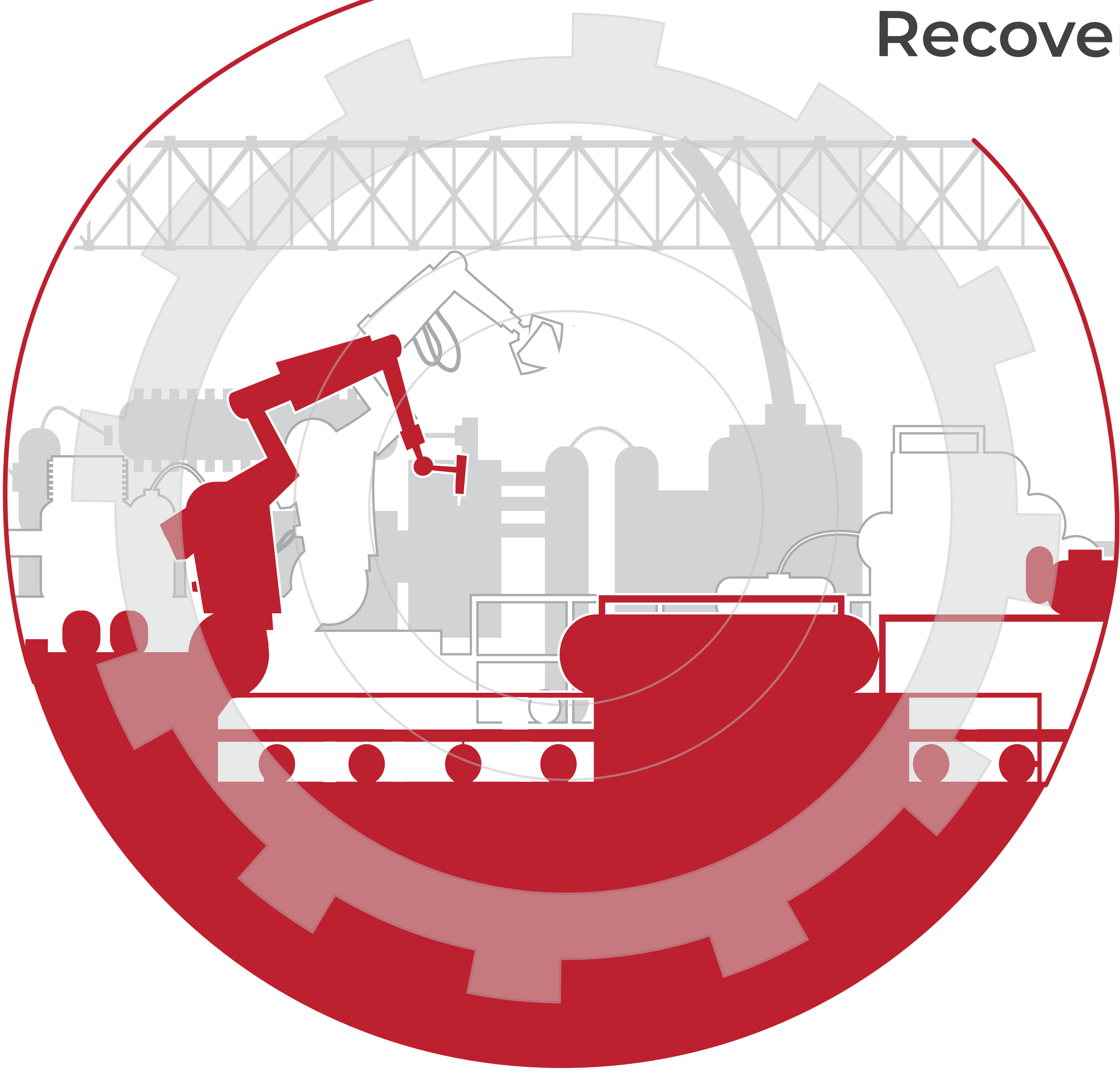
MALAYSIAN INVESTMENT DEVELOPMENT AUTHORITY

