MALAYSIA

PERFORMANCE OF THE MANUFACTURING AND SERVICES SECTORS

2009

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CONTENTS

APPENDICES

MIDA

1 Introduction

1 INTRODUCTION

The slowdown in the world economy resulting from the financial crisis that began in the USA in 2007 continued to adversely affect the world economy in 2009, particularly export-oriented economies including Malaysia. Until the US financial crisis, Malaysia had enjoyed a decade of growth with economic expansion driven by the manufacturing and services sectors. However, given the economic pressures which accompanied the sharp deterioration in the global economic and international financial environment, the Malaysian economy contracted by 3.8 per cent in the first three quarters of 2009[1].

During the January-September 2009 period, the services sector sustained its expansion (1.6%) while the manufacturing sector contracted by 13.7 per cent due mainly to weakness in the export-oriented industries. Given the less favourable external environment, growth in 2009 was supported mainly by activities in the services sector.

Manufacturing

Manufacturing remained an important sector in the economy. During the first nine months of 2009, value-added of the manufacturing sector declined by 13.7 per cent given the less favourable external economic environment. The sector accounted for 26.8 per cent of gross domestic product (GDP) during this period. Exports of manufactured products decreased by 14.1 per cent from RM432.6 billion in 2008 (January-November) to RM371.5 billion in 2009 (January-November), accounting for 74.5 per cent of Malaysia's total exports for the period January-November 2009. Employment in the manufacturing sector was estimated at 3.3 million persons or 28.4 per cent of total employment in 2009[2].

The performance of the manufacturing sector was also reflected in the sector's industrial output (as measured by the industrial production index), sales value and productivity. The production index of the sector shrank by 11.6 per cent in 2009 (January-November) while sales of manufactured products declined by 21.2 per cent to RM426.9 billion in 2009 (January-November). Productivity in the sector, as measured by sales value per employee contracted by 7.5 per cent[3] for the period January-October 2009 following slowdown in the external demand.

[1] *Department of Statistics.*

[2] *Economic Report 2009/2010, Ministry of Finance, Malaysia.*

[3] *Malaysia Productivity Corporation.*

Services

The services sector encompasses broad and diverse activities such as transport, telecommunications, financial services (banking, insurance, and capital markets), real estate, business and professional services, utilities, distributive trade, hotels and tourism, education and health services.

The services sector accounted for the largest share of Malaysia's GDP. For the first nine months of 2009, it accounted for 57.3 per cent of GDP. The services sector recorded a growth of 1.6 per cent in value-added for the period January-September 2009. Employment in the services sector was estimated at 6.1 million persons or 52.6 per cent of total employment in 2009.

For the period January-September 2009, wholesale and retail trade maintained its position as the leading sub-sector, contributing to 13.0 per cent of GDP (RM49.7 billion). This was followed by the finance and insurance sub-sector (11.7% or RM44.7 billion). Productivity in the services sub-sectors recorded a positive growth ranging from 1.2 per cent to 3.5 per cent in 2009[4].

[4] *Malaysia Productivity Corporation.*

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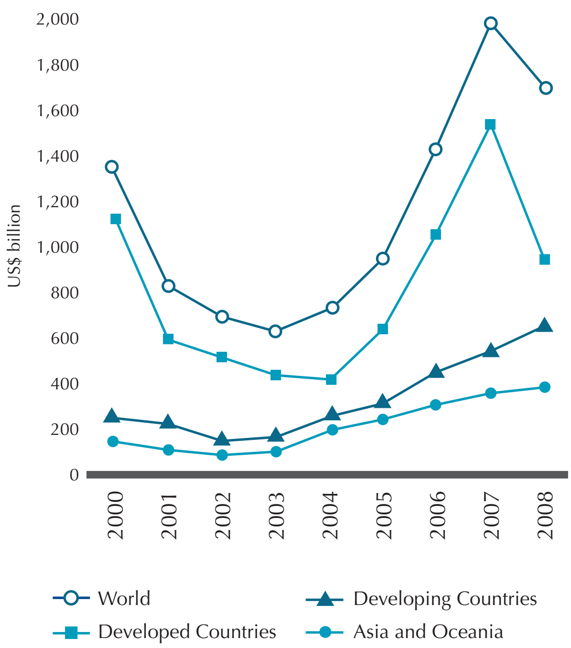
2 Global Investment Scenario

2 GLOBAL INVESTMENT SCENARIO

FDI Inflows

Amid the global financial and economic crisis, world foreign direct investment (FDI)[5] inflows fell from a record high of US$1.97 trillion in 2007 to US$1.69 trillion in 2008, according to the World Investment Report by the United Nations Conference of Trade and Development (UNCTAD).

Graph 1
FDI Inflows by Region, 2000-2008



Source: World Investment Report, 2009

The USA maintained its position as the largest recipient of FDI inflows (US$316.1 billion) in 2008, followed by France (US$117.5 billion), the People's Republic of China (US$108.3 billion) and the United Kingdom (US$96.9 billion).

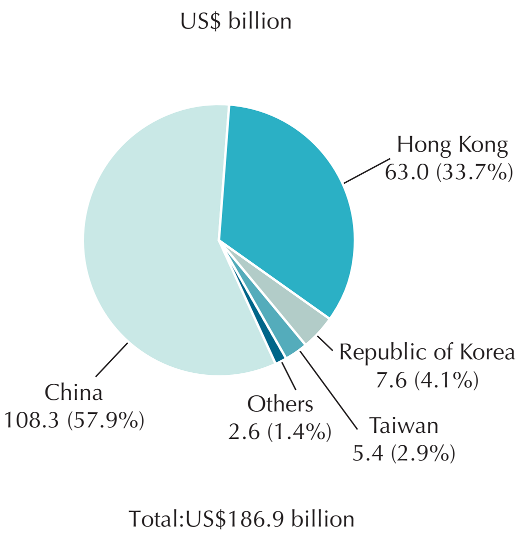
FDI inflows to developed countries in 2008 decreased by 29.2 per cent to US$962.3 billion from US$1.4 trillion in 2007. This was mainly due to a decline in cross-border M&As. FDI inflows into developing countries were less affected than those into developed countries as their financial systems were less closely interlinked with the banking systems in the USA and Europe. Their FDI inflows continued to grow, but at a slower pace, posting an increase of 17.3 per cent to US$620.7 billion in 2008 from US$529.3 billion in 2007.

Asia received the largest amount of FDI inflows among the developing countries with an increase of 17.0 per cent in 2008 to US$387.8 billion. The People's Republic of China was the largest recipient of FDI in Asia (US$108.3 billion), followed by Hong Kong (US$63.0 billion), India (US$41.5 billion) and Singapore (US$22.7 billion).

[5] *FDI is defined by UNCTAD as an international investment made with the objective of a lasting interest by a resident entity in one economy in an entity resident in another economy. It comprises equity capital, reinvested earnings and inter-company debt transactions and is largely based on national balance of payment statistics.*

The total FDI inflows to the East Asia region rose by 24.4 per cent reaching US$186.9 billion in 2008 from US$150.3 billion in 2007. The largest recipients of FDI in East Asia were the People's Republic of China (US$108.3 billion), Hong Kong (US$63.0 billion), Republic of Korea (US$7.6 billion) and Taiwan (US$5.4 billion).

Graph 2
FDI Inflows to East Asia, 2008



Source: World Investment Report, 2009

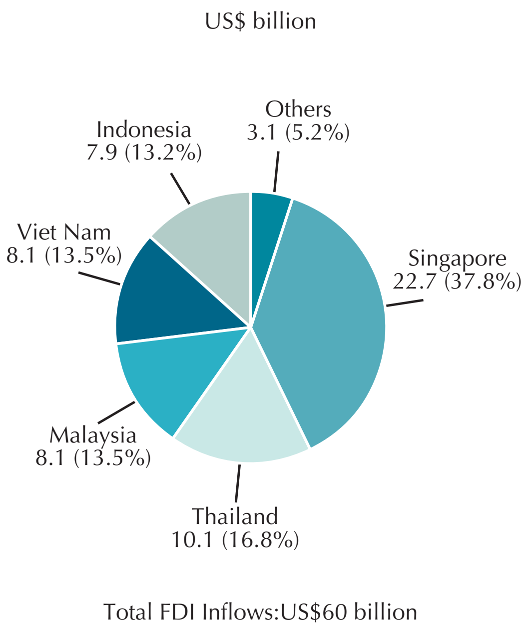
FDI inflows to ASEAN declined by 13.8 per cent from US$69.5 billion in 2007 to US$59.9 billion in 2008. In comparison, FDI inflows into ASEAN have been increasing over the period 2002-2007, with 2007 recording the highest level.

Developments in the global and regional economy continued to influence FDI inflows into open economies such as Malaysia, Thailand and Singapore, all of which had been affected by the impact of the global financial crisis in 2008.

FDI inflows to Malaysia fell slightly by 4.8 per cent from US$8.4 billion in 2007 to US$8.0 billion in 2008. FDI inflows into Singapore dropped by 28.2 per cent from US$31.6 billion in 2007 to US$22.7 billion in 2008, while FDI inflows into Thailand declined by 10.7 per cent from US$11.2 billion to US$10 billion in 2008. The decline in FDI inflows to Malaysia was largely due to loan repayments to parent companies which were in need of funds due to the global financial crisis. Malaysia was the third largest recipient among ASEAN countries in 2008, after Singapore and Thailand.

Although FDI inflows into Malaysia decreased in 2008, Malaysia continues to be a cost competitive location for FDI inflows into the manufacturing sector. FDI inflows into the manufacturing sector rose by 22.6 per cent from US$3.1 billion in 2007 to US$3.8 billion in 2008. The significant increase in FDI inflows was largely due to expansion by the E&E industry, which upgraded their equipment and technology as well as the introduction of new production lines. There were also sizeable inflows of FDI into niche and higher value-added activities, particularly in solar cells, modules and panels as well as testing and measuring instruments.

Graph 3
FDI Inflows to Asian Countries, 2008



Source: World Investment Report, 2009

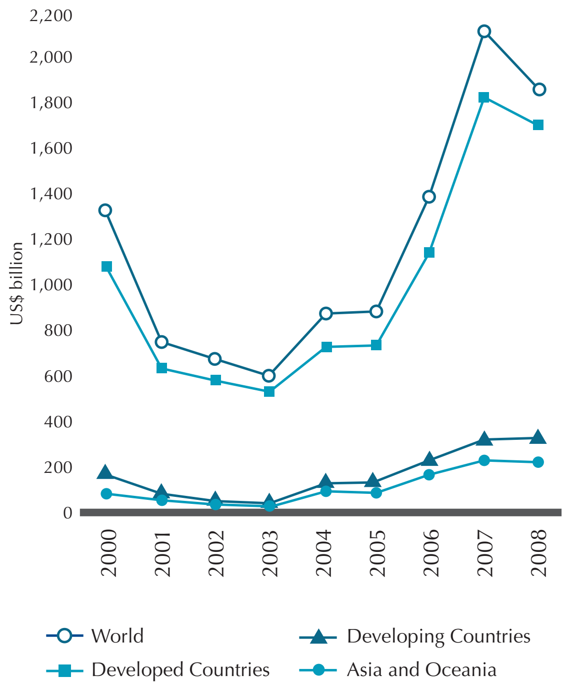
FDI Outflows

Reflecting the trend for FDI inflows, global FDI outflows decreased by 9.5 per cent from US$2.1 trillion in 2007 to US$1.9 trillion in 2008.

FDI outflows from developed countries declined by 16.7 per cent to US$1.5 trillion in 2008 due to decrease in reinvested earnings. Nevertheless, developed countries remained the largest net outward investor group.

FDI outflows from developing countries rose by 2.5 per cent from US$285.5 billion in 2007 to US$292.7 billion in 2008. Transnational corporations (TNCs) as well as sovereign wealth funds (SWFs) from West Asian countries continued to invest abroad. Developing countries' TNCs accounted for 16.0 per cent of total global FDI outflows in 2008 from 13.0 per cent in 2007.

Graph 4
FDI Outflows by Region, 2000-2008



Source: World Investment Report, 2009

In 2008, FDI outflows from the South, East and South-East Asia region rose 6.8 per cent to US$186.5 billion. The main sources of FDI outflows were Hong Kong (US$59.9 billion), the People's Republic of China (US$52.2 billion), India (US$17.7 billion), Malaysia (US$14.1 billion) and Republic of Korea (US$12.8 billion).

In South-East Asia, Malaysia was the largest source of FDI outflows in 2008 with US$14.1 billion followed by Singapore with US$8.9 billion.

Future Prospects

According to UNCTAD's World Investment Prospects Survey 2009-2011 (WIPS), FDI inflows in 2009 will continue to be affected by the economic and financial crisis. Based on WIPS, among the global risks that could potentially affect TNCs' FDI plans for the next three years are deepening of the global economic downturn, increase in financial instability, and rise in protectionism involving a change in foreign investment regimes. Major TNCs are expected to reduce their FDI expenditure in 2009 with 58.0 per cent of respondents intending to reduce their FDI abroad and nearly one-third expecting a large decrease from 2008 onwards.

Based on UNCTAD's latest quarterly publication, global FDI inflows declined by about 40 per cent to US$1 trillion in 2009 from US$1.7 trillion in 2008. Similarly, FDI inflows to developing and transition economies decreased by 39.0 per cent in 2009. Nevertheless, response from WIPS suggests that a progressive rebound of FDI could be expected by 2011.

TNCs are generally more optimistic about the medium term outlook for the global economy and expected to continue investing globally. As such, there should be a moderate recovery in global FDI flows in 2010, before gaining momentum in 2011.

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3 Investment Performance of the Manufacturing Sector

3 INVESTMENT PERFORMANCE OF THE MANUFACTURING SECTOR

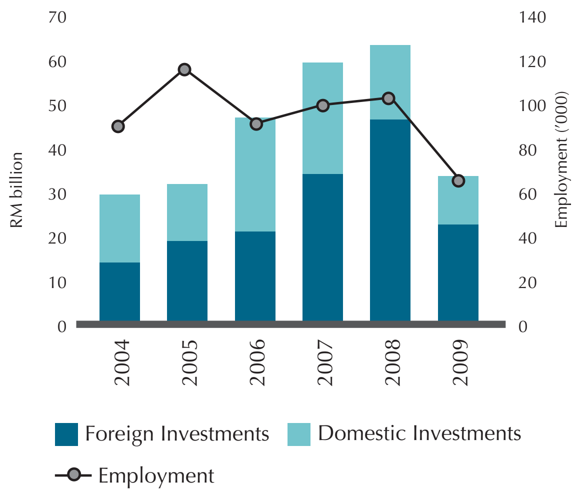
A. PROJECTS APPROVED

OVERVIEW

The investment trend in Malaysia is strongly influenced by global economic developments which turned negative towards the end of 2008 and in 2009. In line with the sharp decline in global FDI inflows in 2009, the total investments in approved manufacturing projects in Malaysia amounted to RM32.6 billion in 2009 compared with RM62.8 billion in 2008. A total of 766 manufacturing projects were approved in 2009.

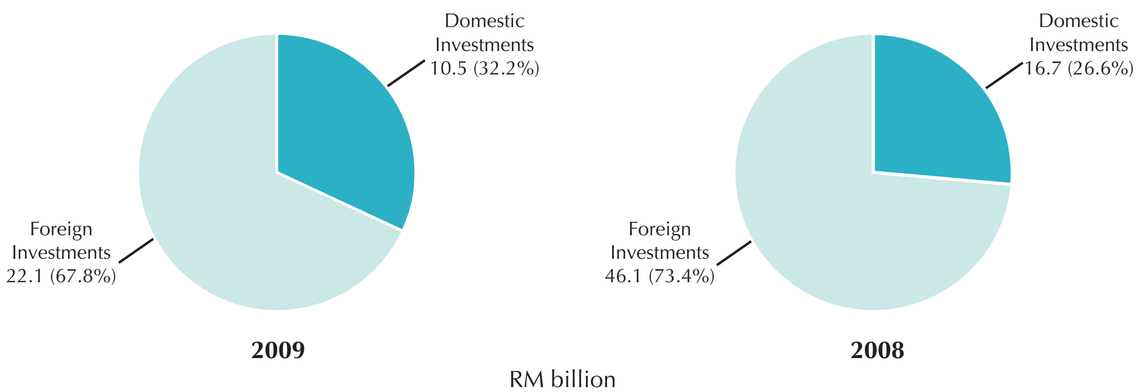
The total investments approved in 2009 exceeded the average annual investment target of RM27.5 billion set under the Third Industrial Master Plan (IMP3). This indicates that Malaysia remains an attractive investment destination.

Graph 5
Investments and Employment in Projects Approved, 2004-2009

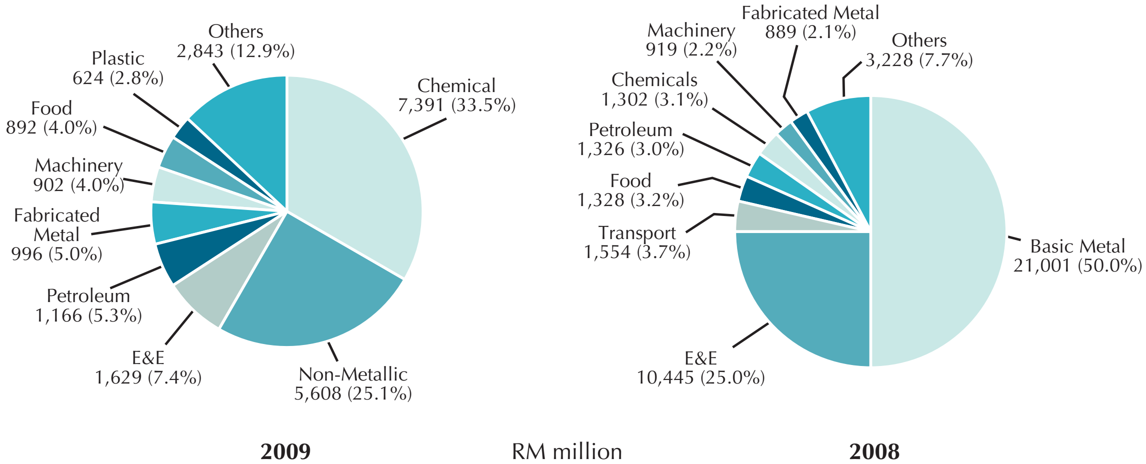


Foreign investments in 2009 amounted to RM22.1 billion and accounted for 67.8 per cent of the total investments approved for the year. The balance of RM10.5 billion or 32.2 per cent were investments from domestic sources.

Graph 6
Sources of Investments in Projects Approved, 2009 and 2008



Graph7
Investments in New Projects by Industry, 2009 and 2008



Despite the global slowdown, Malaysia continued to receive a significant amount of new investments. In 2009, investments in new projects amounted to RM22.1 billion (471 projects), constituting 67.8 per cent of the total investments approved. Of this, RM5.7 billion or 25.8 per cent was domestic investments while RM16.4 billion or 74.2 per cent was from foreign sources.

Existing companies continue to expand and diversify their operations in the country. A total of 295 projects with investments amounting to RM10.5 billion were approved in 2009, accounting for 32.2 per cent of the total investments approved.

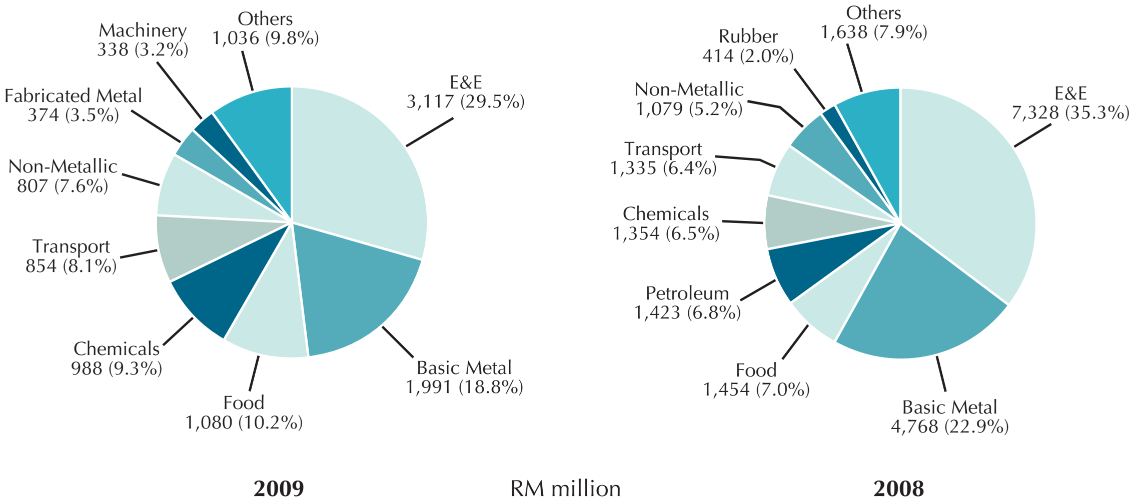
It is significant to note that the investments approved in 2009 helped to develop and strengthen specific industry clusters in the country. Malaysia's strength in the electrical and electronics (E&E) industry continued to provide the platform for developing other clusters especially clusters in the solar, medical devices and machinery & equipment (M&E) industries.

Capital-Intensive Projects

Capital intensity of projects is measured by the capital investment per employee (CIPE) ratio. The CIPE ratio for projects approved In 2009 was RM507,335 compared with RM620,571 in 2008. In 2009, the industry with the highest CIPE ratio was the petroleum products industry (RM6,777,326), followed by the non-metallic mineral products (RM2,242,994) and the chemicals and chemical products (RM2,104,889) industries.

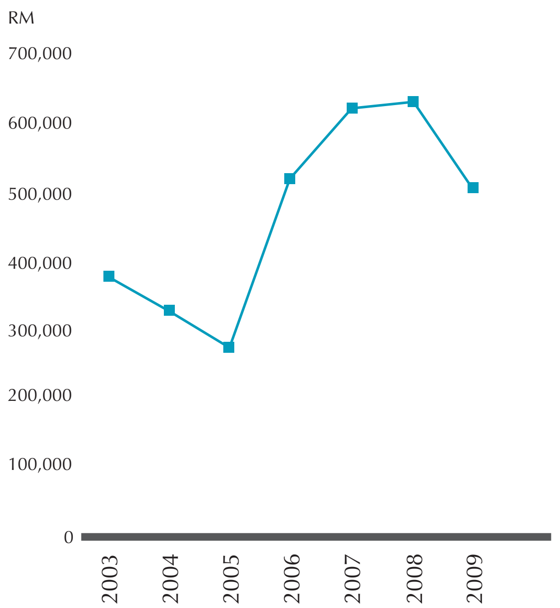
The higher CIPE ratio in the three preceding years (2006-2008) was partly due to the approval of several capital

Graph 8
Investments in Expansion/Diversification Projects by Industry, 2009 and 2008



intensive projects. For instance, in 2008, a total of 12 projects with investments of at least RM1 billion each were approved, with total investments of RM38.3 billion.

Graph 9
CIPE Ratio of Projects Approved, 2003-2009



In comparison, there were five projects which recorded investments of at least RM1 billion each in 2009. The total investments approved in these projects amounted to RM14.5 billion.

In 2009, there were 50 projects approved which recorded investments of at least RM100 million each. Total investments in these projects amounted to RM23.8 billion or 73.0 per cent of total investments approved in 2009. These 50 projects were mainly in the chemicals and chemical products (RM7.3 billion), non-metallic mineral products (RM6.1 billion), electrical and electronic products (RM3.3 billion), basic metal products (RM2.0 billion), petroleum products (RM1.1 billion) and transport equipment (RM923.4 million) industries.

The projects approved with investments of at least RM1 billion each were:

- A new foreign-owned project with investments of RM5.5 billion for the production of polycrystalline silicon, fumed silica and trichlorosilane;

- A new wholly foreign-owned project with investments of RM5.2 billion to manufacture solar glass (coated, tempered, etc) and solar mirror;

- A majority Malaysian-owned expansion project with investments of RM1.6 billion to manufacture aluminium ingots, aluminium alloy ingots and aluminium billets;

- A new joint-venture project with investments of RM1.1 billion to produce petrochemical feedstocks and fuels; and

- An expansion project by a wholly foreign-owned company with investments of RM1.0 billion to produce advanced integrated circuits.

These projects are expected to create substantial impact to the economy and industry through various multiplier effects such as development of supporting industries, transfer of technology, research and development, creation of high income employment opportunities, skills development and generation of foreign exchange earnings.

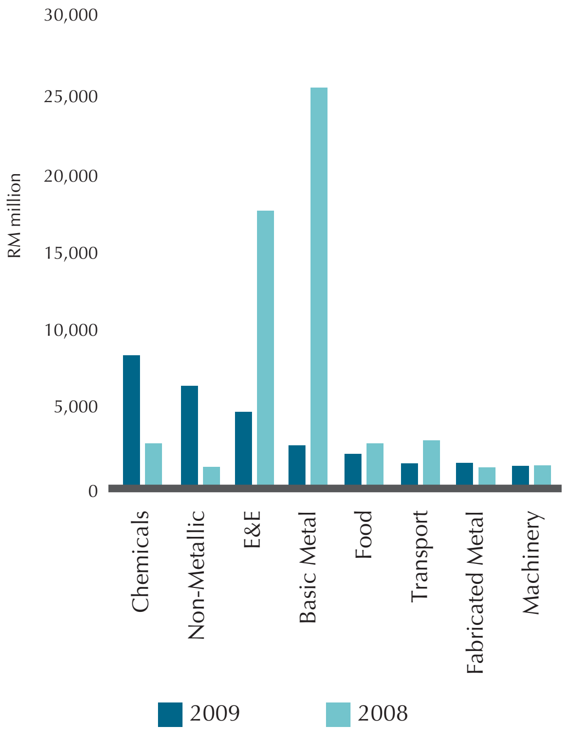
Projects Approved by Industry

The chemicals and chemical products industry recorded the highest investments approved in 2009 with RM8.4 billion (77 projects). This was mainly attributed to the approval of a large project with investments of RM5.5 billion to produce polycrystalline silicon, mixed acid, hydrogen, fume silica, trichlor-silane, silicon tetrachloride and hydrofluoric acid. The project is expected to strengthen the solar industry cluster as polycrystalline silicon is a significant component for the solar industry.

The non-metallic mineral products industry registered the second highest amount of investments. A total of 27 projects were approved with investments amounting to RM6.4 billion. This was largely due to the approval of a new project for the manufacture of solar glass (coated, tempered, etc) and solar mirror with investments of RM5.2 billion. The electrical and electronics (E&E) industry ranked third with total investments of RM4.7 billion (115 projects).

Other industries which attracted significant investments were basic metal products with investments of RM2.6 billion (30 projects) and food manufacturing with investments amounting to RM2.0 billion (69 projects). The total investments in these five industries amounted to RM24.1 billion or 73.9 per cent of the total investments approved in 2009.

Graph 10
Investments in Projects Approved by Major Industry, 2009 and 2008



Export-Oriented Projects

In 2009, a total 251 projects approved involving investments of RM8.6 billion proposed to export at least 80 per cent of their output. Of the total investments approved, foreign investments amounted to RM6.8 billion or 79.1 per cent while the remaining RM1.8 billion or 20.9 per cent was from domestic sources.

The main industries with export-oriented projects were:

- E&E products (RM3.5 billion/57 projects);
- Fabricated metal products (RM764.3 million/28 projects);
- Food manufacturing (RM693.1 million/16 projects);
- M&E (RM671.0 million/35 projects); and
- Chemicals and chemical products (RM662.0 million/12 projects).

The favourable investment environment in Malaysia, including the availability of supporting industries as well as a pool of skilled and trainable workforce, has made Malaysia an attractive investment location to serve the global and regional markets.

Employment Opportunities

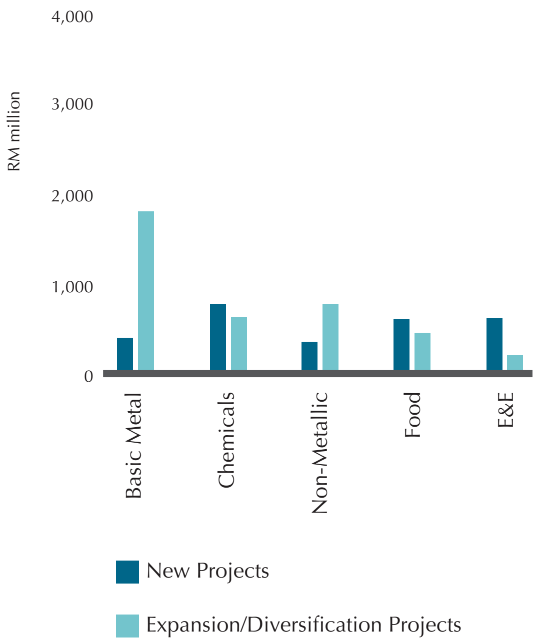
The projects approved in 2009 were expected to create employment opportunities for 64,330 people. Of this, 21.2 per cent was in the managerial, technical and supervisory (MTS) category while another 43.7 per cent was in the category of skilled workers. There was an increase in the MTS index of projects approved from 18.7 per cent in 2008 to 21.2 per cent in 2009.

Most of the employment opportunities were in the E&E industry with 16,757 jobs, followed by the fabricated metal products (5,873) and M&E (5,613) industries.

Expatriate Posts

The Government continues to grant approvals for expatriate posts, particularly managerial and technical posts to Malaysian as well as foreign-owned companies. This is to facilitate technology transfer and to supplement the local pool of managerial and technical skills. A total of 1,852 expatriate posts were approved in 2009, of which 356 were key posts which could be permanently filled by foreigners. The remaining 1,496 were term posts generally granted for 3-5 years where Malaysians are trained to eventually take over the posts.

