11. SUMMARY OF THE INDEPENDENT MARKET RESEARCH REPORT

(Prepared for inclusion in the Prospectus)

VITAL FACTOR CONSULTING
Creating Winning Business Solutions

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16 OCT 2006

The Board of Directors
Kencana Petroleum Berhad
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Dear Sirs

Independent Assessment of the Fabricated Metal Structure Industry for the Oil and Gas Sector

The following is a summary of the independent **Assessment of the Fabricated Metal Structure Industry for the Oil and Gas Sector** in Malaysia prepared by Vital Factor Consulting Sdn Bhd for inclusion in the Prospectus of **Kencana Petroleum Berhad** (herein together with all its subsidiaries and associate companies will be referred to as Kencana Petroleum Group) in relation to its proposed listing on the Main Board of Bursa Malaysia Securities Berhad.

1.1 BACKGROUND OF KENCANA PETROLEUM GROUP

- Kencana Petroleum Group is a provider of Integrated Engineering and Fabrication of Production Facilities for the Oil and Gas Industry.

- The principal business activities of the Group are as follows:
  - Engineering and Fabrication of Production Facilities;
  - Engineering and Fabrication of Modules;
  - Engineering and Fabrication of Process Skid Systems;
  - Engineering, Procurement, Construction and Commissioning, and Design and Engineering services;
  - Provision of Supporting Services;
  - Specialised Fabrication.

- For the financial year ended 31 July 2006, Kencana Petroleum Group recorded total revenue of RM473.3 million. Local revenue accounted for approximately 45.5% of Kencana Petroleum Group's total revenue, while overseas revenue accounted for approximately 54.5% of Kencana Petroleum Group's total revenue.

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1.2 INDUSTRY OVERVIEW

- Engineering and Fabrication of Production Facilities is a subset of the Fabricated Metal Structure Industry.

- The Fabricated Metal Structure Industry plays a significant supporting role to the growth and development of major industrial sectors in Malaysia, including the Oil and Gas, Construction and Manufacturing Industries.

- The Fabrication of Metal Structures is regarded as a high value-added activity converting Iron and Steel into functional structures critical to a number of Industries.

- Operators in the Fabricated Metal Structure Industry including those in the Engineering and Fabrication of Production Facilities in Malaysia have developed world-class capabilities in Oil and Gas offshore/onshore facilities fabrication. Malaysian companies are currently servicing the needs of multinational oil companies in Malaysia as well as the export markets *(Source: Malaysian Industrial Development Authority).*

- The industry also contributes to Malaysia's foreign exchange earning and towards employment generation, value-added creation and income generation from local production activities. This is reflected in the following:

  - In 2005, the sales value of the manufacture of Structural Metal Products totaled RM835.3 million;

  - In 2005, exports of Structures and Parts of Structures, of Iron, Steel or Aluminium totalled RM871.1 million.

  (Source: Department of Statistics)

- In addition to its contribution to the nation's foreign exchange earnings, the Fabricated Metal Structure Industry also contributes towards employment generation, value-added creation and income generation.

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1.3 INDUSTRY STRUCTURE

1.3.1 Oil and Gas Industry Segmentation

- The structure of the Oil and Gas Industry may be depicted as follows:

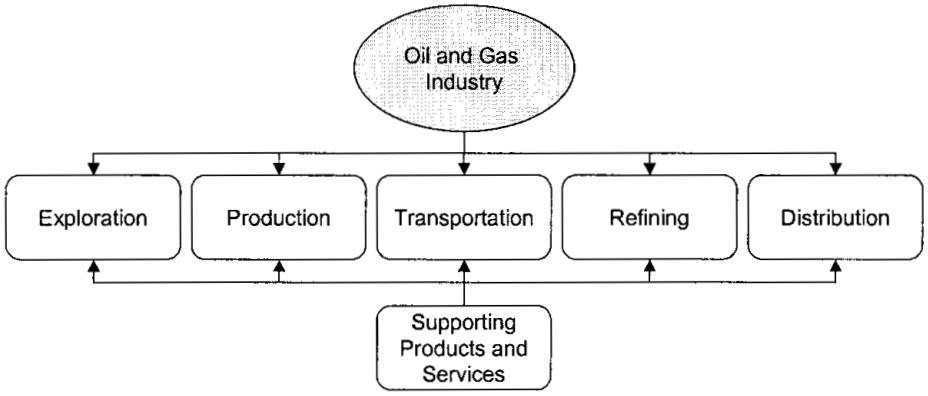

Figure 1 Segmentation of the Oil and Gas Industry

- Exploration comprises activities that are related to the prospecting of undiscovered hydrocarbons.
- Production comprises activities that are related to the extraction of hydrocarbons from identified hydrocarbon reserves.
- Transportation comprises activities related to the transportation of extracted hydrocarbons from production fields to storage facilities and refineries.
- Refining comprises activities that are related to the processing of extracted hydrocarbons into a form that may be utilised by intermediate and final users.
- Distribution comprises activities that are related to the transportation and distribution of refined hydrocarbons to end-users.
- Supporting Products and Services comprised a diverse range of products and services that are used to facilitate the exploration, production through to the distribution of Oil and Gas. Some examples of Supporting Products and Services include, among many others, the Engineering and Fabrication of Production Facility including Modules and Process Skid Systems, which is the focus of this report.