Malaysia Investment Performance Report 2020

Geared for Recovery



MIDA

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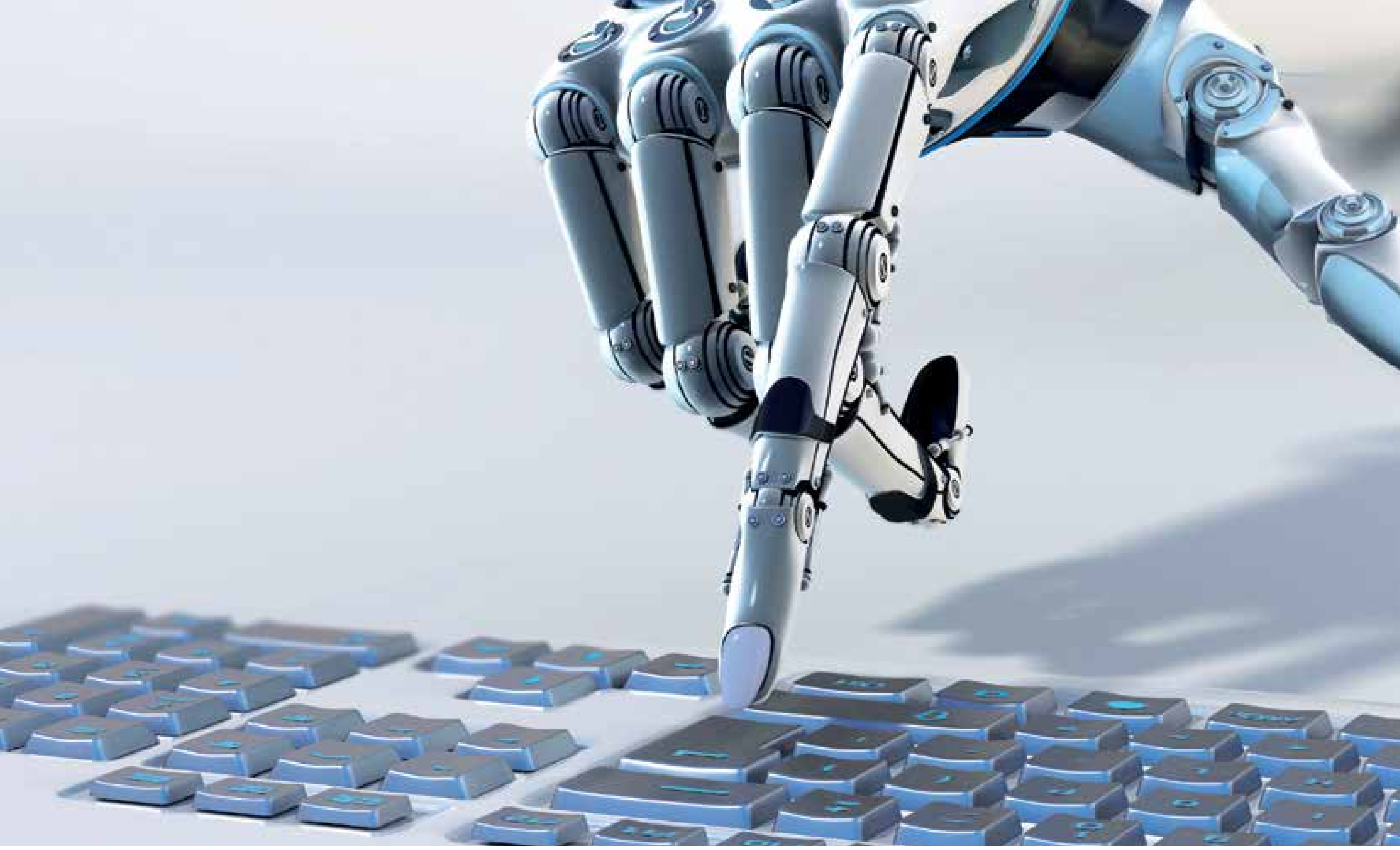
Year in Review 2020

Malaysia Investment
Performance Report

“The post-pandemic period will provide a unique opportunity for global cooperation to rebuild the international economic order and the international social order. Countries need comprehensive trade strategies, they need to prioritise investment in innovation, technology, infrastructure and also the digital economy.”

Pamela Coke-Hamilton, Executive Director of the International Trade Centre



Global Reboot

The world went through one of the most challenging periods in recent history with the spread of the COVID-19 pandemic leading to simultaneous health and economic crises. Streets were emptied, borders closed and the global economic supply chain went through periodic shutdowns to curb the spread of infections. Malaysia was not spared but managed to leverage on its strengths to continue attracting investments from both domestic and overseas sources.

A Year for the Books

The global economy's performance in 2020 largely mirrored the COVID-19 infection rates, with recovery in the middle months of the year as governments lifted restrictions that were imposed again in late 2020 following a rise in infections. These actions have had an adverse impact on their economies, while the supply chain faced numerous challenges on production breaks, closed borders as well as the restricted movements on people and goods. There was a broad-based fall in economic activities with a drop in aggregate demand and unemployment, although there were pockets of resilience too, mostly in healthcare or healthcare-related industries.