Graph 11
Domestic Investments in Projects Approved by Major Industry, 2009



APPROVED PROJECTS BY OWNERSHIP

DOMESTIC INVESTMENTS

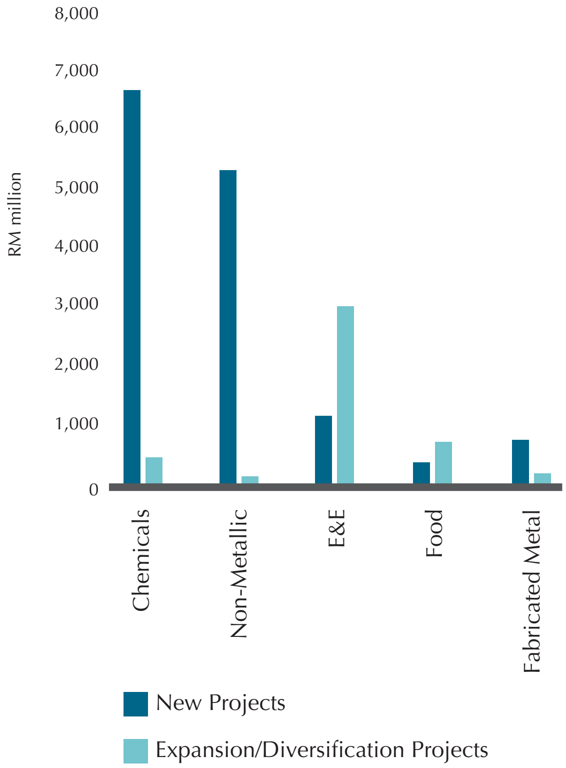
Domestic investments approved in 2009 amounted to RM10.5 billion, accounting for 32.2 per cent of the total investments approved during the year. Though domestic investments declined from RM16.7 billion in 2008 to RM10.5 billion in 2009, as a percentage of total investments, it increased from 26.6 per cent in 2008 to 32.2 per cent in 2009.

Domestic investments were mainly in the basic metal products industry with RM2.2 billion or 20.9 per cent of total domestic investments approved in 2009. Other industries which recorded significant domestic investments were chemicals & chemical products (RM1.3 billion), non-metallic mineral products (RM1.1 billion), food manufacturing (RM1.0 billion), transport equipment (RM864.9 million), E&E products (RM770.0 million) and petroleum products including petrochemicals (RM719.1 million).

FOREIGN INVESTMENTS

Malaysia remained a competitive destination for FDI in the region and continued to attract encouraging levels of foreign investments in the manufacturing sector despite the global economic slowdown. Foreign investments in approved manufacturing projects in 2009 amounted to RM22.1 billion, returning to the levels prior to the record foreign investments registered in the last two years. Of the RM22.1 billion in foreign investments, RM16.4 billion or 74.2 per cent was in new projects while the remaining RM5.7 billion or 25.8 per cent was in expansion/diversification projects.

Graph 12
Foreign Investments in Projects Approved by Major Industry, 2009

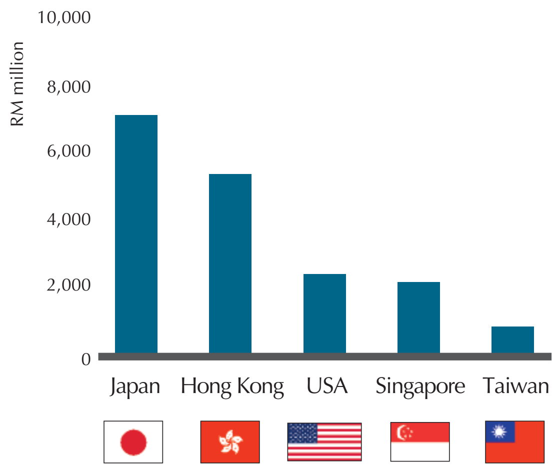


The chemicals and chemical products industry accounted for the largest amount of foreign investments totalling RM7.0 billion. The high foreign investments in this industry was largely attributed to a project with investments of RM5.5 billion for the manufacture of polycrystalline silicon, mixed acid, hydrogen, fumed silica, trichlor-silane, silicon tetrachloride & hydrofluoric acid. Other industries with high levels of foreign investments were the non-metallic mineral products (RM5.3 billion), E&E (RM4.0 billion), food manufacturing (RM934.2 million), fabricated metal products (RM775.0 million), M&E (RM637.2 million) and plastic products (RM549.8 million) industries.

Major Sources of Foreign Investments

Five countries accounted for RM17.3 billion or 77.0 per cent of the total foreign investments in 2009. The five countries were Japan (RM7.0 billion), Hong Kong (RM5.3 billion), the USA (RM2.3 billion), Singapore (RM2.0 billion) and Taiwan (RM716.1 million).

Graph 13
Major Sources of Foreign Investments in Projects Approved, 2009

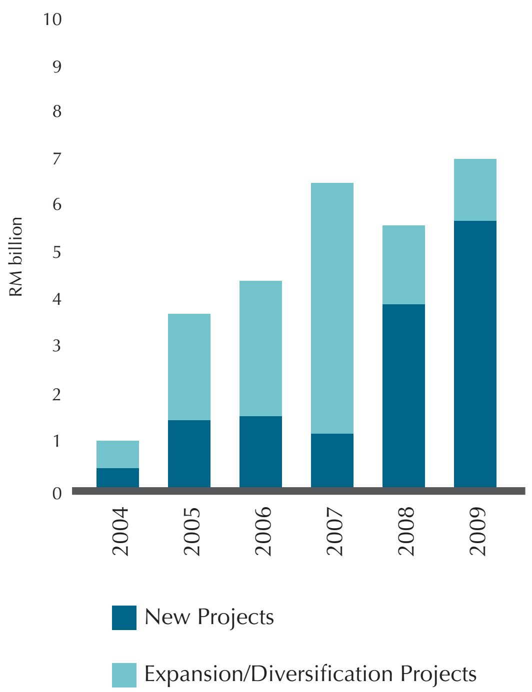


Japan

The leading source of foreign investments in 2009 was Japan with investments totalling RM7.0 billion in 54 approved projects. A major new project approved with investments of RM5.5 billion involved the manufacture of polycrystalline silicon, mixed acid, hydrogen, fumed silica, trichlor-silane, silicon tetrachloride & hydrofluoric acid.

Of the projects approved, 12 were new projects with investments of RM5.7 billion while 42 were expansion/diversification projects with investments of RM1.3 billion.

Graph 14
Japanese Investments in Approved Projects, 2004 – 2009



Projects approved with Japanese participation were mainly in the chemicals and chemical products (4 projects with investments of RM5.6 billion), E&E (13 projects/RM1.1 billion), and transport equipment (8 projects/ RM220.8 million) industries.

Hong Kong

Hong Kong was the second largest source of foreign investments in 2009 with RM5.3 billion in seven approved projects. This was primarily due to a major new project with investments amounting to RM5.2 billion for the manufacture solar glass (coated, tempered, etc) and solar mirror.

The investments approved were mainly in the non-metallic mineral products (RM5.2 billion), E&E (RM103.4 million) and food manufacturing (RM6.1 million) industries. Of the projects approved, six were new projects with investments of RM5.3 billion while one was an expansion/diversification project with an investment of RM0.5 million.

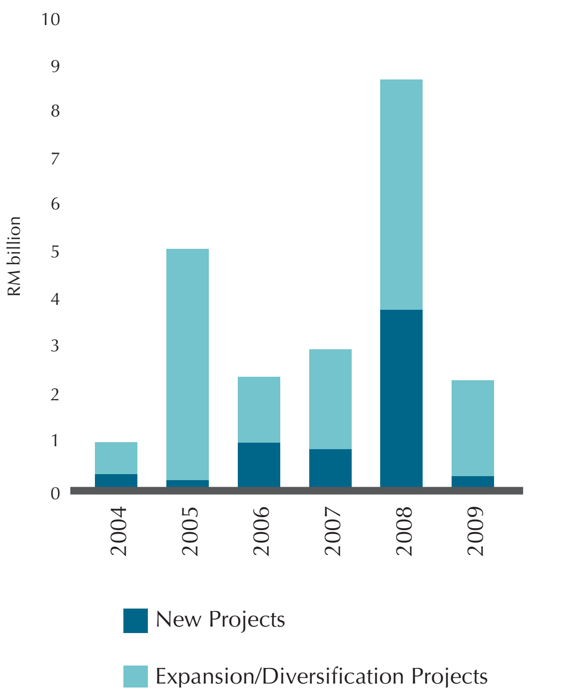
USA

The USA continued to be a major source of foreign investments with investments amounting to RM2.3 billion in 19 projects approved during the year. Of this, 10 were expansion/diversification projects with investments of RM2.0 billion accounting for 87.0 per cent of the investments approved. The remaining nine projects with investments of RM306.3 million were by new companies.

Investments from the USA were mainly in the E&E industry with investments totalling RM1.5 billion (5 projects). Other industries with significant US investments were food manufacturing (1 project/RM380.1 million), transport equipment (1 project/RM155.2 million) and plastic products (1 project/RM103.2 million).

The high level of investments from the USA in the E&E industry was mainly due to an expansion/diversification project with investments of RM1.0 billion for the manufacture of integrated circuits.

Graph 15
US Investments in Approved Projects, 2004 – 2009

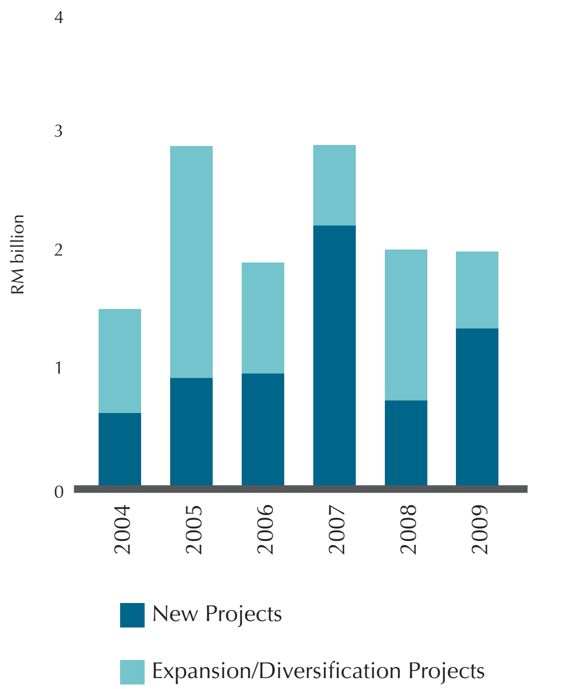


Singapore

Singapore was the fourth largest source of foreign investments in 2009. Singapore continued to account for the highest number of projects approved with 92 projects in 2009. Investments in these projects amounted to RM2.0 billion or 9.5 per cent of the foreign investments approved during the year. Of the projects approved, 42 were new projects with investments of RM1.3 billion and 50 were expansion/ diversification projects (RM690.0 million).

Investments from Singapore were mainly in the E&E (RM619.1 million), petroleum products (RM454.9 million) and fabricated metal products (RM256.9 million) industries.

Graph 16
Singapore Investments in Approved Projects, 2004 – 2009



Taiwan

Taiwan was the fifth largest foreign investor with investments amounting to RM716.1 million in 32 projects approved in 2009. Investments approved were mainly in the chemicals and chemical products industry with investments amounting to RM419.6 million (3 projects) followed by the scientific and measuring equipment (2 projects/ RM103.0 million), E&E (7 projects/ RM58.8 million), transport equipment (2 projects/RM44.3 million) and food manufacturing (1 project/RM42.5 million) industries.

Of the projects approved, 11 were new projects with investments of RM521.7 million while 21 were expansion and diversification projects with investments totalling RM194.4 million.

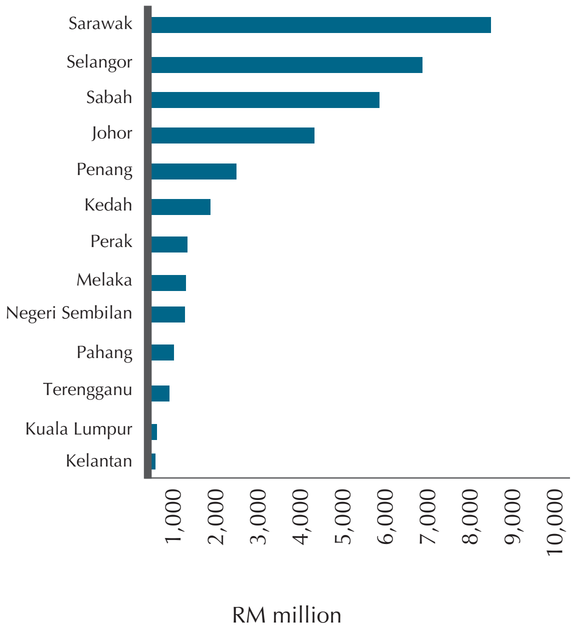
APPROVED PROJECTS BY LOCATION

During the year, the states of Selangor, Johor, Penang, Perak and Kedah continued to record the highest number of projects approved. The approvals in these five states totalled 619 projects or 80.8 per cent of the total number of projects approved in 2009. The breakdown of the approvals is as follows:

- Selangor - 278 projects
- Johor - 150 projects
- Penang - 104 projects
- Perak - 47 projects
- Kedah - 40 projects

In terms of investments approved, Sarawak received the largest amount, with investments amounting to RM8.5 billion. This is attributed to a RM5.5 billion project for the manufacture of polycrystalline silicon, mixed acid, hydrogen, fumed silica, trichlor-silane, silicon tetrachloride & hydrofluoric acid. Selangor ranked second with investments of RM6.8 billion, followed by Sabah (RM5.7 billion), Johor (RM4.1 billion) and Penang (RM2.2 billion).

Graph 17
Investments in Approved Projects by Location, 2009



B. PERFORMANCE OF THE MANUFACTURING SECTOR BY INDUSTRY

ELECTRICAL AND ELECTRONIC PRODUCTS

The electrical and electronics (E&E) industry continued to be the leading industry in the manufacturing sector contributing 55.1 per cent of the country's total export of manufactured products for the period January-November 2009. Output of the industry accounted for 33.9 per cent of the total output of the manufacturing sector for the period January-November 2009. Over the same period, employment accounted for 32.5 per cent, making the E&E industry the largest employer in the manufacturing sector.

For the period January-November 2009, exports of E&E products amounted to RM204.9 billion compared with RM238.3 billion for the corresponding period in 2008, a decline of 14.0 per cent. This decline was attributed to the slowdown in the global economy especially in the exports of electronic products such as automatic data processing machines, semiconductor devices and telecommunication equipment. The top five export destinations for E&E products were Singapore, the People's Republic of China, the USA, Japan and Thailand.

The Nielsen Global Consumer Confidence Survey conducted in June 2009 reported that consumer sentiments around the world was improving. Growing consumer optimism led to a turnaround of the E&E industry in the second half of 2009. Similarly, international research houses had forecasted:

- An expected turnaround in the global E&E industry by 2010 with demand picking up in personal computers, disc storage systems and mobile phones;

- Worldwide consolidation of activities by MNCs;

- Inventory correction; and

- Anticipated increase in sales in the Asia Pacific region.

In Malaysia, the E&E industry is expected to evolve and contribute significantly to the country's industrial progress and transformation. It will leverage upon its strength in semiconductors, information & communication technology (ICT) and supporting industries to develop new products, based on new and emerging technologies. The trend towards extensive application of electronics in industries and services, together with the development of multimedia ICT, will provide growth opportunities which will pave the way to attract new investments into the industry.

Outsourcing is expected to continue as MNCs strive to remain competitive in their core businesses. The industry is expected to strengthen its linkages with other sectors such as automotive, medical, defense and aerospace. The supporting industries and services are also expected to expand in tandem with these developments. Domestic companies are expected to benefit from this trend as MNCs shift their outsourcing activities to the Asia Pacific region.

The future development of the E&E industry in Malaysia will be driven by technology in order to stimulate the cluster development. Among the clusters identified are semiconductor, solar, ICT and light emitting diodes (LEDs) lighting clusters. In addition, new products such as advanced integrated circuits, high brightness light emitting diodes (HBLEDs); radio frequency (RF) and MEMS devices are also given emphasis due to their growth potential.

The E&E industry can be classified into four sub-sectors, namely, electronic components, consumer electronics, industrial electronics and electrical products.

Projects Approved in 2009

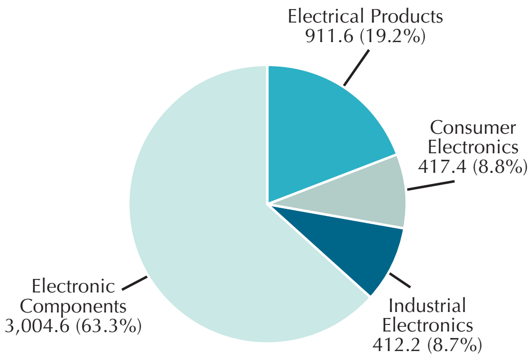
A total of 115 projects with investments of RM4.7 billion were approved in 2009. Foreign investments continued to dominate with investments of RM4.0

Table 1
Structure of E&E Industry

Sectors	Sub-sectors	Examples of Products
Electronics	Components	Semiconductors, passive components, printed circuit boards, metal stamped parts and precision plastic parts
	Consumer	Audio visual products such as television receivers, portable multimedia players (PMP), speakers, cameras and electronic games
	Industrial	Multimedia and information technology products such as computers and computer peripherals, telecommunications equipment and office equipment
Electrical	Electrical	Distribution boards, control panels, switching apparatus and industrial lightings, transformers, cables & wires, primary cells & batteries, solar cells and modules, air conditioners, vacuum cleaners, microwave ovens, washing machines and water heaters

billion (85.1%), signifying that Malaysia is still an attractive offshore location for foreign investors. Domestic investments amounted to RM0.7 billion or 14.9 per cent of total investments. Of the 115 projects approved, 57 were new projects with investments of RM1.6 billion while 58 were expansion/diversification projects with investments of RM3.1 billion. Approved investments were mainly in the electronic components sub-sector, such as integrated circuits, substrates and LEDs. The projects approved are expected to generate employment opportunities for 16,780 persons.

Graph 18
Investments in Projects Approved in the E&E Industry by Sub-sector, 2009



RM million

Electronic Components

Electronic components cover a wide range of products, from semiconductor devices which include fabricated wafers and integrated circuits (ICs) to passive components such as capacitors, resistors, connectors, inductors, crystal quartz and oscillators as well as other components such as storage media, disk drive parts, printed circuit boards (PCB) and metal and plastic parts/components for E&E applications.

Malaysia is currently among the world's leading sites for semiconductor assembly, testing and packaging operations. Exports for the period January–November 2009 amounted to RM84.1 billion or 44.6 per cent of total electronics exports.

To date, more than 70 companies are in operation undertaking silicon wafer processing (e.g. MEMC, S.E.H. Hamadatec and Sapphire), wafer fabrication (e.g. Infineon, X-Fab, SilTerra, and Fuji Electric), IC packaging and testing (e.g. AMD, Intel, Texas Instruments and Freescale) and IC design (e.g. Altera, eASIC, SyMMiD and SiRES LABS).

Projects Approved in 2009

In 2009, a total of 32 projects were approved in the electronic components sub-sector with investments of RM3.0 billion. Of these, 13 were new projects with investments of RM717.1 million (23.9%) and 19 were expansion/ diversification projects with investments of RM2.3 billion (76.1%). Foreign investments amounted to RM2.8 billion (93%), while domestic investments totalled RM209.4 million (7.0%).

Among the significant projects approved were:

- An expansion project by a wholly foreign-owned company with investments of RM1.0 billion to produce advanced integrated circuits. The company plans to expand its R&D activities for MEMS applications and to be a major player in the MEMS sensor business. The R&D activities are expected to contribute towards technology development, product and manufacturing development;

- An expansion and technology upgrading project by a wholly foreign-owned company with investments of RM421.3 million to produce hard disk media and substrates;

- An expansion project to upgrade its Malaysian operations as a global manufacturing hub as well as to undertake activities such as design and development of advanced ICs, supply chain management and R&D with investments of RM391.0 million.

- A diversification project by a wholly foreign-owned company to produce LED chips, LED lamps and wireless diodes with investments of RM110.7 million.

Consumer Electronics

Consumer electronics is one of the important sub-sectors in the electronics industry. Major products include cameras and audio visual products such as flat panel television receivers, video compact disc (VCD) players, digital versatile disc (DVD) players/recorders, walkman, blu-ray, mini discs, and electronic games consoles. Among the major players are Panasonic, Samsung, Sharp, Sony, Hitachi and Clarion.

This sub-sector is mainly dominated by Japanese and Korean companies and continues to contribute significantly to the rapid growth of the industry. Several companies have relocated their low-end activities to other countries while maintaining their high value-added operations such as design and development of audio-visual equipment in Malaysia.

Projects Approved in 2009

Seven projects were approved in the consumer electronics sub-sector with investments of RM417.4 million in 2009. Of these, three were new projects with investments of RM41.0 million (9.8%) and four were expansion/diversification projects with investments of RM376.5 million (90.2%). Foreign investments amounted to RM370.6 million (88.8%) while domestic investments totalled RM46.8 million (11.2%).

Industrial Electronics

The industrial electronics sub-sector includes office equipment, telecommunication equipment, wireless devices, navigational apparatus, computers and computing products, multimedia and information technology products and photonics devices. Among the major companies are Agilent, Xyratex, Motorola, Dell and Kyocera that manufacture a wide range of products including testing equipment, mobile phones, computers, laptops and wireless devices.

Electronics manufacturing services (EMS) companies such as Celestica, Plexus and Jabil also play a pivotal role in transforming the electronics sector in Malaysia. Traditionally, EMS companies undertook assembly operations such as printed circuit board assemblies (PCBA). Today, EMS companies are increasingly providing total solutions from product designing to fully integrated systems (box-built) for aerospace, medical and telecommunication applications.

Projects Approved in 2009

In 2009, a total of 25 projects were approved in the industrial electronics sub-sector with investments of RM412.2 million. Of these, 12 were new projects with investments of RM326.3 million (79.2%) and 13 were expansion/ diversification projects with investments of RM85.9 million (20.8%). Foreign investments amounted to RM222.9 million (54.1%) while domestic investments totalled RM189.3 million (45.9%).

Among the significant projects approved were:

- Three new wholly foreign-owned projects with total investments of RM153.5 million to produce RFID transponders, smart tags and components. The products are mainly for the export market; and

- A new wholly foreign-owned project with investments of RM31.9 million to manufacture LED lighting products, parts & accessories. The products are mainly for the export market.

Electrical Products

The electrical products sub-sector encompasses electrical components, industrial electrical and consumer electrical segments. Investments in this sub-sector amounted to RM911.6 million or 19.2 per cent of the total approved investments in the E&E industry.

Over the years, this sub-sector has steadily evolved with the emergence of new products and technologies. Among the products are intelligent household appliances and energy saving and photovoltaic devices. The presence of renowned global players in this sub-sector has significant impact on the economy especially in enhancing technologies of domestic companies to meet international standards.

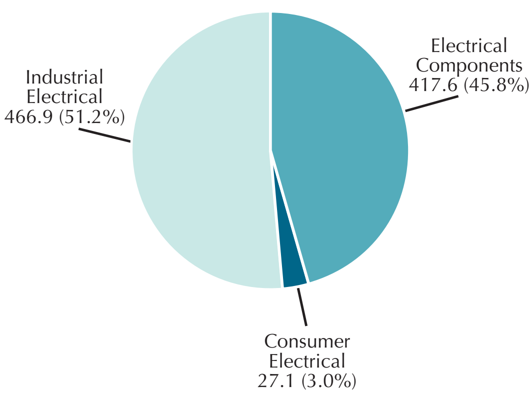
Projects Approved in 2009

A total of 51 projects with investments of RM911.6 million were approved in 2009. Foreign investments totalled RM587.1 million (64.4%) while domestic investments amounted to RM324.5 million (35.6%).

Of the projects approved:

- 22 were in the electrical components segment with investments of RM417.6 million (45.8%);
- 20 were in the industrial electrical segment with investments of RM466.9 million (51.2%); and
- Nine projects were in the consumer electrical segment with investments of RM27.1 million (3.0%).

Graph 19
Investments in Projects Approved in the Electrical Products Sub-sector, 2009



RM million

Of the 51 projects approved, 29 were new projects with investments of RM544.9 million (59.8%) and 22 were expansion/diversification projects with investments of RM366.8 million (40.2 %).

Industrial Electrical

This segment covers a number of key electrical products ranging from conventional and intelligent electrical apparatus for switching/signalling/monitoring, power distribution, electrical connection and circuit protection to illumination and lighting products as well as domestic and industrial energy saving devices/equipment/systems. This segment is mainly dominated by Malaysian-owned companies such as Ancom Components, AM SGB and EPE Power.

Projects Approved in 2009

In 2009, a total of 20 projects were approved with investments of RM466.9 million of which RM419.6 million (89.9%) were foreign investments and RM47.3 million (10.1%) were domestic investments. Of the projects approved, 12 were new projects with investments of RM190.5 million or 40.8 per cent and eight were expansion/diversification projects with investments of RM276.4 million (59.2%). These projects are expected to create job opportunities for 1,112 persons.

Among the significant projects approved were:

- A wholly foreign-owned expansion project with investments of RM207.5 million to undertake the development and production of renewable energy harvesters. The establishment of this project is expected to further promote the renewable energy industry in the country;

- A new wholly foreign-owned project with investments amounting to RM71.2 million to manufacture miniature circuit breakers, distribution boards and switches; and

- A wholly foreign-owned diversification project with investments of RM61.5 million to manufacture mail facilitating devices and parts.

Electrical Components

The products under this segment include wires, cables and solar panels and cells. Electrical power cable and wire production is dominated by local companies such as Leader Cable, Universal Cable and Tenaga Cable. These companies mainly supply the domestic market while MNCs such as Hitachi Cable and Fujikura cater mainly for the export market.

Projects Approved in 2009

In 2009, a total of 22 projects were approved with investments of RM417.6 million. Domestic investments in these projects amounted to RM275.0 million (65.9%) while foreign investments totalled RM142.6 million (34.1%). Fourteen of the projects approved were new projects with investments of RM341.2 million while eight were expansion/diversification projects with investments of RM76.4 million.

Among the significant projects approved were:

- A new majority Malaysian-owned project with investments of RM192.0 million to undertake design, development and manufacture of lithium-ion cells and battery packs;

- A new wholly Malaysian-owned project with investments of RM59.0 million to manufacture solar photovoltaic panels; and

- A majority Malaysian-owned expansion/ diversification project with investments amounting to RM31.5 million to manufacture single core, multi cores and aluminium power cables.

Consumer Electrical

Products covered under this segment are mainly household appliances or 'white goods' such as washing machines, refrigerators, vacuum cleaners and microwave ovens. Among the major existing foreign companies involved in this segment are Panasonic, OYL, Samsung and Dyson while domestic companies include Pensonic and Khind.

Projects Approved in 2009

In 2009, nine projects were approved with total investments of RM27.1 million. Foreign investments amounted to RM24.9 million (91.9%) while domestic investments totalled RM2.2 million (8.1%). Of the projects approved, three were new projects with investments of RM13.2 million while six were expansion/diversification projects with investments of RM13.9 million.

Among the significant projects approved were:

- A wholly foreign-owned expansion project with investments amounting to RM10.0 million to undertake design, development and manufacture of coander air-flow products. These products are meant for export destinations such as Europe, the USA and Japan; and
- A new majority foreign-owned project with investments amounting to RM5.0 million to manufacture high precision & high efficiency particulate (HEPA) filters/sterilisers.

The high level of foreign investments in E&E projects approved in 2009 signifies that Malaysia is still a competitive offshore location for foreign investors. Multinational companies such as National Semiconductor, Hitachi, Rohm-Wako, Freescale and Panasonic continue to expand and diversify their operations in Malaysia.

The emergence of major solar companies in Malaysia such as First Solar, Q-Cells and Sunpower, has spurred the growth of the solar value chain, opening up new opportunities for both local and foreign investors in developing the solar cluster. Cluster development increases co-operation between MNCs and Malaysian companies in sharing knowledge and technical expertise as MNCs outsource certain activities as well as parts and components manufacture to Malaysian companies.

Malaysia is also home to five of the leading EMS companies in the world i.e Flextronics, Jabil Circuits, Plexus, Celestica and Sanmina-SCI. These companies have moved away from traditional operations to providing total solutions.

Malaysia also encourages R&D in E&E. Strong support by Government with the establishment of MIMOS in wafer fabrication facilities as well as collaboration between industry, the IC design association and local universities in R&D through the establishment of the Collaboration Micro-Electronic Design Excellence Centre (CEDEC) and the Malaysia IC Design Association (MICDA) enable the industry to keep abreast with the latest technologies. Many MNCs have also set up R&D centres in Malaysia to undertake R&D in areas such as design and development of chip semiconductor devices, wafer fabrication, LED and display products, as well as IC packaging technology.

Green technology is also at the forefront of Malaysia's initiatives as Government encourages the manufacture of environmental friendly products with energy saving capabilities. This is evident through the Government's efforts such as the introduction of funding and various programs related to the promotion of this initiative.

TRANSPORT EQUIPMENT

The transport equipment industry comprises the automotive, aerospace and shipbuilding & ship repairing sub-sectors. The automotive sub-sector is the largest sub-sector in this industry.