1.3.2 Production

- The structure of the Production segment may be depicted as follows:

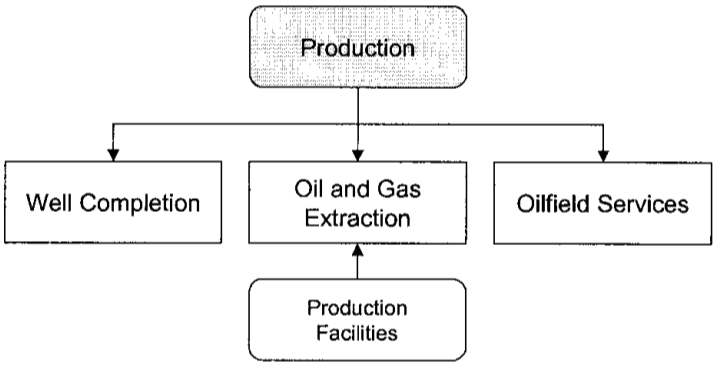

Figure 2 Oil and Gas Industry Production Segment

- Well Completion comprises a set of activities related to the drilling of wells to tap known, proven and economical hydrocarbon reserves.

- Oil and Gas Extraction is focussed on bringing up the hydrocarbon in underground reserves to the surface for transportation to processing and refining sites.

- Production Facilities are supporting products and services that facilitate Oil and Gas extraction. Among others it include engineering and fabrication of the production platforms and various facilities on top of the platform.

- Other activities under Production Facilities include Subsea Production Systems, Floating Production Storage and Offloading (FPSO) and Floating Storage and Offloading (FSO) vessels.

- Oilfield Services are services that are used to support hydrocarbon production.

- Kencana Petroleum Group is involved in engineering and fabricating the following Production facilities:
  - Offshore and Onshore Production Facilities;
  - Modules;
  - Process Skid Systems.

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1.3.3 Fabricated Metal Products Industry

- The structure of the Fabricated Metal Products Industry can be segmented into the following:

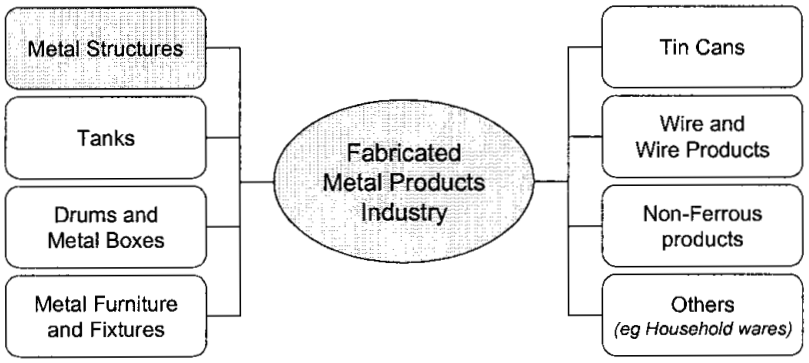

Figure 3 Segmentation of the Fabricated Metal Products Industry

- Fabricated Metal Products Industry covers a diverse range of products. Fabricated Metal Structures is one of the sub-sectors of the Fabricated Metal Products Industry.

- The majority of the companies in the Fabricated Metal Products Industry are Small Medium Enterprises (SME) undertaking simple Metal Fabrication operations.

1.3.4 User-Industries of Fabricated Metal Structures

- The Fabricated Metal Structure Industry services the following user-industries

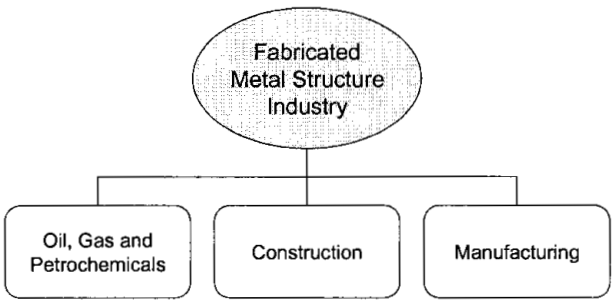

Figure 4 User-Industries of Fabricated Metal Structures

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- The fabrication of metal structures is regarded as higher value-added activities servicing the following categories of users:
  - Oil, Gas and Petrochemicals namely offshore and onshore fabrication;
  - Building and Construction namely building and civil construction;
  - Manufacturing namely processing and manufacturing plant fabrication and industrial machinery and equipment structures and component fabrication.

- Kencana Petroleum Group is a provider of Integrated Engineering and Fabrication of Production Facilities for the Oil and Gas Industry.

- The following sections focus on the fabrication activities within each segment of the user-industries.

1.3.5 Oil, Gas and Petrochemicals Industry

- The fabrication of metal structures for the Oil, Gas and Petrochemical Industry can be segmented into the following:

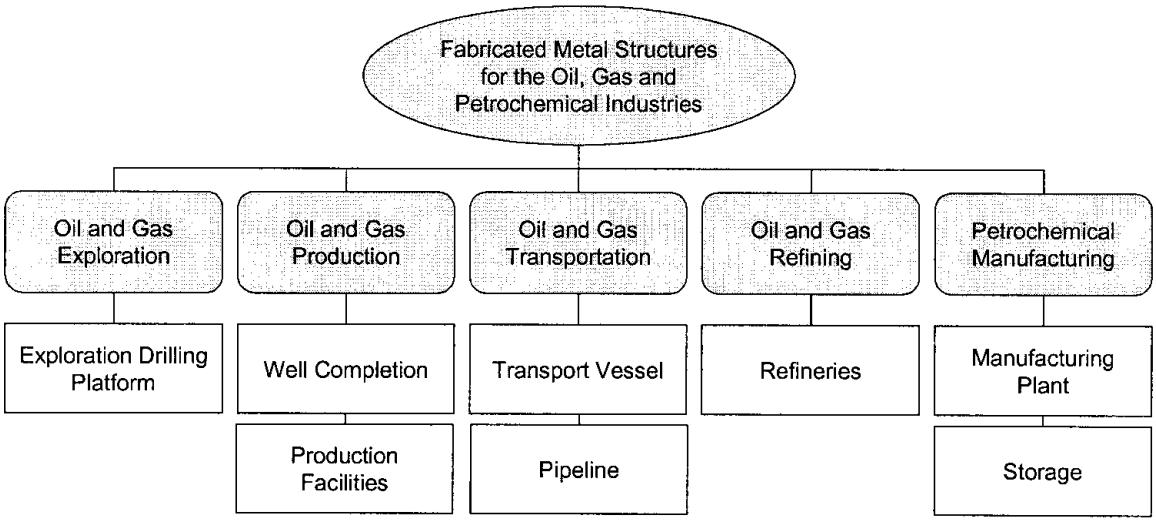

Figure 5 Fabricated Metal Structures for the Oil, Gas and Petrochemical Industry

- The offshore fabrication activities for the Oil, Gas and Petrochemical Industry covers fabrication works for offshore Oil and Gas exploration drilling and production platform requirements such as jackets, platform decks, production modules and accommodation modules.