The International Monetary Fund (IMF), in its World Economic Outlook (WEO) published in January 2021, projected a 3.5 per cent contraction in GDP for the global economy in 2020, due to a stronger than expected recovery in economic activities in the second-half of the year. Advanced economies (AE) are projected to contract by 4.9 per cent, while emerging markets and developing economies (EMDEs) are forecast to contract by 2.4 per cent.

With the exception of People's Republic of China (PRC), for most EMDEs, prospects remain uncertain due to the continuing spread of the pandemic and overwhelmed health care systems and the greater dependence on severely affected sectors, such as tourism and external finance, including remittances. While Asian advanced economies are projected to have a less severe downturn compared to European advanced economies, Asian EMDEs are expected to see contractions. There are stark regional differences, with many Latin American economies severely affected and large declines in economic activities among Middle Eastern and Central Asian countries, as well as oil-exporting countries in sub-Saharan Africa.

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The IMF noted that while the times were difficult, global economic growth has so far been more resilient. Third quarter GDP data was mostly supportive of growth or was in line with expectations. Private consumption has recovered the most due to one-off pent-up demand and adjustments to work-from-home. Investments, on the other hand has picked up relatively slowly, except in PRC. High-frequency data showed some tapering of new orders in industrial production going into the fourth quarter. Services output remained subdued and will likely soften further in the coming months with renewed restrictions to combat rising infections.

Government assistance and policy has been instrumental in ensuring economic resilience. In Malaysia, four stimulus packages were announced in 2020 to aid the economy. Other examples include the European Union's €750 billion pandemic recovery package fund– more than half of which is grant-based– as well as other assistance packages to provide temporary lifelines across the world such as cash and in-kind facilitation to affected firms and households. In AEs, large-scale and more diverse asset purchases and relending facilities were set up to support credit provision to a wide range of borrowers. Emerging market central banks also combined interest rate cuts with new relending facilities and also asset purchases, which for many was the first time.

The current global downturn has had a harsher impact on the services sector in comparison to the manufacturing sector. This is mostly due to governments' responses to curb the pandemic through movement restrictions and social-distancing measures, which has limited face-to-face interactions crucial to the services sector. Businesses in wholesale and retail trade, hospitality as well as arts and entertainment, have felt the brunt of the slowdown in economic activities.

“Government assistance and policy has been instrumental in ensuring economic resilience.”

Global trade experienced significant decline in 2020 due to border closures and supply disruptions. While there has been some recovery in trade in goods, trade in services remains subdued given that measures to curb infections have been reinstated.

Global Investment Landscape Impacts Malaysia's Foreign Direct Investment Flows

From US$1.5 trillion in 2019, global FDI shrunk by 42 per cent to an estimated US$859 billion affecting all types of investments – greenfield investment projects contracted 35 per cent, cross-border mergers and acquisitions (M&As) down by 10 per cent and, new international project finance deals fell by two per cent.

In 2020, Malaysia's net FDI inflows stood at RM13.9 billion; a decline from 2019 (RM31.7 billion). The first quarter came in at RM6.4 billion before dipping in the second quarter to RM2.2 billion. However, there was net outflow of RM846 million in the third quarter. Malaysia's FDI then improved in the final quarter with net inflows of RM6.1 billion.

Malaysia's lower net FDI inflows in 2020 is not necessarily an unfavourable sign, when taking into consideration the global investment landscape and the uncertainties that prevailed during the year.

According to the Department of Statistics Malaysia (DOSM), the total gross FDI inflow into Malaysia in 2020 was valued at RM139.9 billion compared to RM138.8 billion in 2019, indicating an increase of 0.8 per cent. This is a good achievement given the Movement Control Order (MCO) and Recovery Movement Control Order (RMCO) in the second and third quarters of last year, respectively. The gross FDI inflow is also reflective of the continued high levels of FDI projects approved and implemented in the economy (manufacturing, services and primary sectors) over the last few years.