For the period January-November 2009, exports of transport equipment totalled RM9.5 billion, compared with RM8.7 billion for the corresponding period in 2008. Exports of road vehicles (comprising passenger vehicles, commercial vehicles, motorcycles/scooters, trailers/semi-trailers, bicycles/other cycles and parts and components) amounted to RM3.5 billion. Exports of aircraft and associated equipment and parts totalled RM3.3 billion while exports of ships, boats and floating structures amounted to RM2.7 billion.

Automotive

The automotive sub-sector comprises:

- manufacture/assembly of motor vehicles, including motorised two-wheelers;
- reconditioning/reassembling/rebuilding/conversion of motor vehicles; and
- manufacture of parts and components, including coach and vehicle bodies.

There are currently four National Projects and nine assemblers in the motor vehicle sector, with an annual installed capacity of 963,300 units. In addition, there are 11 manufacturers/assemblers of motorcycles and scooters with an installed capacity of 1,069,700 units per year. There are also three composite body sports car manufacturers.

According to the Malaysian Automotive Association (MAA), production of motor vehicles in 2009 totalled 489,269 units (comprising 447,002 units of passenger vehicles and 42,267 units of commercial vehicles). Sales of motor vehicles amounted to 536,905 units in 2009, consisting of 486,342 units of passenger vehicles and 50,563 units of commercial vehicles.

Based on estimates by the Motorcycle and Scooter Assemblers and Distributors Association of Malaysia (MASSAM), production of motorcycles and scooters is expected to reach 440,000 units in 2009, a decrease of 18.0 per cent compared with the actual production volume in 2008. Domestic sales of motorcycles and scooters are expected to decrease by 19.0 per cent from 532,697 units (actual sales in 2008) to 430,000 units (estimated) in 2009.

Exports of motor vehicles and parts and components in 2009 (January-November) amounted to RM3.3 billion, compared with RM3.7 billion for the corresponding period in 2008. The major share of the exports comprised motor vehicle parts.

Imports of motor vehicles and parts and components in 2009 (January-November) totalled RM9.9 billion, compared with RM10.0 billion for the corresponding period in 2008. The major share of the imports comprised automotive components/ parts and passenger vehicles (including CKD parts).

As at November 2009, the automotive sub-sector employed 52,133 persons. PROTON and PERODUA together employed 22,106 persons, constituting 40.4 per cent of the total employment in the sub-sector. The local content achieved by motor vehicle manufacturers is about 60 per cent while for assemblers, it is about 40 per cent.

As at December 2009, there were more than 690 automotive component manufacturers and about 110 motorcycle/ scooter component manufacturers. The automotive component industry produces over 5,000 components.

More than 75 per cent of the automotive component manufacturers are Malaysian-owned. A number of these companies have technical collaborations with global automotive component companies. More than 60 per cent of the component manufacturers have acquired international standards such as ISO 9000, TS16949 and ISO 14000. Global automotive component manufacturers operating in Malaysia include Bosch, GKN, Denso, Delphi, Nippon Wiper Blade, Toyota Auto Body and ZF Steering. They are producing automotive air conditioner systems, security systems and other automotive body and part modules.

About 75 of the automotive component manufacturers are presently exporting their components, mainly for the replacement market. Major components exported include steering wheels, rims, bumpers, brakes, batteries, radiators, shock absorbers, clutches, exhausts and accessories. Total sales value of automotive components and accessories in 2009 (January-November) amounted to RM5.2 billion. Total export value of motor vehicle components and parts for the period January-November 2009 was RM1.8 billion.

The automotive component industry has today achieved the capabilities and competency to design and develop components both for the original equipment and replacement markets. Most of the local component manufacturers are aware of the need to penetrate the global supply chain. They have therefore acquired international procurement standards, thus enabling them to penetrate the regional and global markets.

Review of National Automotive Policy

The Government reviewed the National Automotive Policy (NAP) in October 2009 with the objectives of:

- ensuring orderly development as well as long term competitiveness and capability of the domestic automotive industry as a result of market liberalisation;
- creating a conducive environment to attract new investments and expand existing opportunities;
- enhancing the competitiveness of the national car manufacturer through strategic partnership;
- fostering the development of the latest, more sophisticated technology in the domestic automotive industry;
- developing high value-added manufacturing activities in niche areas;
- enhancing Bumiputera participation in the domestic automotive industry;
- improving safety standards for consumers and promoting environment-friendly opportunities; and
- enhancing the implementation of current NAP's policy instruments.

New Measures in the NAP review (effective 1 January 2010):

- Companies manufacturing transmission systems, brake systems, airbag systems and steering systems (critical and high value-added parts and components) will be eligible for better fiscal incentives.
- Investments in the assembly or manufacture of hybrid and electric vehicles will be granted:

  - 100 per cent ITA or PS for 10 years;

  - Customised training and R&D grants;

- 50 per cent exemption on excise duty [for locally assembled/manufactured vehicles or grants under the Industrial Adjustment Fund (IAF)];

- PS with 100 per cent tax exemption of statutory income for a period of 10 years or ITA of 100 per cent on the qualifying capital expenditure incurred within a period of 5 years for the manufacture of selected critical components supporting hybrid and electric vehicles; and

- Customised incentives based on proposed activities.

- The Ministry of Energy, Green Technology and Water will draw up a roadmap to develop the infrastructure for electric vehicles.

- New manufacturing licences will be issued for selected segments namely:

  - luxury passenger vehicles with engine capacity of 1,800 c.c and above and on the road price not less than RM150,000;

  - hybrid and electric vehicles;

  - pickup trucks;

  - commercial vehicles; and

  - motorcycles with engine capacity of 200 c.c and above.

- Tax exemption on statutory income for manufacturers in the automotive industry is enhanced:

  - from 10 per cent to 30 per cent of the value of increased exports provided the vehicles and parts/components attain at least 30 per cent value-added; and

  - from 15 per cent to 50 per cent of the value of increased exports provided that the goods attain at least 50 per cent value-added.

- For complete built-up (CBU) and complete knocked down (CKD), import and excise duty rates will be maintained;

- Gazetted prices of imported used CBU motor vehicles will be established by the Government in order to address under declaration;

- Import duty will be removed/reduced in compliance with trade agreements;

- Competitiveness of parts and components manufacturers will be improved through the continuation of Automotive Development Fund (ADF) and IAF;

- Under the NAP Review, the Ministry of Transport (MOT) will accord priority in the 10th Malaysia Plan for full establishment of the VTA (Full Implementation of Vehicle Type

Approval) standards and testing facilities;

- The Ministry of Science, Technology and Innovation will coordinate and formulate a roadmap for the introduction and enforcement of mandatory standards for automotive products;

- A mechanism to prohibit imports of used parts and components will be introduced by the Government, with effect from June 2011;

- Imports of used commercial vehicles will be prohibited, effective 1 January 2016 in line with the gradual phase-out of imports of used parts/components; and the termination of Approved Permits (AP) system for used vehicles;

- The Government has set clear targets of implementing EURO 4M specifications for petrol and diesel by 2011 and the Ministry of Natural Resources and Environment will establish a roadmap for fuel standards and quality;

- The Open AP system will be terminated by 31 December 2015, while the Franchise AP will be phased out by 31 December 2020;

- A charge of RM10,000 for each unit of open AP issued will be imposed and the collection will be used to establish a Bumiputera Automotive Fund to assist Bumiputera companies venturing into the automotive and other businesses, effective 1 January 2010;

- A strategic partnership for Proton and a globally established original equipment manufacturer (OEM) will be established to enhance Proton's competitiveness in the global market and its long term viability; and

- The freeze on manufacturing licence (ML) for reconditioning and reassembling (rebuilt) activities will be maintained.

The new policies and measures under the NAP Review are expected to contribute significantly to the growth of the industry and the country. Emphasis will be given on attracting investments in high value-added manufacturing activities using latest and high technology. The lifting of the freeze on ML for manufacturing and assembling activities in selected segments, particularly for luxury cars and hybrid/electric vehicles will encourage new investments and expansion of existing investments in the country. Currently, the hybrid/electric segment is still very new and has the potential to be promoted and developed in this region. With the appropriate incentives offered by the Government, Malaysia would be able to attract OEMs to relocate their operations to the country.

The emphasis on safety and environment aspects under the NAP Review will ensure the continued development of the domestic automotive industry. The phasing-out of imported used automotive products and introduction of mandatory standards for parts and components and standards for fuel and quality will spur the development of the automotive industry in the long run.

The Automotive Industry in ASEAN

Sales of passenger cars in the ASEAN main six countries (namely Indonesia, Thailand, Philippines, Singapore, Vietnam and Malaysia) totalled 1,257,897 units in 2009.

Malaysia remained the largest market for passenger cars, accounting for 38.7 per cent of the market. Thailand remained the largest market for commercial vehicles, accounting for 49.6 per cent of the commercial vehicle segment.

Projects Approved in 2009

In 2009, a total of 44 projects were approved in the automotive industry with investments of RM702.6 million. Domestic investments amounted to RM405.6 million (58.0%), while foreign investments totalled RM297.0 million (42.0%).

Of the total projects approved, 21 were new projects while 23 were expansion/diversification projects. The new projects accounted for RM183.1 million or 26.0 per cent of the investments while expansion/diversification projects accounted for RM519.5 million (74.0%).

Table 2
Motor Vehicles Sales in the ASEAN Main Six Countries

Countries	2009			2008		
	PC	CV	TIV	PC	CV	TIV
Indonesia	359,384	124,164	483,548	425,267	178,507	603,774
Thailand	230,037	318,834	548,871	226,805	388,465	615,270
Philippines	46,228	86,216	132,444	44,428	80,021	124,449
Singapore	73,183	6,320	79,503	100,979	9,595	110,574
Vietnam	62,723	56,737	119,460	49,356	60,830	110,186
Malaysia	486,342	50,563	536,905	497,459	50,656	548,115
ASEAN 6	1,257,897	642,834	1,900,731	1,344,294	768,074	2,112,368

Note: PC - Passenger Car CV - Commercial Vehicle TIV - Total Industry Volume

Source:
Indonesian Automotive Industries (IAI); Malaysian Automotive Association (MAA); Chamber of Automotive Manufacturers of the Philippines, Inc. (CAMPI); Thai Automotive Industry Association (TAIA); Motor Traders Association of Singapore (MTAS); Vietnam Automotive Manufacturers Association (VAMA)

Major projects approved included:

- An expansion project by a majority Malaysian-owned company with investments of RM381.6 million to manufacture multi-purpose vehicles (MPV);

- A new majority Malaysian-owned project with investments of RM38.5 million to manufacture steering columns;

- A new foreign-owned project with investments of RM36.0 million to manufacture battery plates and automobile batteries;

- A new foreign-owned project with investments of RM34.0 million to manufacture disc pads, bonded brake shoes, brake linings, disc pad metals, base plates and brakes; and

- An expansion project by a majority Malaysian-owned company with investments of RM19.3 million to manufacture wire harnesses for passenger and commercial vehicles.

While the year 2009 saw a slowdown in the automotive industry as a result of the global economic crisis, the outlook for the industry is expected to improve in 2010 in line with a higher growth rate projected for the Malaysian economy, stronger consumer confidence, improved access to financing and a more favourable pricing environment.

The revised National Automotive Policy is expected to give a boost to the automotive industry as it would ensure the long-term viability and competitiveness of the industry. Over the long term, the lifting of the freeze on issuance of ML for selected segments of the automotive industry, coupled with the availability of attractive incentives would transform the local automotive industry into a regional hub.

Currently, the principal driving markets for the Asian automotive industry are People's Republic of China, India and ASEAN (Thailand, Philippines, Indonesia and Malaysia). The future of the automotive industry in these ASEAN countries is bright because of the ASEAN Free Trade Area (AFTA) where tariffs will be reduced gradually. Malaysia would continue to remain an attractive investment destination for automotive manufacturers due to its well-developed automotive infrastructure, especially in the automotive engineering support services, component manufacturing and electronic components.

Aerospace

The aerospace industry comprises the aviation and space sub-sectors. In Malaysia, the aviation sub-sector encompasses manufacturing of parts and components; maintenance, repair and overhaul (MRO) activities; design and development; assembly and operation of light aircraft and support services.

The aerospace industry in Malaysia which began with the establishment of MRO operations back in the 1970s has progressed into the manufacture of aerospace parts and components and assembly of light aircraft. Currently, there are 12 companies involved in the manufacture of aircraft parts and components including ground support equipment, while more than 30 companies are involved in MRO activities.

Parts and components manufacturing is one of the growth areas identified for the aerospace industry in Malaysia, according to the National Aerospace Blueprint. The current global economic crisis has caused many airlines to delay or even cancel their aircraft orders. This has affected Malaysian parts and components companies as they are part of the global supply chain. However, the high volume of outstanding orders has managed to sustain the production of local companies throughout the year.

The parts and components sub-sector is expected to experience an upswing from 2010 arising from the recently announced contracts secured from global aircraft component manufacturers. This will further strengthen Malaysia's position in the global supply chain for composite aerostructures. The commencement of operations by Spirit AeroSystems Malaysia and Honeywell Aerospace Avionics Malaysia is expected to contribute significantly to the growth of the aerospace parts and components sub-sector in the country.

Malaysia has a full range of MRO capabilities which include modification and remanufacturing of engines and engine components, repair and overhaul of aircraft parts, components and airframes, repair and testing of aircraft instruments and components and provision of line and heavy maintenance to both military and civil aircrafts. Major MRO companies in Malaysia include MAS Engineering, GE Engine, AIROD, Hamilton Sundstrand, Honeywell, Parker Haniffin and Eurocopter. The MRO sub-sector is projected to grow by 12-15 per cent annually. The sub-sector is estimated to achieve a turnover of RM4.5 billion in 2009 compared with RM4.0 billion in 2008.

Projects Approved in 2009

In 2009, five projects were approved with total investments of RM551.9 million. Foreign investments amounted to RM159.9 million or 29.0 per cent while domestic investments totalled RM392.0 million (71.0%).

The major projects approved included:

- An expansion project by a wholly Malaysian-owned company to manufacture composite panels for aircrafts with investments of RM320.1 million. The main customers are Spirit

AeroSystems, Goodrich Aerostructures, Airbus UK, EADS, GKN and BAE Systems;

- A new majority Malaysian-owned project to manufacture miniature jet engines with investments of RM7.6 million. The product is for the propulsion of remote controlled aeroplanes for the hobby industry and other applications such as target drones. The company will also manufacture related engine control units (ECU); and

- An expansion project by a wholly foreign-owned company to manufacture and reassemble helicopter cockpit and helicopter modifications with investments of RM2.4 million. The company will work closely with industry players and the Government in ensuring the local aviation industry's rapid growth particularly through the formation of smart partnership programmes with local vendors.

Comprehensive Tax Incentives for the Aerospace Industry

To further promote the growth of the aerospace industry, the Government announced comprehensive tax incentives in December 2009. These incentives are effective for applications received by MIDA from 1 January 2010 until 31 December 2014.

These incentives focus on four main groups in the aerospace industry, namely Design, Manufacture & Assembly group, Operator group, Support group and Regulatory group.

1. The Design, Manufacture & Assembly group consisting of activities such as research, design and development, systems integration, manufacturing and assembly will qualify for income tax exemption from 5-15 years subject to evaluation in terms of investment level, value-added, technology and other criteria.

2. The Operator group consisting of general aviation will qualify for ITA of 100 per cent on qualifying capital expenditure incurred within 10 years subject to evaluation in terms of investments in fixed assets of more than RM150 million within 5 years.

3. The Support group consisting of MRO and aerospace training will qualify for the following incentives:

   i. Income tax exemption of 100 per cent of statutory income for up to 10 years for companies that provide MRO and services related to MRO of aerospace end products such as aircrafts, spacecrafts, missiles/rockets, communication and navigation systems (CNS), simulators thereof and equipment, components, accessories or parts thereof; and

ii. Income tax exemption of 100 per cent of statutory income for up to 15 years for companies involved in conversion, upgrading and refurbishment or re-manufacture of aerospace end products.

The grant of these two incentives is subject to evaluation by MIDA in terms of investment level, value-added and significant economic impact to the economy.

i. ITA of 60 per cent on qualifying capital expenditure incurred within 5 years for MRO companies currently operating in Malaysia and undertaking expansion, modernization or automation of existing business or diversifying existing business into any related product within the same industry; and

ii. Double deduction on expenses incurred by the employers in training their employees in pilot conversion and instructor pilot training.

4. The Regulatory group consisting of companies undertaking aerospace related certification, standard development, testing and evaluation and licensing activities, will qualify for PS with tax exemption of 100 per cent of statutory income for a period of 5 years or ITA of 60 per cent on qualifying capital expenditure incurred within 5 years.

The aerospace industry, being high-technology and knowledge-based in nature, has potential to be one of the main sectors that will drive the nation towards a high income economy based on innovation, creativity and high-valued activities.

The continuous escalation in costs has forced global aerospace players to relocate to more cost-competitive locations. Malaysia should take this opportunity to attract more aerospace parts manufacturers especially tier one suppliers to Boeing and Airbus. The comprehensive tax incentives announced recently by the Government are expected to attract more investments into the industry, thus making Malaysia a global centre for the industry in Asia Pacific.

Malaysia aims to be the preferred global aerospace outsourcing centre through participation in 'design and build' activities in aircraft programmes. Malaysia also aims to secure a greater share of the MRO market as well as develop its capability in avionics and systems integration.

Shipbuilding and Ship Repairing

The shipbuilding and ship repairing industry in Malaysia includes the manufacture of a wide range of ships including barges, passenger boats/ferries, patrol vessels, tug-boats, landing crafts, tankers, leisure crafts, yachts, hydrofoils, hovercrafts and ship repairing activities. The industry has developed specialised skills and technological capabilities in engineering design, naval architecture, metallurgy, corrosion control, machining, welding and fabrication. The industry has also extensive linkages with other industries such as steel, glass, logistics, storage, bulk-breaking of goods and services (port services, financing, insurance and consultancy).

There are more than 70 shipyards in Malaysia. The major activities undertaken by these shipyards include constructing or building ocean-going vessels, boats and offshore structures for oil and gas industries; repairing, maintaining, upgrading, overhauling and refurbishing vessels; conversion of ships; and heavy engineering and fabricating of offshore structures, steel structures and cranes.

The largest shipyard in Malaysia can accommodate dry-docking of vessels of up to 450,000 DWT and has a ship lift system capability of up to 50,000 DWT. The demand for larger and more sophisticated naval vessels is still fulfilled by foreign shipyards which have the capacity and capability in the construction of such vessels.

Projects Approved in 2009

In 2009, three new wholly Malaysian-owned projects were approved with investments of RM34.9 million to undertake shipbuilding and ship repairing activities and metal fabrication works. These included a project with investments of RM18.6 million to undertake shipbuilding and ship repairing activities.

The local shipbuilding and ship repairing industry faced declining orders due to the worldwide economic crisis. However, local shipyards have been able to sustain their production by fulfilling the backlog of orders. Challenges faced by local shipyards include shortage of qualified personnel and skilled technicians; high operational costs due to high costs of imported materials and equipment; and stiff competition from new developing shipyards in other ASEAN countries such as Vietnam and Thailand, which offer lower labour costs.

MACHINERY AND EQUIPMENT

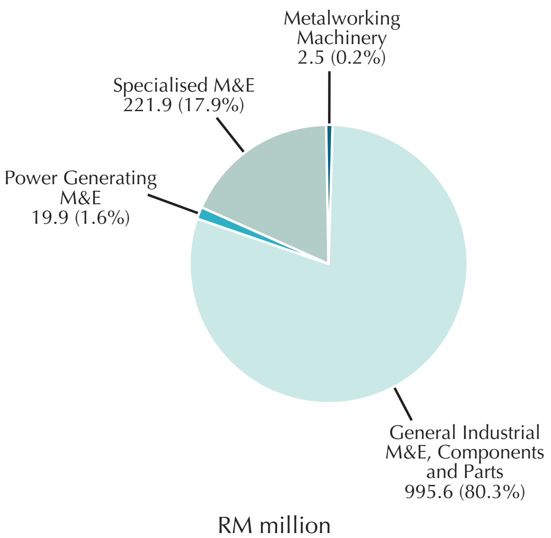
The machinery and equipment (M&E) industry in Malaysia covers the following sub-sectors:

- Specialised M&E for specific industry;
- Power generating M&E;
- Metalworking machinery; and
- General industrial M&E, components and parts.

To date, there are about 800 companies in operation in the M&E industry. Exports of M&E totalled RM17.2 billion while imports totalled RM34.6 billion for the period January-November 2009. Major export destinations included Australia, Indonesia, the People's Republic of China, the USA, the Netherlands and Singapore.

The M&E industry is gradually moving up the value chain and increasing its focus on high technology, high value-added and specialised M&E. Generally, products manufactured have achieved more than 60 per cent value-added. Companies in this industry continued to enhance their design, development, technology and innovation capabilities to remain competitive and sustain the industry's growth.

Graph 20
Investments in Projects Approved in Machinery and Equipment Industry by Sub-sector, 2009



Projects Approved in 2009

In 2009, a total of 95 projects with investments of RM1.2 billion were approved in the M&E industry. Of these, 72 were new projects (RM901.9 million or 72.7%) and 23 were expansion/ diversification projects (RM337.9 million or 27.3%). Foreign investments amounted to RM637.2 million (51.4%) while domestic investments totalled RM602.7 million (48.6%). Projects approved in 2009 are expected to generate employment opportunities for 5,613 persons.

Specialised M&E for Specific Industry

The specialised M&E for specific industry sub-sector caters for the needs of specific industries and are designed according to users' specific requirements. Industries targeted include the E&E, oil & gas, medical, solar/photovoltaic, agriculture, automotive, food and beverage, woodworking and plastic processing industries.

Over the years, companies in this sub-sector have acquired capabilities and technologies to transform themselves from supplying components and sub-assemblies to producing high value-added and sophisticated M&E for the back-end and front-end semiconductor processing industry. These companies have not only become reliable suppliers to foreign companies operating in the country, but have also carved a niche for themselves globally.

Among the leading companies in this sub-sector are Genetec Technology Berhad, Vitrox Corporation Berhad, Kobay Technology Berhad, Pentamaster Corporation Berhad and Upeca Engineering Sdn. Bhd. Through their continuous efforts and involvement in higher value-added activities, Malaysia is now recognised as the leading manufacturer of automation equipment for the E&E industry in the South East Asian region. The impact of the global economic crisis on the semiconductor industry has driven these local automation equipment manufacturers to explore new markets and diversify into supplying to other industries such as solar/photovoltaic, aerospace and medical industries.

In recent years, the importance of oil & gas reserves from deep waters has increased significantly in the Asia Pacific region. This has attracted substantial inflows of FDI into specialised M&E for the oil and gas industry. Many of the world's leading oil and gas M&E companies such as FMC, Aker Kvaerner, Halliburton, Cameron International and Technip have established operations in the country to manufacture high-end specialised M&E for subsea deepwater development. Their presence has resulted in the enhancement of local fabricators' capabilities in the oil & gas sector to move up the value chain from producing low-end process equipment to design and fabricate offshore drilling platform equipment, as well as manufacture and provide high end complex components, sub-assemblies and related services. Among leading Malaysian companies are Kencana HL Engineering Sdn. Bhd., KNM Process Systems Sdn. Bhd. and Scomi Group of Companies.

Projects Approved in 2009

In 2009, a total of 25 projects with investments of RM221.9 million were approved in the specialised M&E for specific industry sub-sector. These comprised 20 new projects with investments of RM203.4 million (91.7%) and five expansion/diversification projects with investments of RM18.5 million (8.3%). Foreign investments amounted to RM83.7 million (37.7%) while domestic investments totalled RM138.2 million (62.3%).

Significant projects approved included:

- A new wholly foreign-owned project with investments of RM39.2 million to manufacture membrane systems and related equipment, process equipment and components/modules for gas processing, petroleum refining and petrochemical industries. The company will also set up an engineering design centre in the country for the Asian region;

- A new wholly Malaysian-owned project with investments of RM25.0 million to manufacture fully integrated fertilizer plants and parts. The company will undertake R&D activities to develop fully automated plants incorporating Programmable Logic Control (PLC) software and 80 per cent of its products will be exported;

- A new majority Malaysian-owned joint venture project with investments of RM10.4 million to manufacture intelligent pipeline inspection gauges (PIG) for the oil & gas industry. The company which specialises in providing full range of inspection services for pipelines will be the first in the country to manufacture PIG to cater to the needs of the oil & gas and petrochemical sectors in the region;

- A majority Malaysian-owned joint venture expansion/diversification project with investments of RM10.4 million to manufacture machinery and parts for the solar industry such as loader/unloader machines, annealing ovens, backcoating and sorting machines. The company which was established in 2001 to supply M&E for the semiconductor industry will diversify its operation to support the solar industry;

- A new majority foreign-owned joint venture project with investments of RM7.3 million to manufacture M&E and related modules and sub-assemblies for the medical, semiconductor and electronics industries. The company is a mechatronic contract manufacturer focusing on production automation and low volume serial production of high-tech modules and equipment. The products manufactured will be fully exported to European-based OEMs and engineering design companies; and

- A wholly Malaysian-owned expansion/diversification project with investments of RM4.7 million to manufacture cleaning and drying equipment and parts for PV solar wafers and silicon wafers; and ultrasonic cleaning equipment and parts for flat display panels. The company is developing its own cleaning and drying technology and will patent its equipment.

Power Generating M&E

The power generating M&E sub-sector comprises the manufacture of boilers, condensers, electric generating sets, turbines and engines.

Companies in this sub-sector manufacture a wide range of power generating M&E such as boilers, condensers, engines, turbines and industrial generator sets for use in refineries, oil & gas exploration platforms, petrochemical plants and other commercial operations, in accordance with internationally recognised standards.

As the demand for environmental-friendly, efficient and cost effective energy in the country increases, this sub-sector is expected to move up the value chain into the manufacture of advanced power generating M&E and environmental-friendly solutions such as water and wind turbines; and photovoltaic power generating systems.

Leading companies in this sub-sector include Tractors Malaysia Sdn. Bhd., UMW Industrial Power Sdn. Bhd., Mechmar Boilers Sdn. Bhd., Vickers Hoskins (M) Sdn. Bhd., Enco Systems Sdn. Bhd. and Transtherm Engineers Sdn. Bhd.

Projects Approved in 2009

In 2009, two projects with investments of RM19.9 million were approved in the power generating M&E sub-sector to manufacture generator sets; and biomass micro power plant equipment and parts. The biomass micro power plant equipment is a green technology project which utilizes organic materials such as paddy husks, wood chips and other agricultural waste to produce up to 200kW of electricity per hour. Domestic investments amounted to RM19.8 million (99.5%) while foreign investments totalled RM0.1 million (0.5%).

Metalworking Machinery

The metalworking machinery sub-sector is divided into two categories, namely metal cutting machine tools and metal forming/shaping machine tools. M&E in this category are laser cutting machines, machining centres, electro-discharge machines (EDM), milling machines, drilling machines, lathes, shearing machines, bending rolls, stamping machines, press brakes, forging machines, and hydraulic and power presses.

Most of the metalworking machines produced locally are metal forming/shaping machine tools such as hydraulic and power presses, sheet metalworking machines and press brakes. Leading companies include AIDA Manufacturing Sdn. Bhd., Hydra-Link Engineering Sdn. Bhd., Li Chin (S.E.A.) Sdn. Bhd. and Sunfluid Engineering Sdn. Bhd.

Projects Approved in 2009

In 2009, two new projects with investments of RM2.5 million were approved to manufacture welding machines, CNC plasma cutting machines and CNC router machines. Domestic investments amounted to RM1.9 million (76.0%) while foreign investments totalled RM0.6 million (24.0%).

General Industrial M&E, Components and Parts

The general industrial M&E, components and parts sub-sector covers a broad category of products such as industrial air-conditioning plants and equipment, material handling equipment, pressure vessels, heat exchangers, valves, gaskets and fittings.

Companies in this sub-sector also provide a wide variety of material handling solutions ranging from unit material handling systems such as cranes and lifts to bulk material handling solutions, logistics, sorting and warehousing systems.

Malaysia is the leading manufacturer in South East Asia of pressure vessels, process equipment and modules for the chemical, petrochemical and oil & gas industries in South East Asia and has attained international recognition for these products.

Projects Approved in 2009

In 2009, a total of 66 projects with investments of RM995.6 million were approved in this sub-sector. Of these, 49 were new projects (RM695.2 million or 69.8%) and 17 were expansion/ diversification projects (RM300.4 million or 30.2%). Domestic investments amounted to RM442.8 million (44.5%) while foreign investments totalled RM552.8 million (55.5%).

Significant projects approved included:

- A new wholly foreign-owned project with investments of RM165.8 million to manufacture sea water reverse osmosis systems for the export market; and
- A new wholly Malaysian-owned project with investments of RM35.2 million to manufacture quayside container cranes and rubber tyred gantry cranes for harbour cargo handling. The company will source its technology from Germany and Japan.

The relatively high level of foreign investments (51.4%) in the M&E industry indicates that Malaysia continues to be an attractive location for companies seeking to produce cost competitive products. The types of products proposed to be manufactured also indicate that companies are moving towards producing high technology and high value-added M&E, modules, components and parts.

The success of Malaysia in attracting investments in high value-added industries such as solar/photovoltaic, medical and aerospace will create opportunities and new markets for local automation equipment manufacturers to diversify or venture to serve these industries. Specialised M&E will continue to be the major sub-sector in the M&E industry. Some of the high value-added products proposed by local and foreign companies included cleaning and drying equipment for PV solar wafers and silicon wafers, ultrasonic cleaning equipment for flat display panels, machinery for the solar industry, modules and sub-assemblies for the medical, semiconductor and electronics industries, and intelligent pipeline inspection gauges (PIG) for the oil & gas industry.

