

1. INTRODUCTION

This publication evaluates the performance of the Oil & Gas Services and Equipment (OGSE) industry based on its contribution to Gross Domestic Product (GDP), output value, input, value-added, employment, salaries and wages, ownership structure, legal status, micro, small, and medium enterprises (MSMEs), core OGSE activities, environmental, social, and governance (ESG) data, and other key statistics. Beyond serving as a new benchmark for OGSE statistics in Malaysia, the data presented in this report is used to assess progress on key indicators outlined in the National OGSE Industry Blueprint 2021-2030.

2. SCOPE AND COVERAGE

The OGSE Census encompasses all organizations engaged in oil and gas services and equipment activities in Malaysia. Organizations in the 2024 OGSE Census are classified according to the Malaysia Standard Industrial Classification (MSIC) 2008 Ver. 1.0, aligned with the International Standard Industrial Classification (ISIC) Ver. 4 issued by the United Nations Statistics Division (UNSD). The sectors covered in the 2024 OGSE Census primarily focus on the services sector, civil engineering within the construction industry, engineering services, and support activities for petroleum and natural gas. The coverage of the entire sector includes 265 industries, as outlined in Table 1.

Table 1: Number of industries by sector

Sector	Category of Industries
Services	150
Manufacturing	57
Construction	55
Mining & quarrying	3
Total	265

The list of MSIC codes involved in the compilation of this publication is provided in **Appendix 1**. This publication is categorized into two segments:

2.1. Industrial Segment

The Industrial Segment covers the Manufacturing, Construction, and Mining & Quarrying sectors.

2.2. Services Segment

The Services Segment consists solely of the Services Sector.

3. SOURCE OF STATISTICAL FRAME

The primary framework sources for this census are the Malaysia Petroleum Resources Corporation (MPRC) and Petroliam Nasional Berhad (PETRONAS). Additionally, the framework is also derived from the 2023 Economic Census (reference year 2022) through data collected from Section H (Oil & Gas Services and Equipment).

4. TYPE OF BUSINESS ACTIVITY

Type of business activity refers to both principal and secondary activities. The principal activity refers to the activity to which the establishment devoted most of its resources or activity which derived most of its income. Secondary activities are defined as those incidental or ancillary to the principal activity. The classification of the industry of the establishment is based on the principal activity and is in accordance with the Malaysia Standard Industrial Classification (MSIC) 2008 Ver. 1.0 conforms to the International Standard Industrial Classification of All Economic Activities (ISIC), Rev. 4, United Nations, with modifications to suit local conditions.

5. CONCEPTS AND DEFINITIONS

5.1. Organisations must meet the following criteria to be eligible for the OGSE Census:

i. Criteria 1

Registered with the Companies Commission of Malaysia (SSM) or other relevant authorities.

ii. Criteria 2

Engaged in core oil and gas activities.

5.2. Determination of Core OGSE Activities

A total of 56 core OGSE activities have been identified and provided by MPRC to DOSM for the implementation of the OGSE Census. This list was refined from approximately 1,200 Standardized Work and Equipment Categories (SWEC) Codes. The SWEC Code refers to work categories related to the supply of goods and services to license holders awarded contracts by PETRONAS. The detailed list of core OGSE activities is provided in **Appendix 2**.

5.3. The definitions applied are categorized into four main sectors: Mining & quarrying, Manufacturing, Construction, and Services, in accordance with MSIC 2008 Version 1.0, which is based on the International Standard Industrial Classification of All Economic Activities (ISIC) Revision 4. The definitions are as follows:

5.3.1. Mining & quarrying

Mining and quarrying include the extraction of minerals occurring naturally as solids (coal and ores), liquids (petroleum) or gases (natural gas). Extraction can be achieved by different methods such as underground or surface mining, well operation, seabed mining, etc. The Mining and quarrying sector consists of two subsectors, (i) Mineral mining and



quarrying and (ii) Petroleum and natural gas extraction. However, the Mineral mining and quarrying subsector is not covered in this publication.

