-type: none"> Waste Management GHG & Climate Resilience Biodiversity Energy Management Water Management 	<ul style="list-style-type: none"> Occupational Health & Safety Supply Chain Management Community Development & Investment Workforce Diversity & Inclusivity Employee Recruitment, Development & Retention 	<ul style="list-style-type: none"> Reliable & Efficient Operations Governance & Business Ethics Economic Performance & Impact Data Privacy & Security Digital Transformation 	<ul style="list-style-type: none"> Bursa Securities MMLR Sustainability Reporting Guide (3rd edition) issued by Bursa Malaysia Securities Berhad FTSE4Good Bursa Malaysia GRI Standards UNSDGs TCFD 	NA	Metrics & Targets

Company Name	ESG/ EESG/ EES	Environment	Social	Governance	Standards/ Frameworks	Methane Focus	Report Metrics & Targets
18 UZMA BHD	EES	<ul style="list-style-type: none"> Energy Management Water Management Paper Management Waste Management Employee Awareness Programme 	<ul style="list-style-type: none"> Health & Safety Performance Employee Engagement Employee Diversity Employee Performance Management Employee Recognition Employee Benefits and Compensation Training And Developments Internships Ethics & Integrity Grievance Mechanisms Vendor Development Programme Customer Programmes and Surveys CSR Activities 	<ul style="list-style-type: none"> Procurement Practices Cost Saving Indirect Economic Contributions Project Execution and Delivery Management 	<ul style="list-style-type: none"> Bursa Securities MMLR GRI Standards FTSE4Good disclosure guidelines 	NA	Metrics & Targets
19 VELESTO ENERGY BHD	ESG	<ul style="list-style-type: none"> Energy & Emission Management Climate Change Water Biodiversity 	<ul style="list-style-type: none"> Health & Safety Human Rights* Employment Practices Diversity, Equity & Inclusion Talent Management Community Impact 	<ul style="list-style-type: none"> Economic Performance Anti-Bribery & Corruption Policy Supply Chain Data Privacy & Security 	<ul style="list-style-type: none"> Bursa Securities MMLR Bursa Malaysia Sustainability Reporting Guide, 2nd Edition 2018 FTSE4Good Index Disclosures (FTSE Russell's ESG Data Model) TCFD 	YES	Metrics & Targets

LIST OF 24 PLCs (OGSE100) COMPANIES REPORTING ON SUSTAINABILITY (CONT'D)

Company Name	ESG/ EESG/ EES	Environment	Social	Governance	Standards/ Frameworks	Methane Focus	Report Metrics & Targets
20 WAH SEONG CORPORATION BHD	EES	<ul style="list-style-type: none"> Energy Management GHG Emissions Management Managing Climate Change Risks and Opportunities Pollution Prevention and Control Preserving Biodiversity Waste Management Noise Boundary Monitoring Conserving Water Resources 	<ul style="list-style-type: none"> Educational Assistance Occupational Health And Safety Competitive Benefits Learning And Development Employee Engagement Human Rights 	<ul style="list-style-type: none"> Anti-Bribery & Corruption Policy Responsible Procurement Whistleblowing 	<ul style="list-style-type: none"> GRI Standards: Core Option Bursa Malaysia's Sustainability Reporting Guide FTSE4Good Bursa Malaysia ESG Index UNSDGs International Organization for Standardisation (ISO) 26000:2010 Guidance on Social Responsibility 	YES	Metrics & Targets
21 YINSON HOLDINGS BHD	ESG	<ul style="list-style-type: none"> Climate Change & Greenhouse Gas Emissions Waste & Pollution Management Environmental Stewardship 	<ul style="list-style-type: none"> Human Capital Development Operational Health & Safety Human & Labour Rights 	<ul style="list-style-type: none"> Good Corporate Governance Cybersecurity Digitalisation 	<ul style="list-style-type: none"> Bursa Securities MMLR Sustainability Reporting Guidelines Sustainability Reporting Toolkit (2nd edition), with inclusion of TCFD guidelines International Petroleum Industry Environmental Conservation Association's ("IPIECA") Oil and Gas Industry Guidance on Voluntary Sustainability Reporting 	YES	Metrics & Targets
22 COASTAL CONTRACTS BHD	EES	<ul style="list-style-type: none"> Sustainable Business Operations Energy Efficient Practices in Office 	<ul style="list-style-type: none"> Employee Benefits and Retention Diversity and Equal Employment Opportunities Safety Measures to the Covid-19 Pandemic Programme of Support to the Community and the Environment Local Community 	<ul style="list-style-type: none"> Procurement Whistleblowing Policies and Procedures Anti-Bribery & Corruption Policy Code of Conduct 	<ul style="list-style-type: none"> Bursa Securities MMLR Sustainability Reporting Guide issued by Bursa Malaysia 	NA	Metrics

