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CHAPTER ONE

MALAYSIAN ECONOMY

1.1 OVERVIEW OF MALAYSIAN ECONOMY IN 2018

According to the Bank Negara Malaysia (Central Bank of Malaysia) Annual Report 2018, the Malaysian economy expanded at a more moderate pace of 4.7% in 2018 (2017: 5.9%). Despite a positive start to 2018, the economy subsequently was confronted with several external and domestic challenges. Major policy and political shifts, arising partly from the global trade tensions and the historic change of government in Malaysia, became sources of uncertainty for the economy. Unanticipated supply disruptions in the mining and agriculture sectors, as well as commodity exports adversely affected Malaysia’s economic performance, resulting in a larger-than-expected moderation in growth.

Domestic demand continued to anchor growth, supported mainly by private sector expenditure. Private consumption growth, in particular, recorded the fastest rate since 2012 at 8.1% (2017: 7.0%). Favourable wage and employment growth continued to drive household spending with additional support from the three-month tax holiday (1 June – 31 August) following the zerorisation of the Goods and Services Tax (GST) rate, as well as other Government measures such as the fixing of the retail fuel price of RON95 petrol and special payments to civil servants and pensioners.

In line with the Government’s commitment to reprioritise expenditures, public consumption growth moderated to 3.3% (2017: 5.4%). Gross fixed capital formation (GFCF) expanded at a slower pace of 1.4% (2017: 6.2%) due to a contraction in public investment and the slower expansion in private investment. Public investment declined by 5.2% (2017: 0.1%) following lower spending by public corporations. Private investment grew at a slower pace of 4.5% (2017: 9.3%) amid heightened uncertainty stemming from both external and domestic developments. However, firms, particularly in the export-oriented sectors, continued to increase production capacity and improve efficiency to meet demand.

On the supply side, most economic sectors recorded an expansion, with the exception of commodity-related sectors. The services sector’s growth improved to 6.8% (2017: 6.2%), the highest since 2011, as better consumer sentiments and favourable labour market conditions spurred spending, in particular during the tax holiday period. The manufacturing sector expanded by 5.0% (2017: 6.0%) supported primarily by a continued expansion in the electrical and electronics (E&E)
The construction sector recorded a moderate growth of 4.2% (2017: 6.7%) due to weaknesses in the property segment. Growth in the mining sector, however, contracted by 1.5% (2017: 1.0%) due to the decline in natural gas production, while adverse weather and production constraints that affected palm oil and rubber production led to a decline in growth in the agriculture sector (2018: -0.4%, 2017: 7.2%).

In the labour market, employment growth was strong at 2.5% (2017: 2.0%), amounting to an additional employment gain of 360,250 persons. Meanwhile, the labour force grew by 2.5% (2017: 1.9%), which amounted to 372,875 persons entering the labour force. The labour force participation rate also rose to 68.4% (2017: 68.0%). As a result, the unemployment rate remained unchanged at 3.4%. Net employment gains were driven mainly by high- and mid-skilled workers, which grew by 1.6% and 4.2% respectively. Reported retrenchments continued on its decreasing trend (23,168 persons; 2017: 35,097 persons), below the long-run average of 29,628 persons per annum. Aggregate nominal wages in the private and public sectors grew by 6.0% and 4.5% respectively (2017: 6.4% and 6.2%, respectively).

In 2018, headline inflation declined to 1.0% (2017: 3.7%). The moderation mainly reflected the impact of the fixing of retail fuel prices and the zerorisation of the GST rate. These factors more than offset upward cost pressures that remained present for some parts of 2018. Core inflation averaged lower at 1.6% (2017: 2.3%) amid smaller cost pass-through to retail prices and the absence of excessive demand pressures.

Malaysia’s external position remained resilient amid an increasingly challenging global economic environment. The current account of the balance of payments continued to register a healthy surplus of 2.4% of GNI (2017: 3.1% of GNI), contributed by a higher goods surplus and a smaller services deficit, which more than offset the deficit in the income accounts. Gross exports registered a more moderate growth of 6.8% in 2018 (2017: 18.8%) driven by manufactured exports which helped to partially offset the decline in commodity exports. Gross imports growth also moderated to 4.9% (2017: 19.7%), on account of weaker intermediate and capital imports.

During the year, movements in short-term flows dominated capital flow developments as the financial account of the balance of payments recorded a net inflow of RM18.6 billion (2017: net outflow of RM4.7 billion). A reversal of portfolio investments by non-residents, which took place amid increasingly more volatile global financial market conditions, were offset by substantial inflows in the other investment account. Meanwhile, long-term foreign direct investment (FDI) flows
resumed at a more moderate pace, while domestic firms and institutional investors continued to undertake direct investments abroad (DIA).

The international reserves of Bank Negara Malaysia amounted to USD101.4 billion as at end-2018 compared to USD102.4 billion as at end-2017. As at 28 February 2019, international reserves amounted to USD102.4 billion and remain adequate to facilitate international transactions. The reserves position is sufficient to finance 7.4 months of retained imports and is 1.0 time the short-term external debt.

Malaysia’s external debt stood at RM924.9 billion as at end-2018, equivalent to USD221.0 billion or 64.7% of GDP (end-2017: RM885.2 billion, equivalent to USD215.9 billion or 65.4% of GDP). The higher external debt was driven mainly by the increase in interbank borrowings and corporate loans to finance investment activity as well as valuation effects following the weakening of ringgit against selected regional and major currencies, in particular, during the second and third quarters of the year. Malaysia’s external debt exposure remained manageable. Favourable external balance sheet profiles across instruments, maturity and currency were reinforced by external asset holdings of the domestic banks and corporates, further mitigating potential risks.

Overall, the strong fundamentals and highly diversified structure of the Malaysian economy have accorded Malaysia the ability to weather the headwinds and challenges. Policies were flexible and pre-emptive to ensure risks were minimised. Malaysia’s external position remained healthy, with a current account surplus, adequate international reserves and manageable external debt exposure. These strengths in the external position, along with a flexible exchange rate and a well-developed financial system, effectively mitigated the impact of volatile shifts in capital flows on domestic financial markets. Appropriate foreign exchange intervention and the implementation of financial market measures during this period of volatility also underscored the importance of pragmatic, timely policy responses in managing risks and supporting growth.

1.2 TRADE PERFORMANCE IN 2018

Malaysia recorded the largest trade surplus since 2012 as exports reached almost RM1 trillion in 2018. Supported by stronger than expected export growth, Malaysia’s total trade in 2018 remained resilient, having expanded by 5.9% to RM1.876 trillion, compared with RM1.771 trillion in 2017. Despite the uncertainties in the global environment, exports rose by 6.7% to reach a value of RM998.01 billion, surpassing the forecast export growth of 4.4% in the Economic Outlook 2019. Imports increased by 4.9% to RM877.74 billion.
Malaysia’s trade surplus widened by 22.1% to RM120.27 billion, registering the fastest rate in 10 years and the largest trade surplus since 2012. This was the 21st consecutive year of trade surplus since 1998. This achievement was contributed by higher trade with Hong Kong SAR, which expanded by 45.2% or RM27.91 billion, China (↑8.1% or RM23.4 billion), ASEAN (↑4.7% or RM22.91 billion), Taiwan (↑22.1% or RM17.37 billion), the European Union (EU) (↑4.8% or RM8.45 billion), Saudi Arabia (↑45.2% or RM6.75 billion), Republic of Korea (ROK) (↑7.2% or RM4.89 billion), Australia (↑4.8% or RM2.52 billion), Bangladesh (↑27.3% or RM2.05 billion) and the United States (US) (↑1.1% or RM1.72 billion).

Major highlights on exports in 2018:
- Average monthly exports was valued at RM83 billion;
- Expansion of manufactured and mining exports by 9.1% and 7.1%, respectively, compensating for the lower performance of agriculture goods;
- Continued growth for electrical and electronics (E&E) exports driven by wider application of semiconductors in technology advancement;
- Double-digit year on year (y-o-y) growth for crude petroleum exports except for January and February, supported by higher crude oil prices;
- Rising exports to ASEAN by 5% with significant growth to Viet Nam, Thailand, Singapore, the Philippines and Cambodia;
- Increased exports to almost all major Free Trade Agreement (FTA) partners;
- Strong export growth to advanced countries, in particular, the US and the EU notably Germany, Spain and Italy; and
- Growing exports to emerging markets such as Bangladesh, Peru, Qatar, Sri Lanka, Papua New Guinea and countries in Africa principally, South Africa, Tunisia and Djibouti.