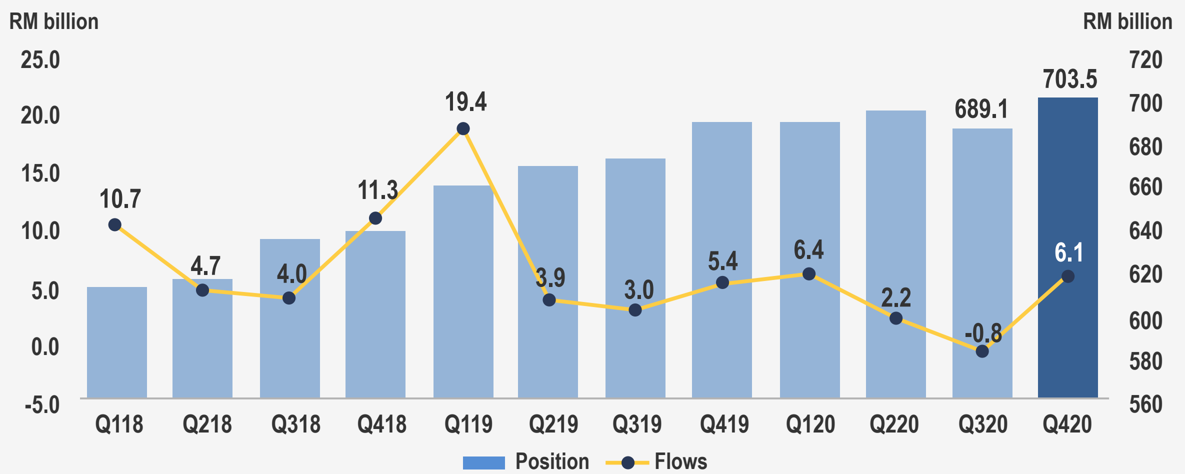
Malaysia's net FDI outflows in the third quarter were driven by the outflows from debt instruments amounting to RM9.4 billion in the stipulated period. This was reflected in inter-company loan extensions and scheduled loan repayments, which are typical for multinational corporations' (MNCs) operations; as well as the trade credits granted to manufacturing firms, in line with substantial exports, especially in the electrical and electronics (E&E) sector. Notably, the third quarter of 2020 was an exceptional period for the first time since the last quarter of 2009.

The decline in net FDI flows in Malaysia in 2020 mirrors the situation Malaysia experienced in 2009 after the subprime crisis in the US. MNCs in Malaysia were repatriating higher amounts of their profits for loan repayments and retaining earnings to help their HQ and affiliates faced with financial difficulties. Net FDI flows also indicates the maturity of Malaysia's monetary policy which allows for the repatriation of capital, interest, dividends and profits, which is a prerequisite for a trading nation such as Malaysia.

The total stock of FDI in the country rose by RM14.4 billion to RM703.5 billion as at the end of December 2020, with Singapore the largest investor at 21.7 per cent, followed by Hong Kong at 12.2 per cent and Japan at 10.9 per cent.

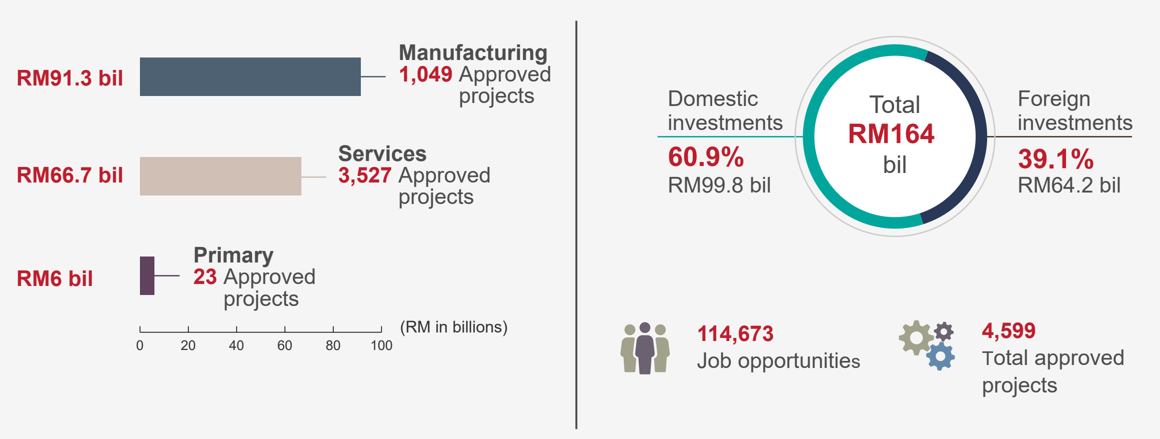
Total direct investments abroad (DIA) stood at RM518.9 billion as at the end of 2020, with investments largely flowing into financial activities (44.2%), mining and quarrying (12.9%) and agriculture (8.7%).