Company Name	ESG/ EESG/ EES	Environment	Social	Governance	Standards/ Frameworks	Methane Focus	Report Metrics & Targets
23 MALAYSIA MARINE AND HEAVY ENGINEERING HOLDINGS BERHAD	ESG	<ul style="list-style-type: none"> Climate Change Natural Resources & Consumption 	<ul style="list-style-type: none"> Health & Safety Skilled Workforce Diversity & Inclusion Strategic Community Initiatives 	<ul style="list-style-type: none"> Governance & Ethics Human & Labour Rights Supply Chain 	<ul style="list-style-type: none"> Bursa Malaysia Securities Berhad Sustainability Reporting Guide Sustainability Accounting Standards Board (SASB) Standards GRI Standards: Core Option FTSE4Good Bursa Malaysia Index Criteria TCFD 	YES	Metrics & Targets
24 PERDANA PETROLEUM BERHAD	ESG	<ul style="list-style-type: none"> Energy Management Water Management Waste Management Emissions Management 	<ul style="list-style-type: none"> Fair Labour Practices Community / Society Diversity Health & Safety 	<ul style="list-style-type: none"> Anti-Bribery & Corruption Policy Data / Customer Privacy Supply Chain Management 	<ul style="list-style-type: none"> Bursa Securities MMLR GRI Standards: Core Option UNSDGs FTSE4Good Sustainability Index 	NA	Metrics

NOTE:
The list of companies in the table above is arranged in no particular order. 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.

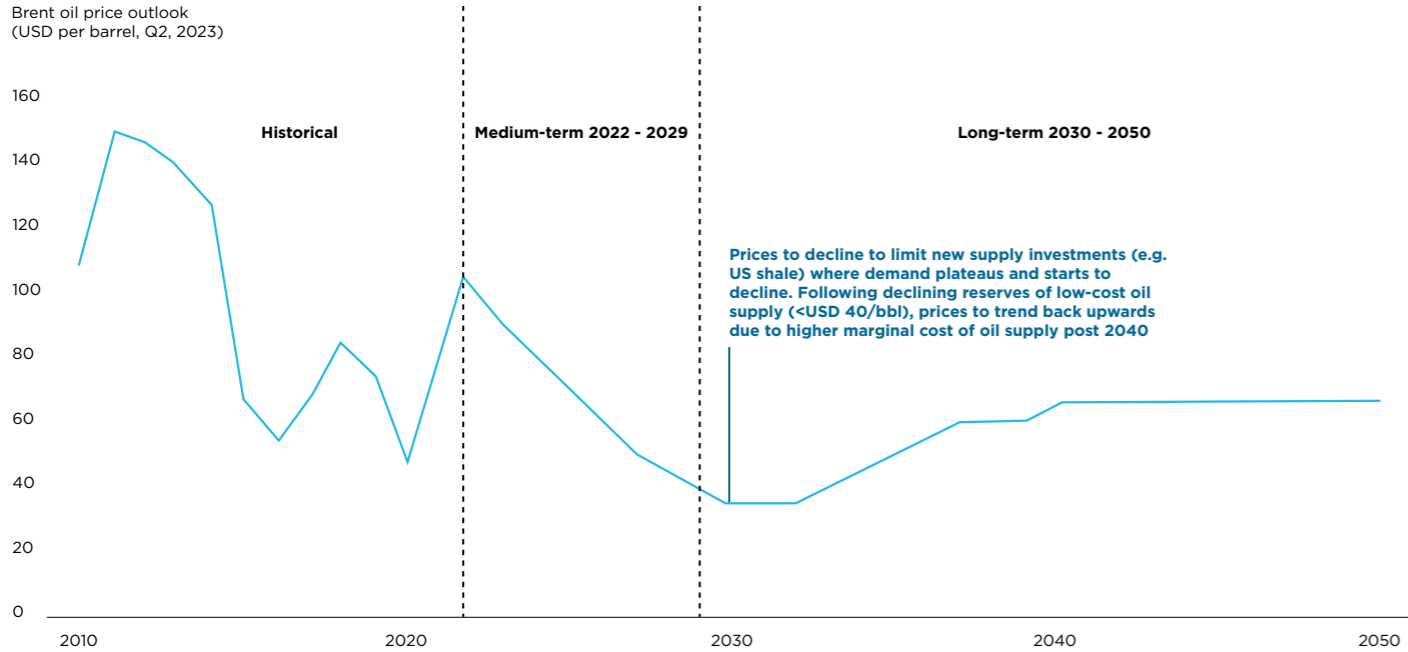
INDUSTRY OUTLOOK

Macro Factors Influencing Oil and Gas/LNG Prices 2023-2030

The future price of oil and gas is likely to be influenced

by a combination of energy transition trends and supply-demand dynamics. As the world shifts towards cleaner energy sources, the demand for traditional fossil fuels may change, impacting prices.³

Figure 14: Brent Oil Price Outlook – Rystad Energy UCube, Rystad Energy research and analysis