5.3.2. Manufacturing

The physical or chemical transformation of materials or components into new products, whether the work is performed by power-driven machines or by hand, whether it is done in a factory or in the worker's home, and whether the products are sold at wholesale or retail. For the Manufacturing sector, the relevant subsectors included in this publication are Textile, apparel, leather, and footwear products, Wood products, furniture, paper products, Printing, Petroleum, chemical, rubber, and plastic products, Non-metallic mineral products, Basic metals, and metal products, Electrical, electronic, and optical products and Transport equipment, other manufacturing, and repairs.

5.3.3. Construction

New construction, alteration, repair and demolition. Installation of any machinery or equipment which built-in at the time of the original construction is included, as well as installation of machinery or equipment after the original construction but which requires structural alteration to install.

5.3.4. Services

For the Services sector, the relevant subsectors included in this publication are Water supply, sewerage, waste management and remediation activities, Wholesale & retail trade, Transportation and storage, Information and communication, Food and beverage, Finance, Real estate activities, Professional, Administrative and support services, Education and Health.

6. CENSUS YEAR AND REFERENCE YEAR

Census year refers to the year in which a survey was conducted while the reference year of the census was the calendar year 2023. Establishments whose accounting year differed from calendar year were requested to report according to the accounting year or financial year covering at least six (6) months in the reference year.

7. REPORTING UNIT

The OGSE Census 2024 uses establishments as the reporting unit.

7.1. The **establishment** is defined as "an economic unit engaged in one activity, under a single legal entity and operating in a single physical / location". In the case of a multi-activity entity, units engaged in separate activities in the same location constituted distinct establishments.

7.2. An **enterprise** is defined as:

- **7.2.1.** The entire economic activity operating under a single legal entity;
- **7.2.2.** It may consist of more than one organisation;
- **7.2.3.** A single institutional unit engaged in the production of goods and services;
- **7.2.4.** This entity has the ability to own assets, incur liabilities, and engage in economic activities and transactions with other entities;
- **7.2.5.** It may be a corporation, cooperative, association, partnership, sole proprietorship, or may take other forms of association.
- **7.3.** The statistics reported in this publication are based on the location of the establishment, reflecting the condition and performance of the establishment according to the geographical area in which it operates.

8. LEGAL STATUS

The legal status of an establishment has been defined as follows:

8.1. Individual proprietorship

This refers to a business, owned and operated by one person for his own profit. The owner has the exclusive right to control the operation of the establishment.

8.2. Partnership

This refers to a group of individuals who agree to contract and to carry out a business with the objective of profit making. All shareholders or anyone could manage the business for all parties. A trading partnership must comprise of at least two members and should not exceed a maximum of twenty members.

8.3. Limited liabilities partnership

Refers to business entity regulated under the Limited Liability Partnerships Act 2012. It is featured with the protection of limited liability to its partners similar to the limited liability enjoyed by shareholders of a company coupled with flexibility of internal business regulation through partnership arrangement similar to a conventional partnership, and

8.4. Private limited company

A private company established to undertake a business with the objective of making a profit. The shares are closely held by the shareholders of the company who have control over its operation.

Characteristics:

- i. Regulated under the Companies Act 1965 and is a legal entity separate from the owners.
- ii. Number of its shareholders between 2 50 members,
- iii. Company owners have limited liability,
- iv. Shareholders who own 51 per cent or more of the total shares shall be entitled to manage the company. The company's shares can be traded but not in the open market,



- v. Trading of share must be with the consent of the other shareholders,
- vi. Not listed on the Stock Exchange, and
- vii. Business life expectancy is longer and can be identified by the words "Sendirian Berhad" (Sdn. Bhd.) at the end of the company name.

8.5. Public limited company

A public limited company is a company established with limited liability, by a minimum of two persons to operate the business with the objective of making a profit. The shares in a public limited company are openly held and in the case of company listed on the Bursa Malaysia, the shares are freely transferable.