With dynamic engineering supporting industry in Malaysia which is cost competitive, competent and capable of supplying an extensive range of parts and components and related services, the future direction of the M&E industry is to focus on and strengthen core activities such as R&D, D&D, prototyping, software development, system integration, assembly, testing and calibration. This will enable the industry to face increasing competition from emerging countries, in its pursuit of new opportunities in the global market.

ENGINEERING SUPPORTING INDUSTRY

Malaysia's engineering supporting industry which mainly encompasses the mould and die, machining, metal stamping, metal casting, surface engineering, heat treatment and forging activities, has in the last four decades, progressed in tandem with the country's transformation from an agriculture dependant economy to a global manufacturing hub.

Currently, the industry is consolidating and rationalising itself to meet the challenges of supporting the Malaysian manufacturing sector which is moving towards high technology, capital intensive and high value-added industries. Building on their vast experience and international recognition for their capabilities, consistent quality production and fast and reliable delivery in a diverse range of engineering activities, particularly in machining and fabrication, players in the industry have begun upgrading their facilities and acquiring technologies to meet the stringent requirements of OEMs for parts and components and precision engineering services.

By moving up the value chain and providing total manufacturing solutions, as well as parts and components, for high technology industries in the E&E, automotive, machinery manufacturing, medical, oil & gas, aerospace, defence and solar/photovoltaic industries, the industry will be a major contributor to Malaysia's efforts to become a preferred location for global outsourcing demands.

Among leading Malaysian companies capable of providing total manufacturing solutions to advanced global demands are Alpha Master Sdn. Bhd., Atasmi Precision Machinist Sdn Bhd., UWC Holdings Sdn. Bhd., Lypometal Sdn. Bhd., Kobay Technology Sdn. Bhd. and Kein Hing International Bhd. These companies develop and produce high value-added modular components, machine structures, precision engineering parts, sheet metal fabrication & sub assemblies and undertake surface finishing.

Projects Approved in 2009

A total of 64 projects were approved in the engineering supporting industry in 2009 with investments of RM454.2

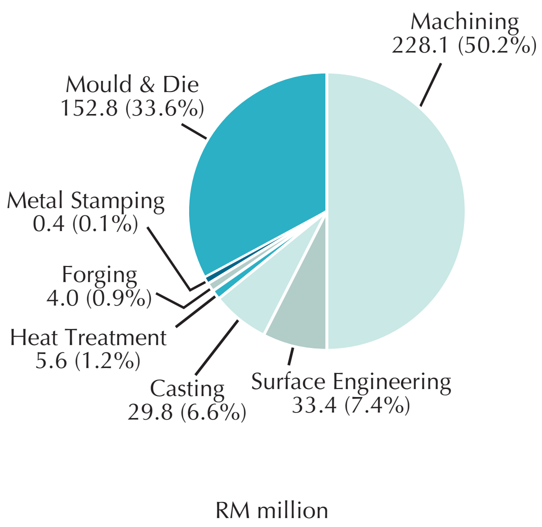
million. Of these, 41 were new projects (RM307.1 million or 67.6%) and 23 were expansion/diversification projects (RM147.1 million or 32.4%). Domestic investments amounted to RM262.9 million (57.9%) and foreign investments totalled RM191.3 million (42.1%). Projects approved in 2009 are expected to generate employment opportunities for 4,027 persons.

Of the 64 projects approved:

- 21 projects were in the the mould & die sub-sector with investments of RM152.8 million;

- 26 projects were in the machining sub-sector with investments of RM228.1 million;

Graph 21
Investments in Projects Approved in the Engineering Supporting Industry by Sub-sector, 2009



- One project was in the metal stamping sub-sector with investments of RM0.4 million;

- Four projects were in the metal casting sub-sector with investments of RM29.8 million;

- Nine projects were in the surface engineering sub-sector with investments of RM33.4 million;

- Two projects were in the heat treatment sub-sector with investments of RM5.6 million; and

- One project was in the forging sub-sector with investments of RM4.0 million.

Significant projects approved included:

- A new wholly foreign-owned project with investments of RM67.3 million to undertake machining activities for the E&E industry. The company will undertake high precision machining up to 5 microns for hard disc drive components such as actuators, dampers, anti-discs and separators for the export market;

- A majority Malaysian-owned joint-venture expansion/diversification project with investments of RM60.8 million to manufacture tools and dies. This expansion/diversification project will be an addition to the group's existing capabilities in metal stamping, forging and fabrication and transform the group to become a one-stop solution provider;

- A new wholly foreign-owned project with investments of RM25.3 million to manufacture stud bolts, threaded rods, nuts, socket head cap screws, hex bolts, pins and customised machined parts. The Malaysian plant will be the manufacturing and distribution centre for its group in the Asia Pacific region;

- A new wholly Malaysian-owned project with investments of RM9.8 million to undertake electroless plating and electroplating activities for the E&E and telecommunication industries. Customers include MNCs such as Sony, Canon, Sharp-Roxy, Fuji, Panasonic and Dell;

- A new wholly foreign-owned project with investments of RM9.3 million to manufacture moulds, tools and dies; metal stamped parts; sub-assembled parts and components for the E&E and automotive industries. T he company will adapt the latest advanced manufacturing process technology from Japan to design and manufacture customised parts and components; and

- A wholly Malaysian-owned expansion/diversification project with investments of RM8.0 million to manufacture iron castings. The company which was involved in castings for the construction industry will expand its production to cater for the automotive industry.

As manufacturing in the global scenario becomes more and more competitive, the extent and efficient management of outsourcing determines the competitive edge that OEMs and ODMs will enjoy. To reduce supply chain management costs, these major players are looking for total solution or manufacturing solution providers and global suppliers who will manage the smaller components, parts and services suppliers. As the global outsourcing market is expected to grow rapidly in the coming decade, Malaysia needs to have in place many more total solution or manufacturing solution providers to secure a larger share of this global market demand, especially for high technology industries.

While companies in the engineering supporting industry are realigning themselves to provide multiple or total engineering services, the Government is also intensifying efforts to encourage major players to transform themselves into high-end solution providers capable of providing cost competitive packaged services from product conception and R&D to serial production and if required, management of entire processes including logistics, packaging, testing and certification.

The engineering supporting industry will continue to play an important role in achieving the country's vision to be the preferred location for manufacturing outsourcing.

BASIC METAL PRODUCTS

The basic metal products industry in Malaysia assumes a major role in the development of the manufacturing and construction sectors. The industry covers primary processing and downstream manufacturing of ferrous (iron and steel) and non-ferrous (aluminium, tin, copper, zinc, lead, etc) metal products. The industry can be categorised into two main sub-sectors, namely:

- Long products comprising billets, blooms, sections, bars and wire rods and downstream wire products, such as wire mesh, hard drawn wire, bolts, nuts and nails; and

- Flat products comprising hot rolled coils, plates and sheets, cold rolled coils and sheets and downstream products, such as pipes, galvanized coils, tin plates and fabricated products.

There are currently 410 companies in operation with sales of RM41.1 billion and employment of 48,400 workers. A wide range of ferrous and non-ferrous products are produced including:

- Primary steel products {direct reduced iron (DRI) and hot briquetted iron (HBI), billets and blooms};

- Rolling/finished products (bars, wire rods, sections, hot rolled coils, plates and sheets, cold-rolled coils);

- Secondary long products (wire and wire products);

- Secondary flat products (pipes and pipe fittings, and tinplate);

- Aluminium sheets/foils;

- Aluminium ingots (recycled);

- Aluminium rods and aluminium extruded profiles;

- Copper rods/wires;

- Copper strips;

- Copper tubes/extrusions; and

- Tin.

Imports of iron and steel products amounted to RM16.3 billion in 2009 (January-November) while imports of non-ferrous metal products totalled RM12.3 billion in 2009 (January-November).

Exports of iron and steel products amounted to RM8.3 billion in 2009 (January-November) while exports of non-ferrous metal products totalled RM6.1 billion for the same period in 2009.

Malaysia's steel consumption in 2008 totalled 8.3 million tonnes, a decrease of 6.0 per cent from 2007. Flat products accounted for 53.9 per cent (4.5 million tonnes) of the steel consumption, and long products accounted for 46.1 per cent (3.8 million tonnes). In 2008, the overall performance of the steel industry was affected by the current economic downturn.

Malaysia produced 6.4 million tonnes of crude steel in 2008 and was the largest producer of crude steel in ASEAN, accounting for about 33.0 per cent of regional production.

Steel production in Malaysia is dominated by long products, principally used in the construction sector, such as steel bars (2.3 million tonnes) and wire rods (1.1 million tonnes). Production of flat products such as hot rolled coils (1.7 million tonnes) and cold rolled coils (0.7 million tonnes) is increasing in tandem with increasing manufacturing activities.

The main raw materials for steel making are DRI/HBI and steel scrap. With the increasing demand from electric arc furnace operators, production of HBI and DRI increased from 1.9 million tonnes in 2007 to 2.0 million tonnes in 2008.

Projects Approved in 2009

In 2009, a total of 30 projects were approved with investments of RM2.6 billion. Of these, 18 were new projects with investments of RM0.6 billion (23.1%) while 12 were expansion/ diversification projects with investments of RM2.0 billion (76.9%). Of the investments in the projects approved, RM2.2 billion or 84.6 per cent was domestic investments while RM0.4 billion or 15.4 per cent was foreign investments.

Overall, the RM2.6 billion investments in basic metal products in 2009 had exceeded the IMP3 investments target of RM1.9 billion per year.

Of the 30 projects approved:

- 25 were for the manufacture of basic iron and steel products with investments of RM0.8 billion; and

- 5 were for the manufacture of non-ferrous metal products with investments of RM1.8 billion.

Major projects approved included:

- A RM1.6 billion majority Malaysian-owned expansion project to manufacture aluminium ingots, aluminium alloy ingots and aluminium billets;

- A new RM131.0 million wholly Malaysian-owned project to manufacture cold rolled steel strip in coil;

- A new RM122.0 million majority foreign-owned project to manufacture gold dore bars;

- A RM116.0 million majority Malaysian-owned expansion project to manufacture steel billets and steel bars;

- A new RM95.0 million majority foreign-owned project to manufacture carbon steel fasteners; and

- A new RM75.0 million majority Malaysian-owned expansion project to manufacture steel billets.

The Government introduced several measures to further enhance competitiveness of the local steel industry in 2009. These measures which came into effect from 1 August 2009 include:

- Manufacturing licences will be granted without restriction to meet the demand for domestic and export markets for long and flat products;

- Import licence requirements and import duties on iron and steel products will be liberalised. Import duties on iron and steel products will be reduced gradually to 0 - 10 per cent in 2018; and

- Standards on selected iron and steel products will be enforced to ensure that products of acceptable quality are produced and imported into the country.

FABRICATED METAL PRODUCTS

Metal fabrication activities can be classified into four categories, namely:

- Fabrication for the offshore/onshore oil and gas industry;

- Building and civil construction fabrication;

- Processing and manufacturing plant fabrication; and

- Industrial machinery and equipment structures and component fabrications.

The industry also covers other products such as the manufacture of tanks, drums, metal boxes, tin cans, metal furniture and fixtures, wire and wire products, non-ferrous metal products and household wares.

Projects Approved in 2009

In 2009, a total of 35 projects were approved for the manufacture of fabricated metal products with investments of RM915.8 million. Domestic investments amounted to RM332.1 million (36.3%), while foreign investments totalled RM583.7 million (63.7%). Of the 35 projects approved, 25 were new projects (RM688.6 million) and ten were expansion/diversification projects (RM227.2 million). Projects approved in 2009 are expected to generate additional employment opportunities for 1,846 persons.

Major projects approved included:

- A new RM324.0 million wholly foreign-owned project to manufacture wire ropes for offshore and mining applications, synthetic fiber ropes, parallel wire strand for bridge cable, anchor chains, sockets, thimbles and locks;

- A new RM120.4 million wholly foreign-owned project to manufacture copper rods and wires;

- A RM87.0 million wholly Malaysian-owned expansion project to undertake industrial fabrication;

- A new RM39.9 million majority foreign-owned project to manufacture drum covers and slitted/sheared steel sheets; and

- A new RM37.7 million majority Malaysian-owned project to manufacture onshore and offshore oil & gas processing modules and equipment.

The metal fabrication industry in Malaysia is an established industry. Domestic companies have developed world-class capabilities in a diverse range of metal fabrication activities. KNM Group Berhad is Malaysia's leading process equipment manufacturer for the oil and gas, petrochemicals, minerals processing, desalination, renewable energy, chemicals, steam generation, power and environment industries. The Group is now operating 19 manufacturing facilities and engineering centres in 12 countries, offering a comprehensive and diversified range of products and services to its clients in more than 60 countries.

Petra Fabricators Sdn. Bhd. is one of the major fabrication yards specialising in the design of process packages, and manufacture of heat transfer equipment, pressure vessels, process packages, expansion joints, and other equipment for the oil and gas, petrochemical and general industries. Petra Fabricators has secured projects in Thailand, Vietnam, Myanmar, Indonesia, Brunei, India, Nigeria, Qatar, United Arab Emirates and the United Kingdom.

Other leading companies in the fabricated metal products industry include Nam Fatt Corporation Berhad, Ikatan Engineering Sdn. Bhd. and Kencana HL Engineering Sdn. Bhd.

TEXTILES AND TEXTILE PRODUCTS

The textiles and textile products industry in Malaysia is categorised into the following activities:

- Upstream activities which cover the production of fibre and yarn (natural and synthetic), fabrics (woven, knitted and non-woven) as well as activities of bleaching, dyeing, finishing and printing; and

- Downstream activities which involve the manufacture of made-up garments (shirts, pants, skirts), home textile products (bed linens, table linens, towels), industrial textile products (ropes, cords) and textile accessories (zip fasteners, sewing threads, drawstring).

Currently, there are more than 670 licensed companies in operation with investments of RM8.6 billion. In addition, there are more than 1,000 small scale textile companies in operation which are exempted from ML. The industry employs more than 68,200 persons.

Due to global competition, Malaysian textile manufacturers are moving up the value chain by diversifying into the production of higher value-added textiles, implementation of automation and computerized manufacturing, business collaboration with foreign companies to acquire new technologies and undertaking research and development activities to formulate new processes, develop new applications and value-added products.

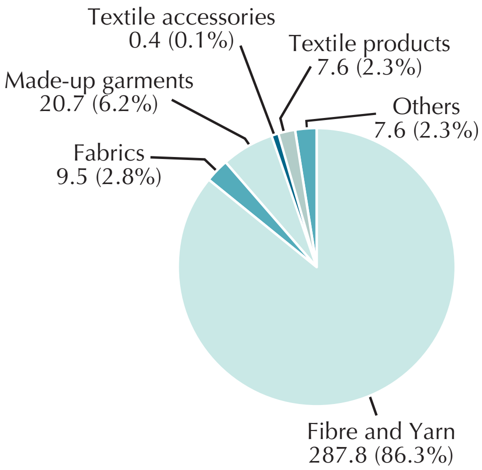
Malaysia was a net exporter of textiles and textile products in 2009 (January-November) with exports totalling RM8.1 billion while imports amounted to RM4.0 billion. The main products exported were apparels and clothing accessories. Malaysian apparel manufacturers continue to maintain excellent reputation for quality and capability in the production of up-market brands such as Nike, Adidas, DKNY, Ann Taylor, Armani, Talbots and Tommy Hilfiger. The main products imported were yarns and woven fabrics.

Projects Approved in 2009

In 2009, nine new projects were approved with total investments of RM333.6 million. Foreign investments totalled RM225.2 million (67.5%) while domestic investments amounted to RM108.4 million (32.5%).

Of the approved projects approved, four were for the production of made-up garments and one each for fibre and yarn; fabrics; textile products; textile accessories; and recycling of textiles. The projects approved are expected to generate 1,345 employment opportunities.

Graph 22
Investments in Projects Approved in the Textiles and Textile Products Industry by Sub-sector, 2009



The continued inflow of investments into the textiles and textile products industry was attributed to a combination of factors such as conducive business environment well developed infrastructure, relatively lower costs of doing business and the availability of relevant skill sets in the country.

Significant projects approved included:

- A new majority foreign-owned project with investments of RM287.8 million for the manufacture of specialty polyester filament yarn. This is the first project of its kind to produce high content and micro filament yarn with technical and functional features such as flame-retardant, breathable and anti-bacteria. The project proposed to export its entire production;

- A new majority foreign-owned project to produce woven fabrics with investments of RM9.5 million and catering mainly for exports to the People's Republic of China, Republic of Korea and the USA; and

- A new majority foreign-owned project with investments of RM2.3 million for the manufacture of made-up garments. The project proposed to utilise domestic latex sheets and fabric backed latex to produce sportswear, swimwear, skiwear or winter outerwear, mainly for the export market.

Future prospects in Malaysia in the textile industry lie in the promotion of high performance textiles, made-up garments and textile products with functional and technical features both in the upstream and downstream sub-sectors. The application of functional and technical textiles are in sectors such as aerospace, automotive, industrial, construction, anti-ballistic protection (police, army), marine, high performance apparels (fire-fighters, racing), medical, sportswear and filtration.

MEDICAL DEVICES INDUSTRY

The medical devices industry is one of the fastest growing and innovative industries globally. The industry encompasses equipment, instruments, appliances and consumables used in healthcare for diagnosis, prevention, monitoring and treatment of illness and injury. Scientific advances in medicine such as the integration of drugs and biologics into devices and longer life expectancy as well as the increasing demand for better healthcare facilities and services are driving rapid technological developments and growth in this industry. Globally, the medical equipment market was valued at US$219.2 billion in 2009 and is expected to increase to US$232.7 billion in 2010. In Malaysia, the consumption of medical devices is expected to grow to US$877.0 million in 2010 from US$826.0 million in 2009.

The medical devices industry in Malaysia is dominated by small and medium-sized companies (SMIs) engaged in the production of medical gloves and other medical disposable products. Currently, there are more than 180 medical devices manufacturers including the MNCs. The MNCs in the industry are mainly involved in the production of higher value products such as orthopaedic products, surgical instruments, medical electrodes, safety intravenous cannulae, pacemakers, defibrillators, dialysers, and ophthalmic lenses. These MNCs include Ambu, B. Braun, C.R. Bard, Ciba Vision, Meditop Corporation, St. Jude Medical and Symmetry Medical.

The medical devices sector is one of the priority sectors identified by the Government for further development given the growing demand for healthcare and medical products, driven by increasing global population, longer life expectancy and growing affluence. The industry continued to expand as existing medical devices companies, both local and foreign, expanded their operations in Malaysia, and new manufacturing facilities were established in the country. Existing companies include Ambu, B. Braun, Meditop, Symmetry Medical and Top Glove.

The presence of supporting industries for the medical devices industry, ranging from sterilisation services, sterile medical packaging, precision engineering, tool and die making to contract moulding and assembly, machinery fabrication and EMS, has enhanced the position of Malaysia as an outsourcing destination and global supplier of parts and components for major medical devices and equipment companies. Increasing interest is shown by local precision engineering, electronic and plastic manufacturers to diversify their operations into the medical devices sector. At the same time, MNCs are also outsourcing some of their manufacturing activities/parts and components to local SMIs. Outsourcing activities undertaken by the local SMIs include machining for instruments, sheet metal fabrication, moulding and packaging.

For the period January-November 2009, exports of medical devices were valued at RM8.0 billion. Malaysia continued to be a major exporter and producer of medical gloves and catheters with exports valued at RM6.2 billion, accounting for about 77.5 per cent of total exports of medical devices. Other major exports included instruments and appliances used in medical, surgical, dental or veterinary sciences (RM785.8 million), ophthalmic lenses, including contact lenses (RM378.6 million) and orthopaedic appliances (RM109.8 million). The USA, Europe and Japan were the major export destinations.

Projects Approved in 2009

In 2009, a total of 25 projects with investments amounting to RM656.4 million were approved. Of these, 12 were new projects (RM410.5 million) and 13 were expansion/diversification projects (RM245.9 million). Foreign investments amounted to RM361.0 million (55%) while domestic investments totalled RM295.4 million (45%). Among the products approved were medical devices such as orthopaedic implants, surgical sutures, medical electrodes, video scopes, medical solution bags, ceramic dental crowns and bridges, synthetic bone graft substitutes, scalp vein sets and surgical and examination gloves.

Among the significant projects approved were:

- An expansion project by a wholly foreign-owned company to expand existing electrode production capacity as well as to produce new products i.e disposable medical video scopes. The products will be exported mainly to the USA, Europe and Japan; and

- An expansion project by a wholly foreign-owned company with investments of RM55.0 million to produce spinal needles, medical disposable needles, PVC tubes, scalp vein sets, extension tubes and parts, plastic injection moulded parts for medical disposable needles, urinary bags and parts, sterile disposable infusion sets and plastic catheters and parts. The products will be exported mainly to Japan.

With increased emphasis by the Government to promote better healthcare systems and health services, greater opportunities will be created especially in higher value-added products such as electromedical equipment, cardiovascular devices, orthopaedic devices, in vitro diagnostic products, wound care products, home healthcare and self-care products.

AGRICULTURE AND FOOD PROCESSING

The agriculture sector (including forestry and fishing) contributed 8.0 per cent of the country's GDP in the first three quarters of 2009, with livestock and other agriculture sub-sectors recording positive growths of 7.4 per cent and 11.5 per cent respectively. The higher growth registered by these sub-sectors was due to the increase in the production of poultry, cattle, vegetables, fruits and paddy. The Government will continue to promote this sector as it is an important source of income in rural areas and has significant linkages with the food processing sector.

The global food shortage and food crisis in early 2008 prompted the Government to introduce the National Food Security Policy to ensure adequate food supply in the country. Various programmes were outlined to increase food production. One such programme was the development of new corridors, which is expected to boost agricultural production as well as revitalise the country's agriculture sector. These corridors propose, among others, the expansion of large-scale commercial farming, wider application of modern technology, development of value-added activities, improving supply chain management, and participation of the private sector as anchor companies in these corridors.

Malaysia remained a net importer of food in 2009. For the period January-November 2009, imports amounted to RM24.4 billion. Major imports were cereals and cereal preparations (RM5.4 billion), cocoa (RM3.9 billion), vegetables and fruits (RM3.1 billion), sugar and sugar confectionery (RM2.4 billion) and animal feed (RM2.3 billion). Raw materials such as cereals and dairy products continued to be imported for further processing for human consumption as well as for the production of animal feed.

For the period January-November 2009, exports amounted to RM14.3 billion. The main products exported were cocoa (RM3.7 billion), fisheries products (RM2.0 billion), margarine and shortening (RM1.4 billion); and cereals and cereal preparations (RM1.2 billion).

Agriculture

The agriculture sector comprises aquaculture and marine fisheries, cultivation of crops/fruits/vegetables, floriculture, ornamental fish, livestock farming and apiculture. Livestock, fisheries, fruits and vegetables are the major sub-sectors with significant linkages to the Malaysian food processing industry.

Chicken and beef are the main products in the livestock sub-sector. While Malaysia is self-sufficient in chicken production, domestic demand for beef continued to be sustained by imports. The poultry industry produces about 764,000 tonnes of chicken meat and 7 billion eggs per year. About 10-15 per cent of chicken meat produced is exported, mainly to Singapore. Considerable improvements, such as the wider adoption of closed-house systems, which are more environmental-friendly, have contributed to higher productivity in poultry farming and lower risk to diseases. In addition, the provision of attractive incentives has encouraged existing farms to convert to closed-house systems. Total exports of livestock products amounted to RM1.5 billion in 2009 (January-November).

The fisheries sub-sector in Malaysia can be categorised into marine capture fisheries and aquaculture. Aquaculture remained the fastest growing segment in this sub-sector, with an estimated annual production of 300,000 metric tonnes. Malaysia's total exports of fish and other seafood for the period January-November 2009 amounted to RM2.0 billion. Crustaceans and molluscs were the major exports valued at RM1.2 billion.

For the period January-November 2009, exports of vegetables and fruits amounted to RM1.1 billion. Most of the fruits produced were for fresh consumption in the domestic market. Besides local fruits such as mangoes, starfruits and papayas, cultivation of pittaya (dragon fruits) is increasing. Imports were mostly of temperate fruits such as apples, grapes and oranges. Total imports of vegetables and fruits amounted to RM3.1 billion in 2009 (January-November).

Projects Approved in 2009

In 2009, a total of 75 agricultural projects were approved incentives, Investments in these projects amounted to RM701.0 million. Of the projects approved, 73 were new projects (RM674.0 million), while two were expansion/diversification (RM27.0 million) projects. Domestic investments amounted to RM670.7 million (95.7%) while foreign investments totalled RM30.3 million (4.3%).

The approved projects included livestock rearing, aquaculture and cultivation of vegetables and fruits. Among the major approved projects were:

- A majority Malaysian-owned project to undertake aquaculture activity in Selangor with investments of RM97.4 million. The company plans to use Fish Protect Control Agriculture System from Australia to rear and breed both freshwater and marine fish in indoor tanks; and

- A wholly Malaysian-owned project with investments of RM84.5 million to rear Dorper sheep for the domestic market.

Food Processing

Food processing is one of the sectors which is less vulnerable to the global economic crisis. This sector comprises all value adding activities which utilise agricultural or horticultural produce. The food processing industry accounts for one-tenth of the domestic manufacturing output. The demand for processed food is expected to continue to grow globally. It is estimated that the global retail sales of food products is worth US$3.5 trillion and is expected to grow at an annual rate of 4.8 per cent to US$6.4 trillion in 2020.

The fisheries product sub-sector, which includes processed seafood products such as frozen and canned fish, crustaceans and molluscs, surimi and surimi products, remained the main contributor to exports of processed food. Although the Hazard Analysis and Critical Control Points (HACCP) certification is still voluntary in Malaysia, manufacturers who intend to export their seafood products to Europe and the USA have to obtain HACCP certification as well as fulfil other requirements of the importing countries.

Currently, Malaysia is the largest cocoa processing (cocoa grinder) country in Asia and the fourth largest in the world. Malaysia is a net exporter of cocoa products, such as cocoa butter, cocoa powder and cocoa cake. These products are raw materials for chocolate manufacturers.

Malaysia is the world's sixth largest producer of pepper and the fifth largest exporter of pepper and pepper products (specialty pepper, processed pepper and pepper sauces). Besides pepper, other spices such as coriander, turmeric, lemongrass, cinnamon, cloves and fennel are also produced.

In the fruit processing sub-sector, pink guavas, passion fruits and pineapples are processed mostly for puree and juices while dragon fruits are for fresh consumption or processed into cordial, jam and other products. Fruits such as jackfruits, bananas and papayas are utilised for the production of snack food while noni and roselle are for the production of health-related products.

Chilled and frozen food, home meal replacements, ready-to-cook and ready-to-drink meals are convenience foods which are increasing in demand. This is due to changes in consumers' lifestyle and preferences especially among working housewives and executives who prefer cooked food with minimal preparations. This has also led to increase in demand for convenience foods which focus on health such as breakfast cereals, muesli, fruit bars and fresh ready-to-eat salads or fruits.

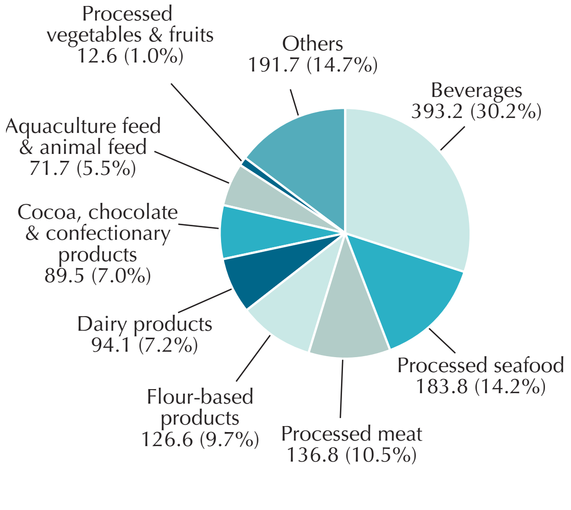
Increasing consumer awareness in food safety and nutritional value has led to higher demand for functional food, organic food and food ingredients from natural sources such as plants and seafood-based products. This sub-sector has the potential for further growth.

Transformation in the food industry from conventional processes into processes utilising emerging technologies is in line with the developments in the industry globally. New emerging technologies, such as biotechnology and nanotechnology, offer platforms and prospects to enhance processes in food production such as development of specialised packaging for improved food safety and security. There is a need for more collaborative efforts between public R&D institutions and industry involved in agriculture and food processing to ensure that new research findings are implemented.

Projects Approved in 2009

A total of 60 projects (food processing and beverages), with investments of RM1.3 billion were approved in 2009. Domestic investments in these projects amounted to RM760.9 million (58.5%) while foreign investments totalled RM539.0 million (41.5%). Of the projects approved, 44 were new projects (RM970.2 million) while 16 were expansion/diversification projects (RM329.7 million).

Graph 23
Approved Investments in the Food Processing Sector, 2009



The approved projects were in the processed seafood; processed meat; flour-based products; cocoa, chocolate & confectionery products; dairy products; processed vegetables & fruits; beverages and aquaculture feed & animal feed sub-sectors.

Among the major projects approved were:

- A majority Malaysian-owned project with investments of RM92.8 million for the production of frozen seafood. This company is involved in integrated fishery activity, which includes deep-sea fishing and production of frozen seafood. About 90 per cent of the finished products will be exported to Japan, Hong Kong and Taiwan; and

- A wholly Malaysia-owned project, with investments of RM62.9 million to manufacture sliced & minced meat and sliced butter for the domestic market.