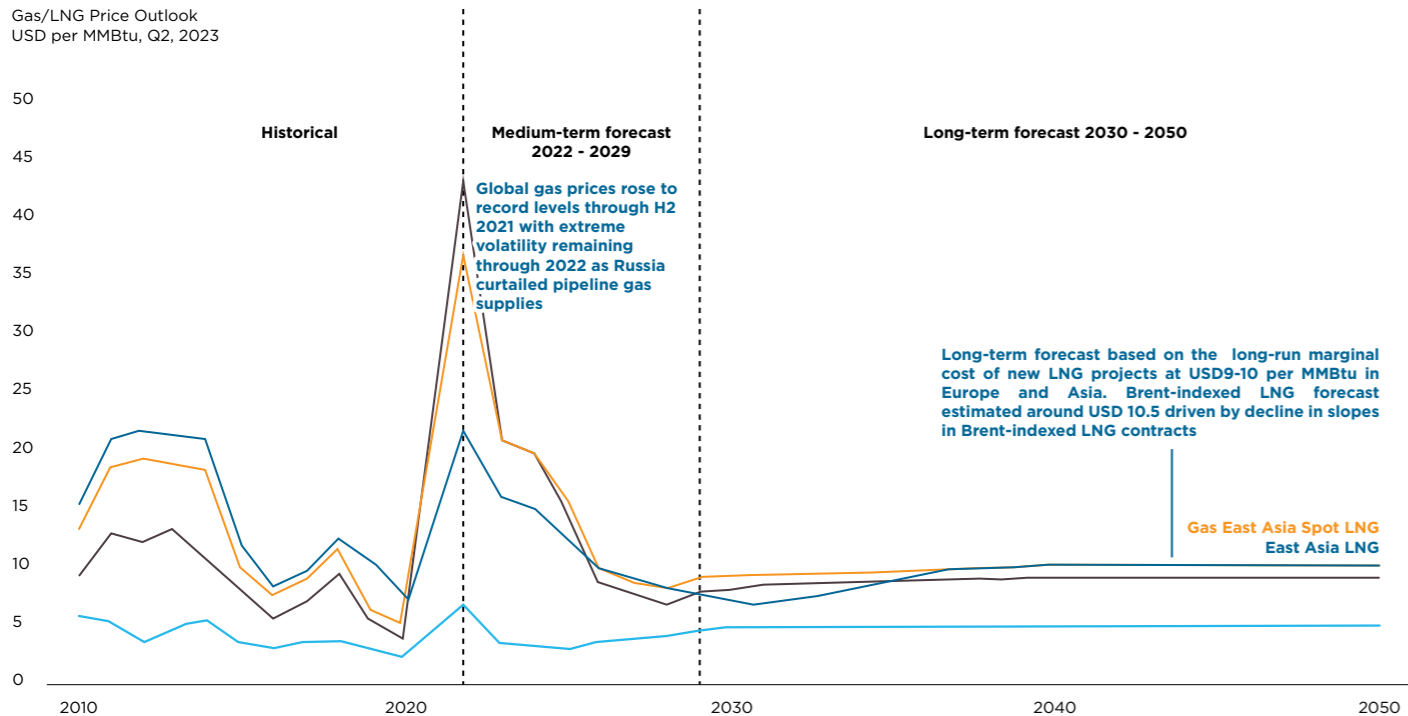


Source: Argus Media, Rystad Energy UCube, Rystad Energy research and analysis

As we approach 2030, the accelerated electrification of energy systems and adoption of electric vehicles (EVs) are poised to exert significant downward pressure on oil prices. According to Rystad Energy and a report by the International

Energy Agency (IEA) it is anticipated that a gradual decrease in demand for oil will lead to a plateau in price.⁴ The descent in oil prices will temporarily curb new supply investments, with a subsequent rebound around 2040.

Figure 15: Gas/LNG Price Outlook – Rystad Energy UCube, Rystad Energy research and analysis



Source: ICE, CME, Rystad Energy GasMarketCube, Rystad Energy research and analysis

Furthermore, gas prices are forecasted to decline leading up to 2030,⁵ facilitated by a reduction in volatility. Beyond 2030, prices are expected to gravitate towards the marginal cost of unsanctioned LNG projects in meeting demand propelled by emerging Asia. The intricate interplay of macroeconomics, technological advancement and geopolitics will serve as pivotal factors steering pricing dynamics.

Energy Industry Outlook 2023-2040

Recent assessments from the International Monetary Fund (IMF) indicate a marginal global economic decline in Gross Domestic Product (GDP) to 2.9% in 2024 from 3% in 2023. Advanced economies are poised for a slight slowdown from 1.5% in GDP in 2023 to 1.4% in GDP in 2024. In contrast, emerging and developing economies are anticipated to maintain a steady growth in GDP of 4% on a year-to-year basis during 2023-2024.⁶

The Malaysian Government envisions an economic growth of 4-5% in 2024,⁷ diverging from global trends. Projections from the IMF and World Bank indicate Malaysia's growth at 4.3%, ranking it as the 5th highest in GDP change in Southeast Asia in the year 2024 when compared to the year 2023.⁸

Rystad Energy's latest figures emphasise the sustained tightness in global oil supply and demand over the next 2 years.⁹ Contributing factors include China's shift from its zero-Covid policy, the resurgence of Russian oil and delays in Iranian supply additions. Energy investments are anticipated to rise, with a notable shift towards the low-carbon sector. The global LNG market is expected to maintain equilibrium as demand from recovering Asian economies rises and Russian gas supply declines, offset by increased supplies from North America.

Globally, exploration and production investment activity are expected to be limited,¹³ influenced by factors such as inflation and a heightened focus on low-carbon projects as the world aligns with net-zero ambitions. Notably, Malaysia continues to dominate oil and gas investments in Southeast Asia, accounting for 85% compared to the regional average of 65%.

Within the Malaysian context, opportunities are in place with PETRONAS targeting to sustain and grow Malaysia's oil and gas production of 2 million barrels of oil equivalent per day by 2025 and beyond.¹⁰ Key projects, such as the Lang Lebah Gas Project, are expected to receive sanctioning in the coming years. Sarawak is estimated to have major projects in the pipeline at 87% of the total upcoming projects while Sabah and Peninsular Malaysia are expected to account for 10% and 3%, respectively, between the period of 2026 to 2030.¹¹

In 2024, oil production in Sabah and Sarawak is expected to remain consistent, with OGSE players receiving a possible boost from more upcoming gas projects in

Sarawak.¹² Additionally, Malaysian oil and gas operators face challenges stemming from ageing and end of life assets where this could also represent opportunities to the OGSE community in the form of life extension projects.