ASEAN remained as an important and strategic trading partner for Malaysia, accounting for 27.1% of Malaysia’s total trade in 2018, valued at RM509.2 billion with an increase of 4.7% from 2017. Exports to ASEAN grew by 5% to RM285.3 billion, contributing 28.6% to Malaysia’s total exports. The expansion was supported by greater exports to Viet Nam, Thailand, Singapore, the Philippines and Cambodia that accounted for 87.1% of Malaysia’s exports to this region. Major contributors to the increase were E&E products, crude petroleum, manufactures of metal, chemicals and chemical
products, transport equipment as well as iron and steel products which collectively increased by RM17.23 billion. Singapore remained the largest export market in ASEAN with a share of 48.8% of total exports to ASEAN. Exports to Singapore increased by 2.6% to RM139.12 billion due to higher exports of E&E products and petroleum related products namely, crude petroleum and petroleum products. Exports to Thailand rose by 12.4% to RM56.77 billion, underpinned by higher exports of manufactured goods primarily E&E products, transport equipment, petroleum products, manufactures of metal as well as chemicals and chemical products. In 2018, Viet Nam has superseded Indonesia as the 3rd largest export destination in ASEAN. Viet Nam registered strong export growth of 24% to reach RM34.21 billion, owing mainly to higher exports of petroleum products, E&E products, manufactures of metal as well as chemicals and chemical products. This was the 4th consecutive year of double-digit export growth to Viet Nam. Exports to Indonesia stood at RM31.75 billion, a decrease of 5.6% attributed to lower exports of petroleum products by RM3.5 billion. However, exports of iron and steel products, crude petroleum, transport equipment as well as chemicals and chemical products registered increases. Exports to the Philippines grew by 2% to RM16.85 billion, benefitting from higher exports of crude petroleum, E&E products, chemicals and chemical products, transport equipment as well as petroleum products. Imports from ASEAN rose by 4.3% to RM223.9 billion. Main imports were E&E products, petroleum products as well as chemicals and chemical products.

China continued to be Malaysia’s largest trading partner for 10 consecutive years since 2009. In 2018, Malaysia’s trade with China rose by 8.1% to RM313.81 billion and constituted 16.7% of Malaysia’s total trade. Exports to China expanded by 10.3% to RM138.88 billion, on account of higher exports of chemicals and chemical products, E&E products, liquefied natural gas (LNG), manufactures of metal, optical and scientific equipment, transport equipment and processed food. China remained as Malaysia’s largest import source, accounting for 19.9% share of total imports in 2018. Imports from China increased by 6.4% to RM174.93 billion, aided by higher imports of E&E products, manufactures of metal, chemicals and chemical products as well as transport equipment.

Trade with the EU in 2018 amounted to RM183.37 billion or 9.8% share of Malaysia’s trade, a growth of 4.8% compared to 2017. Malaysia’s exports to the EU were higher by 3.5%, reaching RM98.6 billion. Among the top 10 EU markets which accounted for 90.7% of Malaysia’s total exports to the EU, 7 countries recorded expansion namely, Germany which increased by 5.7%, Spain (↑46.6%), Italy (↑27%), France (↑7.9%), Czech Republic (↑32.1%), Hungary (↑17.8%) and Poland (↑8.1%). Germany surpassed the Netherlands as the largest export destination in this region in 2018.
Increased exports to the EU were driven mainly by manufactured goods which accounted for 90.8% of Malaysia’s total exports to the region. Exports of this sector rose by 5.5% to RM89.53 billion buoyed mainly by manufactures of metal which increased by 148.7% or RM3.27 billion. Other drivers of exports were chemicals and chemical products, rubber products, iron and steel products, machinery, equipment and parts, transport equipment as well as petroleum products. Imports from the EU expanded by 6.5% to RM84.77 billion and the main imports were E&E products, transport equipment as well as machinery, equipment and parts.

Trade with the US recorded a growth of 1.1% to RM155.68 billion, constituting 8.3% of Malaysia’s total trade in 2018. Exports to the US rose by 2.3% to RM90.73 billion, registering the highest value since 2008. The expansion was led mainly by manufactured goods which increased by 3.1% to RM87.4 billion and accounted for 96.3% of Malaysia’s total exports to the country. This was supported by higher exports of optical and scientific equipment, transport equipment, manufactures of metal, machinery, equipment and parts, rubber products as well as chemicals and chemical products that cushioned the contraction in exports of E&E products. Exports of E&E products decreased by 3.9% or RM1.9 billion, the first decline since 2014. This product accounted for 52.1% of Malaysia’s exports to the US. Imports from the US decreased slightly by 0.5% to RM64.94 billion and the main imports were E&E products, machinery, equipment and parts as well as chemicals and chemical products.

Trade with Japan totalled RM132.57 billion, sustaining an annual value above RM100 billion for over a decade and remained as Malaysia’s 4th largest trading partner since 2015 despite a decline of 4.8% in 2018. Trade with Japan accounted for 7.1% of Malaysia’s total trade. Exports contracted by 8.6% to RM69.06 billion, on account of lower exports of LNG and E&E products which decreased by 18.4% and 11.5%, respectively. These two products contributed 56.8% to Malaysia’s total exports to Japan. Major products that registered significant increases in exports were chemicals and chemical products, iron and steel products, manufactures of metal, petroleum products, wood products, manufactures of plastics as well as rubber products. Imports from Japan decreased slightly by 0.2% to RM63.51 billion in 2018. Major imports were E&E products, machinery, equipment and parts as well as transport equipment.

In 2018, trade with FTA partners increased by 4.1% to RM1.171 trillion and accounted for 62.4% of Malaysia’s total trade. Exports to FTA partners grew by 4.4% to RM615.33 billion, representing 61.7% of Malaysia’s total exports. Imports grew by 3.8% to RM555.73 billion.
Exports to the ROK surged by 17.8% to RM33.68 billion, attributed mainly to higher exports of E&E products, Australia (↑3.2% to RM33.41 billion, crude petroleum), New Zealand (↑6% to RM4.78 billion, crude petroleum), Cambodia (↑23.7% to RM1.54 billion, petroleum products) and Chile (↑13.6% to RM811.4 million, chemicals and chemical products).

Increases in exports were also recorded to India, which grew by 5.1% to RM36.29 billion mainly due to higher exports of crude petroleum and manufactures of metal. Exports to Pakistan were up by 2.1% to RM5.15 billion, spurred by higher exports of petroleum products. These two countries accounted for 76.7% share of Malaysia’s total exports to South Asia.

In 2018, other promising markets with significant growth in exports were Bangladesh, South Africa, Sri Lanka, Papua New Guinea, Peru, Qatar, Tunisia and Djibouti. Exports to Bangladesh increased by 29.5% to RM8.48 billion, South Africa (↑13.2% to RM3.77 billion), Sri Lanka (↑16.4% to RM2.89 billion) and Papua New Guinea (↑27.8% to RM1.85 billion), led by higher exports of petroleum products. Other markets registered expansion in exports were Peru which grew by 50% to RM757.7 million due mainly to palm oil-based manufactured products, Qatar (↑29.8% to RM989.6 million, machinery, equipment and parts), Tunisia (↑108.4% to RM418.6 million, E&E products) and Djibouti (↑33.2% to RM826.1 million, palm oil and palm oil-based agriculture products).

In 2018, exports of manufactured goods grew by 9.1% or RM69.62 billion to RM835.48 billion. Manufactured exports accounted for a larger share of total exports at 83.7% compared to 81.9% in 2017.

E&E products held the biggest share of Malaysia’s exports composition in 2018, at 38.2% or RM380.81 billion, rising by 11% or RM37.74 billion. Increase in exports of E&E products over RM1 billion were registered for, among others:

- Electronic integrated circuits, increased by RM44.47 billion to RM172.63 billion;
- Batteries and electric accumulators, ↑RM2.24 billion to RM4.59 billion;
- Microphones, loudspeakers, headphones, earphones, amplifier sets, and parts, ↑RM2 billion to RM6.45 billion;
- Other units of computers and data processing equipment, ↑RM1.42 billion to RM16.52 billion; and
- Computers, ↑RM1.1 billion to RM6.9 billion.
Markets which registered significant increase in exports of E&E products were Hong Kong SAR, Taiwan, China, Thailand, the ROK, Singapore and Viet Nam.