Characteristics:

- i. Regulated under the Companies Act 1965 and is a legal entity separate from the owner.
- ii. Owned by the shareholders and there is no limit to the shareholder,
- iii. Management of the company is under the board of director responsibilities as appointed by shareholders, and
- iv. Listed on Bursa Malaysia.

8.6. Co-operative

This refers to a voluntary association with unrestricted number of members and registered under the Co-operatives Act 1993. Funds are collectively owned to meet the needs of members.

8.7. Public corporation

This refers to an undertaking set up under a Special Act Parliament or by the State Legislature.

8.8. Private non-profit making organisation

This is non-stock company set up with limited liability. It comprises mainly welfare, religious, educational, health, cultural, recreational and other organisations providing social and community services to households. These services are provided free of charge or at prices, which do not necessarily or fully cover the cost of providing such services (subsidy). Any profit made is reinvested in the organisation.

9. OWNERSHIP

The ownership of an establishment is classified by the residential status of the owner (s) of the majority (more than 50%) of the paid-up capital and not by their citizenship status. In instances where each party (Malaysian Resident and Non- Malaysian Resident) held equal shares in the business, the establishments were classified as "Joint Ownership".

9.1. A **Malaysian Resident** is any individual, company or other organization ordinarily domiciled in Malaysia for a period of at least one year. Malaysian registered branches and incorporated subsidiaries of foreign based/origins are also regarded as Residents.

- **9.2.** A **Non-Malaysian Resident** is any individual, company or other organization ordinarily domiciled in a country other than Malaysia. Foreign branches and/or subsidiaries abroad owned by Malaysian Residents are also regarded as Non-Residents.
- **9.3. Joint ownership** refers to an entity or organization owned by the Federal, State, and Local Governments.

10. VALUE OF GROSS OUTPUT

10.1. The value of gross output of **Mining & quarrying, Manufacturing and Construction** is defined to include the following items:

Sale of mineral/ quarry products/ manufactured products and construction work done

- Values of goods sold in the same condition as purchased
- Cost of goods sold in the same condition as purchased
- + Capital expenditure on own construction
- + Income from industrial services rendered to others
- + Income from industrial work done
- + Receipt from scrap, electricity, waste product, etc. sold to others
- + Receipt from commission and brokerage earned
- + All other output (such as receipts of non-industrial services, e.g. management fees received, income from rental of property, etc)
- + Closing stock of finished goods
- Opening stock of finished goods
- + Closing stock of goods being processed
- Opening stock of goods being processed
- + Research and development expenditure (In-house)
- **10.2.** The value of gross output of **Services** is defined to include the following items:
 - Value of goods sold in the same condition as purchased
 - + Management services
 - + Commission and brokerage earned
 - + Fees earned from membership
 - Rental income received except land rental
 - + Other operating services
 - + Service tax and services charges
 - Value of goods purchased for resale in the same condition
 - + Closing stocks
 - Opening stocks
 - + Research and development expenditure (In-house)
- **10.3.** The value of **OGSE output** refers to the value of goods and services for OGSE activities carried out by the establishment.



11. VALUE OF INTERMEDIATE INPUT

11.1. The value of intermediate input of **Mining & quarrying, Manufacturing and Construction** is defined to include the following items:

Value of materials and supplies consumed

- + Cost of industrial work done by others include stripping overburden (earth removal) and internal transport in mines/ quarries site
- + Electricity and water purchased
- + Value of fuels, lubricants and gas consumed
- + Cost of materials used for repairs and maintenance of assets (including payments to others for this work)
- + Payments for non-industrial services such as toll, ferry, pilotage, towage and harbor fees and charges (including payments for carriage outwards, travelling, management fees, legal services, information technology, advertising, bank chargers, postage, telecommunication, etc
- + All other input costs (including training and value of the free apparel provided for the workers)
- **11.2.** The value of intermediate input of **Services** is defined to include the following items:

Purchase of goods, materials and services

- + Insurance premiums
- + Royalty and patent fees
- + Bank charges
- + Purchase of electricity and water
- Purchase of fuels, lubricants and gas
- + Research and development expenditure
- + Environmental compliance expenditure
- + Other operating expenditure

12. VALUE ADDED

Value added is the increment to the value of commodities and services contributed by the establishment. This value added is derived as the difference between the value of gross output and intermediate input.