OGSE Industry Outlook Towards 2024

Around the globe, investments from the oil and gas sector into the OGSE industry surged by 12.9% to USD621 billion in 2023,¹⁴ while the low-carbon industry's investment in the OGSE industry saw an 11% rise, reaching USD554 billion in 2023—an almost twofold increase compared to 2019. Notably, the oil and gas sector's investments target rising greenfield projects, particularly in LNG facilities, responding to the increased demand for gas, post the Russia-Ukraine conflict. OGSE players are poised to capitalise on this opportunity, leveraging their expertise in equipment, materials, engineering and construction.

Oil and gas investments in Malaysia rose by 10.7% (USD5.3 billion) in 2023 and are projected to grow 4.8% in 2024.¹⁵ Concurrently, the low-carbon industry is forecasted to experience substantial growth in 2024, reaching USD1.2 billion in 2023, reflecting a remarkable increase of 45%. Key projects, including Kasawari, Jerun and Timi gas fields, are slated for development to address the nation's energy needs. This aligns with Rystad Energy's forecast, positioning Malaysia as a major investor in Greenfield projects between 2020 and 2023, accounting for 35% of post-2010 discoveries.

Globally, upstream production is projected to increase by 2.5% in 2024, with a total of 738 oil and gas production projects set to commence operations between 2023 and 2027.¹⁶ Of these projects, Asia takes the lead with 178 projects, a rise of 2.4% from the prior year, signifying substantial demand and opportunities for OGSE companies to capitalise on.

3. Market Intelligence Data & Analytics for the OGSE Industry Final Report, RystadEnergy 3rd April 2023
 4. Advance Gross Domestic Product (GDP) Estimates Third Quarter 2023, Department of Statistics Malaysia
 5. Market Intelligence Data & Analytics for the OGSE Industry Final Report, RystadEnergy 3rd April 2023
 6. World Economic outlook 2023 – IMF
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 8. World Economic Outlook 2023 – IMF
 9. Market Intelligence Data & Analytics for the OGSE Industry Final Report, RystadEnergy 3rd April 2023
 10. PETRONAS Activity Outlook 2023-2025; PETRONAS Activity Outlook 2024-2026
 11. Market Intelligence Data & Analytics for the OGSE Industry Final Report, RystadEnergy 3rd April 2023
 12. Ibid
 13. Ibid
 14. Ibid
 15. Market Intelligence Data & Analytics for the OGSE Industry Final Report, RystadEnergy 3rd April 2023
 16. GlobalData Intelligence Center, Global Data



In terms of OGSE industry development in 2024, there will be more activity on the Malaysian front, with a total of 57 new build projects and 5 expansion projects from 2023 to 2027.

Looking ahead to 2024, 5 of the top 30 Southeast Asian OGSE companies, such as Yinson and MISC, are positioned for revenue growth. However, these companies must navigate challenges including inflationary pressures and supply chain disruptions. Malaysian OGSEs, particularly SMEs, grapple with issues like over-specialisation, financial difficulties and limited support from banks.

Recent trade agreements such as the RCEP and CPTPP present both opportunities and risks for Malaysian OGSE players. The advantages include reduced trade barriers, enhanced market access, foreign investment and knowledge transfer.

RCEP includes 15 countries: the 10 ASEAN member states plus China, Japan, South Korea, Australia, and New Zealand, while CPTPP, originally known as the Trans-Pacific Partnership Agreement (TPPA), currently includes 11 countries: Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore

and Vietnam. In terms of scope and depth, RCEP is more focused on reducing tariffs and increasing market access. CPTPP is broader and deeper, including commitments to labour and environmental standards, intellectual property rights, and the handling of state-owned enterprises. With regard to economic impact, RCEP creates the world's largest trading bloc in terms of population and GDP and includes China, a major global economic player. CPTPP also represents a significant portion of the global economy, and its standards and provisions are seen as more comprehensive and rigorous.¹⁷

OGSE companies have the potential to capitalise on the opportunities presented by the CPTPP signatory countries. In this competitive landscape, the ability to act swiftly and decisively is key to securing deals.

Nevertheless, these agreements introduce challenges, including heightened foreign competition, leading to price and quality pressures. Specific provisions mandate PETRONAS to gradually decrease its domestic preference threshold in upstream services to 40% over 6 years. CPTPP also requires stricter adherence to international standards, incurring short to medium-term adjustment costs but elevating Malaysian OGSE companies' acceptance in the global market.

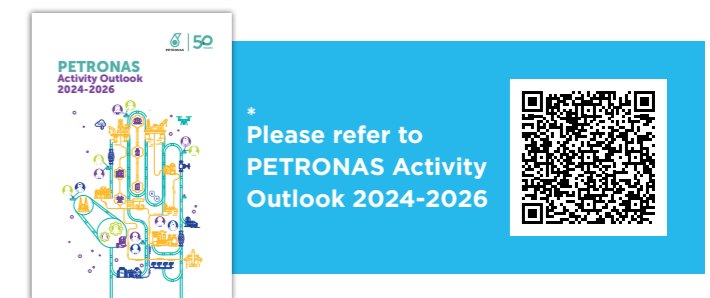
PETRONAS Activity Outlook 2024-2026

In the new PETRONAS Activity Outlook 2024-2026, PETRONAS highlights their activities and goals in realising their long-term target to sustain and grow Malaysia's oil and gas production of 2 Mboed by 2025 and beyond. For 2024, the 9 upstream activities highlighted by PETRONAS depict an increasing growth to most of the activities as compared to 2023. Given the abundant opportunities at hand, the OGSE industry is well positioned going into 2024, especially with major projects such as Kasawari, Jerun, Rosmari-Marjoram and Lang Lebah in Sarawak, Gumusut-Kakap Redev and Belud Clusters in Sabah, and Bekok Oil Redev, Tabu Redev and Seligi Redev in Peninsular Malaysia.