Other manufactured products that contributed to the growth in exports for 2018 were:

- Chemicals and chemical products, ↑22.5% to RM57.72 billion;
- Manufactures of metal, ↑17.8% to RM44.67 billion;
- Petroleum products, ↑6.4% to RM76.39 billion;
- Optical and scientific equipment, ↑12.1% to RM36.33 billion;
- Transport equipment, ↑15.5% to RM18.02 billion;
- Iron and steel products, ↑19.1% to RM14.97 billion;
- Non-metallic mineral products, ↑21% to RM7.26 billion;
- Machinery, equipment and parts, ↑1.2% to RM40.63 billion;
- Paper and pulp products, ↑5.6% to RM4.95 billion;
- Rubber products, ↑0.4% to RM26.41 billion; and
- Manufactures of plastics, ↑0.2% to RM14.53 billion.

Exports of mining goods rose by 7.1% to RM87.62 billion. This sector made up 8.8% share of total exports in 2018. Exports of crude petroleum increased by 29.4% to RM36.57 billion due to higher Average Unit Value (AUV) and volume. However, exports of LNG contracted by 3.1% to RM40.14 billion.

Agriculture goods contracted by 14.2% to RM67.01 billion, accounted for 6.7% of total exports in 2018. Exports of palm oil and palm oil-based agriculture products declined by 17.3% to RM44.7 billion, mainly due to lower exports of palm oil on account of lower AUV in tandem with lower global prices despite higher export volume.

In 2018, Malaysia’s total imports increased by 4.9% to RM877.74 billion. The three main categories of imports by end use which accounted for 73.5% of total imports in 2018 were:
Intermediate goods valued at RM460.32 billion or 52.4% of total imports, decreased by 3.9% from 2017, following lower imports of parts and accessories of capital goods (except transport equipment), particularly electrical machinery, equipment and parts;

Capital goods (RM111.81 billion or 12.7% of total imports), ↓3.2%, due mainly to lower imports of capital goods (except transport equipment), particularly parts of machinery and mechanical appliances; and

Consumption goods (RM72.78 billion or 8.3% of total imports), ↑2.5%, as a result of higher imports of non-durables mainly for pharmaceutical products.

Imports of manufactured goods, accounted for 87% of Malaysia’s total imports. Major imports of manufactured goods in 2018 were:

E&E products, valued at RM261.65 billion, accounted for 29.8% share of Malaysia’s total imports, increased by 3.4% from 2017;

Petroleum products, RM86.2 billion, 9.8% share, ↑14.4%;

Chemicals and chemical products, RM82.73 billion, 9.4% share, ↑11%;

Machinery, equipment and parts, RM73.62 billion, 8.4% share, ↓6.3%; and

Manufactures of metal, RM46.11 billion, 5.3% share, ↑5.6%.

China remained the largest import source since 2011, followed by Singapore, the US, Taiwan and Japan. These countries represented 53.4% of total imports. Imports from ASEAN amounted to RM223.9 billion or 25.5% share of Malaysia’s total imports while the EU accounted for 9.7% share, with a value of RM84.77 billion.

1.3 INVESTMENTS

Based on the Malaysia Investment Performance Report released by the Malaysia Industrial Development Authority (MIDA) on March 14, 2019, approved investments in the manufacturing, services and primary sectors chart RM201.7 billion in 2018.

Malaysia is set to leverage on the improving trend of private investments bolstered by the positive sentiments arising from the new Government’s supportive policies and clear economic direction. This is reflected in the total approved investments in the manufacturing, services and primary sectors, which has increased from RM200.6 billion in 2017 to RM201.7 billion in 2018. To break it
down further, investments approved for the period of January to June 2018 were valued at RM86.1 billion, while a total of RM115.6 billion investments were approved for the period of July to December 2018.

The ratio of foreign and domestic investments is in line with the Government’s aspiration for domestic investments to assume the pivotal role of driving Malaysia’s investment agenda. The pie was split with domestic direct investments (DDI) assuming 60.1% of the share at RM121.2 billion, while foreign direct investments (FDI) accounted for the remaining 39.9% or RM80.5 billion. Foreign investors continue to capitalise on uniquely Malaysian ecosystems and its regional synergies as FDI increased by 48% from RM54.4 billion in 2017.

The manufacturing sector emerged as the champion, recording a significant margin with approved investments totalling RM87.4 billion in 2018, a notable 37.2% higher, as compared to RM63.7 billion in 2017. The services and primary sectors recorded investments of RM103.4 billion and RM10.9 billion respectively in 2018.

Malaysia continued to attract high levels of foreign investments in the manufacturing sector despite the global economic slowdown. Foreign investments in approved manufacturing projects have more than doubled to RM58.0 billion in 2018 from 2017’s figure of RM21.6 billion, constituting 66.4% of the total approved investments in the manufacturing sector. This reflects the country’s success in its targeted approach in attracting investments in high value-added and knowledge-intensive industries.

The majority of FDIs were in new projects, totalling RM40.3 billion (69.5%), with the remaining RM17.7 billion (30.5%) being expansion and diversification projects. This shows that in addition to existing foreign companies expanding or diversifying in the country, more international investors are choosing Malaysia as their preferred investment destination.

China, Indonesia, the Netherlands, Japan and the USA were the largest contributors to the manufacturing sector in Malaysia for 2018. These five countries jointly accounted for RM44.3 billion or 76.4% of the total foreign investments approved during the period.

Pentax Medical from Japan is among the foreign projects approved in the manufacturing sector. The company, which is one of the top three endoscopic and surgical system manufacturers in the world, will be setting up its new manufacturing facility in Penang. This project is expected to create 193 job opportunities, whereby 77% will be Malaysians particularly in the managerial, supervisory and technical category.
Another notable project is Jinjing Technology from China that will be located at the Kulim Hi-Tech Park. The company will contribute to the development of the solar and glass ecosystems in Malaysia. It will provide 855 job opportunities to Malaysians, with salaries between RM3,000 to RM10,000 a month.

Testhub is an exemplary Malaysian company in the E&E industry. It is the only Malaysian entity that has the capability to design and manufacture test boards and test programmes, as well as provides one stop testing solutions to global MNCs. This knowledge-based company, located in Melaka, employs highly skilled local talents in the fields of E&E engineering as well as physics.

Capital intensive projects, which involve advanced technology and skilled manpower, dominated the manufacturing landscape, represented by the 81 projects approved with investments of RM100 million or more. This is 43.2% higher than in 2017. Investments into these projects reached RM75 billion or accounted for 85.9% of total investments approved in the manufacturing sector. This is in line with the country’s push towards more strategic and higher quality investments.

The manufacturing sector remains a key contributor to the nation's exports. Of the total 721 approved manufacturing projects, 30.7% or 221 projects will be making Malaysia their hub for the international markets, whereby at least 80% of their products will be exported.

The petroleum products including petrochemicals industry with approved investments of RM32.9 billion contributed the lion share to the overall manufacturing performance in 2018. A notable project in this industry is Sarawak Petchem which is part of the Sarawak State Government initiative to develop Bintulu as a petrochemical hub. This is in addition to investments by Pengerang Energy Complex and Petronas Chemicals Isononanol that will be located in Johor.

Other industries with high levels of approved investments include basic metal products, E&E products, paper, printing and publishing, chemicals and chemical products, rubber products, non-metallic mineral products and machinery and equipment.

The manufacturing projects approved in 2018 are expected to create employment opportunities for 59,294 people. Of these, 22,449 will be in the managerial, technical, supervisory and skilled workers category.

The services sector continued to be the cornerstone of the nation’s economic growth in 2018. The sector was the largest contributor to the total approved investments, amounting RM103.4 billion.
from 4,103 projects. Domestic investments contributed 84.1% or RM86.9 billion while foreign investments made up the rest or RM16.5 billion.

Foreign investors were strong in the distributive trade and global establishments subsectors recording RM4.8 billion and RM4.4 billion respectively. These two subsectors alone contributed 55.8% to the total foreign investments in the services sector.

Malaysia has been well positioned to attract MNCs to set up their global and regional bases in the country. To date, MIDA has cumulatively approved a total of 35 Principal Hub (PH) projects, with companies committing to business spending of RM35.1 billion, engaging the use of local ancillary services worth RM5.5 billion and creating 2,686 high-value jobs. For 2018 alone, a total of eight new Principal Hub projects were approved, with committed business spending of RM7.1 billion. Among the approved PH projects were Smart Modular Technologies, Frencken Group, Onwards Media Group (OMG) and Jobstreet.