Malaysia's Foreign Direct Investment (FDI) Q1 2018 - Q4 2020



Source: DOSM

Overall Private Investments in Malaysia in 2020



The Malaysian Landscape

According to the Department of Statistics Malaysia (DOSM), Malaysia's GDP contracted 5.6 per cent due to the pandemic. BNM, however, projected that Malaysia's economy would rebound to a GDP growth rate of between 6.5 per cent and 7.5 per cent in 2021, which was also in line with the views of the IMF and the World Bank. The projection for economic rebound was due to the increasing global demand for selected products which would have a positive impact on Malaysia's exports – oriented industries, such as the E&E industry. This led to the expectation for higher investment activities and creation of higher income. New investment projects, demand for technology and healthcare products, as well as expansion in commodity-related production capacity would also support Malaysia's growth in 2021.

At the beginning of September 2020, the country saw a third wave of COVID-19 infections. This led the Government to implement the conditional movement control order (CMCO), a relaxed version of the MCO, to strike a balance between preserving lives and livelihoods; curbing the spread of the virus while allowing economic activities to open. The Government was forced to impose further restrictions via the introduction of MCO 2.0, however, due to the unabated virus surge. The implementation of MCO 2.0 has understandably raised the question of whether Malaysia would still be able to maintain the speed of economic recovery initially forecasted.

The Malaysian Government is committed to cushioning the impact of MCO 2.0, by implementing various stimulus packages including the recent Economic and Rakyat Protection Assistance Package (PERMAI), worth RM15 billion, which is aimed at combatting the COVID-19 outbreak, safeguarding the welfare of the people and supporting business continuity. MIDF Research estimates that MCO 2.0 will drag Malaysia's economic growth by 0.7 to 0.9 percentage points in 2021, and projects lower GDP year-on-year growth of 6.2 per cent. Its research analysts are, however, optimistic that the impact of MCO 2.0 would not be as severe as the previous MCO, particularly as essential economic sectors, such as manufacturing, construction, and trading and distribution have been allowed to operate.

A raft of measures was implemented by the Malaysian Government throughout 2020 to support the economy, including introducing four stimulus packages, namely PRIHATIN, PRIHATIN PLUS, PENJANA and KITA PRIHATIN worth RM305 billion, targeting the welfare of all strata of society, industries and businesses.

Overview of Investments Approved in 2020

Malaysia recorded a total of RM164 billion worth of approved investments in the manufacturing, services and primary sectors in 2020. These investments involved 4,599 projects and are expected to create 114,673 job opportunities in Malaysia. Of the total investments approved, FDI accounted for RM64.2 billion or 39.1 per cent of the total, with domestic direct investments (DDI) accounting for RM99.8 billion or 60.9 per cent.

The top five sources of approved FDI for the manufacturing, services and primary sectors were PRC (RM18.1 billion), Singapore (RM10 billion), The Netherlands (RM7 billion), The British Virgin Islands (RM5.5 billion) and USA (RM4.3 billion).

The manufacturing sector attracted RM91.3 billion or 55.6 per cent of the total approved investments, followed by the services sector at RM66.7 billion or 40.7 per cent, while the primary sector received RM6 billion or 3.7 per cent.

Manufacturing takes the Lead

Despite a volatile first-half of 2020, the manufacturing sector recovered in the second-half of the year especially for sub-sectors that relied on exports and in tandem with the growth of the sector. Malaysia's manufacturing sector brought in investments worth RM91.3 billion (2019: RM82.7 billion) across 1,049 (2019: 988) projects. Of these, RM34.7 billion or 38 per cent (2019: RM28.3 billion, 34.2%) were from domestic investments, while RM56.6 billion or 62 per cent (2019: RM54.4 billion, 65.8%) were from foreign sources.

Lower Investments for Services

The restriction of face-to-face interactions due to COVID-19 has been detrimental to Malaysia's services sector, which still relies on such interactions on a daily basis.

Malaysia's services sector recorded approved investments of RM66.7 billion in year 2020, a drop of about 45 per cent from the RM121.7 billion approvals recorded for year 2019.

A total of 3,527 projects were approved in 2020 with 33,652 potential jobs opportunities . The bulk of the investments were in the real estate (RM31.2 billion), utilities (RM10.8 billion), support services (RM5.2 billion), telecommunications (RM5.2 billion) and MSC status (RM3.9 billion) sub-sectors. Collectively, these investments represented 84.4 per cent of the approved investments in the services sector. The support services investments were mostly in the areas of green technology and integrated logistics services.