13. NUMBER OF PERSONS ENGAGED

Employment covers all persons engaged during December or the last pay period of the reference year. The number of persons engaged was classified under the following categories:

13.1. Working proprietors and active business partners

i. Working proprietors and active business partners

This category refers to all individual proprietors and partners (full-time or part-time) who are actively engaged in the work of the establishment. It, therefore, excludes silent and inactive partners.

ii. Unpaid family workers

Include all household members (full-time or part-time) to the owners of the establishment who perform a specified job and work for a minimum of one third of the normal working time for the establishment, but do not receive regular payment either in cash or in kind for the work done. Such workers generally receive food, shelter and other support as part of the household of an owner, but this would continue whether they worked in the establishment or not.

13.2. Paid full-time employees

Refer to all paid workers (full-time) who work for at least six hours a day and/or 20 days a month. All such employees are to be categorized according to Malaysia Standard Classification of Occupations 2020 (MASCO) as follows:

i. Manager and Professional included:

a. Manager

Refer to those who devise, analyse, formulate, direct and advise on government policy, and make, amend and repeal laws, public rules and regulations, and represent and act on behalf of the government, and oversee the interpretation and implementation of policies and government legislation, or carry out similar tasks on behalf of special interest organisations, or plan, organise, lead, control and coordinate the policies and activities of enterprises, organisations, departments or the internal section, and

b. Professional

Refer to those responsible for increase the existing stock of knowledge, apply scientific or artistic concepts and theories, teach about the foregoing in a systematic manner, or engage in any combination of these three activities.

ii. Technicians and associate professionals

Refer to those who perform technical and related tasks connected with research and the application of scientific or artistic concepts and operational methods, and government or business regulations.

iii. Clerical, services & sales workers, craft workers, plant & machine operators and related occupations includes:



a. Clerical support workers

Refer to those who record, organise, store and retrieve related information and perform clerical duties especially in connection with administrative operations, handling of money, travel arrangements and requests for information and appointments.

b. Service and sales workers

Refer to those who provide personal services related to travel, housekeeping, catering, personal care, or protection against fire and unlawful acts, or demonstrate and sell goods in wholesale or retail shops and similar establishments as well as at stalls and markets.

c. Craft and related trades workers

Refer to those who apply their specific knowledge and skills in the fields of mining and construction, metal forming, and erect metal structures, make, fit, maintain and repair machinery, equipment or tools, carry out printing work as well as produce or process foodstuffs, textiles, or wooden, metal and other articles including handicraft goods; and

d. Plant & machine operators, and assemblers

Refer to those who operate and monitor industrial and agricultural machinery and equipment, drive and operate trains, motor vehicles and mobile machinery and equipment, or assemble product component parts according to strict specifications and procedures.

e. Elementary occupations

Refer to those who perform simple, routine and non-systematic tasks which mainly require the use of handheld tools or with the assistance of simple machines, and in some cases considerable physical effort.

13.3. Paid part-time employees

Refer to all paid workers (part-time) who work less than six hours a day and/or 20 days a month.