Domestic investments continued to dominate this sector, particularly in new projects. With increasing demand for food safety and quality, it is pertinent that these approved projects are implemented in compliance with quality certifications such as Good Manufacturing Practice (GMP), HACCP and *halal* certification.

The global *halal* food market is estimated at US$635.0 billion and is expected to increase to US$642.0 billion in 2010. Various initiatives are undertaken by the Government to assist the Malaysian *halal* food industry to be a major player in the *halal* market and gain better access into the international market, especially through Malaysia's close links with the OIC countries. Currently, Malaysia has five designated *halal* parks in operation namely Port Klang Free Zone and Selangor *Halal* Hub in Pulau Indah, Selangor; Serkam *Halal* Food Park in Melaka; Pedas *Halal* Park in Negeri Sembilan; and Tanjung Manis *Halal* Hub in Sarawak.

OIL PALM PRODUCTS

The oil palm products sector comprises palm oil, palm kernel oil, oleochemicals (including biodiesel) and products from palm biomass (including energy generation).

Palm oil is one of the 17 major oils and fats produced in the world. The other major oils produced include soyabean, rapeseed and sunflower oils. The world's major consumers of oils and fats are the People's Republic of China, Europe, the USA and India.

Indonesia remains the largest producer of palm oil while Malaysia is the largest exporter. The major consumers of palm oil are the People's Republic of China, India and Europe.

In 2009, production of crude palm oil (CPO) totalled 17.6 million tonnes compared with 17.7 million tonnes in 2008. Production of crude palm kernel oil and palm kernel cake amounted to 2.1 million tonnes and 2.3 million tonnes respectively.

The states of Sabah, Johor and Pahang were the main producers of crude palm oil. The utilisation rates of palm oil mills and palm kernel crushers were 90.5 per cent and 71.5 per cent respectively while the utilisation rates of palm oil refineries registered 88.8 per cent and oleochemicals 87.1 per cent.

Exports of Malaysian oil palm products, constituting palm oil (crude palm oil and processed palm oil), palm kernel oil, palm kernel cake, oleochemicals and finished products, increased to 22.4 million tonnes in 2009 from 21.8 million tonnes in 2008 while the export value decreased to RM49.6 billion from RM65.2 billion. This was due to the decrease in price of CPO which averaged RM2,773 per tonne (local delivered) in 2008 compared with the average price of RM2,243.9 per tonne in 2009. This decline in price is in tandem with decrease in prices of other vegetable oils.

The People's Republic of China remained the largest importer of Malaysian palm oil in 2009 with 4.0 million tonnes, followed by Europe, Pakistan, India and the USA.

Projects Approved in 2009

In 2009, a total of 46 projects with investments of RM1.6 billion were approved for the production of oil palm products. These included projects producing palm oil and palm kernel oil products, oleochemicals, products from palm biomass and energy generation from palm biomass. Foreign investments amounted to RM852.9 million (52.3%) while domestic investments totalled RM779.1 million. The palm oil and palm kernel oil sub-sector had the highest investments with RM1.0 billion or 63.5 per cent, followed by products from palm biomass (RM330.0 million or 20.2%), oleochemicals (RM155 million or 9.5%) and energy generation projects from palm biomass (RM110.2 million or 6.8%).

Palm Oil and Palm Kernel Oil

Refining and crushing are the main activities in this sub-sector. Currently, there are 51 refineries and 43 crushing plants in operation with a total capacity of 19.3 million tonnes and 6.7 million tonnes per year respectively. In 2009, the refineries processed a total of 15.7million tonnes of crude palm oil and 1.4 million tonnes of crude palm kernel oil while crushing plants processed 4.6 million tonnes of palm kernel. The main products produced are refined, bleached and deodorised (RBD) palm olein and stearin. Other products include margarine, vanaspati and specialty fat products.

Projects Approved in 2009

In 2009, a total of nine projects with investments of RM1.0 billion were approved. Of these, three were new projects with investments of RM282.7 million and six were expansion/ diversification projects (RM754.2 million). Foreign investments amounted to RM702.1 million (67.7%) while domestic investments totalled RM334.8 million.

The approved projects included four projects for the manufacture of downstream products such as palm-based fats, cocoa butter equivalent, non-dairy creamer and hydrogenated products. Other projects included one integrated refinery, two palm kernel crusher plants and two projects for the production of fractionated products. Among the projects approved was a proposal by a foreign-owned company with investments of RM380.0 million for an integrated palm oil refinery and downstream products.

Oleochemicals

Oleochemicals are products derived directly from naturally occurring fats and oils from animal and vegetable sources. In Malaysia, oleochemicals are mainly derived from palm-based oils. The industry comprises basic oleochemicals (fatty acids, fatty alcohol, methyl esters, and glycerine) and oleochemical derivatives (fatty esters, fatty amines, soap noodles and metallic soaps) and accounts for 10 per cent of the total quantity of oil palm products exported.

There are more than 50 companies involved in the production of basic oleochemicals and derivatives. The industry comprises local manufacturers as well as several joint-venture companies with multinationals. The major global players operating in Malaysia are Croda, Procter & Gamble, Iffco and Kao, while the major local companies are IOI Group, KL Kepong Group and Kulim Group.

In 2009, Malaysia's total production of oleochemicals amounted to 2.3 million tonnes. The main raw materials used in the production of oleochemicals are crude and processed palm kernel oil, processed palm oil and crude palm oil. Of the 2.3 million tonnes of palm-based oils consumed in the production of oleochemicals, crude and processed palm kernel oil constituted 59.3 per cent (1.3 million tonnes) while the balance were processed palm oil (35.2%) and crude palm oil (5.5%).

Exports of oleochemicals amounted to 2.2 million tonnes in 2009. The USA, Europe, Japan and the People's Republic of China remained the major markets for oleochemicals accounting for 60 per cent of total exports.

Malaysian Palm Oil Board (MPOB) has developed and launched a total of 441 technologies and oil palm related products, of which about 22 per cent have been commercialised and licensed to industries. Some of the technologies which have been commercialised are palm-based printing ink, goat's milk soap, personal care products and palm oil-based polyurethane for automotive components.

Projects Approved in 2009

Three projects were approved with investments of RM155.0 million in 2009. Domestic investments amounted to RM74.4 million (48%) while foreign investments totalled RM80.6 million (52%). All projects were expansion/ diversification projects.

The projects approved included the production of fractionated fatty acids, fatty esters, distilled monoglycerides, esters and refined glycerine.

The consumption of oleochemicals is expected to grow due to increased global demand from industries such as pharmaceuticals, personal care products, detergents, paints, cosmetics, food, plastics and rubber. Malaysian manufacturers need to invest in more specialized derivatives such as methyl ester sulphonate from palm stearin which can replace alkyl benzene sulphonate, the main raw material for the detergent industry. This is to encourage manufacturers to use natural materials and to move forward to new technologies in materials and product applications with emphasis on environmental friendly and green products.

Palm Biomass

The oil palm industry produces about 30 million tonnes of fibrous biomass (dry weight) yearly from plantations and processing activities. This biomass can be used to produce value-added products such as panel products, moulded packaging, composite products and is also a suitable substitute for wood-based and pulp and paper industries.

As at 2009, a total of 110 projects with investments of RM1.2 billion were approved for processing of palm biomass into value-added products while 90 projects with investments of RM2.8 billion were approved with incentives for renewable energy using biomass from oil palm, wood, rice, sugarcane and municipal waste.

Of these, 23 companies are in operation producing panel/composite products, moulded products, mulching mats, activated carbon, palm fibre, organic fertiliser and animal feed while 34 projects are involved in energy generation.

Projects Approved in 2009

In the palm biomass products sub-sector, 28 projects with investments of RM330.0 million were approved in 2009. Domestic investments amounted to RM284.6 million (86.2%) while foreign investments totalled RM45.4 million. The approved projects were for utilisation of palm oil mill effluent (POME) to produce organic fertilisers, oil palm plywood, pallets and fibre.

In addition, six projects with investments of RM110.2 million were approved for the generation of energy from palm biomass. Foreign investments amounted to RM24.9 million while domestic investments totalled RM85.3 million.

This sub-sector has shown encouraging progress, particularly in the utilisation of palm waste such as POME to manufacture organic fertilisers. With over 411 palm oil mills in the country, the need for imported fertiliser can be reduced if these mills use the waste materials to produce organic fertilisers.

CHEMICALS AND CHEMICAL PRODUCTS

Malaysia's chemicals and chemical products industry covers pharmaceuticals and other chemicals such as agricultural chemicals, inorganic chemicals, paint and paint products, soaps, detergents, industrial gases and cosmetics & toilet preparations.

Pharmaceuticals

The pharmaceutical industry in Malaysia continued to register strong growth in

2009 despite the global economic downturn. This was due to the increasing awareness for better healthcare and increased demand for medication following the outbreak of diseases such as the Influenza A (H1N1). The Malaysian pharmaceutical market is expected to grow by 10 per cent to more than RM4.2 billion in 2009 compared with RM3.8 billion in 2008. The major consumer of pharmaceuticals in 2009 was the Government, especially with increased spending in the healthcare sector and the expansion of medical services.

The pharmaceutical industry in Malaysia is divided into two sub-sectors namely the modern pharmaceuticals and the traditional herbal medicines. The industry is dominated mainly by small and medium-sized industries (SMIs) engaged in the production of prescription medicines, over-the-counter (OTC) products, traditional medicines and health/food supplements. As at 31 December 2009, there were 249 pharmaceutical premises licensed by the Drug Control Authority, Ministry of Health, comprising 74 modern medicine premises and 175 traditional medicine premises.

In the modern pharmaceuticals sub-sector, Malaysian pharmaceutical manufacturers have the capability to produce medicines in all dosage forms e.g. tablets (coated & non-coated), capsules (hard and soft gelatin), liquids, creams, ointments, sterile eye drops, small volume injectables (ampoules and vials), large volume infusions, as well as dry powders for reconstitution and active pharmaceutical ingredients (APIs).

Major Malaysian pharmaceutical companies, including herbal medicine manufacturers in operation, include Pharmaniaga, CCM, Kotra Pharma, Xepa-Soul, Hovid, and Nova Laboratories. Among the major foreign companies producing pharmaceutical products in Malaysia are Y.S.P. Industries (Taiwan), Sterling Drug (UK) and Ranbaxy (India). These companies focus mainly on the production of generic drugs, particularly antibiotics, painkillers, injectables and herbal medicines/supplements. With the global trend towards the expiry of patented drugs and the rising expenditure for healthcare, the market for generic products is expected to grow further.

Increasingly health-conscious Malaysians have contributed to the growth of OTC food supplements as well as herbal and traditional medicines. The herbal industry comprises a wide range of products such as herbal remedies, flavours and fragrances, pharmaceuticals, nutraceuticals and cosmaceuticals. The herbal industry has been identified as a new and emerging industry under the Third Agriculture Policy. Malaysia aspires to be a major producer in the international herbal industry by 2010. Malaysia has over 12,000 plant species, of which 2,000 plants have the potential to be commercially developed. Among the popular local herbs are *Tongkat Ali, Kacip Fatimah, pegaga, peria* (bitter gourd) and *Misai Kucing*.

Exports of pharmaceuticals were valued at RM671.2 million during the period January-November 2009. Exports were mainly to ASEAN countries (Singapore, Vietnam, Brunei, and Thailand), Germany, Hong Kong and Taiwan. With the acceptance of Malaysia into the Pharmaceutical Inspection Co-operation (PIC) Scheme, Malaysian companies are now exporting pharmaceutical products to PIC countries namely Europe, Canada and Australia.

In 2009, Malaysian pharmaceutical manufacturers continued to expand production of generic drugs in anticipation of its increasing demand, especially from the Government. In addition, advances in biotechnology are expected to drive the future direction of research and development in drugs. Among the notable developments in 2009 were:

- Ranbaxy Malaysia announced the launch of its first generic Losartan K tablets in Malaysia. The market size of Losartan K tablets in Malaysia is estimated at RM22.0 million. The products will also be exported to ASEAN countries and the Middle East;

- A new strategic partnership between CCM Duopharma Biotech and Inno Bio Ventures Sdn. Bhd. was established to develop and commercialise the first locally produced biosimilar product, i.e erythropoietin (EPO). Annual import of this product is currently valued at RM45.0 million. The product is expected to be commercialised by the end of 2011. The Inno Bio Ventures facility in Nilai, with a capacity of 1,000 litres bio-reactor can cater for the ASEAN market;

- Malladi Drugs & Pharmaceutical Ltd. from India announced plans to invest up to US$300.0 million over the next three to five years to establish a global hub in Malaysia, focusing on formulation and production of APIs; and

- A memorandum of Understanding (MOU) was signed between Universiti Sains Malaysia (USM) and Biotropics Malaysia Berhad to set up a herbal standardisation centre, to utilise a software developed by USM for identifying molecules with potential bioactivity and to commercialise specific extracts and compounds.

Projects Approved in 2009

In 2009, four projects were approved with investments of RM16.0 million. Domestic investments valued at RM14.8 million continued to dominate this sector while foreign investments totalled RM1.2 million. Three of the projects approved were new projects for the production of food supplements, multi-purpose solution/ saline solution for contact lens and pharmaceutical products in the form of tablets and capsules.

There is a growing trend among international pharmaceutical companies to outsource their research and manufacturing activities to emerging countries to increase their competitiveness. Malaysia is expected to benefit from this trend because of its reliable quality, excellent infrastructure and facilities as well as its cost competitiveness compared with other developing nations such as the People's Republic of China, Indonesia and Vietnam.

Chemical Products

The chemical products industry provides intermediate products and inputs to end user industries such as agriculture, electronics, automotive, construction-related industry, waste treatment, household products and personal care products.

This industry comprises a wide range of products which include agricultural chemicals (fertilisers and pesticides), inorganic chemicals, soap and cleaning preparations, cosmetics and toilet preparations, paints and paint products and industrial gases. There are currently more than 180 companies in operation in this sector.

Exports of chemicals and chemical products for the period January-November 2009 amounted to RM10.5 billion The major products exported were soap, cleansing and polishing preparations (RM1.8 billion); fertilisers (RM1.5 billion); basic chemical products for industrial applications (RM1.5 billion) and paints and colouring chemicals (RM1.3 billion).

Project Approved in 2009

In 2009, a total of 66 projects with investments of RM7.7 billion were approved. Of these, 35 were new projects (RM6.9 billion) while 31 projects were expansion/diversification projects (RM777.4 million). Domestic investments totalled RM1.2 billion (15.2%) while foreign investments amounted to RM6.5 billion (84.8%). The projects approved are expected to generate employment for 3,570 persons.

Of the 66 projects approved:

- 16 projects with investments of RM5.8 billion were for the manufacture of other chemical products such as polysilicon, silane, methyl chloride, cleaning and treatment chemicals, zinc stearate, glyphosate, planting chemicals and drilling fluid chemicals;

- Four projects (RM535.1 million) were for the manufacture of biodiesel (isoparaffin) and biodiesel based on jatropha;

- Three projects (RM349.5 million) were for the manufacture of basic industrial chemical products such as calcium nitrate, chlorine, sodium hydroxide, sodium hypochlorite, hydrochloric acid and calcium carbonate;

- 18 projects (RM479.1 million) were for the manufacture of agriculture chemicals and fertilisers;

- 16 projects (RM368.6 million) were for the manufacture of paints, coatings, lacquers, solvents, thinners, toners, varnishes, sealants, adhesives, ink and coating chemicals;

- Six projects (RM97.6 million) were for the production of industrial gases such as carbon dioxide, argon, nitrogen, hydrogen and acetylene; and

- Three projects (RM49.7 million) were for the manufacture of personal care products and cleaning and toilet preparations.

Among the significant projects approved were:

- A new project by a foreign-owned world leader in semiconductor materials, with investments of RM5.5 billion for the production of polycrystalline silicon, fumed silica and trichlorosilane in Sarawak. Polycrystalline silicon is a fundamental material for the semiconductor industry and is used in the production of mono-crystalline as well as polycrystalline silicon wafers for the fabrication of semiconductor chips and solar cells. Construction of the new factory is scheduled to commence in 2011 with operations expected in the second quarter of 2013. This is the second manufacturing base for the company and the selection of the site in Sarawak is based on the availability of electricity, industrial water, quality workers and other resources. The company will employ about 300 workers on commencement of operations, of which about 280 will be Malaysians. The choice of Malaysia as a location for its project is based on potential supply and demand for polycrystalline silicone. The company will actively strengthen related operations and focus on getting new customers in addition to retaining existing ones; and

- Nine new projects by a Malaysian company, with investments of RM46.6 million for the production of organic fertilisers in Perak (3 projects), Negeri Sembilan (3 projects), Johor (2 projects) and Selangor (1 project).

The products approved in 2009 are in line with Malaysia's target to attract investments in high value-added products such as polycrystalline silicon for solar cell industry. The presence of three world leading solar cell companies, namely First Solar in Kulim, Kedah, Q-Cells in Selangor and Sunpower in Melaka, has created opportunities and demand for products such as new materials, chemicals and polymers for the solar cell industry. This is in line with the Government's policy of creating a complete value chain for green technology industries to include material suppliers, machinery and equipment manufacturers, product fabricators, installers and designers as well as service providers.

BIOTECHNOLOGY INDUSTRY

Biotechnology has been identified as a new engine of growth for Malaysia. Biotechnology will be able to improve the quality of life, generate new wealth and income for both rural and urban populations and improve the socio-economic status of the population as a whole. Biotechnology also helps to enhance the level of knowledge and innovation in the country, the two crucial elements in Malaysia's quest towards attaining the status of a high income country.

The Malaysian Biotechnology Corporation (BiotechCorp) has since its inception in 2005, nurtured about 151 biotechnology companies in the areas of agriculture, healthcare, industrial and bioinformatics. Currently, the biotechnology industry contributes about one per cent of the GDP. It is estimated that by 2020 the industry will contribute approximately five per cent of the GDP with total investments of about RM8.0 billion and create 280,000 new jobs.

Projects Approved in 2009

In 2009, a total of 61 projects with investments of RM615.9 million were approved. Domestic investments in these projects amounted to RM168.3 million (27%) while foreign investments totalled RM447.6 million (73%). Foreign investments were mainly from Taiwan, the USA, Europe, Japan, India and the Republic of Korea.

Among the major types of products/ activities approved were:

- Manufacture of tacrolimus and rapamycin (immunosuppressive drugs);

- Manufacture of probiotics for agriculture, healthcare and animals;

- Contract manufacturing organisation specialising in biomanufacturing of mammalian cell culture and microbial based biopharmaceuticals;

- Research and development (R&D), extraction, production and commercialisation of identified biological active compounds from herbs and plants for the formulation of herbal-based health supplement products;

- R&D, production and commercialisation of bio-degradable packaging products derived from agricultural waste using enzymatic processes;

- R&D, manufacturing and commercialisation of products and services for the application in the field of gene expression, genotyping, stem cell research, pharmaceutical drug discovery, biomarker discovery and medical diagnostics; and

- R&D, production and commercialisation of biomedical devices for orthopaedic care.

A significant project approved was a majority foreign–owned project to manufacture active pharmaceutical ingredients (APIs), namely tacrolimus and rapamycin (immunosuppressive drugs). This project will be the first of its kind to be established in Malaysia, using biotechnology process, i.e. fermentation process to produce APIs. The company plans to export 100 per cent of its products globally.

In 2009, the biotechnology industry in Malaysia continued to grow with more collaborations between the private and public sectors. Among the new initiatives undertaken were:

- The Malaysian Life Sciences Capital Fund (MLSCF) invested about RM40 million in Sentinext Therapeutics Sdn. Bhd. to commercialise its vaccines within the next five years;

- Inno Biologics Sdn Bhd, a company incorporated under Ministry of Finance, signed a strategic licensing agreement with CEVEC Pharmaceuticals GmbH, to utilise a newly developed expression system based on human amniocytes, to develop cell line and manufacture biopharmaceutical products;

- Sarawak Biodiversity Council (SBC), Novartis Pharma AG and BiotechCorp signed an MOU to enhance Malaysia's scientific capability in exploring bioactive compounds from natural sources in Sarawak; and

- An international team of researchers led by the Centre for Chemical Biology (CCB) under Universiti Sains Malaysia (USM) decoded the genome of rubber tree, Hevea Brasiliensis. This effort will enable Malaysia to remain a leader in rubber research and be at the forefront of the global rubber industry.

The Malaysian Government will continue to undertake concerted efforts to address the challenges facing the industry. The Government will work together with financial and funding groups to assess and evaluate biotechnology value propositions within the context of intellectual property, intellectual asset management, patent revenue and patent royalty, as well as continue to implement far-reaching initiatives aimed at strengthening infrastructure for the biotechnology industry.

PETROLEUM PRODUCTS INCLUDING PETROCHEMICALS

The petroleum and petrochemical industry comprises natural gas, petroleum products and petrochemicals. The industry is characterised by high capital investments and long gestation periods. To date, the industry is one of the leading manufacturing sub-sectors with total investments of RM58.0 billion. PETRONAS is the leading investor in the sector with investments of RM37.8 billion in 2009, with the takeover of Dow Chemical's share in the Optimal Group of companies in Kertih, Terengganu.

For the period January-November 2009, Malaysia's exports of petroleum products, natural gas and petrochemical products amounted to RM68.7 billion while imports totalled RM29.7 billion.

The petroleum products sub-sector includes refinery products such as liquefied petroleum gas, naphtha, gasoline, kerosene, fuel oils, gas oils, jet oils, diesel, bitumen and lubricating oils. There are currently six refineries and a gas-to-liquid plant in operation. PETRONAS, Shell, Esso and Conoco are the major investors in this sub-sector.

Currently, there are more than 20 companies in operation producing various types of lubricating oils. The domestic demand for lubricants is estimated at 300,000 metric tonnes per annum (mtpa). PETRONAS, Shell and BP supply 70 per cent of domestic demand. Other companies involved in this sub-sector are mainly SMIs. Total investments as at 2009 in this sub-sector amounted to RM1.1 billion, of which 63.0 per cent were domestic investments.

Natural gas and naphtha are the two locally available basic raw materials for the petrochemical industry. Currently, a wide range of petrochemicals are produced in Malaysia, including olefins, polyolefins, aromatics, ethylene oxide, glycols, oxo-alcohols, ethoxylates, acrylic acids, phthalic anhydride, acetic acid, styrene monomer, polystyrene, ethylbenzene, vinyl chloride monomer and polyvinyl chloride by world-scale producers such as Polyethylene Malaysia Sdn. Bhd., Titan Petchem Sdn. Bhd., Petlin Sdn. Bhd., Vinyl Chloride Malaysia Sdn. Bhd., Petrochemicals Malaysia Sdn. Bhd., Idemitsu SM Sdn. Bhd., Industrial Resins Malaysia Sdn. Bhd. and BASF Petronas Chemicals Sdn. Bhd. The establishment of these plants in Malaysia has provided a steady supply of resins for the plastic industry.

There are 42 companies in operation producing petrochemicals with a combined capacity of 12.9 million mtpa. Investments in these companies totalled RM32.3 billion as at 2009. The main domestic investor in the petrochemical industry is PETRONAS. The USA is the largest source of foreign investments, contributing 33.0 per cent of the total foreign investments in the petrochemical industry, followed by Germany (22.8%) and Japan (14.0%).

Three major petrochemical zones have been established in Kertih, Terengganu; Gebeng, Pahang; and Pasir Gudang-Tanjung Langsat, Johor with 29 petrochemical plants. Each zone is an integrated complex with crackers, syngas and aromatics facilities to produce basic feedstocks for downstream products.

Other petrochemical plants in Malaysia include the ammonia and urea plants in Bintulu, Sarawak and Gurun, Kedah; acrylonitrile butadiene styrene (ABS) plant in Penang; methanol plant in Labuan; and nitrile-butadiene rubber (NBR) plants in Kluang and Pasir Gudang, Johor.

Projects Approved in 2009

In 2009, eight projects were approved with investments of RM1.2 billion. Of these, four were new projects (RM1.16 billion) while four projects were expansion/diversification projects (RM13.3 million). Domestic investments amounted to RM719.1 million or 61.0 per cent while foreign investments totalled RM460.1 million or 39.0 per cent. The approved projects are expected to generate employment opportunities for 174 persons, including chemical engineering, process engineering and skilled workers.

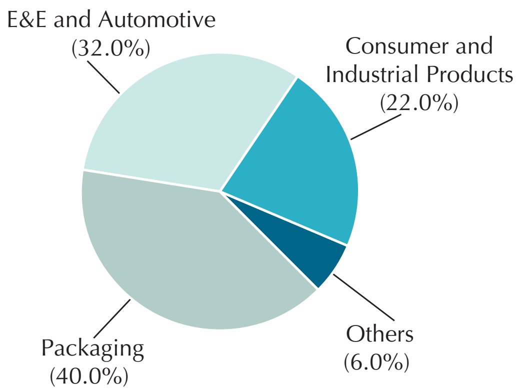
A major project approved was a new Malaysian majority joint-venture project involving investments of RM1.1 billion to produce petrochemical feedstocks and fuels. The products approved in 2009 reflect Malaysia's efforts in targeting investments in projects to provide additional petrochemical feedstocks as outlined in the IMP3.

Currently, the existing production of olefin feedstocks are fully committed to existing petrochemical projects. As such, to continue to develop the petrochemical industry in Malaysia, it is crucial that new sources of feedstock are made available. There is a need to establish new crackers in order to provide additional feedstocks to encourage the expansion of capacities of petrochemical plants. These additional feedstocks will provide a base for broadening the range of petrochemical products produced in the country.

PLASTIC PRODUCTS

The plastic products industry comprises four sub-sectors, namely plastic packaging; E&E and automotive components; consumer and industrial products; and others. Plastic packaging, both flexible and rigid (including bags, films, bottles and containers), remains the largest sub-sector in the plastic products industry.

Graph 24
Sub-sectors of Plastic Products, 2009

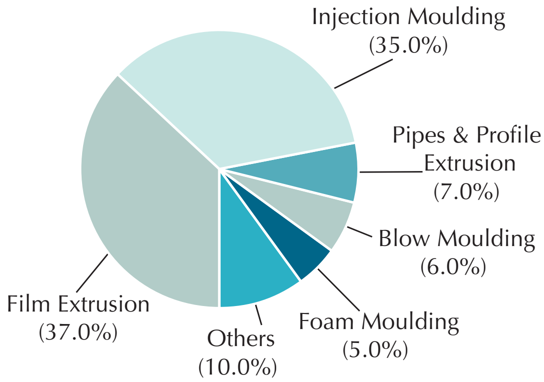


Source: Malaysian Plastics Manufacturers Association

The main production processes in the plastic products industry are film extrusion, injection moulding, pipes and profiles extrusion, blow moulding and foam moulding.

Presently, there are more than 1,450 plastic product manufacturers in the country, employing about 85,000 workers. Of these, about 1,160 (80%) are SMIs.

Graph 25
Profile of the Plastic Products Industry by Manufacturing Process, 2009



Source: Malaysian Plastics Manufacturers Association

Exports of plastic products amounted to RM7.4 billion for the period January–November 2009. Major export destinations were Europe, Singapore, Japan, Australia, Thailand, Indonesia and the People's Republic of China. The main products exported were plastic bags, bottles and containers (40%), plates, films, sheets, foils and strips (30%) and other articles of plastic (30%).

The growth of domestic downstream plastic processing activities can be attributed to the existence of a developed petrochemical sector in Malaysia. The sector provides a steady supply of materials for the plastic industry with world-scale resin production facilities producing polyethylene (PE), polypropylene (PP), polyvinylchloride (PVC), polystyrene (PS), acrylonitrile butadiene styrene (ABS), polyacetal (PA), polyester copolymers, styrene acrylonitrile

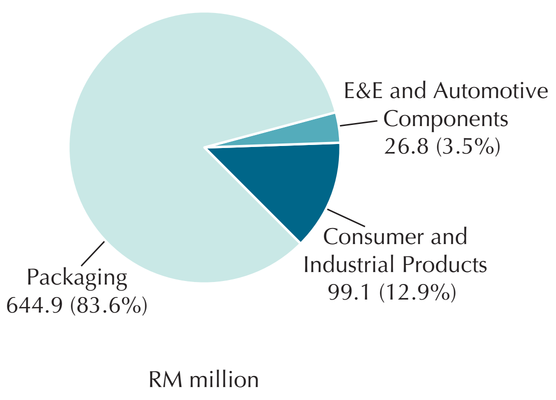
(SAN) and polybutylene terephthalate (PBT).

Other engineering plastics, such as polyamides (nylons) and polycarbonates (PC), continue to be imported. These engineering plastics are mainly used for the production of parts and components for the E&E, automotive, medical equipment and construction industries. In flexible packaging, more bio-, photo- or chemical- degradable plastics are being introduced with increasing awareness on environment protection.

Projects Approved in 2009

In 2009, a total of 42 projects with investments of RM770.8 million were approved. Of these, 22 were new projects with investments of RM624.0 million and 20 were expansion/diversification projects with investments of RM146.8 million.