- Other fabrication activities within the Oil and Gas Transportation sector include transport vessels and pipeline.

- Other related onshore fabrication activities include Oil and Gas refinery and downstream petrochemical manufacturing plants and storage facilities.

- There are fewer than 20 fabricators of Metal Structures for the Oil and Gas Industry in Malaysia in 2005.

- Of these, there are seven operators that are licensed by Petroliam Nasional Berhad (Petronas) to undertake major fabrication work for the Oil and Gas Industry *(Source: Primary Market Research undertaken by Vital Factor Consulting)*.

- Kencana Petroleum Group is one of the seven licensees.

1.3.6 Production Facilities

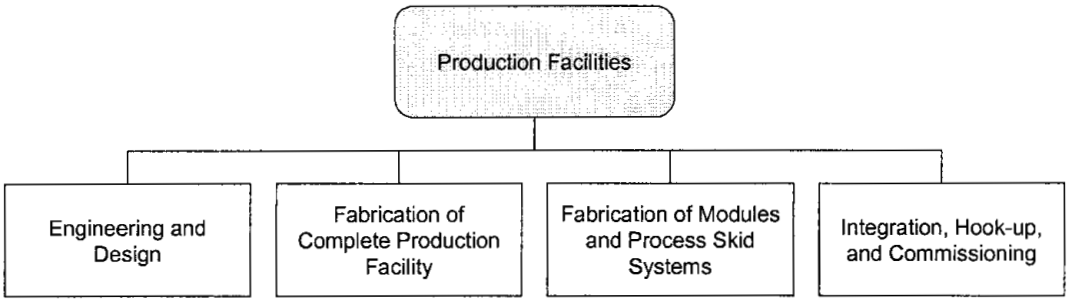

Figure 6 Oil and Gas Production Facilities

- The Engineering and Fabrication of Production Facilities typically consists of the following activities:
  - Engineering and Design;
  - Fabrication of Complete Production Facilities;
  - Fabrication of Modules and Process Skid Systems;
  - Integration, Hook-up and Commissioning.

- Engineering and Design refers to the activities related to the application of design and engineering knowledge to the creation of Production Facilities.

- Multiple engineering disciplines are typically used in fabricating production facilities, including mechanical engineering, electrical engineering, corrosion protection engineering, and instrumentation engineering.

- Fabrication of Complete Production Facilities refers to the fabrication of production facilities that are substantially complete, and which can be brought to operational status once installed on-site with a minimum of additional work.

- The Fabrication of Modules and Process Skid Systems refers to the fabrication of process equipment systems that are intended for use in Production Facilities. Modules and Process Skid Systems may be engineered and fabricated separately from the main production facility, but must be eventually integrated to become fully functional.
- Integration, Hook-up and Commissioning are the steps that are taken to bring a Production Facility to a fully operational state.

1.4 INDUSTRY LIFE-CYCLE

- Generally, the Fabricated Metal Structure Industry in Malaysia is in the **matured** phase of its life-cycle. However, within the Oil and Gas Industry, it continues to experience **growth**.
- The general maturity of the Fabricated Metal Structure Industry is tied to the Construction Industry, where fabricated metal structures have long been used in many Construction applications.
- However, growth of the Fabricated Metal Structure Industry within the Oil and Gas Industry is in tandem with the overall state of the Oil and Gas Industry. This is substantiated by the following:

Investment in Exploration and Production

- The level of Investment made by Petronas and PSC operators in the Exploration and Production of Oil and Gas Industry in Malaysia increased at an average annual rate of 17.9% between the financial years ended 31 March 2000 and 31 March 2006.

  (Source: Petronas)

Exports of Oil and Gas

- The export value of Crude Oil increased at an average annual rate of 27.6% between 2001 and 2005;
- The export value of Refined Petroleum Products increased at an average annual rate of 18.9% between 2001 and 2005;
- The export value of Natural Gas, whether or not Liquefied increased at an average annual rate of 16.9% between 2001 and 2005.

  (Source: Department of Statistics)

- As a significant proportion of the Fabricated Metal Structure Industry within the Oil and Gas Sector relies on imports, and since fabricators are engaged in exporting their products, the following provides some indication of the growth of the Fabricated Metal Structure Industry within the Oil and Gas Sector:

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Imports and Exports of Structural Metal Products

- Between 2001 and 2005, imports of Structures and Parts of Structures, of Iron, Steel or Aluminium grew at an average annual rate of 14.4%.

- Between 2001 and 2005, exports of Structures and Parts of Structures, of Iron, Steel or Aluminium grew at an average annual rate of 17.9%.

(Source: Department of Statistics).

1.5 GOVERNMENT LEGISLATION, POLICIES AND INCENTIVES

1.5.1 Government Regulations

- All rights related to the exploration and extraction of petroleum in Malaysia is vested in Petroliam Nasional Berhad (Petronas) under the Petroleum Development Act 1974. Petronas was also granted control on downstream activities and developments relating to petroleum and its products under the Petroleum Development Act 1974.

- All operators wishing to participate in the Oil and Gas Industry are required to obtain the necessary licenses, or to successfully register with Petronas, before they are allowed to participate in these activities. Kencana Petroleum Group is licensed with Petronas.