14. CATEGORY OF SKILLS

Category of skills have been classified according to Malaysia Standard Classification of Occupation (MASCO) 2020 as follows:

14.1. Skilled

Managers, Professionals and Technicians and associate professionals;

14.2. Semi-skilled

Clerical support, Service & sales workers, Craft & related trades workers, and Plant & machine operators and assemblers; and

14.3. Low-skilled

Elementary occupations

15. SALARIES & WAGES

All payments (salaries, wages, bonuses, commissions, overtime pay and cash allowances including cost of living, housing, car, food, etc.) made throughout the reference year to all paid employees in each category. For all directly employed workers, total payments made before deductions for income tax and employees' contributions to Employees' Provident Fund (EPF)/ Social Security Organisation (SOCSO)/ Other provident/ Retirement Funds Incorporated (KWAP). The Employer's contribution to such funds as mentioned above should be excluded.

16. VALUE OF FIXED ASSETS

Value of fixed assets is the value of acquisition or used of such entities in a period of time. The value of fixed assets can be distinguished from non-financial assets and financial assets. For non-financial assets, it distinguished between production and non-production assets. Production assets consist of structure, machinery & equipment and other assets. The types of assets are defined as follows:

16.1. Buildings and other construction:

- i. Residential consists entirely or primarily of dwellings.
- ii. Non-residential buildings for industrial, commercial or public use; e.g. factories, warehouses, office buildings, stores, restaurants, garage, shops, hospitals, school, etc.
- *iii.* Other construction work includes building or renovation of roads, railroads, sewers, bridges, harbours, car parks, pipelines, etc.
- iv. Land includes the value of sites without considering on land improvements and structures. (e.g. reclaimed land and coastal land reclaimed to create a land).

16.2. Machinery and equipment:

i. Main machinery and equipment

Includes power generating machinery, office machinery and equipment, metal working machinery, construction and other industrial machinery, cranes, fork-lift equipment etc., durable containers, equipment and instruments used by professionals and any other machinery and equipment including major repair and improvement to these types of machinery and equipment.



ii. Drone

A drone or unmanned aircraft system (UAS) means an aircraft and its associated elements which are operated with no pilot on board.

iii. Transport equipment

Refers to equipment used for the conveyance of goods and / or persons for business purpose

iv. Information and communications technology

a. Computer hardware

Refers to all computer hardware used for processing, storing and transmitting data and information related to computer system.

b. Computer software

Refers to software used in operating the computer programme and database whether it is self-produced, custom-made as well as ready-made (non-customised).

c. Telecommunications equipment

Refers to mobile phones, personal digital assistants (PDAs), satellite dishes, audio visual equipment (e.g. radio, television) and other television / radio transmitters and receivers.

v. Furniture and fittings

Covers all items required to furnish and equip a building, e.g.: chairs, tables, carpeting etc.

vi. Land improvement

Includes all value of work done on clearing, preparing construction sites and landscaping but excludes the value of land before improvement. It also includes outlays on land reclamation and land clearance irrespective of whether it represents an addition to total land availability or not. For example, irrigation and flood control projects, dams and dykes which are part of these projects, clearance and forestation to timber tracts and forests.

- **16.3. Other assets** refer to asset not classified under buildings intangible assets that includes patent and goodwill.
 - *i.* **Patent** refers to exclusive right to manufacture a mechanical invention which runs for numbers of years. Patent is valued at cost.
 - ii. Goodwill arises from the good reputation of a company and the customer's loyalty it has gained. When a business is purchased for a price in excess of the value of its net assets, then the excess presumably is for goodwill.

iii. Work in progress refers to assets (e.g. building, machinery & equipment etc.) partially completed and has yet to be capitalised. For example, if a company is constructing an asset such as building to be used in production, and the asset is only partially completed, the amount spent would be recorded as work in progress.

16.4. Net book value as at beginning of the financial year

Net book value as at the beginning of the financial year, net of depreciation in the year before.

16.5. New include imported (new & used)

Cover acquisitions of new assets including imports of used assets since they represent newly acquired assets for the Malaysian economy. This refers to fixed assets that is not used in Malaysia, including imported fixed assets, whether new or used.

16.6. Used assets (Malaysia)

Used assets (Malaysia) refer to all assets previously used in Malaysia including those reconditioned or modified before acquisition.