Graph 26
Investments in Projects Approved in the Plastic Products Industry by Sub-sector, 2009



Foreign investments amounted to RM549.8 million (71%) while domestic investments totalled RM221.0 million (29%). The projects approved will provide potential employment for 2,190 persons. Of the 42 projects approved:

- The packaging sub-sector remained the leading sub-sector in 2009 with 15 projects and investments of RM644.9 million. Of these, seven were new projects (RM541.6 million) and eight were expansion/diversification projects (RM103.3 million). The majority of these projects were for the manufacture of flexible films, sheets and bags, and blow moulding bottles and containers;

- Twenty one (21) projects were approved in the consumer and industrial sub-sector (RM99.1 million). Of these, nine were new projects (RM55.6 million) while 12 were expansion/diversification projects (RM43.5 million); and

- Six projects were approved in the E&E and automotive component sub-sector with investments of RM26.8 million. The major projects approved involved Malaysian-owned companies with investments of RM14.4 million.

Among the major projects approved were:

- A new foreign-owned project with investments of RM290.0 million to manufacture biaxially-oriented polyester film (metallised & non-metallised). The product is used as packaging materials in food, medical and E&E industries;

- A new majority foreign-owned project with investments of RM133.0 million for the manufacture of film and courier bags; and

- A new foreign-owned project with investments of RM53.0 million to manufacture plastic bags.

The plastic products industry experienced a contraction in 2008 and early 2009, due to the effects of the global economic downturn. However, the industry returned to positive growth in the third quarter of 2009. A stronger recovery in the plastic products industry is expected in 2010. However, the strength of recovery is still dependent on global economic performance, as the demand for plastic products is dependent on other industries, especially the E&E and automotive industries.

Growth potential is expected primarily in the production of plastic bags and other packaging materials which are mainly exported to major world markets such as the USA, Europe, Australia and Japan. Malaysia is able to produce high quality and environmental friendly plastic packaging products at competitive prices. With new emerging markets, especially the People's Republic of China, the demand for regional suppliers is expected to grow.

Trade liberalisation under the FTAs and AFTA is expected to open up opportunities for Malaysian plastic manufacturers. However, due to the competitive nature of the industry, the future growth of the Malaysian plastic products industry will depend on the ability of domestic manufacturers to sustain their competitiveness through improvements in technologies and skills to maintain current markets and diversify into new markets. In this regard, it is important that the Malaysian plastic products industry continuously keep abreast with the developments in international environmental regulations and directives such as Restriction on Hazardous Substances (RoHS), Waste Electrical and Electronics Equipment (WEEE), Energy Using Products (EuP), End of Life Vehicle (ELV) and Registration, Evaluation and Authorisation of Chemical Substances (REACH).

RUBBER PRODUCTS

The rubber products industry can be categorised into latex products, tyres and tyre-related products and industrial and general rubber products. The industry is dominated mainly by SMIs.

Domestic consumption of natural rubber in 2009 was estimated at 450,000 tonnes while synthetic rubber consumption was estimated to be around 112,000 tonnes. Consumption by the latex products sector constituted 79.0 per cent of the total domestic natural rubber consumption in Malaysia.

Total revenue from exports of rubber products amounted to RM10.2 billion in the first eleven months of 2009, contributing 1.7 per cent of Malaysia's total export earnings. During the same period, imports of rubber products totalled RM2.8 billion, comprising industrial and general rubber products (63.3%), tyre & tyre-related products (28.7%) and latex products (8.0%).

The latex products sub-sector is the largest sub-sector in the rubber products industry in terms of export earnings with 165 companies in operation. For the period January-November 2009, export earnings of this sub-sector amounted to RM6.6 billion or 64.7 per cent of export revenue of the industry. Malaysia is a major producer and exporter of latex products, consisting mainly of catheters, latex thread and medical gloves.

In the industrial and general rubber products sub-sector, there are currently 184 companies in operation. This sub-sector produces a wide range of rubber products such as anti-vibration mountings, beltings, hoses, tubings, seals and sheeting for the automotive, E&E, machinery & equipment and construction industries. For the period January-November 2009, export earnings of this sub-sector amounted to RM3.2 billion.

There are currently 120 companies in the tyres and tyre-related products sub-sector with ten tyre producers, while the remaining companies produce retreaded tyres, inner tubes, and other accessories. For the period January-November 2009, this sub-sector contributed RM431.0 million to the export earnings of the country.

Projects Approved in 2009

A total of 16 projects with investments of RM131.1 million were approved in the rubber products industry (excluding medical devices). Of these, seven were new projects with investments of RM35.4 million, while nine were expansion/ diversification projects with investments of RM95.7 million.

The approved projects involved domestic investments of RM33.8 million (25.8%) and foreign investments of RM97.3 million (74.2%). Four of the projects approved were wholly Malaysian-owned (RM12.4 million), four were joint-ventures with Malaysian majority ownership (RM19.5 million), six were wholly foreign-owned (RM86.1 million) and two were joint-ventures with foreign majority ownership (RM13.1 million).

Of the 16 projects approved:

- Five projects with investments of RM68.3 million were in the industrial and general rubber products sub-sector. These projects were for the manufacture of products such as green rubber compounds, seals, vibration insulators, weather strips, tubings & profiles and reinforced radiator hoses for automotive industries. Domestic investments amounted to RM2.7 million (4.0%), while foreign investments totalled RM65.6 million (96.0%). There were two new projects with investments of RM15.9 million (23.3%) and three expansion/diversification projects with investments of RM52.4 million (76.7%);

- Three projects with investments of RM32.4 million were in the latex products sub-sector. All of these projects were expansion/diversification projects. Domestic investments amounted to RM5.6 million (17.3%), while foreign investments totalled RM26.8 million (82.7%);

- Six projects with total investments of RM28.7 million were in the recycling of used tyres into rubber crumbs, carbon black, steel wire and fuel oil. Of these, five were new projects while one was for expansion/diversification. Domestic investments amounted to RM24.8 million (86.4%), while foreign investments totalled RM3.9 million (13.6%); and

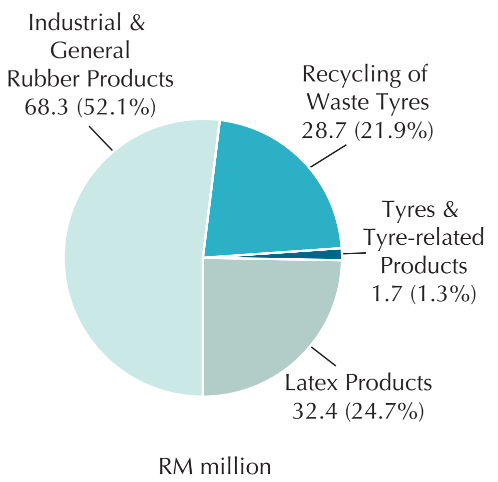
- Two projects with investments of RM1.7 million for tyre and tyre-related products, both of which were expansion/diversification projects. Domestic investments amounted to RM0.8 million (47.1%) while foreign investments totalled RM0.9 million (52.9%).

Major projects approved included:

- An expansion/diversification project by a wholly foreign-owned company to produce rubber compound with investments of RM44.8 million; and

- A new project by a wholly foreign-owned company to undertake production of delinked and green rubber compounds with investments amounting to RM13.2 million.

Graph 27
Investments in Projects Approved in the Rubber Products Industry by Sub-sector, 2009



The Malaysian rubber industry is facing competition from regional producers such as Thailand, Vietnam, the People's Republic of China and India. Besides lower costs of production, these countries also have access to readily available raw materials.

As a measure to sustain competitiveness, the industry is moving towards high value-added and high technology rubber products for engineering, construction and marine applications. Continuous efforts have been made in R&D both by Government agencies and the private sector to improve efficiency, quality and productivity.

Additional challenges are expected in the area of international certification and compliance. Implementation of the Registration, Evaluation, and Authorisation and Restriction of Chemical Substances (REACH) regulations by the EU will be a challenge to Malaysian rubber product manufacturers and exporters in their efforts to penetrate the global market, particularly the EU market.

However, there are vast opportunities for these manufacturers to gain market access and increase exports with the implementation of ASEAN-China Free Trade Agreement, Malaysia-Pakistan Closer Economic Partnership Agreement, ASEAN-Korea Free Trade Agreement and Japan-Malaysia Economic Partnership Agreement.

WOOD AND WOOD PRODUCTS AND FURNITURE

The wood-based industry comprises upstream and downstream activities. Upstream activities involve the systematic and sustainable harvesting of natural forests and forest plantations. Downstream activities cover primary, secondary and tertiary operations where primary wood processing activities utilise logs as their raw material to produce sawntimber and veneer. Secondary and tertiary wood processing activities turn primary products and other solid wastes such as small branches, off-cuts, edgings or slabs, chippings and sawdust into value-added products.

There are more than 3,900 mills in operation, providing employment to about 300,000 people or 3.5 per cent of the total labour force in Malaysia. The industry is predominantly owned by Malaysians and about 80 - 90 per cent of the companies are small and medium scale manufacturers. Over the years, it has developed from a primary processing industry to a more advanced and technology-driven industry producing a significant number of downstream value-added products.

More than 60 per cent of Malaysian timber mills are in the downstream activities such as mouldings, builders' carpentry and joinery (BCJ), fibreboard, as well as furniture and furniture components. They are mainly located in Peninsular Malaysia. The production of sawntimber, veneer, plywood and other veneered panel products are concentrated in Sabah and Sarawak.

According to the National Timber Industry Policy (NATIP), the re-structuring of the industry into the manufacture of high value-added products and services is the main target of the Government. The industry is expected to achieve annual export earnings of RM53.0 billion by 2020, where 60 per cent of the exports will be derived from activities related to wooden and composite furniture products, panel products and engineered wood products. The remaining 40 per cent will be from primary processed wood products such as logs, sawntimber and plywood.

Recognising that readily available raw material supply is the key to the succesful transformation of the industry, the Government has embarked on several projects to source raw materials and explore alternative sources of raw materials. One of the programmes undertaken is the Forest Plantation Development Programme. To date, the Government has approved more than RM200 million in loans (of the RM1.45 billion allocation) to 14 companies to establish forest plantations.

Alternative raw materials such as fibres from palm biomass (oil palm trunks, empty fruit bunches, kernels), kenaf, bamboo and other agricultural materials (cocoa, coconut, sago and sugar cane) offer vast potential for development. In line with increasing global emphasis on protection and conservation of the environment, the Government encourages the establishment of projects for these alternative raw materials with various tax incentives.

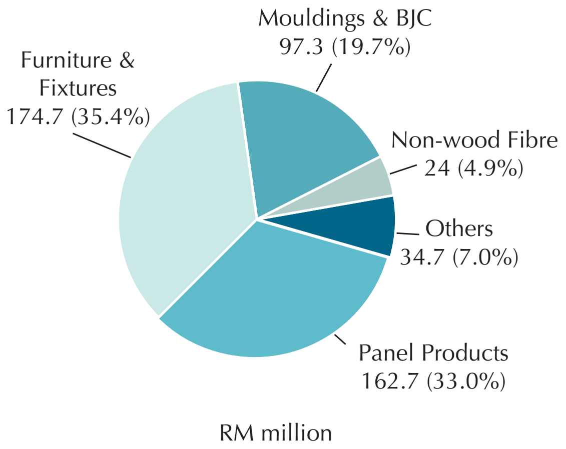
Malaysia is one of the world's largest exporters of timber and timber products. For the period January – November 2009, exports of wood-based products amounted to RM18.1 billion. Wooden furniture was the major contributor to the exports of wood-based products accounting for RM5.7 billion (31.5%), followed by sawntimber and logs RM4.6 billion (25.4%), plywood RM4.5 billion (25%), mouldings; and builders' carpentry and joinery RM1.8 billion (10%).

Malaysia is the tenth largest exporter of furniture in the world and the third largest in Asia after the People's Republic of China and Vietnam. More than 80 per cent of Malaysian furniture is made of rubberwood while the rest are made from a mixture of other wood species and wood composites such as medium density fibreboard (MDF) and particleboard. Most Malaysian-made furniture are still OEM. The Government continues to encourage furniture manufacturers to move up the value chain from OEM to original design manufacture (ODM) and original brand manufacture (OBM) of furniture products.

Projects Approved in 2009

In 2009, a total of 62 projects were approved with investments of RM493.4 million. Of these, 48 were new projects with investments of RM317.9 million (64.4%) while 14 were expansion/diversification projects (RM175.5 million or 35.6%). Domestic investments amounted to RM354.4 million or 72.0 per cent while foreign investments totalled RM139.0 million.

Graph 28
Approved Investments In the Wood-based Industry by Sub-sector, 2009



The highest investments were recorded in the furniture sub-sector with RM174.7 million (35.4%). A total of 31 projects were approved in this sub-sector, of which 26 were new projects (RM122.6 million or 70.2%) and five were expansion/diversification projects (RM52.1 million or 29.8%). Domestic investments amounted to RM132.5 million (75.8%) while foreign investments totalled RM42.1 million (24.2%).

In the panel products sub-sector, eight projects were approved with investments of RM162.7 million (33.0%). Of these, four were new projects (RM51.9 million) and four were expansion/diversification projects (RM110.8 million). Domestic investments amounted to RM131.9 million (81.1%) while foreign investments totalled RM30.8 million (18.9%). Among the projects approved were for the production of plain particleboard, plywood from palm biomass and fancy MDF.

A total of nine new projects were approved in the mouldings and builders' carpentry and joinery (BJC) sub-sector with investments of RM97.3 million or 19.7 per cent of the investments in the wood-based industry. All the investments were by domestic investors. Most of the projects approved were for the manufacture of architectural frames, doors and windows.

In the non-wood fibre products sub-sector, six projects were approved with investments of RM24.0 million. These projects were for the manufacture of veneer, briquettes, fibre and pellets from oil palm biomass.

Among the major projects approved were:

- A new wholly Malaysian-owned project with investments of RM21.0 million, to produce plain particleboard. About 30 per cent of production will be exported to the Middle East and India; and

- An expansion/diversification project by a wholly foreign-owned company to manufacture wooden and metal furniture with investments of RM26.0 million. The company will export more than 80 per cent of its products to the Middle East and other ASEAN countries.

Malaysia is the first tropical timber producing country to offer certified timber products under its own Malaysian Timber Certification Scheme (MTCS). In enhancing market access for wood-based products, Malaysia continues to be actively involved in several international initiatives and negotiations such as the High-Level Event on Reducing Emissions from Deforestation and Forest Degradation (REDD), International Conference on Green Industry in Asia, World Forestry Congress and (EU) Action Plan for Forest Law Enforcement Governance and Trade (FLEGT). Malaysia has also commenced negotiations to conclude voluntary partnership agreement (VPA) with European Commission (EC) which aims to combat illegal logging and reduce illegally harvested timber.

The implementation of NATIP in 2009 complements IMP3 strategies and targets where it is envisaged to provide new directions for the Malaysian wood-based industry to remain sustainable and competitive in the challenging global environment. NATIP outlines programmes, plans and activities up to the year 2020 to encourage and continuously support the industry in areas of innovation and technology; marketing and promotion; human capital; funding and incentives; as well as develop bumiputera entrepreneurs at all levels to improve their capability in management, production skills and marketing strategy.

NON-METALLIC MINERAL PRODUCTS

The non-metallic mineral products industry includes cement and concrete products, fibre cement and gypsum products, ceramic and clay products, glass, insulation materials, dimension stones and other non-metallic minerals.

The types of cement produced in Malaysia include ordinary Portland cement, hydraulic cement, slag cement, fly ash cement, other blended cement and white cement. Current approved capacity is sufficient to meet the local demand. Expansion and diversification by existing manufacturers as well as establishment of new integrated cement manufacturing projects are allowed.

Fibre cement boards have evolved into multifaceted applications that include ceiling, wall cladding, roof decking, roofing, interior partitioning, elevated floors and exterior windows. Local manufacturers have expanded efforts to develop new and technologically advanced products to cater to the needs of the construction sector. Other construction materials such as gypsum products have also undergone various improvements in product features and quality.

The ceramic industry sub-sector covers the production of traditional ceramics and advanced ceramics. The traditional ceramics industry involves the production of wall and floor tiles, roofing tiles, sanitary ware, tableware, decorative ware, pottery, high refractory products, bricks and formers. The fine/advanced ceramics industry is a new industry in the country and it has wide technologically advanced applications in electronics, aerospace, medical and other industries.

The glass industry covers the production of float glass, safety glass, glass containers, glassware, architectural glass, glass fibre and hi-tech precision glass products such as glass funnels and panels for cathode ray tubes, hard disc glass substrates, plasma display and solar glass. Solar glass is a combination of solar and glass technologies and often used for top surface of thermal collectors and photovoltaic modules.

Insulation materials of non-metallic minerals include mineral wool made from either glass or volcanic rocks. This is considered a green construction material due to its energy saving function and is expected to gain importance as a construction material.

Dimension stones are natural stones or rocks that have been fabricated to various colours, sizes and shapes. The principal rock types are granite, marble, limestone, travertine, quartz-based stone, slate and other products formed from natural stone. Major applications of dimension stones are countertops, bathroom vanities, tiles, monuments, tombstones and building components such as veneer (exterior), roofing slate, curbing and flagstone.

Other non-metallic minerals include quicklime and calcium carbonate. Quicklime is a chemical compound widely used in mortar and plaster as well as production of glass, metal and paper. Calcium carbonate is a chemical compound used in the construction industry as a building material or as a component for cement. It is also used in drilling fluids for the oil industry, as filler material for latex gloves and plastics and as glazing applications.

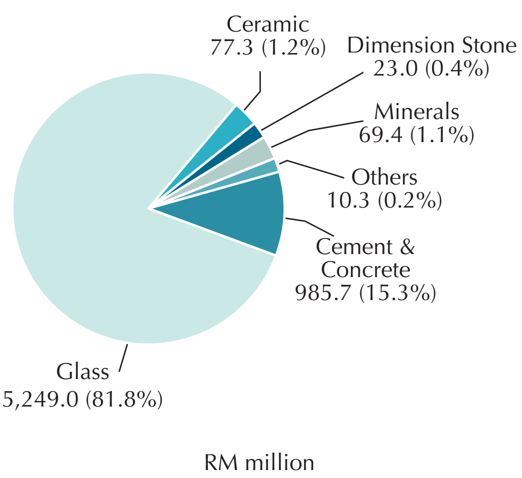
Exports of non-metallic mineral products for the period January-November 2009 totalled RM4.8 billion while imports amounted to RM3.6 billion thus making Malaysia a net exporter of non-metallic mineral products. Major exports included glass and glassware amounting to RM2.3 billion; lime, cement and fabricated construction materials totalling RM1.1 billion; and mineral manufactures of RM769.8 million. Major imports were glass and glassware (RM1.8 billion), mineral manufactures (RM487.5 million) and lime, cement and fabricated construction materials (RM471.5 million).

To date, a total of 318 companies are in production in the non-metallic mineral products industry. Investments in this sector amounted to RM28.4 billion with foreign investments of RM15.3 billion (53.9%) and domestic investments of RM13.1 billion (46.1%).

Projects Approved In 2009

In 2009, a total of 27 projects were approved in the non-metallic mineral products industry with investments of RM6.4 billion. Of these, 19 were new projects with investments of RM5.6 billion (87.5%) while eight were expansion/ diversification projects with investments of RM807.0 million (12.5%). Domestic investments totalled RM1.1 billion (17.1%), while foreign investments were RM5.3 billion (82.9%).

Graph 29
Investments in Projects Approved in the Non-Metallic Mineral Products Industry by Sub-sector, 2009



The projects approved were for the manufacture of cement and concrete products (10 projects), glass (6 projects), non-metallic minerals (5 projects), ceramics and clay products (4 projects) and one project each for dimension stones and others.

Significant projects approved included:

- A new wholly foreign-owned project with investments of RM5.2 billion to manufacture solar glass (coated, tempered, etc) and solar mirror. This high technology project is a first of its kind in Malaysia and will form a significant part of the solar cluster in the country;

- An expansion/diversification project by a wholly Malaysian- owned company with investments of RM735.5 million for the expansion of production capacity of clinker and ordinary Portland cement; and

- A new majority Malaysian-owned project with investments of RM35.8 million to manufacture ceramic roofing tiles. This is a new product in this sector and is expected to modernise the local construction industry.

Promotional efforts within the non-metallic mineral products sector will be targeted towards three main areas namely, fine/advanced ceramics, green building products and specialty glass such as solar glass and coated float glass.

The fine/advanced ceramics industry has a strong potential for development in Malaysia. Currently, fine/advanced ceramics which uses alumina and zirconia as the basic raw materials are consumed primarily in the production of semiconductors and other electronic parts and components such as capacitors, resistors, indicators and filters. There is also potential for growth in the mechanical and engineering industries and bio-ceramics products for biomedical industries.

Green building products are basically focused on increasing the efficiency of resource use such as energy, water and materials and hence reducing the buildings' impact on human and environment. There is great potential for the development of these products in the country due to the availability of vast renewable natural resources.

PAPER, PRINTING AND PUBLISHING INDUSTRY

The paper, printing and publishing industry encompasses the manufacture of pulp, paper, paper products as well as printing and publishing activities. The paper sub-sector covers the production of medium paper, test liner, newsprint, printing and writing paper, tissue paper and joss paper. The paper products sub-sector consists of packaging products such as corrugated cartons, inner packaging and cushioning materials, labels, stickers and disposable diapers. The printing and publishing sub-sector includes all printing of packaging materials, books, magazines, security documents, greeting cards, calendars and other miscellaneous printing activities.

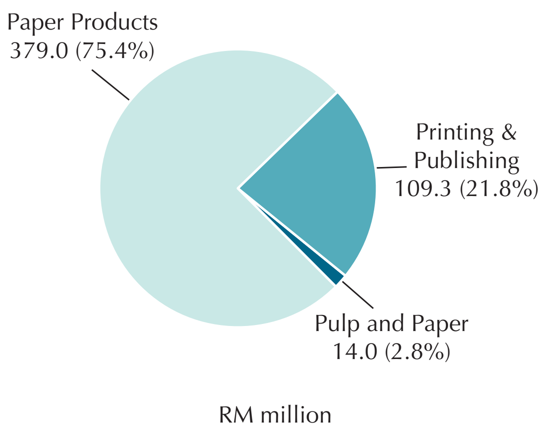
The paper, paper products and printing sub-sector is among the key supporting industries to the manufacturing sector in Malaysia. Most of the manufacturing activities are concentrated in Peninsular Malaysia. So far, Malaysia has recorded 83 per cent self-sufficiency in the supply of paper and paperboard with total production of 1.5 million metric tonnes and local consumption of around 1.8 million metric tonnes. In 2009 (January-November) imports of paper and paper products amounted to RM5.0 billion while exports totalled RM2.6 billion.

The domestic printing and publishing industry consists mainly of small and medium-scale domestic-oriented manufacturers. However, local printers have been able to secure contract printing of books and magazines for international publishers. Exports of this sub-sector in 2009 (January-November) amounted to RM730.2 million while imports totalled RM771.6 million.

Project Approved In 2009

In 2009, a total of 20 projects with investments of RM502.3 million were approved in the paper, printing and publishing industry. Of these, 12 were new projects with investments of RM201.0 million (40%), while eight were expansion/diversification projects with investments of RM301.3 million (60%). Domestic investments amounted to RM186.4 million (37%) while foreign investments totalled RM315.9 million (63%).

Graph 30
Investments in Projects Approved in the Paper, Printing and Publishing Industry by Sub-sector, 2009



Significant projects approved included:

- A wholly foreign-owned expansion/ diversification project with investments of RM268.0 million to produce disposable diapers and feminine care hygiene products. The company plans to export 40 per cent of production to Singapore, Thailand, Australia and New Zealand; and

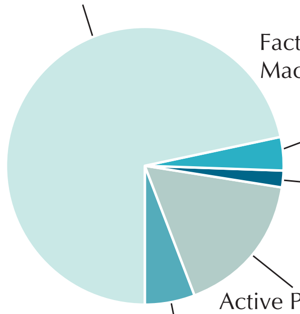
- An expansion/diversification project by a wholly Malaysian-owned company with investments of RM58.0 million to produce printed materials with UV coating, blister pac, lamination as well as spot UV.

C. IMPLEMENTATION OF APPROVED MANUFACTURING PROJECTS

A total of 5,839 manufacturing projects were approved during the period 2004-2009 of which 4,201 projects (71.9%) had commenced production as at 31 December 2009 while 218 (3.7%) were at the stage of factory construction and machinery installation. Of the 4,201 projects in production, 520 projects had commenced production in 2009.

Total capital investment in the 4,419 projects that were implemented (covering projects which have commenced production and those that have undertaken factory

Graph 31
Status of Implementation of Manufacturing Projects Approved during 2004-2009



Investments in Projects Implemented: RM145.5 billion

construction and machinery installation) amounted to RM145.5 billion. In addition, 110 projects with investments of RM33.8 billion have acquired sites for factories, while 939 projects (RM63.4 billion) are in active planning stage. When these 1,049 projects are realised, total investments will amount to RM97.2 billion.

Most of the implemented projects are located in Selangor (1,389 projects) with investments of RM37.0 billion, followed by Johor (966 projects/RM34.7 billion), Penang (629 projects/ RM19.6 billion), Perak (266 projects/RM6.0 billion), Kedah (243 projects/RM16.1 billion) and Melaka (226 projects /RM7.2 billion).

Significant projects implemented in 2009 covered a broad range of industries, namely, electrical and electronics, fabricated metal products, chemicals and chemical products, food manufacturing and machinery and equipment.

Various measures and initiatives continue to be undertaken by the Government to improve the delivery system, including to facilitate investors to implement their approved projects. These measures and initiatives include:

- Handholding activities which are actively carried out by Special Projects Officers (SPOs) at the Federal and State levels in MIDA through meetings, briefings, dialogues and consultations between Federal and State Agencies and companies to facilitate implementation of projects;

- State Investment Centres (SICs) set up as the States' one-stop agency to promote and provide information and advisory services to potential and existing investors as well as to facilitate investors in setting up operations in their respective States. The SICs are also involved in handholding activities together with MIDA;

- The Advisory Services Centre (ASC) set-up in MIDA in 1988 to provide information and advisory support services effectively and efficiently in all areas of implementation. Representatives stationed in MIDA are from the Department of Environment, Immigration Department, Royal Customs and Excise Department, Tenaga National Berhad, Telekom Malaysia Berhad and Labour Department. To further enhance the activities of ASC, designated Liaison Officers have been appointed from various Ministries/Agencies such as Multimedia Development Corporation (MDeC), Construction Industry Development Board (CIDB), Ministry of Health, Ministry of Tourism and Ministry of Higher Education;

- The District Industry Implementation Units (DIIUs) established in August 2006 to monitor the implementation of approved manufacturing and services projects at the district level and to provide assistance to expedite approvals from various Government agencies during the process of project implementation;

- The Customer Service Centre (CSC) launched in MIDA in 2006. The main objective is to serve investors and clients by providing information particularly through direct response to phone enquiries;

- The Immigration Unit set up in MIDA in December 2007 to facilitate applications relating to immigration matters for expatriates and their dependents. The main functions of the Immigration Unit are to assist and advise companies as well as to approve applications for visas, work permits, employment passes, dependant passes for wives and children under 21 years old, social visit passes for husbands, parents and children above 21 years old, students' endorsements for the children of expatriates and identification card for expatriates;

- On-line application in MIDA introduced in January 2008 for submission of application forms to be done electronically to MIDA for processing. Submissions cover all aspects relating to application for manufacturing licence, incentives, expatriate post and duty exemption on raw materials, components, machinery and equipments;

- Automatic issuance of Manufacturing Licence introduced in December 2008. It covers all industries and activities except for those related to security, safety, health, environment, religion, projects located in Sabah and Sarawak, activities subject to Environmental Impact assessment (EIA) approval from Department of Environment (DOE) and projects requiring approval under Petroleum Development Act (PDA)/Ministry of Health (MOH)/Atomic Energy Licensing Board (AELB);

- Approving and monitoring of the Infrastructure Development Fund by

MIDA in January 2008 (previously managed by Economic Planning Unit, Prime Ministers's Department) with the main objective to ensure that existing industrial estates are properly maintained; and

- Improvements by the Special Task Force to Facilitate Business (PEMUDAH) in 2008 to enhance transparency and strengthen processes and procedures include:

  - Reducing the time taken for clearance of exports to facilitate trade;

  - Reducing the time taken for property registration through improvement of processes and enabling on-line applications for property registration;

  - Improvements in tax administration;

  - Facilitating e–Payments;

  - Establishing a one–stop centre to expedite incorporation of companies; and

  - Improving the processes for employing expatriates and skilled workers.

Based on Ministry of Human Resource (MOHR)'s records, in 2009, a total of 363 companies had downsized their operations, which resulted in the retrenchment of 13,096 workers, In addition, 64 companies had ceased operation, resulting in the loss of job for 4,754 workers. The main reasons cited for closures were the global economic downturn which resulted in financial problems, declining market demand and increasing cost of production.

However, 520 projects had commenced production in 2009 resulting in the creation of 64,157 job opportunities. These projects will provide alternative employment opportunities for the 17,850 workers who were retrenchment during the same period

MIDA

4 Investment Performance of the Services Sector

4 INVESTMENT PERFORMANCE OF THE SERVICES SECTOR

A. PROJECTS APPROVED

OVERVIEW

The services sector comprises a broad range of services including regional establishments; support services; MSC status companies; real estate (housing); transport; energy; telecommunications; distributive trade; hotels and tourism; financial services; health services and educational services.

A total of 2,016 projects with investments of RM29.5 billion were approved in the services sector in 2009[6]. Domestic investments accounted for the bulk of the investments (RM27.2 billion or 92.2%) while foreign investments totalled RM2.0 billion (7.8%). The services projects approved in 2009 are expected to provide 31,490 employment opportunities, especially in the managerial, professional and technical levels.