- Operators who wish to obtain contracts from the Government are required to register as contractors with the Ministry of Finance. Kencana Petroleum Group is registered with the Ministry of Finance.

- Operators who wish to carry out construction work in Malaysia are required to register with the Construction Industry Development Board (CIDB) under the Construction Industry Development Board Act 1994. Kencana Petroleum Group is registered with CIDB. Kencana Petroleum Group is registered with CIDB.

- According to the Industrial Coordination Act, 1975 which mandates all manufacturing companies with shareholders' funds of RM2.5 million or above, or engaging 75 or more full-time employees to attain a manufacturing licence *(Source: Malaysian Industrial Development Authority).*

1.5.2 Petronas Licenses and Registration

- Applicants are required to specify the scope of work for which the license or registration is being applied for, based on a set of Standardised Work & Equipment Categories (SWEC). An individual license or registration must be obtained for each SWEC.

- Companies that have obtained a license for a SWEC are allowed to participate in the upstream sector, downstream sector, and maritime sector of the Oil and Gas Industry.

- In contrast to a licence, companies that are registered in a SWEC are allowed to only participate in the downstream sector and maritime sector of the Oil and Gas Industry. Registered companies are not allowed to participate in the upstream sector.

- Licenses and registration are generally effective for a period of 1 or 2 years, after which they may be renewed.

- Kencana Petroleum Group holds relevant Petronas licences.

1.5.3 Governing Bodies

- The quality and integrity of the Metal Structures is critical due to the potential hazardous nature of its usage in the Oil and Gas Industry. As such, the fabrication and manufacture of such structures is subject to stringent quality standards and approvals by recognised governing bodies.

- Kencana Petroleum Group has been audited and approved by the following standard and quality bodies:
  - The American Society of Mechanical Engineers (ASME)
  - Lloyd's Register Quality Assurance Kuala Lumpur and Moody International Certification (Malaysia) with respect to the Group's ISO accreditation.

- In Malaysia, Kencana Petroleum Group is also regulated by the Department of Occupational Safety and Health (DOSH).

1.6 ENVIRONMENTAL REGULATIONS

- The design, engineering and fabrication carried out by Kencana Petroleum Group does not result in any material environmental impact in terms of generating effluent.

- The Group generate bulk waste in the form of scrap steel during the metal fabrication process. This does not result in any material environmental impact, as scrap steel may be collected and sold to scrap dealers for eventual recycling.

- According to management, the following waste materials are generated at the Lumut Fabrication Yard:
  - Used paint cans;
  - Garnet.

- Kencana Petroleum Group has engaged Kualiti Alam Sdn Bhd to treat waste that may be generated at the Lumut Fabrication Yard.

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1.7 SUPPLY

- According to Malaysian Industrial Development Authority, metal fabrication covers manufacture of metal structures for the oil and gas, construction and manufacturing industries.

- In addition, Malaysia also imports fabricated metal products. According to the Department of Statistics, fabricated metal products include "Manufactures Of Metal, not elsewhere specified (n.e.s)" and "Structures and structure parts of iron and steel, and aluminium".

- In 2005, sales value of manufacture of structural metal products increased by 15.3% to reach RM835.3 million *(Source: Department of Statistics)*.

- Between 2001 and 2005, production index of Fabrication Of Metal Products grew at an average annual rate of 6.6%. In 2005, production index of Fabrication Of Metal Products declined by 7.5% to 258.7 points *(Source: Bank Negara Malaysia)*.

- Between 2001 and 2005, import value of Manufacture of Metal, n.e.s registered an average annual growth rate of 11.5%. In 2005 import value of Manufacture of Metal, n.e.s increased by 9.7% to reach RM7.0 billion *(Source: Department of Statistics)*.

- Between 2001 and 2005, import value of Structures and Structure Parts of Iron and Steel, and Aluminium (sub-sector of manufacture of metal, n.e.s) grew at an average annual rate of 14.4%. In 2005, import value of Structures a Structure Parts of Iron and Steel, and Aluminium (sub-sector of manufacture of metal, n.e.s) declined by 1.5% to reach RM311.2 million *(Source: Department of Statistics)*.

1.8 SUPPLY DEPENDENCIES

- The major raw materials required for the Fabrication of Metal Structures include:
  - Iron and steel, and
  - Other metal materials.

- According to Malaysian Industrial Development Authority, there were 367 establishments for producing iron and steel products operating in 2005.

- In addition, Malaysia also imports Iron and Steel from overseas countries. In 2005, imports of Iron and Steel amounted to RM16.1 billion.

- Between 2001 and 2005, sales value of Primary Iron and Steel Industries grew at an average annual rate of 32.6%. In 2005, sales value increased by 40.2% to reach RM13.2 billion.

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- Between 2001 and 2005, sales value of Manufacture of Steel Bars and Rods (round, flat, deformed, angle and others) grew at an average annual rate of 12.5%. In 2005, sales value decreased by 2.6% to reach RM4.4 billion.

- In 2005, production quantity of Steel Bars and Rods (round, flat, deformed, angle and others) decreased by 11.1% to reach 2.6 million tonnes. However, between 2001 and 2005, production quantity declined at an average annual rate of 0.7%.

- Between 2001 and 2005, production quantity of Steel Billets grew at an average annual rate of 9.1%. In 2005, production quantity declined by 9.0% to reach 3.0 million tonnes.

- Between 2001 and 2005, import value of Iron and Steel Billets grew at an average annual rate of 18.5%. In 2005, import value increased by 17.8% to reach RM16.1 billion.

- Between 2001 and 2005, import value of Iron and Steel Bars, Rods, Angles and Shapes and Sections (including sheet pilling) grew at an average annual rate of 19.1%. In 2005, import value increased by 8.6% to reach RM1.8 billion.