US-based Smart Modular Technologies has made Malaysia its base to undertake supply chain management from 3rd party suppliers to 3rd party customers. This translates to employment opportunities for 90 Malaysians. The company will utilise big data, cloud computing and real-time analytics technology to efficiently manage its global supply chain, which will involve over one million components, 220 suppliers and network companies in 1,000 locations.

Another project is from Frencken Group, a high-tech capital and consumer equipment service provider. Through its newly established Principal Hub, Frencken Group has shifted the global supply chain management of its Integrated Manufacturing Services division from Singapore to Malaysia. The company will incur a business spending of RM89.9 million over the next 10 years and will train 30 employees in areas such as strategic supply chain management and financial planning.

The global establishments and end-to-end supply chain management services are key components to the nation’s economy. These services create trade efficiency and competitive advantages for other Malaysian industries. Given that the services sector is dominated by domestic industry players, the Government has introduced various initiatives to provide more business opportunities for Malaysian service providers. This includes the introduction of a mechanism to encourage better linkages with local service providers in the fields of architecture, engineering, transportation, banking, insurance, legal and ICT.

Investments in the primary sector registered a decrease of 12.2% from RM12.4 billion in 2017 to RM10.9 billion in 2018. This is largely due to lower investments in oil and gas exploration activities,
under the mining subsector. The rest of the investments in the primary sector comprise of the plantation and commodities subsector, and the agriculture subsector, registered sustainable investments of RM601.8 million and RM68.8 million respectively.

The Malaysian economy is likely to remain on a steady path in 2019 as the country’s macroeconomic fundamentals remain strong despite domestic and external challenges. This optimism is shared by Bloomberg in its recent analysis of emerging markets, whereby Malaysia was ranked first due to its growth prospects, state of the current account, sovereign credit ratings and, stock and bond valuation.

The Malaysian Government has also unveiled the National Budget 2019 to plot a path forward for Malaysia. It includes a mixture of stimuli, incentives, and safeguards to facilitate business and enhance the nation’s ongoing competitiveness. In addition, the year 2018 marked a significant stage in the country’s automation journey with the launch of Industry4WRD, the National Policy on Industry 4.0. The broad strategies and action plans under this framework will contribute to the progressive transformation of industries, boosting Malaysia as a key player on the world stage.

With the existing policies in place, Malaysia s expected to continue to spark confidence in investors and business owners, and attract more quality investments this year. As to date, MIDA has 399 manufacturing and services projects with investments totalling RM23.7 billion in the pipeline.

1.4 ECONOMIC OUTLOOK FOR 2019

In 2019, the global economy is projected to expand moderately, following slower growth in both advanced and major emerging market economies. In the advanced economies, economic activity is projected to moderate. While labour market strength will continue to support domestic demand, moderating investments and external demand will affect overall growth. In PR China, ongoing structural reforms to rebalance the economy are leading to slower, but more sustainable growth. In other Asian economies, growth will likely moderate despite stable domestic demand, as exports react to the slowdown in the advanced economies and PR China. Global trade developments will remain a key factor affecting the 2019 outlook. Prolonged policy uncertainty could adversely affect investment decisions and thus, longer-term productivity growth. Elevated investor uncertainty and bouts of volatility in the financial markets will pose further risks of greater volatility in capital flows to emerging market economies. Overall, the balance of risks to the global growth outlook is tilted to the downside. Against the backdrop of a challenging global environment, the Malaysian economy is expected to sustain its growth momentum, expanding by 4.3% – 4.8% in 2019 (2018: 4.7%).
Domestic demand will remain the anchor of growth, underpinned by continued expansion in private sector activity. Private consumption growth is expected to moderate, but remain firm supported by stable labour market conditions and continued wage growth. The implementation of several government measures, particularly aimed at alleviating rising cost of living, is expected to further support consumption spending, especially by lower income households.

Private investment activity will be supported by the implementation of on-going multi-year projects, particularly in the manufacturing and services sectors. The normalisation of destocking activities by firms after the strong demand during the tax holiday period in 2018 will serve as an additional support to growth. Public sector expenditure, however, is expected to weigh on growth. The projected contraction in public investment will be due mainly to lower investment by public corporations following the completion of large-scale projects, while the expectations for a moderate growth in public consumption reflect the continued reprioritisation of government spending.

The external sector is expected to register a more moderate growth. While the export sector will soften in line with the more moderate expansion in global growth and trade activity, Malaysia’s well-diversified export structure will contribute to sustain gross exports expansion. Gross imports are also expected to expand on account of a turnaround in intermediate and capital imports. Overall, the current account of the balance of payments is projected to remain in surplus, albeit narrowing to 1.5% – 2.5% of GNI.

On the supply side, all economic sectors are expected to expand with the services and manufacturing sectors remaining the key contributors to overall growth. Both the mining and agriculture sectors are projected to record positive growth rates amid recovery in natural gas production and higher palm oil output. Growth in the construction sector is expected to moderate due to the completion of large petrochemical projects in the civil engineering sub-sector.

Labour market conditions are expected to be stable, with continued employment and income growth, underpinned by steady expansion in services and manufacturing sectors. The unemployment rate is projected to be relatively unchanged. In the long run, the rollout of government policies such as the tiered levy and social security contribution for foreign workers is a positive step in reducing the reliance on foreign labour and spurring the creation of higher skilled, higher income jobs in the economy.

Headline inflation is expected to be broadly stable, with a projected annual average of 0.7% – 1.7% in 2019. The inflation projection incorporates some cost pass-through from domestic cost factors,
but the upward impact will be offset by the expected lower global oil prices and the implementation of price ceilings on domestic retail fuel prices. Underlying inflation, as measured by core inflation, is expected to be sustained amid the steady expansion in economic activity and in the absence of excessive demand pressure.

Overall, the domestic growth projection is subject to several downside risks. As a small open economy, the unresolved trade tensions between the US and PR China, and a slower-than-expected global growth will affect Malaysia primarily via the trade and investment channel. The uncertain pace of the monetary policy normalisation in the US could heighten financial market volatility across emerging market economies, leading to volatile two-way capital flows and currency fluctuations. Volatility in global oil prices would also affect export performance and mining sector investment. On the domestic front, a re-occurrence of commodity supply disruptions, partly from unanticipated weather patterns, could affect the recovery in the mining and agriculture sectors. In addition, the oversupply situation in the property market could dampen activity in the construction sector.

Malaysia’s strong fundamentals and the diversified nature of the economy will help to weather these risks and vulnerabilities while preserving macroeconomic and financial stability. These strong fundamentals include a healthy labour market, stable inflation rate, continued surplus in the current account of the balance of payments, deep financial markets as well as a strong financial sector. Exchange rate flexibility and sufficient level of international reserves further enhance the economy’s capability to withstand external shocks. Moreover, commitment by the Government to fiscal, structural and institutional reforms will contribute to inclusive and sustainable growth going forward.
### 1.5 Malaysia – Key Economic Indicators

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018 (p)</th>
<th>2019 (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (million persons)</td>
<td>31.6</td>
<td>32.0</td>
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<tr>
<td>Labour force (million persons)</td>
<td>14.7</td>
<td>15.0</td>
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<tr>
<td>Employment (million persons)</td>
<td>14.2</td>
<td>14.5</td>
<td>14.8</td>
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<tr>
<td>Unemployment (as % of labour force)</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
<td>3.5</td>
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<tr>
<td>Per Capita Income (RM)</td>
<td>37,822</td>
<td>41,128</td>
<td>42,627</td>
<td>44,275</td>
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<tr>
<td>(USD)</td>
<td>9,117</td>
<td>9,554</td>
<td>10,564</td>
<td>10,809</td>
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</table>