Table 3
Approved Investments in the Services Sector, 2009 and 2008

Services Sub-Sector	2009		2008	
	No.	RM mil.	No.	RM mil.
Regional Establishments	161	325.9	161	219.1
Support Services[7]	202	1,397.9	245	2,085.0
MSC Status Companies	284	2,160.4	242	1,778.4
Sub-Total	**647**	**3,884.2**	**648**	**4,082.5**
Other Services Sub-Sector	**Jan – Sept 2009**		**2008**	
	No.	**RM mil.**	**No.**	**RM mil.**
Transport	26	7,731.7	19	1,422.9
Energy	1	5,010.4	106	4,407.2
Telecommunications (including Post)	11	3,783.0	22	4,954.0
Financial Services	46	3,704.7	79	4,771.0
Real Estate (Housing)	641	3,142.8	749	25,921.0
Distributive Trade	481	1,606.4	813	2,040.9
Hotels & Tourism	23	589.0	44	1,929.6
Health Services	4	12.4	19	122.3
Education Services	136	12.2	160	184.9
Sub-Total	**1,369**	**25,592.5**	**2,011**	**45,753.8**
TOTAL	**2,016**	**29,476.7**	**2,659**	**49,836.3**

[6] *For this report, statistics on investments in regional establishments, support services and MSC status companies are based on projects approved by MITI and MOSTI for the year 2009 while statistics on investments in the other services sub-sectors are based on projects approved by the respective Government Ministries/Agencies and are available only for the period of January to September 2009.*

[7] *Approval statistics for 2009 for other R&D financial assistance schemes under Support Services cover the period January to September only.*

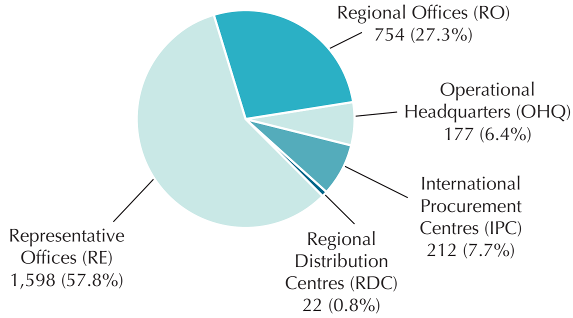
B. PERFORMANCE OF THE SERVICES SUB-SECTORS

REGIONAL ESTABLISHMENTS

As at 31 December 2009, a total of 2,763 regional establishments have been approved, comprising 177 Operational Headquarters (OHQs), 212 International Procurement Centres (IPCs), 22 Regional Distribution Centres (RDCs), 754 Regional Offices (ROs) and 1,598 Representative Offices (REs).

Malaysia's world class infrastructure, good connectivity and strategic location within ASEAN are some of the main reasons why MNCs continue to choose Malaysia to locate their regional establishments. Attractive investment incentive packages including tax incentives and liberal policies on foreign equity participation and employment of expatriates are other factors cited by these MNCs for the establishment of these regional establishments in Malaysia.

Graph 32
Number of Regional Establishments Approved as at 31 December 2009



In 2009, a total of 161 new regional establishments were approved to be set up in Malaysia with investments of RM325.9 million. Estimated annual sales turnover for IPCs and RDCs amounted to RM758.3 million. These operations will create a total of 1,271 jobs for Malaysians, especially in the managerial, professional and technical levels.

Operational Headquarters (OHQs)

As at 31 December 2009, a total of 177 OHQs were approved with investments of RM2.0 billion. Of these, 34 were from the USA; 15 from Japan; 13 each from Australia, Germany and the UK; 12 from the Netherlands while 77 were from other countries. These OHQs have created a total of 11,434 job opportunities comprising 9,283 Malaysians and 1,954 expatriates. The major OHQ activities undertaken by these companies include the provision of common corporate functions such as finance/accounting, human resource, IT, technical support, R&D services, administration and management; as well as business planning and coordination to support their operations in the Asia Pacific region.

Of the 177 OHQs approved, a total of 132 are in operation. These OHQs are involved mainly in E&E; oil and gas; pharmaceutical; chemicals and automotive.

Some of the world renowned MNCs which have established OHQs in Malaysia include:

Country	Company	
USA	• General Electric • Du Pont • Dow Chemicals • PepsiCo • Grey Communications • Hess Oil & Gas • Air Products • Henry Schein • Kellogg's	• Schlumberger • Baker Hughes • Intel • Transocean • Agilent • IBM • Mars Foods • Hewlett-Packard
Japan	• Sharp Electronics • Kajima Corporation • Japan Tobacco International • Bridgestone	• NEC Infrontia • Sumitomo • Nippon Electric Glass • Nippon Menard
Germany	• BASF • Muehlbauer • Eppendorf • Arvato	• Siemens • Nordenia • Bayer • Binder
Australia	• IBA Health • IEV Group • Leighton • Linfox • Wagners	• Paradigm • Ansell • Dome • Delta Asia
UK	• RMC Industries • British-American Tobacco • Diagonal Consulting Group	• Avocet Mining • OHM Surveys • Fitness First
Switzerland	• Michelin • Norvatis Corporation • SBM Group	• Omya Group • Tetra Pak
France	• Lafarge • Thales International	• Monier
Netherlands	• Flexsys • Prometric • Friesland Foods	• Organon • Mammoet
Sweden	• Volvo	• UCB Group
People's Republic of of China	• China Shipping	
Norway	• Aker Kvaerner • Wilhelmsen	• AGR
Singapore	• NOL Global • ACE Asia Pacific	• Mattel • Global Footware
Hong Kong	• Aramis	• OMG

Projects Approved in 2009

In 2009, a total of 18 OHQs were approved with investments of RM139.3 million. Of these, three each were from the British Virgin Islands, Singapore and Hong Kong, two were from Switzerland and one each from the UK, Australia, Cayman Islands, Sudan, the USA, France and Japan. A total of 90 expatriate posts were approved for these OHQs and 577 employment opportunities will be provided for Malaysians, of which, 40.6 per cent of the posts were for senior management and senior executive positions.

Major OHQs approved in 2009 included:

- Pacific Inter-link Sdn. Bhd., a wholly-owned subsidiary of Capital House Investment Ltd., from Cayman Islands, which is involved in project management, engineering, technical assistance and consultancy services for the oil and gas, petrochemicals, energy and process industries. The OHQ will be providing qualifying services for its related companies in Malaysia, Indonesia, Yemen, Saudi Arabia and Egypt;

- OMG Asia Pacific Sdn. Bhd, a wholly-owned subsidiary of OMNI Marketing Global Limited, which provides in-store integrated retail marketing service to major retailers such as Carrefour SA, Tesco, Guardian, Seven Eleven, Giant and Cold Storage. The OHQ will be servicing 11 related companies and provide eight qualifying services such as general management and administration; business planning and coordination; and procurement of raw materials, components and finished products to its offices or related companies within or outside Malaysia;

- Mass Trading Malaysia Sdn. Bhd., a wholly-owned company of Mass Co. Ltd, Japan, which is a trading company specialising in production system line for the electronics industry. The OHQ will be providing nine qualifying services to seven of its related companies within and outside Malaysia;

- Monier Asia Pacific Sdn. Bhd., a wholly-owned company of Monier Group GmbH, which is the world's leading supplier of roofing and chimney systems. The establishment of the OHQ will centralise the key management functions of the Group's operations in the Asia Pacific region;

- The Mattel Group which is involved mainly in the manufacturing and marketing of toys under the Mattel brand and will be providing services to its related companies in the USA, the People's Republic of China, Hong Kong, Singapore, Malaysia, Australia, New Zealand, India, Indonesia and Thailand; and

- Gold Coin Group, a pioneer in the manufacture and distribution of animal feeds and one of the biggest agribusiness enterprises in Asia. Its OHQ will be servicing 15 related companies in Singapore, Thailand, Vietnam, Indonesia, the People's Republic of China, Sri Lanka and India.

International Procurement Centres (IPCs)

A total of 212 International Procurement Centres (IPCs) have been approved as at 31 December 2009 with total annual sales turnover estimated at RM68.7 billion while investments in these IPCs amounted to RM5.4 billion. Of the IPCs approved, a total of 89 or 42.0 per cent were by corporations from Japan, 36 from Malaysia, 15 from the USA, 11 each from Taiwan and Singapore, five from Germany while the remaining 45 were joint-ventures.

A total of 119 or 56.0 per cent of these IPCs will be servicing the E&E industry while the remaining IPCs will be servicing the chemicals/petrochemicals (29); machinery and industrial parts (14); textiles (10), oil and gas (10); and furniture (7) industries. To date, 139 IPCs have started operation.

These MNCs establish their IPC operations in Malaysia mainly to serve as their procurement and distribution centres and undertake supply chain management for their manufacturing operations in the region.

Major MNCs which have located their IPC operations in Malaysia include:

Country	Company	
Japan	• Matsushita • Sharp • Sony • Kenwood • TDK Corporation • Canon Opto • Murata • Sumiden	• Hitachi • JVC Electronics • NEC Electronics • Brother Engineering • Sharp-Roxy • Nitto Denko • Mitsumi • Mitsubishi
USA	• Dell • Knowles	• Smart Modular Technologies
Germany	• Robert Bosch • Henkel	• B.Braun
Taiwan	• Acer • Inventec Electronics	• Titan
France	• Mapa Spontex	• Safic-Alcan
Hong Kong	• Lee Kum Kee	
Netherlands	• Flextronics	• Benchmark
Singapore	• Ghim Li	• Jackspeed Leather

Projects Approved in 2009

Three projects to establish IPCs were approved in 2009 with investments of RM41.1 million and estimated annual sales turnover of RM671.2 million. Of the three IPCs approved, one was by a company from the Netherlands, one by a joint-venture company with Japan and one by a local company. These IPCs will provide employment opportunities for 108 Malaysians, mainly in the managerial, technical and skilled categories. These IPCs proposed to procure a total of RM29.8 billion worth of products from local companies.

In addition, 15 approved IPCs have embarked on expansion programs by adding new products in their procurement and distribution network.

Among the IPCs approved were:

- Benchmark Electronics (M) Sdn. Bhd. (formerly known as Quantum Storage Solutions (M) Sdn. Bhd.), an existing manufacturing company, will set up its IPC to procure and distribute electronic devices and EMS to its customers inside and outside Malaysia; and

- Nakareg Sdn. Bhd., an existing manufacturing company was approved IPC to procure and distribute linear transformers for audio industry, switching transformers, noise filter coils and linear transformers for adapters to its customers inside and outside Malaysia.

These IPCs will export about RM563.1 million or 49.2 per cent of their products through seaports, of which RM496.4 million (88.2 per cent) will be exported through Port of Sungai Udang, Melaka and the rest will be exported through Penang Port, Pasir Gudang Port and Port Klang. Of the goods to be exported through airports, RM580.6 million will be exported via the Penang International Airport.

Regional Distribution Centres (RDCs)

As at 31 December 2009, a total of 22 Regional Distribution Centres (RDCs) have been approved with total annual sales turnover of RM87.0 million and investments of RM80.1 million. Of these, four were from Germany, two from the UK and one each from the USA, Austria, the Netherlands, Switzerland, Malaysia, Belgium, Finland, France, Italy, Ireland, Spain, Denmark, Canada, and India while two were joint-venture projects with Japan and Germany. A total of 555 employment opportunities will be created by these RDCs, of which 90 per cent will be filled by Malaysians.

To date, 14 MNCs have started their RDC operations. These RDCs are:

Country	Company
Germany	Osram Opto Semiconductors, BMW, EPCOS AG, Siteco Group and BD Agriculture
Japan	UMW Toyota
UK	Scapa Group
Belgium	Agfa
Finland	Amer Sport
France	Sidel Group
Spain	Acerinox
Ireland	Kerry Group
Canada	International Merchandising Inc.
India	BEML

Projects Approved in 2009

Three projects were approved for RDC in 2009 with investments of RM79.8 million and total annual sales turnover of RM87.1 million. These RDCs will provide employment opportunities for 59 Malaysians.

Among the RDCs approved were:

- Intersil International Operations Sdn. Bhd., a newly incorporated subsidiary of Intersil U.S. Corporation, established as a RDC to distribute and market products related to analogue semiconductors to companies within the Group. Parts and components for its companies will be sourced mainly from suppliers in the USA; and
- Kohoku Electronics (M) Sdn. Bhd., an existing manufacturing company producing lead tab terminals for aluminium electronic capacitors. The RDC will distribute parts and components which are mainly sourced from its related companies in Japan and Singapore.

Regional/Representative Offices (ROs and REs)

To date, a total of 754 Regional Offices (ROs) and 1,598 Representative Offices (REs) have been approved. These ROs and REs were established mainly to assist foreign companies to plan or coordinate business activities for the corporations' affiliates, subsidiaries and agents in Malaysia and in the region.

Major ROs and REs approved include:

Country	Name of Regional/Representative Office	
UK	• Rolls Royce • Westland Helicopters	• SS8 Networks
France	• Peugeot	• Citroen
USA	• Parsons • Nexus Media • Lifecore Biomedical • WJ Communications	• Gregg Protection • XM Satelite Radio • Vitron • Croll-Reynolds
Republic of Korea	• Korea Petroleum • Hyundai	• Samsung • Xener System
Singapore	• Infrasys • D-Link • Kodak Polychrome • Heinz	• Soft Imaging System • Lawson Software • Benlux • LG Display
Republic of Ireland	• Tango Telecom	• Red Hat
Australia	• Clarity	• Petrosys
Hong Kong	• T&A Mobile Phones • Laureate	• QAD
Saudi Arabia	• Aramco	
Denmark	• Maersk	
UAE	• Sondex	
Switzerland	• Pelikan	• Georg Fischer
Bermuda	• Mitra Energy	
Qatar	• Al-Jazeera	
Scotland	• Total Waste Management	
Thailand	• Keihin	
Japan	• Sanyo Hikari	

Malaysia is a base for these ROs and REs to coordinate and support their operations in the Asia Pacific region. The establishment of these ROs and REs will provide opportunities for the companies to set up IPCs/RDCs in the long run.

Projects Approved in 2009

In 2009, a total of 53 ROs and 84 REs were approved with total investments of RM65.7 million. Of the total, investments for ROs and REs were RM35.1 million and RM30.6 million, respectively. These ROs/REs were mainly from Singapore (31), the USA (12), the UK (10), and Japan (nine). These ROs and REs are expected to create employment opportunities for 289 Malaysians.

The major approved ROs and REs included:

Country	Company
Japan	Sanyo Hikari
Singapore	Benlux, LG Display and Heinz
USA	Vitron, Croll-Reynolds, Barriersafe Solutions International Inc. and Bridgelux, Inc.
Switzerland	Georg Fischer and Global Supply Chain Ltd.
Hong Kong	Laureate and Nikko Entertainment Hong Kong Ltd.
Netherlands	JS Bariatrics BV
UK	Airo-Zone 5000 Ltd.
People's Republic of China	China Unionpay Co. Ltd.

Malaysia with its strategic location within the ASEAN region has vast potential to be the logistics hub for MNCs. Malaysia has also been actively promoting the services sector as it provides numerous opportunities for growth especially in the establishment of OHQs, IPCs and RDCs. The setting up of these establishments will benefit the country in terms of enhanced global trade, provision of skilled employment opportunities and business opportunities for local wholesalers and retailers.

SUPPORT SERVICES

Support services cover research and development (R&D), renewable energy and energy conservation/ efficiency, engineering design, integrated logistics services, integrated market support services, cold chain facilities, sterilisation and central utilities facilities. These services activities are the targeted service activities currently being promoted by the Government to further enhance the value creation of the manufacturing sector in Malaysia. Service providers undertaking these activities are eligible to apply for tax incentives in the form of Pioneer Status (PS) and Investment Tax Allowance (ITA) for a period of 5 to 10 years.

In 2009, these incentives were extended to testing facilities for medical devices to encourage the establishment of new testing laboratories for medical devices as well as existing testing laboratories to upgrade their facilities to meet international standards. Promotional efforts will be intensified to attract investments in this activity.

A total of 202 support services projects were approved with incentives in 2009, involving total investments of RM1.4 billion. Domestic investments continued to dominate the support services sector with RM1,001.0 million (71.6%) while foreign investments amounted to RM396.9 million (28.4%). A total of 5,149 employment opportunities would be created by these projects.

Of the projects approved, 18 were for the generation of energy using renewable resources or renewable energy, 175 for R&D, five for energy conservation/ efficiency, three for integrated logistics services and one for integrated market support services. The majority of the investments approved were for the generation of renewable energy (RM376.6 million or 27.4%), energy conservation/ efficiency (RM375.0 million or 27.2%) and integrated logistics services (RM120.7 million or 8.8%). Investments in these three categories accounted for 63.4 per cent of the total investments approved.

Table 4
Investments in Approved Support Services, 2009

Support Services	2009	
	No.	RM mil.
Renewable Energy	18	376.6
Energy Conservation/Efficiency	5	375.0
Research & Development (R&D)		
• R&D incentive	4	25.6
• R&D grant schemes[8]	171	457.9
Integrated Logistic Services (ILS)	3	142.3
Integrated Market Support Services (IMS)	1	20.5
Total	**202**	**1,397.9**

Renewable Energy

To supplement the conventional supply of energy, new sources such as renewable energy are encouraged by the Government. In this regard, the fuel policy which comprises oil, gas, hydro and coal has been extended to include renewable energy as the fifth fuel. The main renewable resources for generation of energy include biomass such as wastes from palm oil, rice, sugar cane, timber, sawmill and paper recycling mills; municipal wastes; biogas from landfills, palm oil mill effluent and animal wastes; mini-hydro; solar; and wind power. Of these, biomass resources and solar energy are widely used for generation of electricity.

As a major producer of agricultural commodities in the region, Malaysia is well-positioned to promote the use of biomass as a renewable energy source. Oil palm waste is the main source of biomass for renewable energy as there are abundant oil palm plantations in the

[8] *Approval statistics for R&D grant schemes cover the period January-September 2009 only.*

country. It is estimated that the oil palm industry generates 65.5 million tonnes of waste annually in the form of empty fruit bunches (EFB), fibres, shells and palm oil mill effluents (POME). A total of 2,400 megawatts (MW) of electricity could be generated if all the wastes are fully utilised and converted into renewable energy.

Malaysia also has vast potential for solar power generation. The SURIA 1000 programme launched by the Government in 2006 to intensify the usage of solar energy as an alternative source of energy, provides financial rebates on the cost of installing solar building integrated photovoltaic (BIPV) systems for residential and commercial building owners. To date, a total of 83 residential and commercial building owners with a capacity to generate a total of 600 kW of solar energy were approved financial rebates ranging from 42 per cent to 75 per cent under the programme.

Under the Ninth Malaysia Plan, the Government has targeted about 350 MW of electricity to be generated from renewable resources by 2010. Incentives that are being offered by the Government to encourage wider implementation of renewable energy projects include:

- Tax incentives in the form of PS and ITA for companies generating electricity using renewable resources either for their own consumption or for sale through the distribution grid system;

- Import duty and sales tax exemption on machinery, equipment, parts and components used to generate energy which are not produced locally;

- Sales tax exemption on equipment purchased from local manufacturers;

- Import duty and sales tax exemption to importers including photovoltaic service providers approved by the Energy Commission for imported solar photovoltaic system equipment for use by third parties; and

- Sales tax exemption on the purchase of solar heating system equipment from local manufacturers.

To date, a total of 90 projects have been approved PS or ITA incentives for renewable energy, involving total investments of RM2.8 billion. These projects are capable of generating 498.9 MW of electricity, 683,714.4 tonnes of steam, 399.9 giga joules (GJ) of heat and 1,030 refrigerant tonnes (RT) of chilled water, utilising 12.3 million tonnes of biomass per annum. Sources of biomass are oil palm, wood, rice, sugar cane and municipal wastes. Of the projects approved, 42 are in operation of which, 27 are located in Peninsular Malaysia and 15 in Sabah.

Projects Approved in 2009

In 2009, a total of 18 renewable energy projects were approved with tax incentives. Total investments in these projects amounted to RM376.6 million comprising domestic investments of RM193.3 million (51.3%) and foreign investments of RM183.3 million (48.7%). A total of 3,449 employment opportunities would be created by these projects.

Seventeen of the projects approved were new projects and one was a diversification project. These projects would generate energy in the form of electricity, steam or heat using biomass, solar and hydro power. Of the projects approved:

- Nine projects would be utilising 536,807 kWh of solar energy to generate 169.2 kWp electricity and 30 RT chilled water;
- Seven projects would be utilising 700,656 tonnes of biomass to generate 18 MW electricity and 134.5 tonnes steam;
- One project would be utilising 43,234,560 m^3 of hydro power to generate 2.2 MW electricity; and
- One project would be utilising 5,430,000 m^3 of biogas to generate 0.2 MW electricity and 5 tonnes steam.

All the energy generated from the solar power projects are for own consumption while more than 85 per cent of the energy generated from biomass and hydro would be sold.

Among the major approved projects were:

- A new project undertaken by a wholly foreign-owned mobile phone service provider to generate electricity from solar energy for its own consumption. Investments in this project totalled RM143.1 million. The project would generate 20 kWp of electricity by utilising 7,200 kWh of solar energy;
- A majority Malaysian-owned project undertaken by a real estate developer with investments of RM71.7 million to generate 64.8 kWp of electricity for own consumption, utilising 73,476 kWh of solar energy; and
- A wholly Malaysian-owned project with investments of RM52.0 million, to generate 11.5 MW of electricity and 30 tonnes of steam utilising 432,000 tonnes of oil palm wastes. Ten MW of the electricity generated would be sold to Tenaga National Berhad.

Energy Efficiency/Conservation

The increasing demand for energy as a result of continuous economic development would pose challenges for energy security in the long run. Conserving energy or using energy in a more efficient manner is crucial to preserve our environment and achieve sustainable development. In this regard, the Government continues to encourage investments in energy conservation/efficiency activities through the provision of incentives as follows:

- PS or ITA for energy consultants or service providers as well as companies investing in energy conservation/efficiency;

- Import duty and sales tax exemption on machinery, equipment, parts and components used in energy conservation/efficiency projects;

- Import duty and sales tax exemption to importers of energy efficient equipment such as high efficiency motors and insulation materials supplied to third party end users; and

- Sales tax exemption on the purchase of locally manufactured energy efficiency consumer goods such as refrigerators, air conditioners, lightings, fans and televisions.

To date, 19 projects have been approved PS or ITA incentives for energy conservation/efficiency activities, involving total investments of RM4.7 billion. Of the projects approved, nine projects (RM19.2 million) involved service providers for energy conservation / efficiency activities, while 10 projects (RM4.7 billion) were approved for energy conservation/efficiency activities by companies for their own consumption. Of the 19 projects approved, 18 projects are located in Peninsular Malaysia and have started operations. These projects would be able to conserve about 685 MW of electricity per annum.

Projects Approved in 2009

In 2009, five energy conservation/efficiency projects were approved tax incentives involving investments of RM375.0 million. Domestic investments amounted to RM198.4 million or 52.9 per cent of total investments. Total value of energy savings from these projects would amount to RM766,414 while total energy conserved would amount to 153.7 MW per annum.

Among the major projects approved were:

- A majority foreign-owned hypermarket operator undertaking energy conservation/efficiency project for its own consumption, involving investments of RM235.0 million. Energy conserved in this project would amount to 94.0 MW which would result in energy savings of RM585,572 per annum;

- A majority Malaysian-owned real estate developer undertaking energy conservation/efficiency project for a 26-storey building currently under construction, with investments of RM126.5 million. This project would use energy efficient chillers to conserve a total of 18.7 MW of energy which would result in energy savings of RM74,023 per annum; and

- A new project undertaken by a Malaysian energy consultant to conserve energy for an educational institution, with investments of RM9.3 million. Energy conserved in this project would amount to 20.5 MW and energy savings of RM13,875 would be through the replacement of the existing cooling system that uses energy efficient equipment.

Research and Development (R&D)

Research and development (R&D) services include industrial design (product and process development including designing and prototyping) and research services provided by design houses, contract R&D companies, R&D companies, and approved R&D institutes/research companies.

To date, a total of 105 R&D projects involving investments of RM1.4 billion have been approved PS or ITA incentives. Foreign investments in these projects amounted to RM934.9 million (67.4%) while domestic investments totalled RM451.2 million (32.6%). R&D investments were mainly in the E&E (36 projects/RM697.7 million), chemicals and chemical products (16 projects/RM221.4 million), machinery and equipment (10 projects/RM141.1 million) and transport equipment (19 projects/RM78.9 million) industries. A total of 3,107 employment opportunities would be created by these projects.

Projects Approved in 2009

In 2009, four R&D projects were approved PS or ITA incentives comprising two contract R&D companies and two in-house R&D projects. Total investments amounted to RM25.6 million, of which RM19.1 million (74.6%) were domestic investments and RM6.5 million (25.4%) were foreign investments.

Besides tax incentives, the Government also provides other financial assistance in the form of grants to further encourage industries to undertake R&D activities and commercialise R&D findings. For the period January-September 2009, a total of 171 R&D projects with investments of RM457.9 million were approved under the following financial assistance schemes:

- Demonstrator Applications/Techno/Science Grant Scheme-123 projects with investments of RM224.2 million;

- Commercialisation of R&D Fund (CRDF)/Technology Acquisition Fund (TAF) Scheme-27 projects with investments of RM213.2 million; and

- MSC R&D Grant Scheme - 21 projects with investments of RM20.5 million.

Integrated Logistics Services (ILS)

The main activities in the integrated logistics services (ILS) industry cover freight forwarding, warehousing, transportation and other related value-added services such as distribution, procurement and supply chain management on an integrated basis.

Currently, companies undertaking ILS are eligible for PS or ITA. The objective of granting the ILS incentive is to create an efficient and competitive logistics industry to encourage the integration and consolidation of the various transport intermediaries along the logistics supply chain in Malaysia. In this regard, Malaysian companies are encouraged to expand and venture into higher value-added services to enable them to compete globally.

A total of 24 companies with investments valued at RM2.1 billion have been granted the ILS incentive. Of these, five were new projects and 19 were expansion projects.

In 2009, three ILS companies were approved, as follows:

i. An expansion project by a Malaysian-owned company, with investments of RM48.4 million to undertake non-vessel operating common carrier (NVOCC), container handling, warehousing and distribution activities in Port Klang, Selangor;

ii. An expansion project by a locally incorporated company to build its own warehouse, acquire additional transportation equipment and incorporate more value-added activities such as packing, repacking, sorting, grading and sampling with additional investments of RM54.0 million in Nilai, Negeri Sembilan; and

iii. An expansion project by a Malaysian company in Bukit Kayu Hitam, Kedah to enlarge its existing warehouse facility and increase the number of prime movers and ICT equipment with additional investments of RM39.8 million.

International Integrated Logistics Services (IILS)

The IILS scheme was mooted in 2008. The Government announced a major development in the logistics sector whereby access is given to International Integrated Logistics companies for Customs Agent Licence. This licence, which was previously restricted to domestic logistics service providers, is now open to International Integrated Logistics Services (IILS) providers without any restrictions on equity. The Customs Agents licence will be issued to qualified IILS providers that provide integrated and seamless logistics services (door-to-door) along the logistics value chain as a single entity on a regional or global scale.

In 2009, an existing local company in Selangor with investments of RM208.0 million was approved IILS status. The company plans to undertakes freight forwarding, warehousing, transportation and value-added services, namely, Vendor Managed Inventories (VMI), on-site logistics management, cross border transportation and management of outsource transportation. It has good networking with logistic service providers abroad in Hong Kong, the People's Republic of China, Singapore, Philippines, the United Arab Emirates (UAE) and British Virgin Islands. Malaysia is expected to be the logistics supply chain services in the region.

Integrated Market Support Services (IMS)

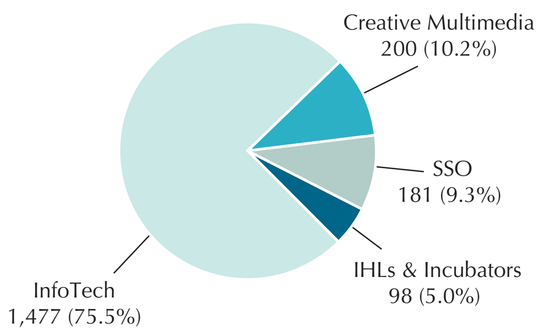
Integrated Market Support Services (IMS) comprise the activities of branding, market research and customer relationship management. To date, seven companies have been approved PS to undertake integrated market support activities, involving total investments of RM34.2 million.

In 2009, a wholly foreign-owned market research company with investments of RM20.5 million was approved PS to undertake branding and research services for the food industry. The company is a subsidiary of a public-listed company based in UK with operations in 60 countries. Branding services provided include brand design and development, brand promotion and packaging design while research services cover feasibility study, consumer research, market research and research on product development.

MSC STATUS COMPANIES

As at 31 December 2009, a total of 2,520 companies were granted MSC Status by the Multimedia Development Corporation Sdn Bhd (MDeC). Of these, 1,879 (74.5%) were majority Malaysian-owned, 566 were majority foreign-owned (22.4%) and 75 were with equal ownership. The 2,520 companies are grouped into four main technologies namely creative multimedia; shared services and outsourcing (SSO); information technology (InfoTech); and institutions of higher learning and incubators. Of the 2,520 MSC status companies approved, a total of 1,956 or 78.0 per cent are in operation.

Graph 33
Approved MSC Status Companies in Operation by Technology Cluster as at 31 December, 2009



Source: Multimedia Development Corporation (MDeC)

Based on the MSC Malaysia Annual Industry Report 2008, both local and export sales of MSC Malaysia Status companies have increased in 2008, pushing total revenue to rise by 27.5 per cent to RM21.8 billion in 2008. The biggest contributor to overall revenue in 2008 was the Information Technology cluster with 43.0 per cent contribution.