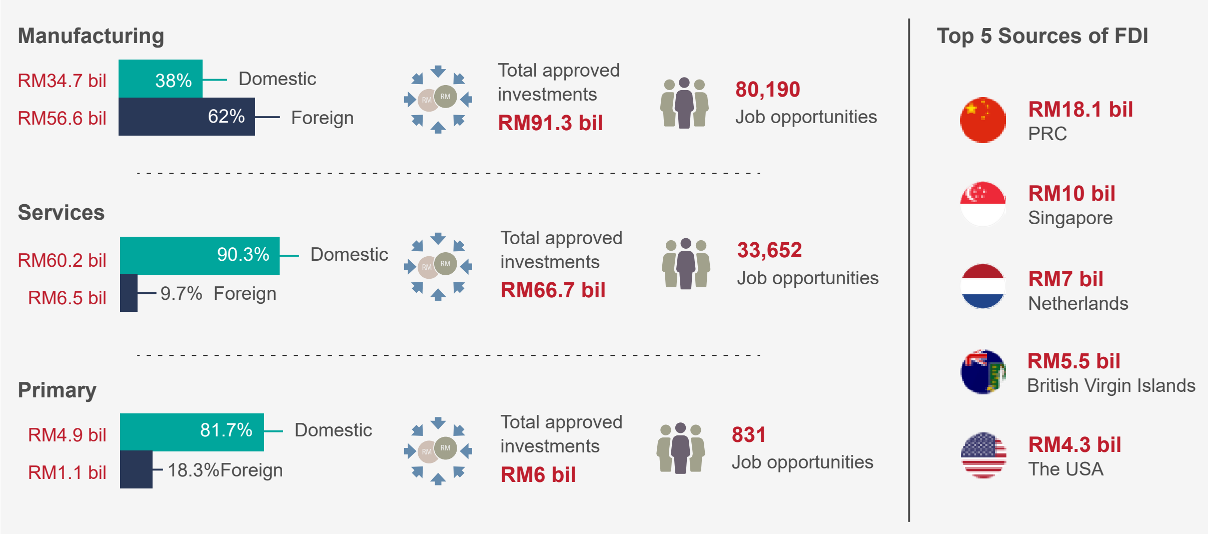
Of the total approved investments, 90.3 per cent or RM60.2 billion were from domestic sources, and the balance 9.7 per cent or RM6.5 billion were foreign investments. A bulk of approved domestic investments were in real estate, utilities and telecommunications.

Volatile Year for Primary

The primary sector comprises three major sub-sectors namely agriculture, mining and plantation and commodities. A total of 23 projects were approved in 2020 with investments of RM6 billion, a slight drop from the approval of RM7 billion in 2019.

Of the approvals in 2020, RM4.9 billion (81.7%) was derived from domestic investments, while foreign investments contributed RM1.1 billion (18.3%). These investments are expected to provide 831 potential employment opportunities.

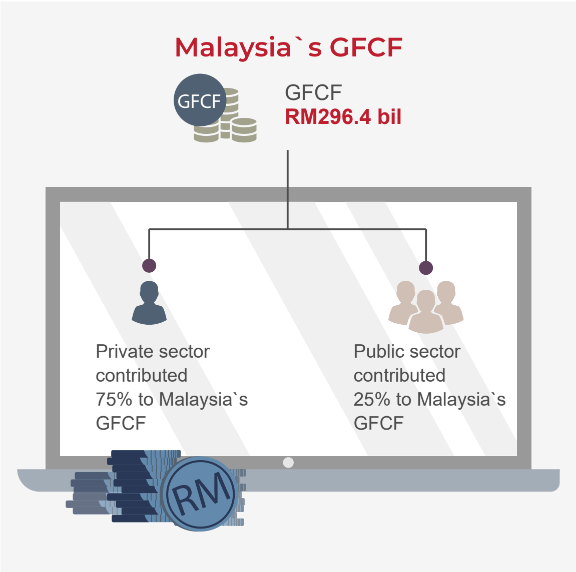
Domestic Vs Foreign Investments by Sectors for 2020



Gross Fixed Capital Formation (GFCF)

In 2020, Malaysia's Gross Fixed Capital Formation (GFCF) at current prices recorded RM296.4 billion which was a slight decrease compared to the GFCF of RM346.8 billion in 2019.

The private sector contributed 75 per cent to Malaysia's GFCF while the public sector contributed 25 per cent in 2020.



Resilient in Tough Times - Laudable International Rankings

Malaysia continues to be a competitive investment destination despite the current uncertainties, proven by its rankings in the global economic scene.

The World Bank Doing Business 2020 Report ranked Malaysia at the 12th position among 190 economies worldwide, a further improvement from 15th position the previous year. This ranking was based on the assessment of ease of doing business, measuring processes such as incorporating businesses, obtaining permits, engaging in international trade and enforcing contracts. The Doing Business Report advocates regulatory quality and efficiency by instituting reforms. Malaysia's improved performance attests that on-going reform initiatives are on the right track to further enhance its competitiveness, productivity and governance which will help promote investments and accelerate national economic development.