#### National Product (% change)

<table>
<thead>
<tr>
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<th>2016</th>
<th>2017</th>
<th>2018 (p)</th>
<th>2019 (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP at 2010 prices (RM billion)</td>
<td>1,108.9</td>
<td>1,174.3</td>
<td>1,229.8</td>
<td>1,287.9</td>
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<tr>
<td>Agriculture, forestry and fishery</td>
<td>-5.2</td>
<td>7.2</td>
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<tr>
<td>Mining and quarrying</td>
<td>2.1</td>
<td>1.0</td>
<td>-1.5</td>
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<tr>
<td>Manufacturing</td>
<td>4.4</td>
<td>6.0</td>
<td>5.0</td>
<td>4.8</td>
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<tr>
<td>Construction</td>
<td>7.4</td>
<td>6.7</td>
<td>4.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Services</td>
<td>5.7</td>
<td>6.2</td>
<td>8.8</td>
<td>5.7</td>
</tr>
<tr>
<td>Nominal GNI</td>
<td>6.2</td>
<td>10.1</td>
<td>4.8</td>
<td>5.0</td>
</tr>
<tr>
<td>(RM billion)</td>
<td>1,186.4</td>
<td>1,317.0</td>
<td>1,380.5</td>
<td>1,449.6</td>
</tr>
<tr>
<td>Real GNI</td>
<td>4.4</td>
<td>6.0</td>
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<td>4.9</td>
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<tr>
<td>(RM billion)</td>
<td>1,085.7</td>
<td>1,151.3</td>
<td>1,191.5</td>
<td>1,249.5</td>
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<tr>
<td>Real aggregate domestic demand$</td>
<td>4.3</td>
<td>6.5</td>
<td>5.6</td>
<td>4.4</td>
</tr>
<tr>
<td>Private expenditure</td>
<td>5.6</td>
<td>7.5</td>
<td>7.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Consumption</td>
<td>6.0</td>
<td>7.0</td>
<td>8.1</td>
<td>6.6</td>
</tr>
<tr>
<td>Investment</td>
<td>4.3</td>
<td>9.3</td>
<td>4.5</td>
<td>4.9</td>
</tr>
<tr>
<td>Public expenditure</td>
<td>0.3</td>
<td>3.3</td>
<td>0.1</td>
<td>-1.8</td>
</tr>
<tr>
<td>Consumption</td>
<td>0.9</td>
<td>5.4</td>
<td>3.3</td>
<td>1.2</td>
</tr>
<tr>
<td>Investment</td>
<td>-0.5</td>
<td>0.1</td>
<td>-5.2</td>
<td>-7.1</td>
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<tr>
<td>Gross national savings (as % of GNI)</td>
<td>29.1</td>
<td>29.3</td>
<td>26.9</td>
<td>26.0</td>
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</table>

#### Balance of Payments (RM billion)

<table>
<thead>
<tr>
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<th>2016</th>
<th>2017</th>
<th>2018 (p)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Goods balance</td>
<td>102.0</td>
<td>116.8</td>
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<tr>
<td>Exports</td>
<td>686.9</td>
<td>807.0</td>
<td>836.4</td>
<td>845.5</td>
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<tr>
<td>Imports</td>
<td>584.8</td>
<td>690.2</td>
<td>715.0</td>
<td>729.3</td>
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<tr>
<td>Services balance</td>
<td>-18.9</td>
<td>-22.8</td>
<td>-19.7</td>
<td>-19.8</td>
</tr>
<tr>
<td>Primary income, net</td>
<td>-34.6</td>
<td>-36.4</td>
<td>-49.4</td>
<td>-50.2</td>
</tr>
<tr>
<td>Secondary income, net</td>
<td>-18.6</td>
<td>-17.3</td>
<td>-18.8</td>
<td>-18.2</td>
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<tr>
<td>Current account balance</td>
<td>29.9</td>
<td>40.3</td>
<td>33.5</td>
<td>28.0</td>
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<tr>
<td>(as % of GNI)</td>
<td>2.5</td>
<td>3.1</td>
<td>2.4</td>
<td>1.5 - 2.5</td>
</tr>
<tr>
<td>Bank Negara Malaysia international reserves, net$</td>
<td>423.9</td>
<td>414.6</td>
<td>419.5</td>
<td>-</td>
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<tr>
<td>(in months of retained imports)</td>
<td>8.7</td>
<td>7.2</td>
<td>7.4</td>
<td>-</td>
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</table>

#### Prices (% change)

<table>
<thead>
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<th></th>
<th>2016</th>
<th>2017</th>
<th>2018 (p)</th>
<th>2019 (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI (2010=100)</td>
<td>2.1</td>
<td>3.7</td>
<td>1.0</td>
<td>0.7 - 1.7</td>
</tr>
<tr>
<td>PPI (2010=100)</td>
<td>-1.1</td>
<td>6.7</td>
<td>-1.1</td>
<td>-</td>
</tr>
</tbody>
</table>

---

1. Exclude stocks
2. All assets and liabilities in foreign currencies have been revalued into ringgit at rates of exchange ruling on the balance sheet date and the gain/loss has been reflected accordingly in the Bank Negara Malaysia's audited accounts
3. Based on average USD exchange rate for the period of January-February 2019
4. Preliminary
5. Forecast

Note: Figures may not necessarily add up due to rounding.

Source: Department of Statistics, Malaysia and Bank Negara Malaysia
CHAPTER TWO
PETROCHEMICAL INDUSTRY IN MALAYSIA

2.1 OVERVIEW

Malaysia aims to become a new centre of growth for the global petrochemical industry. As a reputable petrochemicals manufacturing hub, Malaysia churns out polymers, alcohols, phenols, polycarbonates, among others, and exported to more than 30 countries. Malaysia is expected to overtake current leaders Indonesia and Thailand by 2020 in terms of production capacity especially in basics and derivatives chemicals with the completion of integrated refinery and petrochemical complex project in Pengerang, Johor.

The Malaysian government’s investor-friendly policies and the availability of feedstock have been largely responsible for Malaysia’s petrochemical growth. Over the last decade, Malaysia has established a near-ideal infrastructure to support a vibrant petrochemicals industry, and investors benefit from the facilities that are already in place.

In view of roping in new CAPEX for the country’s petrochemical sector, Malaysian government has set up a third industrial master plan for the petrochemicals industry. The plan focuses on developing integrated petrochemicals zones which offer centralised utilities, efficient storage services and a comprehensive transportation network that helps reduce capital and operational costs. The development of these zones, with clusters of petrochemicals plants, has resulted in a value chain that ensures the progressive development of downstream petrochemical activities.

The country’s role in propelling growth and as a major consumption centre prompted a number of petrochemical giants – BASF, Mitsui, Lotte Chemical Titan, Toray Industries, Dow Chemical, Eastman Chemicals, Polyplastics, Kaneka Dairen, Idemitsu Kosan – to invest in the East Coast of Peninsular Malaysia in the last couple of decades, building on partnerships or strategic alliances to scale new heights in terms of production, job creation and innovation.

The Malaysian petrochemical industry is poised for further record growth on the back of planned expansions and access to feedstock. The country’s goal to be a major regional hub for petrochemicals is driven by the US$27 billion PETRONAS’ Refinery and Petrochemical Integrated Development (RAPID) project in the Pengerang Integrated Complex in Johor, which will be the central focus of growth in the next few years.
The Pengerang Integrated Complex (PIC) which represents PETRONAS’ largest investment in Malaysia is part of the Malaysia’s Economic Transformation Programme, ETP which is intended to position Malaysia as a major energy and commodity petrochemical producer over the next two decades. Project RAPID is expected to deliver a cumulative Gross National Income, GNI of about RM18.3 billion by 2020 contributing significantly to the Oil, Gas and Energy National Economic Area, NKEA target of raising the GNI contribution to RM241 billion by 2020 from RM110 billion in 2009. Thus, it will spur the growth of Malaysia’s Oil and Gas downstream sector, pushing Malaysia into a new frontier of technology and economic development.

In March 2018 PETRONAS and Saudi Aramco announced the creation of two joint ventures for the RAPID project namely: Pengerang Refining Company Sdn Bhd (formerly known as PRPC Refinery & Cracker Sdn Bhd); and Pengerang Petrochemical Company Sdn. Bhd. (formerly known as PRPC Polymers Sdn Bhd) – collectively known as PRefChem. This came after the two companies concluded negotiations regarding Saudi Aramco’s US$7 billion investment in the project. This represents the largest offshore investment ever made by Saudi Aramco and is the largest-ever foreign direct investment (FDI) in Malaysia.

In 2018, the petroleum products including petrochemicals industry with approved investments of RM32.9 billion contributed the lion share to the overall manufacturing performance in 2018. Malaysia will also witness another methanol project with an investment worth approximately RM5.7 billion by Sarawak Petchem Sdn Bhd. This project forms part of the Sarawak State Government initiative to develop Bintulu as a Petrochemical Hub in Sarawak. It will be implemented with Natural Gas as feedstock from PETRONAS and product off take by PETRONAS Chemicals Marketing (Labuan) Ltd. The proposed site of the methanol plant is located at Tanjung Kidurong, Bintulu, Sarawak. The plant is designed with a capacity of 5,000 Metric Ton Per Day and expected to start production by Q4, 2022.