In 2009, a total of 284 companies were granted the MSC Status with approved investments amounting to RM2.2 billion. Domestic investments amounted to RM1.5 billion (71.0%) while foreign investments totalled RM623.0 million (29.0%). A total of 13,587 employment opportunities are expected to be created by the MSC companies. Of the 284 companies awarded MSC Status in 2009, a total of 221 (78.0%) were wholly Malaysian-owned, 56 (20.0%) were wholly foreign-owned, while the remaining seven (2.0%) were joint-venture projects. In 2008, a total of 242 companies were awarded MSC Status with approved investments amounting to RM1.78 billion.

TRANSPORT

The transport sub-sector covers maritime transport; aviation; and highway construction and maintenance.

For the period January-September 2009, a total of 26 projects were approved with investments of RM7.7 billion, the highest level of investments in the services sector. Domestic investments amounted to RM7.6 billion (98.7%) and foreign investments totalled RM45.0 million (1.3%). Investments approved in the transport sub-sector in 2009 exceeded the investments in 2008 which amounted to RM1.4 billion (19 projects).

The investments approved in 2009 were mainly in the aviation sub-sector with 16 projects valued at RM7.6 billion. Nine projects were approved in the maritime sub-sector with investments amounting to RM66.5 million while one project was approved for highway construction and maintenance (RM2.1 million).

ENERGY

The energy sub-sector covers independent power producers (IPPs); and generation, transmission and distribution of electricity by Tenaga Nasional Bhd. (TNB), Syarikat SESCO Bhd. (SESCO) and Sabah Electricity Sdn. Bhd. (SESB).

For the period January - September 2009, one project with investments valued at RM5.0 billion was approved in this sub-sector, (100% domestic investments). The amount of investments approved for this sub-sector in 2009 was higher than investments recorded in 2008 which amounted to RM4.4 billion. The sub-sector remained as one of the major contributors to investments in the services sector.

FINANCIAL SERVICES

Investments in financial services cover banking, insurance and capital markets (venture capital, fund management, investment advisory and brokerage).

For the period January-September 2009, a total of 46 projects were approved in the financial services sub-sector with investments of RM3.7 billion. Domestic investments amounted to RM3.6 billion (97.3%) while foreign investments totalled RM93.5 million (2.7%).

The number of projects and investments approved in the financial services sub-sector for 2009 (January to September) and 2008 are as follows:

Table 5
Approved Investments in Financial Services, 2009 (January-September) and 2008

Activity	Jan – Sept 2009		2008	
	No.	RM mil.	No.	RM mil.
Banking	11	3,448.8	23	4,107.4
Insurance	15	190.5	21	284.9
Capital Markets	20	65.4	35	378.7
Total	**46**	**3,704.7**	**79**	**4,771.0**

Banking contributed the largest amount of investments in the financial services sub-sector with RM3.4 billion or 93.1 per cent, followed by insurance (RM190.5 million) and capital markets (RM65.4 million).

Brokerage and fund management were among the major contributors to investments in the capital markets amounting to RM32.0 million and RM31.0 million respectively.

TELECOMMUNICATIONS

The telecommunications sub-sector covers network facilities, network services, application services (including content application services), post and broadcasting.

For the period January-September 2009, estimated total investments amounted to RM3.8 billion, all of which were domestic investments. A number of new projects commenced in 2009 to accelerate and upgrade communications infrastructure and services. Mobile cellular service providers have invested to upgrade to higher speeds such as 3G/HSPA+ while wireless broadband service providers such as Packet One Networks (Malaysia) Sdn. Bhd., Redtone Telecommunications Sdn. Bhd., Asiaspace Sdn. Bhd. and YTL Communications Sdn. Bhd. have invested in WiMAX service.

REAL ESTATE (HOUSING)

Real estate covers the housing industry (excluding commercial buildings) in Peninsular Malaysia.

Real estate was among the largest services sub-sector in terms of investments approved in January - September 2009. A total of 641 projects were approved with total investments amounting to RM3.1 billion. Domestic investments accounted for 96.7 per cent (RM3.0 billion) of the total investments in this sub-sector.

DISTRIBUTIVE TRADE

The distributive trade sub-sector covers wholesale and retail trade; hypermarkets/ supermarkets, department stores and direct selling; franchising; and projects approved under the Petroleum Development Act, 1974.

A total of 481 projects were approved with investments of RM1.6 billion for the period January - September 2009. Foreign investments totalled RM900.8 million (56.1%), while domestic investments amounted to RM705.6 million (43.9%).

Investments in distributive trade were mainly in:

- Hypermarket and supermarkets (16 projects) with investments of RM650.0 million or 40.4 per cent of total investments in this sub-sector;
- Wholesale and retail trade (175 projects) with investments of RM577.6 million;
- Projects approved under the Petroleum Development Act, 1974 with investments of RM217.1 million;
- Departmental store (4 projects) with investments of RM80.0 million;
- Direct selling (26 projects) with investments of RM41.7 million; and
- Franchising (113 projects) with investments of RM40.0 million.

HOTELS AND TOURISM

A total of 23 projects were approved in the hotels and tourism sub-sector for the period January - September 2009, with investments of RM589.0 million, all of which were domestic investments.

Table 6
Approved Investments in Hotels and Tourism, 2009 (January-September) and 2008

Activity	Jan – Sept 2009		2008	
	No.	RM mil.	No.	RM mil.
Hotel projects:				
- *With incentives*	9	198.7	20	987.8
- *Others*	7	325.0	15	837.1
Tourism projects:				
- *With incentives*	-	-	3	48.7
- *Others*	7	65.4	6	56.1
Total	**23**	**589.0**	**44**	**1,929.6**

HEALTH SERVICES

Health services cover approvals for private healthcare institutions.

For the period January - September 2009, approvals were granted to four private healthcare institutions (comprising hospitals, maternity homes, nursing care centres, and medical specialist centres) involving investments of RM12.4 million, all of which were domestic investments.

To further promote and develop the health tourism industry in the country and encourage private hospitals to be more export driven, special incentives for the healthcare travel industry were announced in 2009. These incentives are:

- 100 per cent exemption on the value of increased exports, subject to 70 per cent of the statutory income for each year of assessment for healthcare service providers offering services to foreign clients in Malaysia. Foreign clients exclude:
  - a non-Malaysian citizen who participates in Malaysia My Second Home programme and his dependents;
  - a non-Malaysian citizen holding a Malaysian student pass and his dependents;
  - a non-Malaysian citizen holding a Malaysian work permit and his dependents; and
  - a Malaysian citizen who is a non-resident living abroad and his dependents.
- ITA of 100 per cent on qualifying capital expenditure incurred on the construction of new private hospitals and the expansion/refurbishment of existing private hospitals. This allowance can be offset against 100 per cent of statutory income for a period of 5 years. The incentive is applicable for applications received from 1 January 2010 to 31 December 2014;
- Review of advertising regulations and guidelines to accommodate the changing role of private hospitals in promoting healthcare travel;
- Double deduction for expenses incurred by private hospitals to obtain domestic/internationally recognised accreditation;
- Automatic issuance of employment /professional pass for foreign spouses of Malaysian or non-Malaysian medical specialists who qualify as professionals under the Malaysian Classification of Occupation; and
- Issuance of permits for the transportation of patients from the airport to the hospital, the conversion of "visit-on-arrival" status to a social visit pass for foreigners seeking medical treatment and expediting the approval to stay to medical tourists at the state level.

EDUCATION SERVICES

Education services cover private colleges/universities, private education institutions and skills centres.

A total of 136 projects were approved for the establishment of educational institutions, involving investments of RM12.2 million for the period January-September 2009, all of which were domestic investments.

Investments in education services were in skill centres which totalled RM7.3 million (46 projects) and private education institutions (RM4.9 million/90 projects).

MIDA

5 Investment Outlook

5 INVESTMENT OUTLOOK

Global FDI flows in 2009 were affected by the economic and financial crisis facing the world. Based on UNCTAD's latest quarterly publication, global FDI inflows declined by about 40 per cent to US$1 trillion in 2009 from US$1.7 trillion in 2008. Similarly, FDI inflows to developing and transition economies decreased by 39.0 per cent in 2009.

In tandem with this trend, the total investments approved in the manufacturing sector in Malaysia amounted to RM32.6 billion in 2009 compared with RM62.8 billion in 2008. This, however, still exceeded the average annual investment target of RM27.5 billion set under the Third Industrial Master Plan (IMP3).

Malaysia remained a competitive destination for FDI in the region and continued to attract encouraging levels of foreign investments in the manufacturing sector. Foreign investments in approved manufacturing projects in 2009 amounted to RM22.1 billion, returning to the levels prior to the record foreign investments registered in the last two years. Domestic investments in projects approved were valued at RM10.5 billion in 2009, indicating continued interest among domestic investors in the manufacturing sector.

Approved investments in the services sector totalled RM29.5 billion[9] in 2009. Recognising the growth and investment potential in the services sector, the Government has liberalised 27 services sub-sectors, with no equity condition imposed. These sub-sectors are in the areas of health and social services, tourism services, transport services, business services, and computer and related services. The Government will be progressively undertaking liberalisation of the other services sub-sectors.

According to UNCTAD's World Investment Report 2009, global FDI inflows are expected to recover moderately in 2010, before gaining momentum in 2011. Given the improving global economic and investment environment and the forecast for the Malaysian economy to grow 2.0 - 3.0 per cent in 2010, foreign investments in Malaysia are expected to be sustained in 2010.

In-line with the Government's move to a new economic model based on innovation, creativity and high value-added activities, the emphasis will be on attracting quality investments in knowledge and technology-intensive projects which may not necessarily

[9] *Approved statistics for the services sectors are based on projects approved for the period January-September 2009, except for projects approved by MITI/MIDA and MSC status companies approved by MOSTI which are for the whole of 2009.*

require large investments. Green technology including renewable energy has been identified as a growth area by the Government. This technology will not only assist in protecting the environment but will also provide business opportunities and a competitive edge for the country. Efforts will also be intensified to target and attract industries in which Malaysia has strong foundations as well as new growth areas such as automotive, aerospace, renewable energy, electronics, petrochemical, biotechnology, machinery and equipment and medical equipment.

To sustain the levels of investment inflows into the manufacturing as well as the services sectors, the Government would continue to respond to local and global challenges to maintain the country's competitiveness. In this regard, the Government will ensure that the investment environment remains conducive and competitive particularly in terms of delivery system, cost of doing business, provision of tax incentives, infrastructure as well as availability of skilled and knowledge workforce.

MIDA

Appendices

Appendix 1

APPROVED MANUFACTURING PROJECTS, 2009 AND 2008

	New		Expansion/ Diversification		Total	
	2009	2008	2009	2008	2009	2008
Number	471	548	295	371	766	919
Potential Employment	39,706	58,518	24,624	42,655	64,330	101,173
Total Proposed Capital Investment (RM million)	22,051.4	41,992.0	10,585.4	20,793.0	32,636.8	62,785.0
- Local (RM million)	5,654.9	7,769.4	4,837.2	8,916.8	10,492.1	16,686.2
- Foreign (RM million)	16,396.5	34,222.6	5,748.2	11,876.2	22,144.7	46,098.8

Appendix 2

NEW MANUFACTURING PROJECTS APPROVED BY SIZE OF CAPITAL INVESTMENT, 2009 AND 2008

Size of Capital Investment	2009				2008			
	Number	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	Number	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)
Less than RM 2.5 million	103	111.0	21.6	132.6	119	157.2	11.0	168.2
RM 2.5 million - < RM 5.0 million	66	189.8	42.3	232.1	82	247.2	39.2	286.4
RM 5.0 million - < RM 10.0 million	113	603.9	190.5	794.5	104	558.2	170.9	729.1
RM 10.0 million - < RM 50.0 million	143	1,887.3	1,038.9	2,926.2	187	2,398.7	1,324.7	3,723.4
RM 50.0 million - < RM 100.0 million	15	395.5	620.0	1,015.5	21	786.2	637.9	1,424.1
RM 100.0 million - < RM 500.0 million	28	1,787.7	3,350.5	5,138.2	24	2,465.2	2,527.0	4,992.2
RM 500.0 million - < RM 1.0 billion	-	-	-	-	5	671.8	2,248.1	2,919.8
RM 1.0 billion & Above	3	679.8	11,132.5	11,812.3	6	484.9	27,263.9	27,748.8
TOTAL	**471**	**5,654.9**	**16,396.5**	**22,051.4**	**548**	**7,769.4**	**34,222.6**	**41,992.0**

Appendix 3

APPROVED MANUFACTURING PROJECTS BY INDUSTRY, 2009 AND 2008

Industry	2009					2008				
	Number	Employment	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	Number	Employment	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)
Chemicals & Chemical Products	77	3,981	1,341.9	7,037.7	8,379.6	70	2,864	1,435.4	1,221.1	2,656.5
Non-Metallic Mineral Products	27	2,860	1,099.0	5,316.0	6,415.0	28	1,150	746.8	521.7	1,268.5
Electronics & Electrical Products	115	16,757	770.0	3,975.9	4,745.9	132	34,196	440.9	17,332.1	17,773.0
Basic Metal Products	30	3,784	2,151.9	435.3	2,587.2	53	8,289	5,321.6	20,446.6	25,768.2
Food Manufacturing	69	5,512	1,037.6	934.2	1,971.8	87	6,029	1,711.2	1,070.2	2,781.5
Transport Equipment	54	4,563	864.9	541.0	1,405.9	73	7,732	2,036.9	853.1	2,890.0
Fabricated Metal Products	99	5,873	595.0	775.0	1,370.0	105	5,397	518.8	554.6	1,073.4
Machinery & Equipment	95	5,613	602.7	637.2	1,239.9	93	5,377	738.2	519.3	1,257.6
Petroleum Products (Inc.Petrochemicals)	8	174	719.1	460.2	1,179.3	16	487	1,503.0	1,246.6	2,749.6
Plastic Products	42	2,190	221.0	549.8	770.8	60	5,687	424.4	211.4	635.8
Scientific & Measuring Equipment	19	1,541	202.1	312.9	515.0	18	2,056	141.1	378.9	520.1
Paper, Printing & Publishing	20	1,253	186.4	315.9	502.3	26	2,237	430.2	480.3	910.5
Beverages & Tobacco	3	847	78.2	315.0	393.2	3	164	27.6	60.2	87.8
Textiles & Textile Products	9	1,345	108.3	225.3	333.6	18	3,090	105.4	303.0	408.4
Wood & Wood Products	31	2,375	221.9	96.8	318.7	37	5,052	433.6	496.6	930.2
Rubber Products	22	2,064	92.5	127.9	220.4	37	5,790	407.4	314.5	721.9
Furniture & Fixtures	31	2,696	132.5	42.1	174.6	45	4,605	197.9	17.8	215.6
Leather & Leather Products	2	130	13.3	-	13.3	-	-	-	-	-
Miscellaneous	13	772	54.0	46.6	100.6	18	971	66.0	70.7	136.6
TOTAL	**766**	**64,330**	**10,492.1**	**22,144.7**	**32,636.8**	**919**	**101,173**	**16,686.2**	**46,098.8**	**62,785.0**

Appendix 4

APPROVED MANUFACTURING PROJECTS WITH INVESTMENTS OF RM100 MILLION AND ABOVE, 2009

Industry	New				Expansion/Diversification				Total			
	Number	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	Number	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	Number	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)
Chemicals & Chemical Products	9	461.9	6,503.5	6,965.5	2	160.8	165.1	325.9	11	622.7	6,668.7	7,291.4
Non-Metallic Mineral Products	2	147.7	5,199.3	5,347.0	1	735.5	-	735.5	3	883.2	5,199.3	6,082.5
Electronics & Electrical Products	6	340.5	440.0	780.4	7	-	2,503.8	2,503.8	13	340.5	2,943.7	3,284.2
Basic Metal Products	2	168.1	85.9	254.0	2	1,655.0	91.0	1,746.0	4	1,823.1	176.9	2,000.0
Petroleum Products (Including Petrochemicals)	1	679.8	453.2	1,133.0	-	-	-	-	1	679.8	453.2	1,133.0
Transport Equipment	1	320.1	-	320.1	2	272.6	330.7	603.3	3	592.7	330.7	923.4
Food Manufacturing	1	-	229.0	229.0	2	137.4	380.1	517.5	3	137.4	609.1	746.5
Fabricated Metal Products	2	-	444.4	444.4	-	-	-	-	2	-	444.4	444.4
Plastic Products	2	30.0	393.5	423.5	-	-	-	-	2	30.0	393.5	423.5
Beverages & Tobacco	1	77.0	311.0	388.0	-	-	-	-	1	77.0	311.0	388.0
Scientific & Measuring Equipment	2	156.0	56.0	212.0	1	-	135.0	135.0	3	156.0	191.0	347.0
Textiles & Textile Products	1	86.4	201.5	287.9	-	-	-	-	1	86.4	201.5	287.9
Paper, Printing & Publishing	-	-	-	-	2	-	267.9	267.9	2	-	267.9	267.9
Machinery & Equipment	1	-	165.8	165.8	-	-	-	-	1	-	165.8	165.8
TOTAL	**31**	**2,467.5**	**14,483.1**	**16,950.6**	**19**	**2,961.2**	**3,873.7**	**6,834.9**	**50**	**5,428.7**	**18,356.8**	**23,785.5**

Appendix 5

APPROVED NEW AND EXPANSION/DIVERSIFICATION MANUFACTURING PROJECTS BY INDUSTRY, 2009 AND 2008

Industry	2009						2008					
	New		Expansion/ Diversification		Total		New		Expansion/ Diversification		Total	
	Number	Total Capital Investment (RM million)	Number	Total Capital Investment (RM million)	Number	Total Capital Investment (RM million)	Number	Total Capital Investment (RM million)	Number	Total Capital Investment (RM million)	Number	Total Capital Investment (RM million)
Chemicals & Chemical Products	41	7,391.5	36	988.1	77	8,379.6	35	1,302.4	35	1,354.1	70	2,656.5
Non-Metallic Mineral Products	19	5,607.7	8	807.2	27	6,415.0	13	189.3	15	1,079.2	28	1,268.5
Electronics & Electrical Products	57	1,629.3	58	3,116.6	115	4,745.9	47	10,445.4	85	7,327.5	132	17,773.0
Basic Metal Products	18	595.8	12	1,991.3	30	2,587.2	31	21,000.6	22	4,767.6	53	25,768.2
Food Manufacturing	48	891.9	21	1,079.9	69	1,971.8	45	1,327.6	42	1,453.8	87	2,781.5
Transport Equipment	25	551.9	29	854.0	54	1,405.9	48	1,554.5	25	1,335.5	73	2,890.0
Fabricated Metal Products	66	995.6	33	374.3	99	1,370.0	82	889.0	23	184.4	105	1,073.4
Machinery & Equipment	72	902.0	23	338.0	95	1,239.9	68	919.4	25	338.1	93	1,257.6
Petroleum Products (Incl.Petrochemicals)	4	1,165.9	4	13.3	8	1,179.3	8	1,326.3	8	1,423.3	16	2,749.6
Plastic Products	22	624.0	20	146.8	42	770.8	37	460.0	23	175.8	60	635.8
Scientific & Measuring Equipment	10	304.0	9	211.0	19	515.0	11	377.9	7	142.2	18	520.1
Paper, Printing & Publishing	12	201.1	8	301.3	20	502.3	20	872.2	6	38.3	26	910.5
Beverages & Tobacco	2	389.2	1	4.0	3	393.2	1	3.4	2	84.4	3	87.8
Textiles & Textile Products	9	333.6	-	-	9	333.6	8	171.0	10	237.3	18	408.4
Wood & Wood Products	22	158.1	9	160.6	31	318.7	21	541.6	16	388.6	37	930.2
Rubber Products	9	107.1	13	113.2	22	220.4	23	307.4	14	414.5	37	721.9
Furniture & Fixtures	26	122.5	5	52.0	31	174.6	37	199.0	8	16.7	45	215.6
Leather & Leather Products	-	-	2	13.3	2	13.3	-	-	-	-	-	-
Miscellaneous	9	80.2	4	20.3	13	100.6	13	104.9	5	31.8	18	136.6
TOTAL	**471**	**22,051.4**	**295**	**10,585.4**	**766**	**32,636.8**	**548**	**41,992.0**	**371**	**20,793.0**	**919**	**62,785.0**

Appendix 6

APPROVED MANUFACTURING PROJECTS WITH MALAYSIAN MAJORITY* OWNERSHIP BY INDUSTRY, 2009 AND 2008

Industry	2009						2008					
	New		Expansion/ Diversification		Total		New		Expansion/ Diversification		Total	
	Number	Total Capital Investment (RM million)	Number	Total Capital Investment (RM million)	Number	Total Capital Investment (RM million)	Number	Total Capital Investment (RM million)	Number	Total Capital Investment (RM million)	Number	Total Capital Investment (RM million)
Basic Metal Products	15	366.6	9	1,862.9	24	2,229.5	22	762.0	19	4,043.6	41	4,805.6
Chemicals & Chemical Products	31	673.4	20	600.4	51	1,273.8	27	997.8	20	524.6	47	1,522.5
Petroleum Products (Incl.Petrochemicals)	4	1,165.9	2	2.6	6	1,168.6	6	718.2	4	1,256.8	10	1,975.0
Non-Metallic Mineral Products	15	365.4	2	750.5	17	1,115.9	9	144.1	3	711.4	12	855.5
Food Manufacturing	42	609.2	14	505.8	56	1,115.0	44	1,311.0	21	583.9	65	1,894.8
Transport Equipment	22	480.9	20	487.8	42	968.7	35	506.8	19	1,245.5	54	1,752.3
Electronics & Electrical Products	33	656.0	16	177.5	49	833.5	26	184.0	32	286.6	58	470.6
Machinery Manufacturing	49	440.6	12	179.1	61	619.6	43	529.4	17	193.7	60	723.0
Fabricated Metal Products	49	371.7	16	219.6	65	591.2	64	410.0	12	105.9	76	515.9
Wood & Wood Products	18	130.7	5	93.7	23	224.5	16	259.8	11	126.3	27	386.1
Paper, Printing & Publishing	11	176.6	4	12.9	15	189.5	18	366.2	4	15.4	22	381.6
Plastic Products	15	119.5	12	63.3	27	182.8	28	355.2	11	49.2	39	404.4
Scientific & Measuring Equipment	8	145.0	1	2.0	9	147.0	4	103.1	2	10.2	6	113.3
Furniture & Fixtures	25	117.7	2	16.1	27	133.8	35	193.1	8	16.7	43	209.8
Rubber Products	8	93.9	3	19.5	11	113.3	18	160.7	8	240.0	26	400.7
Leather & Leather Products	-	-	2	13.3	2	13.3	-	-	-	-	-	-
Textiles & Textile Products	4	13.1	-	-	4	13.1	5	109.5	5	4.8	10	114.3
Beverages & Tobacco	1	1.2	-	-	1	1.2	1	3.4	-	-	1	3.4
Miscellaneous	8	63.6	2	7.6	10	71.2	12	63.0	2	9.3	14	72.3
TOTAL	**358**	**5,990.9**	**142**	**5,014.6**	**500**	**11,005.5**	**413**	**7,177.3**	**198**	**9,423.9**	**611**	**16,601.1**

*Projects with Malaysian equity ownership of more than 50 per cent.

Appendix 7

APPROVED PROJECTS IN THE ENGINEERING SUPPORTING INDUSTRY BY SUB-SECTOR, 2009

Sub-sector	New				Expansion/Diversification				Total			
	Number	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	Number	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	Number	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)
Moulds, Tools & Dies	11	27.9	23.5	51.4	10	86.7	14.7	101.4	21	114.7	38.2	152.8
Machining	18	79.9	117.2	197.2	8	25.7	5.2	30.9	26	105.6	122.4	228.1
Stamping	-	-	-	-	1	-	0.4	0.4	1	-	0.4	0.4
Casting	2	13.8	5.8	19.6	2	8.0	2.2	10.2	4	21.8	8.0	29.8
Surface Engineering	9	18.0	15.4	33.4	-	-	-	-	9	18.0	15.4	33.4
Heat Treatment	1	2.7	2.7	5.4	1	0.0	0.2	0.2	2	2.7	2.9	5.6
Forging	-	-	-	-	1	0.1	3.9	4.0	1	0.1	3.9	4.0
TOTAL	**41**	**142.4**	**164.7**	**307.0**	**23**	**120.5**	**26.6**	**147.1**	**64**	**262.9**	**191.3**	**454.2**

Appendix 8

APPROVED PROJECTS IN ELECTRICAL & ELECTRONICS INDUSTRY BY SUB-SECTOR, 2009

Sub-sector	New				Expansion/Diversification				Total			
	Number	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	Number	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)	Number	Domestic Investment (RM million)	Foreign Investment (RM million)	Total Capital Investment (RM million)
Consumer Electronics	3	41.0	-	41.0	4	5.8	370.6	376.5	7	46.8	370.6	417.4
Electronic Components	13	120.0	597.2	717.1	19	89.5	2,198.1	2,287.5	32	209.4	2,795.2	3,004.6
Industrial Electronics	12	139.8	186.5	326.3	13	49.6	36.3	85.9	25	189.3	222.9	412.2
Electrical Products	29	284.9	260.0	544.9	22	39.6	327.2	366.8	51	324.5	587.1	911.6
TOTAL	**57**	**585.6**	**1,043.7**	**1,629.3**	**58**	**184.4**	**2,932.2**	**3,116.6**	**115**	**770.0**	**3,975.9**	**4,745.9**

Appendix 9

MANUFACTURING PROJECTS APPROVED WITH FOREIGN PARTICIPATION BY SOURCE, 2009 AND 2008

Country	2009		2008	
	Number	Foreign Investment (RM)	Number	Foreign Investment (RM)
Japan	54	7,041,393,073	63	5,594,869,207
Hong Kong	7	5,315,671,056	7	83,557,592
USA	19	2,344,987,246	22	8,668,976,778
Singapore	92	1,992,453,506	112	2,004,260,964
Taiwan	32	716,094,564	32	911,617,377
Netherlands	21	479,696,932	19	1,795,674,697
Korea,Republic	11	455,522,339	9	197,619,840
Germany	14	424,977,489	19	4,438,254,903
Luxembourg	3	396,899,046	2	220,717,315
British Virgin Islands	11	375,336,380	6	1,230,417,087
Sweden	12	352,312,858	8	62,897,601
United Kingdom	24	325,774,938	23	850,464,793
Australia	13	323,146,625	20	13,105,834,743
Norway	2	170,798,974	2	941,940
China	17	162,221,544	17	35,655,186
Iran	3	151,458,933	1	2,863,284
Denmark	3	137,631,869	7	123,343,707
Finland	1	123,795,000	-	-
Switzerland	8	85,912,790	8	873,227,170
Canada	2	85,862,000	1	330,000
India	8	82,834,936	8	170,975,614
United Arab Emirates	1	73,472,984	5	90,877,420
Others	72	526,421,830	130	5,635,397,312
TOTAL	***	**22,144,676,912**	***	**46,098,774,530**

*** *The number of projects approved figures are not totalled to avoid double counting.*

Appendix 10

APPROVED MANUFACTURING PROJECTS BY STATE, 2009 AND 2008

State	2009						2008					
	New		Expansion/ Diversification		Total		New		Expansion/ Diversification		Total	
	Number	Total Capital Investment (RM million)	Number	Total Capital Investment (RM million)	Number	Total Capital Investment (RM million)	Number	Total Capital Investment (RM million)	Number	Total Capital Investment (RM million)	Number	Total Capital Investment (RM million)
Sarawak	15	5,894.3	10	2,556.4	25	8,450.8	22	13,718.9	17	1,450.0	39	15,168.9
Selangor D.E.	182	3,181.7	96	3,577.9	278	6,759.6	201	6,323.3	100	5,517.7	301	11,840.9
Sabah	16	5,463.7	9	200.6	25	5,664.3	29	609.8	11	354.6	40	964.4
Johor D.T.	82	2,992.2	68	1,071.3	150	4,063.4	93	10,100.1	80	1,611.6	173	11,711.7
Penang	61	1,368.3	43	796.9	104	2,165.2	84	3,425.7	67	6,730.6	151	10,156.3
Kedah D.A.	26	701.1	14	794.9	40	1,496.1	26	352.5	20	2,214.9	46	2,567.3
Perak D.R.	29	321.5	18	572.4	47	893.9	26	2,135.3	24	994.7	50	3,130.0
Melaka	14	458.5	9	434.2	23	892.7	28	3,554.4	13	80.1	41	3,634.5
Negeri Sembilan D.K.	15	685.1	15	172.5	30	857.6	13	380.6	14	765.1	27	1,145.8
Pahang D.M.	12	491.0	5	113.9	17	604.8	11	867.3	12	213.5	23	1,080.7
Terengganu D.I.	6	338.5	3	167.3	9	505.8	4	313.2	5	679.1	9	992.3
Kuala Lumpur	10	139.2	4	16.5	14	155.7	8	104.0	4	13.8	12	117.8
Kelantan D.N.	3	16.2	1	110.7	4	126.9	1	17.6	2	66.0	3	83.6
Perlis I.K.	-	-	-	-	-	-	1	79.0	1	91.3	2	170.3
Labuan	-	-	-	-	-	-	1	10.3	1	10.2	2	20.5
TOTAL	**471**	**22,051.4**	**295**	**10,585.4**	**766**	**32,636.8**	**548**	**41,992.0**	**371**	**20,793.0**	**919**	**62,785.0**

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