Malaysia is rapidly becoming a place where digital talent development and workforce upskilling are rising to the forefront, which is also in line with the country's push to adopt digitilisation and move up the value chain in economic activities. These efforts were not in vain as the country improved its ranking to 26 from 29 among 88 countries in the Global Talent Competitiveness Index 2020 (GTCI 2020), a report jointly produced by INSEAD University, Google and Adecco to track and measure talent performance. Malaysia was also the only upper-middle income bracket economy that stood in the top quartile of the report, pipping high-income economies such as PRC, Republic of Korea (ROK), Spain and Portugal. The ranking is Malaysia's highest yet and the GTCI 2020 saw Malaysia doing well in the Enable, Attract, and Vocational and Technical Skills pillars while improving in the Retain pillar. Malaysia also ranked highly for Employability, ranking at the sixth spot globally while placing highly in Business and Labour Landscape, ranking at 13 and Market Landscape, ranking at 22.

Malaysia emerged fifth in a Bloomberg study released in December 2020 that gauged 17 developing markets and their outlook for 2021 based on 11 indicators of economic and financial performance. Citing a Goldman Sachs Group Inc report, Bloomberg noted that Malaysia stands to gain from recovering economic activities once the pandemic is under control. Bloomberg also noted that Malaysian assets were especially undervalued compared to the average of its peers, when judged on real effective exchange rates versus five-year averages.

A joint study by KPMG and Washington, DC-based The Manufacturing Institute, "Cost of Manufacturing Operations Around the Globe", ranked Malaysia fourth among 17 countries, outperforming PRC, India, Japan and Vietnam. The study provided an assessment of how the USA manufacturing sector compares in competitiveness to its main trading partners by evaluating 23 cost factors divided into primary and secondary costs through a Cost of Doing Business (CoDB) Index. Malaysia emerged at the top of the CoDB Index tied with PRC, Mexico and Vietnam in terms of primary costs while outperforming on three factors - hourly compensation costs, real estate costs and corporate tax rates.

Malaysia continued to be ranked among the top 10 countries to invest or do business in by CEOWORLD Magazine. The country was at the ninth spot, one spot below the USA and beating countries such as Netherlands, Sweden, Finland and Germany. The rankings were based on 11 factors namely, corruption, freedom (personal, trade, and monetary), workforce, investor protection, infrastructure, taxes, quality of life, red tape, and technological readiness – with each category equally weighted.

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Built to Last

Despite the border closures and the tough investment landscape, policymakers strived to ensure that Malaysia remained welcoming of investors by rolling out several measures to ease the challenges of operating businesses in the country while encouraging and facilitating the adoption of technology, innovation and research by SMEs.

Investment Strategies and Initiatives

For MIDA, promotion and outreach programmes are an ongoing undertaking to attract FDI and DDI despite the SOPs and closure of borders imposed by governments worldwide. All MIDA's global representatives in 20 overseas and 12 regional offices remain active in facilitating investors to ensure that their investment projects thrive and are sustainable, amidst the current circumstances.

To ease the entry of eligible business travellers into the country for trade and investment purposes, a One-Stop Centre (OSC) operated by MIDA was established in early October 2020. The OSC plays a critical role in Malaysia's path to economic recovery and growth as it ensures that executives and essential personnel can continue to travel into and work in the country.

In June 2020, following the launch of the PENJANA economic recovery plan, MIDA established the Project Acceleration and Coordination Unit (PACU) to increase the ease of doing business. PACU provides end-to-end facilitation for all approved projects to enable their timely implementation.

The Domestic Investment Agenda

Given that the pandemic is likely to be here for the foreseeable future, businesses will need to re-evaluate their processes and strategies to remain sustainable.This is particularly true for SMEs as many of the smaller ones are forced to close due to insurmountable costs and depleted cash reserves.

The Government together with relevant agencies swung into action by providing support and aid for SMEs – Malaysia's critical backbone – to navigate through this period. As a whole, they represent 98.5 per cent of business establishments in the country, contribute 38.3 per cent to GDP and 17.3 per cent to exports, and employ 48 per cent of the workforce.

> "The Government together with relevant agencies swung into action by providing support and aid for SMEs – Malaysia's critical backbone – to navigate through this period."

MIDA has taken the opportunity to encourage potential investors and industry players to engage and work with local businesses, particularly SMEs. MIDA also facilitates SMEs and local businesses that want to rationalise and reposition themselves through M&As, joint ventures (JVs) or equity financing by finding them the right partnerships.