A notable new project approved with investments of RM400 million was from Idemitsu Chemicals (M) Sdn Bhd, with their production of Syndiotactic Polystyrene (SPS) resin. This is a new version of polystyrene with superb chemical and mechanical properties that is also environmentally friendly. The establishment of the SPS project in Johor will further enhance and complement the industry’s ecosystem in Malaysia. Another highlight from 2018 is an investment from Toray Plastic (Malaysia) Sdn Bhd worth RM1.1 billion, with its expansion project of producing advanced engineering plastic products. The Japanese company has been operating in Malaysia since 1970, and its huge investment decision on the expansion project demonstrated its continued confidence in Malaysia.
2.2 PLASTICS INDUSTRY

The plastics industry registered a mild growth due to the slowing global economy. Sales turnover increased by 4% from RM29.80 billion in 2017 to RM30.98 billion in 2018 - roughly half of which were for exports at RM14.53 billion.

Source: MPMA & Department of Statistics
Export however, was flat in 2018, partially attributed to the restrictions on the use of plastic bags in certain EU countries - growth was mainly driven by the domestic sectors, namely, the E&E as well as the automotive sectors. Rising labour and raw materials costs remained the main issues of concern.

During the period under review, clarion calls against plastics, in general, had been gaining momentum, not only in Malaysia but on a global level. In 2016, we had seen the several Malaysian States taking actions to limit the use of plastic bags and polystyrene food packaging by introducing bans. In 2017, we observed how these actions were also implemented in other countries affecting more and more types of plastic products.

In October 2018, the Ministry of Energy, Science, Technology and Climate Change (MESTECC) launched the Roadmap towards Zero Single-Use Plastic 2018-2030, which aim to eliminate and replace fossil-based single-use plastics with biodegradable and compostable products. There is a need to understand the impact of this Roadmap on all stakeholders in the plastics industry value chain including brand owners as single-use plastics is a wide encompassing term, covering an extensive variety of items from medical devices, food packaging to everyday household items.

MESTECC had also informed that the Malaysian Government is supportive of the initiation of an international legally binding agreement on marine litter and microplastics, but priority would be towards supporting the amendment of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, with the aim to reduce movement of plastic waste.

The Malaysian Petrochemicals Association (MPA) is working closely with our customers, the plastics manufacturers to address environmental concerns related to plastic waste. The MPA is engaged in a number of activities and partnerships with the Malaysian Plastics Manufacturers Association to address the challenge of marine litter, plastic waste and ban on single-use plastic.

The increasing legislation against single-use plastics may affect certain fast-moving consumer products but the overall impact would not be significant. Production cost will escalate due to new policies on minimum wage, general employment and foreign workers. Raw material and energy costs are also expected to rise due to the rising crude oil prices. With an anticipation of the slowing global and Malaysian economies, the plastics industry is expected to grow at about 2% in 2019. Export growth will remain flat due to the challenging environmental issues.
CHAPTER THREE

COMMITTEE REPORTS

3.1 GENERAL MATTERS & RAW MATERIALS COMMITTEE

Both Malaysian petrochemical players have added and are adding significant new petrochemicals capacities and expanding and debottlenecking existing plants, with some projects completed and others underway and on schedule. Additional capacity is targeting the growing domestic and Asian market.

The Pengerang Refining and Petrochemical (PRefChem), a strategic alliance between Petroliam Nasional Berhad (PETRONAS), the national oil company of Malaysia, and Saudi Arabian Oil Company (Saudi Aramco), the national oil company of Saudi Arabia project, with 3mn tonnes per annum (tpa) of new petrochemicals capacity, including 1.1mn tpa of ethylene, and a 300,000 barrels per day (b/d) refinery is expected to come online in 2019 as projected. Lotte Chemical Titan’s expansion of its Malaysian steam cracking operations was completed in 2017, increasing the complex’s production capacities for ethylene by 92,000 tpa, for propylene by 170,000 tpa, and for BTX by 134,000 tpa. The new PP 200 KTA PP3 plant plant started the successful commercial operation in September 2018.

On the demand side, notwithstanding economic headwinds, the Malaysian plastics industry has steadily increased consumption of polymers in line with a GDP growth and are expected to continue to grow to cater to both domestic and overseas consumption. All figures in the table are in ktpa.

<table>
<thead>
<tr>
<th>Nameplate capacity</th>
<th>Year 2010</th>
<th>Year 2015</th>
<th>Year 2016</th>
<th>Year 2017</th>
<th>Year 2018</th>
<th>Year 2019</th>
<th>Year 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>332</td>
<td>369</td>
<td>369</td>
<td>369</td>
<td>369</td>
<td>369</td>
<td>613</td>
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<td>Butadiene (BDE)</td>
<td>100</td>
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<td>100</td>
<td>100</td>
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<td>100</td>
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<td>1723</td>
<td>1723</td>
<td>1723</td>
<td>1815</td>
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<td>1060</td>
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<td>1060</td>
<td>1810</td>
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<tr>
<td>Propylene</td>
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<td>1077</td>
<td>1077</td>
<td>1077</td>
<td>1237</td>
<td>2137</td>
<td>2437</td>
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<td>Polypropylene (PP)</td>
<td>550</td>
<td>373</td>
<td>390</td>
<td>440</td>
<td>540</td>
<td>640</td>
<td>1540</td>
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<td>Vinyl Chloride Monomer (VCM)</td>
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<td>Styrene</td>
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<td>Terephthalic Acid (PTA)</td>
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<td>600</td>
<td>600</td>
<td>600</td>
<td>600</td>
<td>600</td>
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<tr>
<td>Paraxylene</td>
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<td>550</td>
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<td>Monoethylene Glycol (MEG)</td>
<td>380</td>
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<td>Polyethylene Terephthalate</td>
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<td>666</td>
<td>666</td>
<td>666</td>
<td>666</td>
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<tr>
<td>Grand Total</td>
<td>8498</td>
<td>7758</td>
<td>7740</td>
<td>7765</td>
<td>8117</td>
<td>9792</td>
<td>13451</td>
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</tbody>
</table>
3.2 POLYOLEFINS COMMITTEE

Until 2012, Malaysia was a net exporter of polyolefin products. The major export destinations were China (including Hong Kong), and countries in the South-East Asia region and India Sub-Continent. After PETRONAS subsidiary, Polypropylene Malaysia mothballed its 80,000 tons/year polypropylene (PP) plant in Kuantan, Malaysia at the end of December 2012 which was then followed by a capacity reduction at the second producer Lotte Chemical Titan from 480 to 400 ktpa in 2013, Malaysia became net polyolefins importer.

This has started to change again from 2018, when Lotte Chemical Titan started its third PP line with a nameplate capacity of 200,000 tpa, which will be followed by PRefChem bringing its new petrochemical project online in 2019.

<table>
<thead>
<tr>
<th>Nameplate capacity</th>
<th>Year 2010</th>
<th>Year 2015</th>
<th>Year 2016</th>
<th>Year 2017</th>
<th>Year 2018</th>
<th>Year 2019</th>
<th>Year 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDPE</td>
<td>485</td>
<td>525</td>
<td>455</td>
<td>455</td>
<td>455</td>
<td>455</td>
<td>855</td>
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<tr>
<td>LDPE</td>
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<td>485</td>
<td>485</td>
<td>485</td>
<td>485</td>
<td>485</td>
<td>485</td>
</tr>
<tr>
<td>LLDPE</td>
<td>100</td>
<td>60</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>470</td>
</tr>
<tr>
<td>PP</td>
<td>550</td>
<td>373</td>
<td>390</td>
<td>440</td>
<td>540</td>
<td>640</td>
<td>1540</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>1620</td>
<td>1443</td>
<td>1450</td>
<td>1500</td>
<td>1600</td>
<td>1700</td>
<td>3350</td>
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</tbody>
</table>
3.2.1A LDPE

Malaysia LDPE

- Consumption
- Exports
- Imports
- Capacity

Graph showing the trend of Malaysia LDPE from Y2010 to Y2020.
3.2.1B LLDPE

Malaysia LPDE

Malaysia LLDPE

Consumption  Exports  Imports  Capacity

3.2.1C HDPE
3.2.2 PP

Malaysia Propylene

- Capacity
- Demand
- Exports
- Imports

Malaysia HPDE

- Kerteh
- Pasir Gudang
- Pengerang
3.3 STYRENICS COMMITTEE
3.4 PVC COMMITTEE
3.5 SYNTHETIC RUBBER COMMITTEE

World Production, Consumption and Trade of Rubber

Global production of rubber grew at an average annual growth rate of 2.7% to 28.4 million tonnes in 2017 from 25.3 million tonnes in 2011. Natural rubber (NR) accounted for 53% of world rubber production in 2017 with 15.0 million tonnes. Synthetic rubber (SR) made up 47% of global production of rubber in 2017 with 13.4 million tonnes.