While the PETRONAS Activity Outlook 2024-2026 indicates in general an increase in planned activities for 2024, it is worth noting, some of the activities planned for 2024 were carried over from 2023. The outlook's new addition in categorising the activities between contracted and uncontracted helps in providing OGSE companies with clearer insights into the demand landscape in Malaysia.

Overall, with numerous opportunities highlighted in the outlook, OGSE companies can anticipate a generally positive industry landscape for 2024 to 2026. Despite quite a number of activities already being contracted out, there are still opportunities for other OGSE companies to participate through sub-contracting arrangements.

To summarise, the OGSE companies in Malaysia can expect an overall positive outlook in the short-term with the various opportunities highlighted in the PETRONAS Activity Outlook 2024-2026. However, the OGSE sector will be required to remain vigilant and agile to address the challenges posed by potentially declining demands in certain segments. In addition, OGSE companies are encouraged to look for opportunities beyond Malaysia's borders and to increase competitiveness.



Energy Transition Overview

The global shift toward lower and zero carbon emission fuels is gaining momentum as the world endeavours to avert catastrophic climate change. A structural transformation in global industry is imperative, emphasising a cleaner energy mix and concerted efforts to reduce reliance on fossil fuels, major contributors to escalating carbon emissions.

Looking ahead to 2030, Asia's robust GDP growth, fuelled by countries like China, India and Japan, raises concerns about increased fossil fuel demand. These 3 nations, ranking among the top 5 in GDP growth for 2022, collectively contribute over a quarter of the world's GDP. By 2028, India and China are anticipated to record GDP growth rates of 8% and 7%, respectively, indicating a potential surge in energy consumption and, consequently, an uptick in harmful emissions into the atmosphere. Notably, Asia, led by China and India, remains a significant consumer of coal for energy generation, contributing to over half of global CO2 emissions in 2021.

A report from GlobalData highlighted increased investments in renewables and Carbon Capture and Storage (CCS) notably by the European oil majors in 2023, signalling diversification in portfolios - not

¹⁷ Market Intelligence Data & Analytics for the OGSE Industry Final Report, RystadEnergy 3rd April 2023

exclusively oil and gas projects.¹⁸ Examples of this shift can be seen with TotalEnergies' commitment to low-energy segments, setting aside USD5 billion in Capex in 2023, and in 2022, Shell created a separate business unit for financial reporting of renewables and other non-core operations. It allocated an annual Capex of USD2.8 billion for this new segment, with plans to raise this Capex over the coming years.

Malaysia's energy landscape with a 61% reduction in solar project investments due to an expected fall in project approvals from 2023 to 2024, coupled with a 130% increase in investments on a year-to-year basis in CCS technologies, aligning with the nation's net-zero carbon emissions strategy by 2050.¹⁹

The National Energy Transition Roadmap (NETR), a Ministry of Economy initiative, outlines a commitment to consistent oil and gas supply until 2050. The NETR aims to align the energy sector with sustainable development goals, emphasising a just, inclusive and cost-effective transition. 6 energy transition levers, spanning Energy Efficiency, Renewable Energy, Hydrogen, Bio Energy, Green Mobility and CCUS, alongside 10 key projects, are set to spearhead these initiatives. Cross-cutting enablers like financing, human capital, policy and regulation, technology and infrastructure as well as good governance will be overseen by the government.

The NETR underscores the role of natural gas as a vital transition fuel and emphasises CCUS as a pathway to achieving net-zero. This document is in line with Malaysia's Nationally Determined Contributions (NDCs) to the Paris agreement where it committed to reduce carbon intensity by 45% of GDP by 2030 compared to 2005 levels. The total primary energy supply (TPES), highlighted in NETR, identified oil and gas as still the biggest component of the energy mix until 2050, standing at 77%, with the remaining coming from renewables. Budget 2024 allocated RM2 billion for the National Energy Transition Facility (NETF) and an additional RM892 million for the Low Carbon Transition Facility (LCTF) to support companies in adapting to sustainability requirements.²⁰

As sustainability compliance becomes mandatory, OGSE companies must adapt to stringent funding terms for sustainability risk management. The top drivers for compliance include customers' expectations, regulatory frameworks, investor and lender considerations and seizing opportunities in the circular/sustainable economy.²¹ The NOS-R is being developed and will be launched in 2024 to create pathways for OGSE companies to adopt and respond to sustainability requirements.

Moreover, the hydrogen economy is also growing in prominence in Malaysia, with the HETR recently launched by the Ministry of Science, Technology and Innovation.



The HETR's objective is to position Malaysia as a leading hydrogen producer in ASEAN, supporting a sustainable energy mix and investing in key hydrogen production technologies. The hydrogen market's potential valuation of USD2.5 trillion by 2050 presents significant economic and environmental opportunities, including job creation and substantial carbon emission reduction.²²

COP28 has highlighted several incentives in its efforts to address climate change. Key outcomes include the establishment of the Oil and Gas Decarbonisation Charter. Over 40% of global oil and gas producers have committed to achieving net-zero operations by 2050, ending routine flaring and near-zero methane emissions by 2030, along with increased transparency in emissions reporting.