16.7. Built / self-produced

Built / self-produced for assets produced by the establishment for its own use, the costs of all works done during the year should be recorded. Any overhead costs allocated to this work should be included.

Capital transaction should generally be recorded when ownership is acquired. Normally it should coincide with the time at which the assets are in its completed form and delivered to the control of the establishment. This is the basis for recording expenditure of all fixed assets except construction work. In the case of construction, the value of construction work done is the value of work carried out on projects completed during the reference year, plus the value of work under construction at the end of the reference year minus the value of work at the beginning of the reference year.

16.8. Assets sold or disposed / discarded during 2023

The value of fixed assets sold / disposed / discarded during the year regardless of their condition is to be reported according to the actual amount

16.9. Gain (+) / loss (-) from sales / revaluation of assets

Gain / loss from sales / revaluation of assets refer to when an asset is sold above / below the net book value, a gain / loss from the sale of asset is realised and should be reported. Similarly, an asset can be revalued to reflect the current market value. A gain / loss from revaluation of the asset is realised and should also be reported. If it is a loss, the figure should be written beginning with symbol (-).



16.10. Current depreciation / amortisation during 2023

Current depreciation / amortisation represents loss or diminution of value of an asset consequent upon wear and tear, obsolescence or permanent fall in market value (depreciation allowed for a tax purpose is acceptable). The value reported in the establishment's books of accounts for each class of fixed assets should be reported. This includes amortisation of leasehold land.

16.11. Net book value as at end of the financial year

- + the net value as at beginning of the financial year
- + new include imported (new & used)
- + used assets (Malaysia)
- + built / self-produced
- assets sold / disposed / discarded
- +/- gain / loss from sales / revaluation of assets
- current depreciation / amortisation during 2023

16.12. Rent paid during 2023

The amount paid for the use of any assets taken on lease or rent.

17. REGION

The regions are divided into Peninsular Malaysia, Sabah, and Sarawak. For the Peninsular region, it consists of the states of Johor, Kedah, Kelantan, Melaka, Negeri Sembilan, Pahang, Pulau Pinang, Perak, Perlis, Selangor, and Terengganu, as well as the Federal Territories of Kuala Lumpur, Putrajaya, and Labuan.

18. ENVIRONMENT, SOCIAL AND GOVERNANCE (ESG)

Doesn't only refer to the calendar year of 2023. ESG refers to the criteria used to assess the impact of a company's practices and operations on its financial performance and operations, with the aim of enhancing the performance and sustainability of the industry.

18.1. Environmental

Refers to the impact of organization's activities / operations on living organisms and non-living elements, including air, soil, water, and ecosystems.

18.2. Social

Refers to the impact of organization's activities / operations on individuals and groups such as communities, vulnerable groups, or society.

18.3. Governance

Refers to organizational governance structure, composition, knowledge, roles, and incentives.

19. MICRO, SMALL AND MEDIUM ENTERPRISES (MSMEs)

Sector	Micro	Small	Medium
Number of Full-Time Employees			
Manufacturing	Less than	From 5 to less than	From 75 to not exceeding
	5 employees	75 employees	200 employees
Mining & quarrying,	Less than	From 5 to less than	From 30 to not exceeding
Construction and	5 employees	30 employees	75 employees
Services			
Annual Sales Turnover			
Manufacturing	Less than	From RM300,000 to	From RM 15 million to not
	RM300,000	less than	exceeding RM50 million
		RM15 million	
Mining & quarrying,	Less than	From RM300,000 to	From RM3 million to not
Construction and	RM300,000	less than	exceeding RM20 million
Services		RM3 million	

20. ROUNDING

The sum of the component figures may not tally with the sub-total or total figures due to rounding.

21. SYMBOLS AND ABBREVIATIONS

- : no information

& : and

% : per cent

e.g. : exempli gratia

etc. : et cetera

n.a : not available

n.e.c. : not elsewhere classified

RM : Ringgit Malaysia

W.P. : Federal Territory