  (Source: Department of Statistics)

1.9 DEMAND

- Malaysia exports fabricated metal products. According to the Department of Statistics, fabricated metal products include "Manufactures Of Metal, not elsewhere specified (n.e.s)" and "Structures and structure parts of iron and steel, and aluminium".

- Between 2001 and 2005, export value of Manufacture of Metal, n.e.s registered an average annual growth rate of 16.4%. In 2005, export value of Manufacture of Metal, n.e.s increased by 10.1% to reach RM5.7 billion.

- Between 2001 and 2005, export value of Structures and Structure Parts of Iron and Steel, and Aluminium (sub-sector of manufacture of metal, n.e.s) grew at an average annual rate of 17.9%. In 2005, export value of Structures and Structure Parts of Iron and Steel, and Aluminium (sub-sector of manufacture of metal, n.e.s) increased by 22.6% to reach RM871.1 million.

1.10 DEMAND DEPENDENCIES

- In Malaysia, Fabricated Metal Structure is primary used for the Oil, and Gas, Construction and Manufacturing Industries, which are derived from:
  - local markets
  - exports.

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- As such, the demand dependencies of Fabricated Metal Structure Industry are dependent on the performance of the following sectors:
  - Oil and Gas Industry, including offshore fabrication such as offshore oil drilling platform fabrication including jackets, modules, platform decks, accommodation modules, pipeline & spools, and onshore fabrication including petroleum refineries and storage facilities.
  - Building and Construction Industry.
  - Manufacturing Industry.

- The following is the performance of the Oil and Gas Industry in Malaysia, including the level of investment in upstream Exploration and Production, and downstream activities such as petroleum and petrochemical products, which may have impact on the demand on the Fabricated Metal Structure Industry:

  - The level of Investment made by Petronas and PSC operators in the Exploration and Production of Oil and Gas Industry in Malaysia increased at an average annual rate of 17.9% between the financial years ended 31 March 2000 and 31 March 2006. During the financial year ended 31 March 2006, investment increased by approximately 30.9%, with the level of investment reaching approximately RM16.1 billion *(Source: Petronas)*;

  - Between 2001 and 2005, production of Crude Oil and Condensates grew at an average annual rate of 2.2%. In 2005, production of Crude Oil and Condensates decreased by 4.7% to reach approximately 727,000 barrels per day;

  - Between 2001 and 2005, production of Natural Gas grew at an average annual rate of 6.3%. In 2005, production of Natural Gas increased by 11.6% to reach 5,800 million standard cubic feet per day (mmscfd);

    (Source: Bank Negara Malaysia)

  - During the first six months of 2006, production of crude oil and condensates averaged 690,610 barrels per day, representing an increase of 1.1% compared to the corresponding period in 2005. Production of crude oil and condensates for 2006 as a whole is expected to average 724,500 barrels per day in anticipation of higher production capacity and demand;

  - During the first six months of 2006, production of natural gas was 5,781 mmscfd, representing a decline of 3.7% compared to the corresponding period in 2005. Production of natural gas for 2006 as a whole is projected to average 6,000 mmscfd on expectation of higher production in the second half of the year;

    (Source: Ministry of Finance)

- Between 2001 and 2005, sales value of the manufacture of Refined Petroleum Products grew at an average annual rate of 38.0%. In 2005, sales value increased by 42.0% to reach RM72.2 billion;

- In 2005, production quantity of Liquefied Petroleum Gas (LPG) increased by 4.9% to reach 3.4 million tonnes. Between 2001 and 2005, production quantity grew at an average annual rate of 10.1%;

- In 2005, sales value of Manufacture of other Basic Industrial Chemicals except Fertiliser increased by 19.7% to reach approximately RM17.9 billion. Between 2001 and 2005, sales value grew at an average annual rate of 30.8%;

- In 2005, sales value of Manufacture of Plastics in Primary Forms and of Synthetic Rubber increased by 22.1% to reach RM12.4 billion. Between 2001 and 2005, sales value grew at an average annual rate of 23.7%.

(Source: Department of Statistics)

- In 2005, Real GDP of Construction Industry declined by 1.6% to reach RM7.1 billion. However, between 2001 and 2005, Real GDP of Construction Industry grew at an average annual rate of 0.1% *(Source: Bank Negara Malaysia)*.

1.11 COMPETITIVE NATURE AND INTENSITY IN MALAYSIA

- Generally the Fabricated Metal Structure Industry operates under **normal** competitive conditions.

- However, there are some conditions as follows:

  - Only operators that are licensed or registered by Petronas are allowed to bid directly for work provided by Petronas and Production Sharing Contract (PSC) operators in the Oil and Gas Industry.

  - Operators who wish to carry out construction work in Malaysia are required to register with the CIDB.

  - All builders, contractors and sub-contractors who wish to tender for Government projects must also register with Pusat Khidmat Kontraktor (PKK) of the Ministry of Entrepreneur Development.

  - All operators who wish to obtain contracts from the Government or to bid directly for work provided by Petronas and Production Sharing Contract operators in the Oil and Gas Industry are required to register as contractors with the Ministry of Finance.

- As with most free enterprise environments, once all the licensing and registration requirements are complied, competition is based on a number of factors, including:
  - Technical compliance to customers' specifications and requirements
  - Cost competitiveness
  - Quality of products and services
  - Prompt delivery/completion
  - Fabrication/Manufacturing capabilities and capacity.

1.12 PLAYERS IN THE INDUSTRY

- There are fewer than 20 fabricators of Metal Structures for the Oil and Gas Industry in Malaysia in 2005.

- Of these, there are seven operators that are licensed by Petroliam Nasional Berhad (Petronas) to undertake major fabrication work for the Oil and Gas Industry *(Source: Primary Market Research undertaken by Vital Factor Consulting)*.