Methane reduction, recognised as a crucial step in mitigating climate change, saw significant commitments

from countries and companies, as methane emissions from oil and gas operations contribute about 10% to global greenhouse gas emissions. Additionally, the conference highlighted the need for substantial investment in green technologies, with a focus on scaling renewable energy sources and improving energy efficiency in oil and gas operations.

The "Just Transition Work Programme" was also introduced, aiming for an equitable shift away from fossil fuel energy, particularly in developing countries, by addressing social impacts and creating new opportunities in a carbon-neutral world.

Malaysia is expected to experience an increase in investment in renewable energy sources and innovations in carbon reduction technologies as a response to global calls for decarbonisation. This shift could lead to a transformation in the industry's operational landscape,

fostering the development of cleaner and more environmentally friendly technologies.

Fluctuating market dynamics could become a reality as the industry navigates this transition, with changing consumer preferences and geopolitical factors influencing demand. To remain competitive, Malaysia's OGSE sector may need to align more closely with global emission reduction goals, necessitating adjustments in long-term strategies and day-to-day operations to meet evolving environmental standards and expectations.

Way Forward

In 2024, the OGSE industry is poised for significant developments. Despite an anticipated decline in oil and gas prices, a surge in upstream production and PETRONAS projects will present new opportunities for OGSE players. The international landscape is shifting, with companies increasingly adhering to sustainability requirements.

Heightened investments in energy transition projects are expected across the ASEAN region. Notably, Malaysia, guided by the NETR and the HETR, has launched initiatives to secure funding for its energy transition journey, with the NETF set to be launched in 2024, ensuring financial support for the nation's transition efforts.

18. GlobalData Intelligence Center, Global Data

19. Market Intelligence Data & Analytics for the OGSE Industry Final Report, RystadEnergy 3rd April 2023

20. Appendix 1, Touchpoint Budget 2024, Ministry of Finance, Malaysia

21. National Energy Transition Roadmap part 1 and 2, Ministry of Economy Malaysia

22. Hydrogen Economy & Technology Roadmap, Ministry of Science, Technology and Innovation, Malaysia

Special Feature: BURSA MALAYSIA'S PLC TRANSFORMATION PROGRAMME

The OGSE industry is a key pillar in Malaysia's energy landscape, propelling the nation's economic activities forward. Whilst there are both distinct challenges and opportunities in the OGSE industry – particularly for SMEs and mid-tier companies – there is an underlying imperative to develop robust business practices whilst striving towards sustainable development and responsible governance. In line with this, the Public Listed Companies Transformation (PLCT) Programme, spearheaded by Bursa Malaysia, assumes a pivotal role.

The key targets in the OGSE Blueprint are to enhance the proportion of listed companies within the sector and increase the number of billion-ringingit enterprises. For Public Listed Companies (PLCs), embracing the PLCT programme to catalyse revenue expansion through the adoption of industry-leading practices. Whilst non-PLCs stand to gain from the PLCT programme by traversing a pathway designed to position them for future listing, thereby capitalising on the opportunities for growth and success within the industry.

This transformative programme serves as a guide for all Malaysian companies regardless of their listing status. Its purpose is to propel Corporate Malaysia towards higher performance, fostering a dynamic environment that attracts both local and global investors.

The PLCT Programme may also be as a stepping stone for business transformation. By engaging in business transformation, companies crucially become

more attractive to investors and shareholders. This transformative journey is encapsulated in a series of 5 digital books launched in 2022, each focusing on crucial topics such as purpose and performance, sustainability, stakeholder & investor management, digital enablement, and nation building. This strategic initiative underscores the commitment to advancing Malaysia's corporate landscape, laying the foundation for sustained growth and prosperity.

Guidebook 1

[Click to Guidebook](#)

Outlines the fundamental principles and steps to assist PLCs in becoming Purpose and Performance Driven companies. In order for companies to elevate performance and improve their attractiveness to investors and other stakeholders, PLCs need to transition from merely *Keeping Up to Stepping Up*.

Guidebook 2

[Click to Guidebook](#)

Presents an Environmental, Social, and Governance (ESG) framework with practical guiding steps on how PLCs can develop a well-defined ESG approach, towards being Sustainable, Socially Responsible and Ethical PLCs. There are also dedicated chapters on key topics under the E, S and G dimensions respectively, which include a 'how-to' guide on areas that are relevant to businesses. This guidebook also features insights on the relevance of ESG for various corporate functions, to better understand how ESG can align across the whole company.





Guidebook 3

[Click to Guidebook](#)



Outlines the best practices of stakeholder management in PLCs, including the importance of the Investor Relations (IR) programme and associated activities that ultimately lead to improvements in the overall performance of PLCs. Beyond a deep-dive in effective communication strategies with various stakeholder groups, this Guidebook also provides a plan for crisis communications of diverse scenarios. This Guidebook goes beyond basic communication plans, emphasising instead a sustainable plan that not only maintains relations but deepens trust with stakeholders and investors.



Guidebook 4

[Click to Guidebook](#)



Highlights the opportunities, benefits, and imperatives for companies to adopt Digital Enablement, which can lead to improvements in performance and investor attraction. Many technological aspects have been included to illustrate the implementation of key propositions. Global and local examples and case studies as well as practice aids have also been included to provide a better appreciation of the 'how-to' aspects.