In the first half of 2018, total world production of rubber increased by 3.3% to 14.1 million tonnes from 13.6 million tonnes in the corresponding period of 2017. Major rubber producing countries are Thailand, Indonesia, Viet Nam, China, Malaysia, Cote d'Ivoire, Myanmar, Brazil and Cambodia.

World consumption of rubber in 2017 increased by 3.3% year-on-year (yoy) to 28.4 million tonnes from 27.5 million tonnes in 2016. Total NR consumption increased by 4.4% yoy to 13.2 million tonnes in 2017. Total SR consumption grew by 2.4% yoy to 15.2 million tonnes in 2017. China, USA, India, Japan, Thailand, Malaysia, Indonesia, Brazil, Germany and Russia were the top 10 consumers of rubber in 2017.

Rubber imports rose by 10.4% to 22.9 million tonnes in 2017 from 20.7 million tonnes in 2016.

Global exports of rubber rose to 22.0 million tonnes in 2017, a 9.7% increase from 2016.

Chart 1: World Production, Consumption in Rubber, 2011 – 2018 (Jan - June) (million tonnes)

Source: International Rubber Study Group (IRSG)
Malaysian Rubber Production, Consumption and Trade

Production
- Production of rubber in Malaysia increased by 10.6% yoy to 880.6 thousand tonnes in 2017.
- During the first six months of 2018, rubber production declined by 18.5% to 361.3 thousand tonnes from 443.5 thousand tonnes in the corresponding period last year.
- NR made up 79.5% of total production of rubber in the first six months of 2018 with 287.1 thousand tonnes, a drop of 24.2% from 378.7 thousand tonnes in the corresponding period last year.
- Production of SR rose sharply by 33.4% to 39.7 thousand tonnes in the first three months of 2018 from 29.8 thousand tonnes in the corresponding period last year.

Consumption
- In 2017, rubber consumption grew by 7.6% yoy to 970.3 thousand tonnes.
- In the first six months of 2018, total rubber consumption rose by 16.6% to 559.9 thousand tonnes, from 480.0 thousand tonnes in the first half of 2017.
- Total consumption of NR increased by 8.7% to 257.7 thousand tonnes in the first six months of 2018 from 237.1 thousand tonnes in the same period last year.
- Consumption of SR rose sharply by 24.4% to 302.2 thousand tonnes in the first six months of 2018 from 243.0 thousand tonnes in the corresponding period last year.
Global exports of rubber rose to 22.0 million tonnes in 2017, a 9.7% increase from 2016.

Import

- Since 2015, Malaysia has been a net importer of rubber.
- Total imports of rubber increased by 20.9% yoy to 1.62 million tonnes in 2017.
- In the first six months of 2018, rubber imports increased by 6.8% yoy to 792.4 thousand tonnes.
- During the same period, NR imports grew strongly by 6.0% yoy to 529.5 thousand tonnes, accounting for 66.8% of total rubber imports.
- Imports of SR also increased sharply by 8.5% yoy to 262.9 thousand tonnes in the first six months of 2018.
- In 2017, rubber exports increased by 18.8% to 1.35 million tonnes from 1.13 million tonnes in 2016.
- During the first six months of 2018, Malaysia exported 640.0 thousand tonnes of rubber, a decline of 1.7% compared to the first six months of 2017.
- NR remained the biggest export in the first six months of 2018, accounting for 88.2% of total rubber exports.
- During the same period, SR exports rose by 18.1% yoy to 75.8 thousand tonnes.
Malaysia’s Export of Rubber Products

- In the first six months of 2018, exports of rubber products from Malaysia amounted to RM11.2 billion, recording a growth of 5.2% from the corresponding period last year.

- Latex goods remained the largest contributor to Malaysian exports of rubber products, reaching RM9.2 billion in the first six months of 2018 and accounted for 81.6% of the total exports of rubber products.

- Export of non-latex goods increased by 5.7% to RM2.1 billion in the first six months of 2018, growing from RM1.9 billion in the corresponding period last year.
Malaysia’s Export of Non-Latex Rubber Products

- In the first six month of 2018, exports of industrial rubber goods expanded by 36.6% to 662.4 thousand tonnes whereas general rubber goods dropped by 1.8% to 625.8 thousand tonnes as compared to the corresponding period last year.

- Exports of footwear and tyres dropped by 16.4% and 3.0% in the first six months of 2018 from 184.4 thousand tonnes and 579.6 thousand tonnes respectively.
Malaysia’s Export of Non-Latex Rubber Products

- Malaysian rubber products are exported to more than 190 countries.
- In 2017, the USA and EU remained the largest markets for Malaysian rubber products, accounting for a combined 52% share of total exports of rubber products.
- Malaysia remains the world’s leading supplier of medical gloves (examination and surgical gloves), supplying more than 50% of the global demand.
- Malaysia is also one of the world’s leading suppliers of foley catheters, condoms and latex threads (in value terms).
### Malaysia’s Exports of Selected Rubber Products

**Table 1: Malaysia's Exports of Selected Rubber Products, 2011 – 2018 (Jan - July)**

<table>
<thead>
<tr>
<th>Rubber Product</th>
<th>Value (RM Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gloves, Other Than Surgical Gloves</td>
<td>8,817.00</td>
</tr>
<tr>
<td>Surgical Gloves</td>
<td>1,074.50</td>
</tr>
<tr>
<td>Tubes, Pipes and Hoses</td>
<td>416.8</td>
</tr>
<tr>
<td>Latex Thread</td>
<td>848.2</td>
</tr>
<tr>
<td>Wires, Cables and Other Electrical Conductors</td>
<td>30.7</td>
</tr>
<tr>
<td>Condoms</td>
<td>277.1</td>
</tr>
<tr>
<td>Catheters</td>
<td>149.1</td>
</tr>
<tr>
<td>Product Type</td>
<td>2017</td>
</tr>
<tr>
<td>----------------------</td>
<td>------</td>
</tr>
<tr>
<td>Seals and Gaskets</td>
<td>73.8</td>
</tr>
<tr>
<td>Foam Products</td>
<td>74.5</td>
</tr>
<tr>
<td>Precured Treads</td>
<td>58.5</td>
</tr>
<tr>
<td>Beltings</td>
<td>54.9</td>
</tr>
<tr>
<td>Finger Stalls</td>
<td>13.5</td>
</tr>
<tr>
<td>Teats &amp; Soothers</td>
<td>11.8</td>
</tr>
</tbody>
</table>

Source: Department of Statistics (DOS), Malaysia
3.6 SYNTHETIC FIBER RAW MATERIALS COMMITTEE

Ethylene Glycols [Mono-Ethylene Glycol (MEG), Di-Ethylene Glycol (DEG)] as Synthetic Fiber Raw Material

The Ethylene Glycols (MEG & DEG) market in Malaysia is expected to be stable as domestic demand growth is expected to be rather limited.

Currently, Malaysia’s leading EG producer is PETRONAS Chemicals Glycols Sdn Bhd which produces three main products which are Mono-Ethylene Glycol (MEG), Di-Ethylene Glycol (DEG) and Re-Distilled Ethylene Oxide (RDO), using world-renowned EOG METEOR Technology from Dow, the most advanced, efficient and cost competitive technology to produce MEG, DEG and high purity EO for derivatives.

Both, MEG (the largest volume product manufactured by PETRONAS Chemicals Glycols Sdn Bhd) and DEG are sold within Malaysia and to various countries throughout the Asia Pacific region. PETRONAS Chemicals Glycols Sdn Bhd’s production capacity of MEG is 360kTa and is applied in resins for fibers and PET containers or bottles, antifreeze as well as electronic applications. PETRONAS Chemicals Glycols Sdn Bhd’s production capacity for DEG is 20kTa and used in the production of unsaturated polyester resins (used for fiberglass) and brake fluid formulation.