1.13 BARRIERS TO ENTRY

- Barriers to entry into the Fabricated Metal Structure Industry in Malaysia are **moderate to high** depending on the type of projects and the user-industries:

  - Barriers to entry into major fabrication projects for the Oil and Gas Industry is **high**. This is due to the stringent specifications and complexity of the metal structures used in offshore and onshore facilities compared to general fabrication work.

  - This is also substantiated by the fact that there are only seven operators with major fabrication licences issued by Petronas in Malaysia in 2005 *(Source: Primary market research undertaken by Vital Factor Consulting Sdn Bhd)*.

  - Barriers to entry into other types of fabrication projects for the Building and Construction and Manufacturing industries are **moderate**. This is due to the fact the requirements are less stringent compared to the Oil and Gas Industry.

- Other main barriers to entry include:
  - Government regulations and policies;
  - Capital set-up cost;
  - Technical expertise and specialisation;
  - Track record.

- **Government Regulations and Policies**

  Government barriers are **high** for the Oil and Gas Industry. Under the Petroleum Development Act, 1974 and related legislation, activities within the Oil and Gas Industry in Malaysia are regulated by Petronas.

- **Capital Set-up Cost**

  Barriers to entry into the Fabricated Metal Structure Industry based on capital requirements (excluding land and building) are **moderate to high**.

- **Technical Expertise and Specialisation**

  As the design, engineering and fabrication of Metal Structures for the Oil and Gas is very specialised due to the stringent safety and quality requirements, it requires significant input in terms of
  - design engineering skills,
  - fabrication skills
  - welding skills
  - research and development
  - technical knowledge.

  These technical skill sets represent a **high** barrier to entry.

- **Track Record**

  Track record also forms a **high** barrier to entry for new entrants.

  As the demands by the Oil and Gas Industry tend to be critical in nature, track record and safety record are important factors in securing a contract.

1.14 BARRIERS TO EXIT

- Barriers to exit in the Fabricated Metal Structures Industry are **moderate**.

- Some of the machinery and equipment utilised in the Fabrication of Metal Structures may be sold to other operators in the industry.

- In addition, general metal fabrication equipment and tools such as welding sets, cutting and shearing machines may be sold to other operators engaged in general metal fabrication.

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1.15 INDUSTRY OUTLOOK

1.15.1 Outlook of the Fabricated Metal Structure Industry within the Oil and Gas Sector

- The outlook for the Fabricated Metal Structure Industry is influenced by the outlook of certain other industries, including the Oil and Gas Industry, and the Construction Industry.
- Sectors of the Fabricated Metal Structure Industry that are dependent on the Oil and Gas Industry include those that are involved in the fabrication of offshore and on-shore facilities, and other metal structures.
- The outlook of the Fabricated Metal Structure Industry within the Oil and Gas Sector in Malaysia is **favourable**. This is substantiated by the following:
  - There is substantial deepwater development (generally sea depth of over 200 meters) potential as PSC rights have yet to be awarded for many of these areas. Awarding PSC to open up these deepwater areas should drive demand for the fabrication of new offshore platforms, especially those that are able to operate in deepwater;
  - In particular, the discovery of new reserves should sustain and may increase demand for fabricated metal structures, particularly offshore platforms;
  - Technological development has lowered the cost of producing hydrocarbons from some reserves. Combined with the current high price of hydrocarbons, production from some previously marginal reserves may now be economical. Bringing these marginal fields into production should drive demand for, among others, the fabrication of new offshore platforms;
  - Oil and Gas Industry activity is likely to continue to grow with the sustained high level of demand for hydrocarbons;
  - Sustained high price for hydrocarbons is likely to sustain hydrocarbon exploration, development and production activity. In particular, discovery of new reserves may lead to demand for new offshore production platforms.

Performance of the Oil and Gas Industry

The following is the performance of the Oil and Gas Industry, which may have an impact on the demand of Fabricated Metal Structure Industry.

- Between 2001 and 2005, production of crude oil and condensates grew at an average annual rate of 2.2%. In 2005, production of crude oil and condensates decreased by 4.7% to approximately 727,000 barrels per day;

- Between 2001 and 2005, production of natural gas grew at an average annual rate of 6.3%. In 2005, production of natural gas increased by 11.6% to reach 5,800 million standard cubic feet per day (mmscfd);

  (Source: Bank Negara Malaysia)

- During the first six months of 2006, production of crude oil and condensates averaged 690,610 barrels per day, representing an increase of 1.1% compared to the corresponding period in 2005. Production of crude oil and condensates for 2006 as a whole is expected to average 724,500 barrels per day in anticipation of higher production capacity and demand;

- During the first six months of 2006, production of natural gas was 5,781 mmscfd, representing a decline of 3.7% compared to the corresponding period in 2005. Production of natural gas for 2006 as a whole is projected to average 6,000 mmscfd on expectation of higher production in the second half of the year;

  (Source: Ministry of Finance)

- The level of Investment made by Petronas and PSC operators in the Exploration and Production of Oil and Gas Industry in Malaysia increased at an average annual rate of 17.9% between the financial years ended 31 March 2000 and 31 March 2006 *(Source: Petronas)*.

1.15.2 Overall Outlook of the Fabricated Metal Structure Industry

- The overall outlook of the Fabricated Metal Industry is **favourable** and is predicated on the following factors and observations in local production, import and export performances.

Local Production

- In 2005, sales value of manufacture of structural metal products increased by 15.3% to reach RM835.3 million;

- Between 2001 and 2005, production index of fabrication of metal products grew at an average annual rate of 6.6%. In 2005, production index of fabrication of metal products declined by 7.5% to 258.7 points.

  (Source: Department of Statistics and Bank Negara Malaysia)

Exports

- Between 2001 and 2005, export value of manufacture of metal, n.e.s registered an average annual growth rate of 16.4%. In 2005, export value of manufacture of metal, n.e.s increased by 10.1% to reach RM5.7 billion;

- Between 2001 and 2005, export value of structures and structure parts of iron and steel, and aluminium (sub-sector of manufacture of metal, n.e.s) grew at an average annual rate of 17.9%. In 2005, export value of this category increased by 22.6% to reach RM871.1 million.