This Guidebook is structured around the 4 aspects of Digital Enablement. Each chapter expands on the benefits, key considerations, and examples to help PLCs on their transformational journey.



Guidebook 5

[Click to Guidebook](#)



Looks into how PLCs can contribute to as well as benefit from nation building. This Guidebook highlights the attributes of nation-building and outlines the diverse roles of businesses, government, and society within the following value creation areas:

- Sustaining economic growth and productivity
- Cultivating future-readiness, wellbeing, and talent inclusiveness
- Fostering stronger public-private partnerships

Both internationally and locally, addressing ESG topics has become a top priority for governments and companies alike. In the past few years, three pivotal themes have been observed: the imperative for robust sustainability governance, a global shift towards net-zero commitments, and the enhancement of human rights and labour standards. Malaysia is responding to this heightened pressure from international investors and stakeholders by intensifying local efforts to meet these standards.

Considering the OGSE sector's significant role in supplying the nation's energy resources, it is imperative for the industry to recognise its role as a front-liner and act as a role-model for other businesses in sustainable development and responsible governance.

Bursa Malaysia's Enhanced Listing Requirements Pertaining to the Sustainability Reporting Framework

With the aim of advancing the sustainability practices and disclosures of listed companies, Bursa Malaysia has mandated Main Market listed issuers to disclose their common material sustainability matters on nine themes except emission and waste management for the financial year ending on or after 31 December 2023. The disclosure of emission and waste management will only be required for financial years ending on or after 31 December 2024.

On the other hand, ACE Market listed issuers are only required to disclose their common material sustainability matters 2 years after it is enforced on the Main Market.

Introduction of the Centralised Sustainability Intelligence (CSI) Platform

To facilitate ESG reporting as well as decarbonisation efforts beyond PLCs, Bursa Malaysia will also introduce the CSI Platform. This innovative platform serves as an integral tool for both OGSE PLCs and non-PLCs, offering a comprehensive assessment of their carbon emissions impact. By enabling companies to calculate and report their carbon footprint, the CSI platform supports greater transparency as well as enhances business value extraction, including facilitating access to sustainable financing. For OGSE PLCs, this platform is particularly relevant as it supports the industry's objective of managing carbon emissions, from their supply chain and beyond. Moreover, this platform assists the industry in its decarbonisation plans.

The move towards greater transparency is especially useful as it informs businesses on best-suited suppliers. The carbon monitoring tool enables PLCs and non-listed SMEs to monitor carbon profiles of all their suppliers, from top to bottom. It is evident therefore that the standardised reporting facilitated by the CSI Platform not only accelerates the decarbonisation process within the sector but also positions OGSE PLCs and non-listed SMEs favourably for green financing products and services.

Bursa Malaysia has also signed an MoU with the Indonesia Stock Exchange (IDX) and the Stock Exchange of Thailand (SET) to harmonise ESG reporting in the ASEAN region while promoting cross-border trade. This collaboration serves as a testament to Bursa Malaysia's commitment towards enhancing trade opportunities and fostering economic growth.

Furthermore, the recent partnership with UN Global Compact Network Malaysia & Brunei (UNGCMYB) is equally noteworthy as they plan to co-develop awareness sessions and capacity building training for PLCs and their supply chains, including SMEs. This collaboration demonstrates Bursa Malaysia's dedication to empowering and equipping businesses with the knowledge and resources needed to decarbonise.

For non-PLC SMEs in the OGSE sector, the CSI platform opens avenues for them to actively participate in sustainability initiatives. It does not facilitate the measurement and disclosure of their environmental impact but also enhances their credibility and attractiveness to potential investors or financial institutions. The CSI platform serves as a catalyst for accelerating the decarbonisation process, while also granting access to funds. This contributes to establishing a more sustainable and resilient future for both OGSE PLCs and non-PLC SMEs in Malaysia.



01 Population Sampling

The OGSE100 rankings analysis was initiated from **PETRONAS' list of 4,741 companies with Standardised Work & Equipment Categories (SWEC) licences**. We removed 890 companies from the list identified as PETRONAS subsidiaries, non-oil and gas companies and non-corporate entities (such as architecture firms), leaving **3,851 companies** for the next step in this methodology.

Companies are excluded if they fall within segments or specific SWEC including among others:

Services:

Digital & ICT, Human Resources Services, Marketing, Advertising & Public Relations, Leasing & Rental, Cargo Transport, Business Travel Management, Upgrading/Renovation & Repair Works.

Materials and/or Equipment:

Automotive, Mechanical, Medical Equipment, Office Supplies and Electrical Appliances & Parts.

Core business activities described in the business website which do not indicate OGSE related activities.

02 Data Acquisition

The next step involved obtaining companies' financial data from SSM. We requested SSM to provide the financial data of the 3,851 companies identified during the Population Sampling. However, data from only 2,578 companies were available.

The data from SSM was received as of November 2023 and typically lags by a period of 1 year, accounting for the historical tendency of unlisted OGSE companies to defer the submission of annual reports. Through this practice, the purposeful 1-year delay enables MPRC to ensure the consolidation of a comprehensive data set for Malaysia's OGSE industry.

If no accounts are lodged by that period, MPRC assumed:

- The company is late in submitting its accounts; or
- The company had a change in its financial year-end.

Then, we added 23 PLCs, leading to a new population of **2,601 companies**.