PETRONAS Chemicals Glycols Sdn Bhd’s key markets include South East Asia, Japan, South Korea, China and Taiwan. About 60 percent of PETRONAS Glycols Derivatives Sdn Bhd’s products are utilized to meet local demands with the remaining 40 percent for the export market.

The EG market growth relies heavily on the polyester demand or supply since it is a key feedstock together with Purified Terephthalic Acid (PTA) in this industry. The Asia market is projected to have immense potential on the EG growth and consumption.

During the recession in 2008-2009 monoethylene glycol (MEG) market slowed down globally but production has already markedly increased in 2010. Today’s major MEG producers include Saudi Arabia, China, Taiwan, USA and Canada. In the near future, global demand growth rate is expected to be about 6% per year, while China is forecasted to grow at 6.5%. Today China is the largest MEG consumer and the country depends a lot on import. New capacity introductions are expected to solve this problem partially.
With respect to new MEG capacities in Malaysia, Pengerang Refining and Petrochemical (PRefChem), a JV of PETRONAS Chemicals Group (PCG) and Saudi Aramco will start up their plant at their new refinery and petrochemical project located in Pengerang, Johor, Malaysia in 2019.
3.7 CHEMICALS COMMITTEE

The chemicals and chemical products industry is one of the key industries in Malaysia, ranking third in 2018 for its contribution towards manufactured goods in Malaysia’s total exports and amounting to RM57.7 billion. Chemicals and chemical products have mostly been exported to Asian countries, with China being the largest importer, followed by Indonesia, Thailand, Viet Nam, and Singapore. Malaysia’s chemical and chemical products industry encompasses the production of agricultural chemicals, fertilisers, industrial gases, inorganic chemicals, paint, and printing ink.

In 2018, a total of 48 projects representing investments worth RM1.84 billion were approved. Of these projects, 27 were new projects (RM950 million), while the rest were expansion/diversification projects (RM892 million). Foreign investments dominated the industry, making up over three quarters of all investments (RM1.46 billion, or 79.1%). One of the notable projects approved in 2018 in the chemicals and chemical products industry was an expansion/diversification project by Arkema Thiochemicals Sdn Bhd worth RM500 million to produce raw materials that could be used as a dietary supplement in poultry and animal feed, as well as an intermediate product in the production of pesticides, fungicides, and plastics. Another investment approved was a project by Chromaflo Technologies (M) Sdn Bhd, a world leader in colourant technology to produce colourants and pigment dispersions in Selangor.

Malaysia is one of the largest producers of palm oil and oleochemicals globally, (contributing about 20% to world production.), housing 50 palm oil refineries that produce up to 26.2 million tonnes of palm oil annually. The country’s primary focus is on producing basic oleochemicals (fatty acid, fatty alcohol, methyl esters, and glycerine), oleochemical derivatives (fatty esters, fatty amines, soap noodles, and metallic soaps), and palm-based constituents such as tocotrienols and carotene. There are currently 19 oleochemical plants operating in Malaysia, which produced approximately 2.7 million tonnes of oleochemicals in 2018. Some of these companies are vertically integrated (i.e. active in both upstream and downstream activities, from oil palm plantation management to the actual manufacturing of oleochemicals), such as IOI, KLK, Sime Darby, and FGV - in 2018, eight projects were approved in the oleochemical industry with a total investment of RM109.9 million. Approved domestic investments dominated the industry, amounting to RM79.9 million, while FDI amounted to RM30 million. Among the major projects approved was an expansion/diversification project by Lipidchem Sdn Bhd., a local company to produce oleochemical derivatives.
CHAPTER FOUR
MALAYSIAN PETROCHEMICALS ASSOCIATION (MPA)

4.1 BACKGROUND

The Malaysian Petrochemicals Association (MPA) is a formal association registered with the Registrar of Societies in Malaysia.

At present, members of MPA comprise companies engaging in the manufacture and trading of petrochemicals and plastic resins, as well as companies that provide services required by the petrochemical industry.

MPA was officially formed on March 19, 1997 with the following objectives:-

- To provide a forum to discuss and resolve common problems of the petrochemical industry
- To provide a focal point for the petrochemical industry to liaise with the public and government and to make recommendations on relevant issues
- To advance the philosophy of Responsible Care, its implementation and compliance throughout the industry
- To represent the petrochemical industry within Malaysia to interface with similar groups on international basis
- To compile and disseminate information of common concerns and provide facilities for consultation and exchange of views between members.

4.2 MPA MEMBERS

MPA has 23 members engaged in the manufacture and trading of petrochemicals and plastic resins.

1. Air Liquide Global E&C Solutions Malaysia Sdn Bhd
2. Ancom Kimia Sdn Bhd
3. Aramco Overseas Malaysia Sdn Bhd
4. BASF (M) Sdn Bhd
5. BASF-PETRONAS Chemicals Sdn Bhd
6. Dairen Chemical (M) Sdn Bhd
7. Idemitsu Chemicals (M) Sdn Bhd
8. Kaneka (Malaysia) Sdn Bhd
9. Kemaman Bituman Company Sdn Bhd
10. KOPETRO Trading & Services Sdn Bhd
11. Lotte Chemical Titan (M) Sdn Bhd
12. Mitsubishi Corporation Kuala Lumpur Branch
13. Optimistic Organic Sdn Bhd
14. Petrochemicals (M) Sdn Bhd
15. PETRONAS Chemicals Glycols Sdn Bhd
16. PETRONAS Chemicals Ethylene Sdn Bhd
17. PETRONAS Chemicals Group Berhad
18. PETRONAS Chemicals LDPE Sdn Bhd
19. PETRONAS Chemicals MTBE Sdn Bhd
20. Petrotechnical Inspection (M) Sdn Bhd
21. Recron Malaysia Sdn Bhd
22. Technip Geoproduction (M) Sdn Bhd
23. Toray Plastics (M) Sdn Bhd

The Plastic Resins Producers’ Group (MPA PRPG) is a product group under the Malaysian Petrochemicals Association (MPA). Membership in PRPG is open to manufacturers of plastic resins in Malaysia. MPA PRPG currently has 6 members.

1. Lotte Chemical Titan (M) Sdn Bhd
2. Petrochemicals (M) Sdn Bhd
3. PETRONAS Chemicals Ethylene Sdn Bhd
4. PETRONAS Chemicals LDPE Sdn Bhd
5. Recron Malaysia Sdn Bhd
6. Toray Plastics (M) Sdn Bhd
4.3 MPA COUNCIL 2018/2019

PRESIDENT
Akbar Md Thayoob
PETRONAS Chemicals Group Berhad

VICE PRESIDENT (retired Dec 2018)
Cheong Peng Khuan
Lotte Chemical Titan (M) Sdn Bhd

HONORARY SECRETARY
Shamsairi Mohd Ibrahim
PETRONAS Chemicals Derivatives Sdn Bhd

HONORARY TREASURER
Dr Sven Crone
BASF PETRONAS Chemicals Sdn Bhd
COUNCIL MEMBER
Nobuhiro Miyagishi
Idemitsu Chemicals (M) Sdn Bhd

COUNCIL MEMBER
Zameer Zahur Hussain
PETRONAS Chemicals MTBE Sdn Bhd

COUNCIL MEMBER
Ch'ng Guan How
PETRONAS Chemicals LDPE Sdn Bhd

COUNCIL MEMBER
Yee Kok Leong
Toray Plastics (M) Sdn Bhd
COUNCIL MEMBER
Lim Boon Hoe
Petrochemicals (M) Sdn Bhd

COUNCIL MEMBER
Edmund Tan Teck Boon
BASF (M) Sdn Bhd

COUNCIL MEMBER
Datuk Abdul Rashid Hashim
Ancom Kimia Sdn Bhd

COUNCIL MEMBER
Hemant Kedia
Recron Malaysia Sdn Bhd
COUNCIL MEMBER

B Sreenivasacharyulu
Optimistic Organic Sdn Bhd

CHAIRMAN – MPA PLASTIC RESIN PRODUCERS GROUP

Lau Chee Ming
Lotte Chemical Titan (M) Sdn Bhd

4.4 MPA SECRETARIAT

Malaysian Petrochemicals Association (MPA)
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MALAYSIA
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Fax: 603-62776714
Website: www.mpa.org.my

April 2019