  (Source: Department of Statistics)

Imports

- Between 2001 and 2005, import value of manufacture of metal, n.e.s registered an average annual growth rate of 11.5%. In 2005, import value of manufacture of metal, n.e.s increased by 9.7% to reach RM7.0 billion;

- Between 2001 and 2005, import value of structures and structure parts of iron and steel, and aluminium (sub-sector of manufacture of metal, n.e.s) grew at an average annual rate of 14.4%. In 2005, import value of this category declined by 1.5% to reach RM311.2 million.

  (Source: Department of Statistics)

1.16 DRIVERS OF GROWTH

- Some of the drivers of growth for the Fabricated Metal Structure Industry for the Oil and Gas Industry are as follows:

  - **Market Price of Hydrocarbons Sustained at a High Level**

    Sustained high market prices for hydrocarbons are likely to encourage hydrocarbon producers to maintain production at a high level, or even to increase production by developing new fields, including marginal fields. The development of new fields for production may require the fabrication of new offshore platforms to support production.

    The market price of hydrocarbons was high during the middle of 2006, as evidenced by the historically high price (in nominal terms) of benchmark crude oil prices. This in turn has driven high level of activities in the Oil and Gas Industry.

- **Petronas Policy**

Petronas has a policy of nurturing the development of local Oil and Gas Industry operators, including local fabricators of offshore platforms and skidded systems.

As part of the aim to promote and encourage local participation in the Oil and Gas Industry, Petronas has implemented the following initiatives:

. licensing and registration of companies with preference given to local companies;
. implementation of the Vendor Development Programme (VDP) for Bumiputera entrepreneurs.

Petronas also initiated Cost Reduction Alliance (CORAL) in 1995 with the primary objective to reduce the operating cost of upstream operations.

In addition, Petronas encourages Malaysian operators to participate in the Oil and Gas Industry overseas. Qualified Malaysian Oil and Gas Industry operators are encouraged to support Petronas' foreign operations. As at 31 March 2006, Petronas had interests in international upstream Oil and Gas industry ventures in 23 countries *(Source: Petronas)*.

- **Government Incentives**

As part of the Government's incentives for the Fabricated Metal Structure Industry, raw materials used for the fabrication of offshore applications for Oil and Gas are exempted from import duties. Due to the stringent specifications for the fabrication of offshore platforms in the Oil and Gas Industry, many of the raw materials specified have to be imported from overseas.

- **Technological Advances**

Technological advances that enhance production efficiency, lower production cost, or enable production to take place in previously inaccessible areas are likely to drive the development of new fields for production, particularly when coupled with sustained high price of hydrocarbons. The development of new fields may drive demand for the fabrication of new offshore platforms.

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1.17 AREAS OF GROWTH AND OPPORTUNITIES

Overseas Operations

- The Malaysian Oil and Gas Industry is large, and has been able to sustain the development of local operators. To support future growth, it is important that these operators operate in overseas markets.
- Operators may gain a foothold in overseas markets by first providing products and services to Petronas and its affiliates in its overseas operations.
- Similarly, export markets for Fabricated Metal Structures for the Construction Industry, especially Super Steel Structures, offers growth opportunities for local operators and also to provide geographic diversification.

Technological Advancement

- The Oil and Gas Industry is driven by technology, and operators are generally willing to adopt new technology. This is particularly true for advances that increase production efficiency, decrease cost of production, and/or enable production in previously inaccessible areas.
- Development of technological advance that fits one or more criteria is likely to create an opportunity for operators that able to provide that technology.

Industry Diversification

- Many operators within the Fabricated Metal Structure Industry are relatively focused in their business fields. However, there are many areas that could use similar skill sets and facilities that may provide growth opportunities. Some of these include shipbuilding and repair, prefabricated building structures, manufacturing applications, substitution of concrete with fabricated metal.

1.18 THREATS AND RISK ANALYSIS

Sustained Fall in the Market Price of Hydrocarbons

- Activity in the Oil and Gas Industry is, to some degree, affected by fluctuations in the market price of hydrocarbons.
- Oil producers may lower their forecast of future sustainable hydrocarbon prices, and lower investment into new production capacity, including offshore platforms and skidded systems, accordingly.
- There is a risk that sustained lower price of hydrocarbons will negatively affect activities in the Oil and Gas Industry, which may lower demand for the fabrication of offshore platforms and skidded systems.

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Mitigating Factor

- The Organisation of the Petroleum Exporting Countries (OPEC) has some influence on the price of hydrocarbons. Although the influence of OPEC is not absolute, OPEC has a vested interest in ensuring that hydrocarbon prices do not collapse, and as such are likely to actively attempt to sustain hydrocarbon prices at an 'acceptable' level.

Competition from Imports

- In 2005, the import value of manufacture of metal, n.e.s. totalled RM7.0 billion. The import value of structures and structure parts of iron and steel, and aluminium (a sub-sector of manufacture of metal, n.e.s.) was RM311.2 million in 2005 *(Source: Department of Statistics)*.

- With a high level of imports, there is a risk that competitive pressure from imports may aversely impact on the business of local fabricators.

Mitigating Factors

- Participation in Malaysian Oil and Gas Industry is regulated by Petronas. Overseas suppliers are required to obtain a license from, or successfully register with, Petronas before they are allowed to supply to the Oil and Gas Industry in Malaysia.
- Local fabricators now have the capability to fabricate more complex and advanced structures.

- As part of the Government's incentives for the Fabricated Metal Structure Industry, raw materials used for the fabrication of offshore applications for Oil and Gas are exempted from import duties.

- It is generally costly to transport large and complex structures that cannot be readily disassembled for transport, such as offshore platforms. This discourages importation of structures fabricated in distant fabrication yards.