03 Data Processing

We mapped the 2,601 companies with the subsidiary listing in FY2022 obtained from SSM to identify their parent companies. This exercise led to the removal of 96 subsidiary companies attached to 59 parent companies. The removal of subsidiaries is conducted to avoid double-counting, once on the subsidiary's financial records and again on the parent's financial records. Next, we removed 4 PETRONAS-related companies, followed by 85 companies validated against the PETRONAS SWEC where oil and gas were not part of their core operations. Then, we removed another 130 companies which recorded no revenues for FY2022 based on SSM's Corporate & Business Information Data. As such, we arrived at our industry population of **2,286 companies**.

04 Data Interpretation

The industry population of 2,286 companies was then ranked only based on their revenue in FY2022, of which we identified the top 100 companies. At this point, we verified the top 100 companies' financials specifically for revenue, PBT and total non-current assets through their annual reports obtained from Bursa Malaysia for listed companies and the SSM database for non-listed companies.

We then grouped the 2,286 companies into OGSE100, non-OGSE100 Mid-Tiers and SMEs.

The criteria for non-OGSE100 Mid-Tiers and SMEs are as follows:

- Non-OGSE100 Mid-Tier:
Sales turnover > RM50 mil and < RM500 mil (Manufacturing) OR Sales turnover > RM20 mil and < RM500 mil (Services and Other sectors)
- SMEs:
Sales turnover < RM50 mil (Manufacturing) OR Sales turnover < RM20 mil (Services and Other sectors)

05 Publication

The OGSE100 FY2022 Report's content underwent a rigorous review and validation process with key stakeholders. This process involved stages such as copywriting, design, approval, and printing before making the OGSE100 FY2022 Report available for circulation.



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GLOSSARY

ABC	PETRONAS Asset Integrity Backlog Clearance	E&C	Engineering and Construction
ASEAN	Association of Southeast Asian Nations	EIA	U.S. Energy Information Administration
bbbl	Barrel	EPCI	Engineering, Procurement, Construction and Installation
BOD	Board of Directors	ESG	Environment, Social, and Governance
CBID	Corporate and Business Information Data	ESOS	Employees' Share Option Scheme
CCS	Carbon Capture and Storage	EVs	Electric Vehicles
CCUS	Carbon Capture, Utilisation and Storage	FY2022	Financial Year 2022
COP28	The 28th United Nations Climate Change Conference	GDP	Gross Domestic Product
CO2	Carbon Dioxide	GHG	Greenhouse Gas
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership	GRI	Global Reporting Initiative
CSI	Centralised Sustainability Intelligence	HETR	Hydrogen Economy and Technology Roadmap
CSR	Corporate Social Responsibility	HUC	Hook-Up and Commissioning
DOE	Department of Environment	IDX	Indonesia Stock Exchange
DTN	National Energy Policy	IEA	International Energy Agency

IMF	International Monetary Fund	PLCT	Public Listed Companies Transformation Programme
IR	Investor Relations	PV	Photovoltaic
IPEF	Indo-Pacific Economic Framework	QHSSE	Quality & Health, Safety, Security & Environment
IPIECA	International Petroleum Industry Environmental Conservation Association's	RCEP	Regional Comprehensive Economic Partnership
KPIs	Key Performance Indicators	LHS	Left-hand-side
LBT	Loss Before Tax	RHS	Right-hand-side
LCTF	Low Carbon Transition Facility	SASB	Sustainability Accounting Standards Board
LNG	Liquefied Natural Gas	SEA	Southeast Asia
LTI	Lost Time Incidents	SET	Stock Exchange of Thailand
LTIF	Lost Time Injury Frequency	SMEs	Small and Medium-Sized Enterprises
Mboed	Million Barrels Oil Equivalent Per Day	SOP	Standard Operating Procedure
MCCG	Malaysian Code of Corporate Governance	SRG	Sustainability Reporting Guide
MHB	Materials Hazardous Only in Bulk	SSM	Companies Commission of Malaysia (Suruhanjaya Syarikat Malaysia)
MMBtu	Million British Thermal Units	SWEC	Standardised Work & Equipment Categories
MMLR	Main Market Listing Requirement	TCFD	Task Force on Climate-related Financial Disclosures
MPRC	Malaysia Petroleum Resources Corporation	TFA	Total Fixed Assets
MTCs	Mid-Tier Companies	TNCA	Total Non-current Asset
NDCs	Nationally Determined Contributions	TPES	Total Primary Energy Supply
NETF	National Energy Transition Facility Fund	TPPA	Trans-Pacific Partnership Agreement
NETR	National Energy Transition Roadmap	U.S	United States of America
NIMP	New Industrial Master Plan	UNGCMYB	UN Global Compact Network Malaysia & Brunei
NOS-F	National OGSE Sustainability Framework	UNSDG	United Nations Sustainable Development Goals
NOS-R	National OGSE Sustainability Roadmap	WHP	Wellhead Platforms
O&M	Operations and Maintenance	Y-O-Y	Year-on-Year
OGSE	Oil and Gas Services and Equipment		
OGSE Blueprint	National OGSE Industry Blueprint 2021-2030		
OIC	Offshore Installation and Construction		
OSH	Occupational Safety and Health		
OSVs	Offshore Support Vessels		
P&A	Plug & Abandonment		
PACs	Petroleum Arrangement Contractors		
PBT	Profit Before Tax		
PLC	Publicly Listed Companies		

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