Downturn in Local and Global Economies

- In 2003, the war in Iraq and the outbreak of the Severe Acute Respiratory Syndrome (SARS) have aggravated the global economic situation. The economy of the world and in particular, the United States has been increasingly volatile.

- A slowdown in the global economy may also have some impact on the market price of hydrocarbons. A global slowdown may affect the demand for, and production of, hydrocarbons, which, in turn, will affect demand for Supporting Products and Services.

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Mitigating Factors

- A global economic slowdown does not automatically lead to a sustained fall in the market price for hydrocarbons, as the demand for hydrocarbons for power generation and transport tends to be relatively inelastic.

- The Malaysian Government's pro-active policies in mitigating the negative impact of global economic downturns through stimulus packages to boost domestic spending and demand have previously been successful in countering a slowdown in the local economy.

Foreign Exchange Risk

- A large proportion of the raw materials and inputs, particularly those of steel and stainless steel that are used in the fabrication of structures for use in the Oil and Gas Industry are imported.

- As such, fluctuations in foreign exchange rates will have an impact on the price of imported raw materials and other inputs, as well as an impact on export earnings.

Mitigating Factor

- The exchange rate of the Ringgit now operates on a managed float following the removal of the removal of the exchange rate peg to the US Dollar on 21 July 2005. Bank Negara Malaysia will now monitor the value of the Ringgit relative to a trade-weighted index of Malaysia's major trading partners. Promoting stability of the exchange rate remains a primary policy objective *(Source: Bank Negara Malaysia)*.

Availability of Raw Materials

- Fabricators of structures are ultimately dependent on the availability of raw materials, in this case primarily iron and steel.

- Although there is an active iron and steel industry in Malaysia, due to the stringent specifications for the fabrication of offshore platforms in the Oil and Gas Industry, the steel specified has to be imported.

- Some clients may specify that only raw materials from particular sources be used. Fabricators have little choice other than to select providers from this list, which may not include domestic suppliers.

Mitigating Factor

- In general, as raw materials may be sourced from a number of countries overseas, the probability of shortages in the supply of these items is not likely to be high.

Depletion of Hydrocarbon Resources

- All hydrocarbon deposits are non-renewable, in that it is not possible to regenerate these hydrocarbons within a reasonable timeframe once they have been extracted. As such, Hydrocarbon resources in all producing regions, including Malaysia, will eventually be depleted.

- It is likely that demand for Fabricated Metal Structures such as offshore platforms and skidded systems in Malaysia will end soon after, or even before, Oil and Gas Industry Exploration and Production activities in Malaysia cease.

Mitigating Factors

- The relatively long period of time before current reserves Crude Oil (including Condensates) in Malaysia are expected to be completely depleted enables Oil and Gas Industry operators, including fabricators of offshore platforms and skidded systems, to diversify into other industries and/or venture into overseas markets.

1.19 SUSTAINABILITY

- The sustainability of the overall Oil and Gas Industry is dependent on a large degree to the availability of Hydrocarbon Reserves in Malaysian territory.

- Over time, Hydrocarbon Reserves are depleted as hydrocarbons are extracted from hydrocarbon reserves. Hydrocarbon Reserves may increase with the discovery of commercially viable hydrocarbon reserves that were previously unknown.

- On 1 January 2006, reserves of crude oil and condensates stood at 5,250 million barrels, with a lifespan of 20 years.

- On 1 January 2006, reserves of natural gas stood at 87.9 trillion cubic feet, with a lifespan of 34 years.

(Source: Ministry of Finance)

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1.20 CRITICAL SUCCESS FACTORS

- The critical success factors for operators within the Fabricated Metal Structure Industry focusing on the Oil and Gas, and Construction Sectors are as follows:

  - **Petronas Licensing and Registration:** The possession of these licenses or registrations is a fundamental requirement for entry and participation.

  - **Track Record:** Having an established track record is a key advantage when submitting tenders or proposals for contracts, particularly for engineering and fabrication companies.

  - **Ability to Undertake a Wide Range of Fabrication Projects:** Fabricators that are able to undertake a wide range of fabrication projects are able to serve a broader segment of the Oil and Gas Industry and Construction Industry.

  - **Integrated Fabrication Capability:** Integrated fabricators have an advantage as they have more control over such important aspects of the fabrication process as quality control, cost, and ensuring timely delivery.

  - **Multi-Discipline Engineering Capability:** Companies that have multi-discipline engineering capability are able to provide a wider range of engineering services, as well as undertake more complex engineering projects.

  - **Quality of Product and Services:** Operators who are able to offer proof of quality through formal quality accreditation are able to offer comfort to their clients.

  - **Compliance with Recognised Standards:** A company engaged in the engineering and fabrication of certain systems must show proof of compliance with recognised standards.

  - **Health, Safety and Environment (HSE) Concerns:** Operators in the Oil and Gas Industry require that their contractors and sub-contractors have a good HSE record.

  - **Financial Stability:** Companies who are in a healthy financial position are more likely to retain and attract new customers.

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1.21 MARKET RANKING BASED ON TURNOVER

- Based on turnover, Kencana Petroleum Group is ranked **fourth** among operators within the Metal Structure Fabrication Industry in Malaysia *(Source: Primary Market Research undertaken by Vital Factor Consulting Sdn Bhd).*

Vital Factor Consulting Sdn Bhd has prepared this report in an independent and objective manner and has taken all reasonable consideration and care to ensure the accuracy and completeness of the report. It is our opinion that the report represents a true and fair assessment of the industry within the limitations of, among others, secondary statistics and information, and primary market research. Our assessment is for the overall industry and may not necessarily reflect the individual performance of any company. We do not take any responsibilities for the decisions or actions of readers of this document. This report should not be taken as a recommendation to buy or not to buy the shares of any company.

Yours sincerely

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