This is where the Domestic Investment Coordination Platform (DICP), a MIDA initiative dedicated to providing the crucial link between businesses, funding, technologies and research capability comes into play. The DICP works closely with regulators, technology providers and financial institutions including equity and corporate advisory firms, to help SMEs and local companies grow their businesses. The DICP team also engages with research and development (R&D) institutions to help in commercialising projects. Besides the business-to-business facilitation, the DICP also organises and promotes seminars and fora on alternative financing in collaboration with financial institutions, equity and venture capital firms.

MIDA's commitment to strengthening the domestic investment ecosystem has enabled local companies and SMEs to explore greater opportunities during this pandemic. Among the success stories are the signing of a Memorandum of Understanding (MoU) between BiON Sdn Bhd, an environmental engineering and renewable energy solutions provider, and SIRIM Tech Venture for technical cooperation in the production of compressed biogas alongside related systems and other potential projects related to waste-to-energy. The collaboration also paves the way for BiON Sdn Bhd to merge with Green Lagoon Technology Sdn Bhd in creating the biggest biogas power plant operator in the country.

The DICP team also collaborated with Bursa Malaysia in preparing a local telecommunications services company and an agriculture-based company to go for their initial public offerings in 2022. A local SME also received support with their collaboration with a local financial technology company to adopt digital technology and e-commerce platforms into their business.

Towards Malaysia's future

MIDA had to be fast-thinking and creative in responding with measures to benefit the country and its economy by creating new business and job opportunities against 2020's challenging backdrop. MIDA has played a significant role in advocating and providing proposals for the development of new policies and blueprints, and they are as follows:

New Services Sector Blueprint

To drive the development of the services sector for the period 2021 – 2025, the Government, through the Ministry of International Trade and Industry (MITI), formulated the New Services Sector Blueprint 2021 – 2025 (NSSB). This plan is vital in understanding the services sector from a more holistic perspective and aims to build upon the successes of the first blueprint, while identifying lessons learned and focussing on high growth and potential areas for development.

National Policy Framework for the Fourth Industrial Revolution and Digital Economy Blueprint

As the focus of Industry4WRD launched on 31 October 2018 was on the manufacturing sector and the manufacturing-related services, there was a need for a broader Industry 4.0 policy framework for the rest of the economy to interlink with the Industry4WRD framework and thus, the National Policy on Industry 4.0 was mapped out as an overarching policy.The framework will help steer Malaysia's socio-economic transformation by harnessing potential Industry 4.0 technologies to boost growth and the socio-environmental wellbeing of Malaysians over the period of 2021 to 2030.

The Industry 4.0 framework is complemented by the Digital Economy Blueprint (2021 – 2030), which was developed in response to how digital technology advancement and the growth of high-speed internet connectivity have changed the way goods and services are created, distributed and consumed, and how people interact.The blueprint will help accelerate Malaysia's digital technology adoption in the manufacturing, services and agriculture sectors – in a bid to enhance the nation's efficiency and productivity, competitiveness and growth, as well as boost innovation– as it outlines action plans including implementation, monitoring and assessment of identified initiatives.

The Economic Planning Unit, together with MIDA and MITI, drafted the blueprint. From 2021 onwards, MIDA will lend its expertise in executing the identified initiatives to expedite the Industry 4.0 framework adoption in the country while positioning Malaysia as a regional leader in the digital economy with inclusive, responsible and sustainable socio-economic development and growth.

Digital Adoption

A range of incentives has been offered to encourage companies to adopt digitalisation. Seeing as policy interventions will continue to assume a crucial role in shaping the future of Malaysia's digital economy, MIDA introduced the Automation Capital Allowance (Automation CA) for the services sector and Smart Automation Grant (SAG) to particularly drive automation and digitalisation of SMEs and mid-sized companies.

Under Budget 2020, the existing Automation CA for the manufacturing sector was expanded to also drive the services sector towards automation. Meanwhile, the SAG introduced under PENJANA aims to assist and incentivise SMEs and mid-sized companies to digitalise operations and trade channels as well as to enhance their competitiveness at an international level.

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APEC 2020 : A Virtual Success

The Asia-Pacific Economic Cooperation (APEC), a regional economic forum of 21 members, successfully concluded the APEC Malaysia 2020 Summit in November chaired by Prime Minister Tan Sri Muhyiddin Yassin, with the adoption of the 2020 Kuala Lumpur Declaration and the APEC Putrajaya Vision 2040.

As with many events in 2020, hosting the summit, which was themed 'Optimising Human Potential towards a Resilient Future of Shared Prosperity', had to take into account the COVID-19 pandemic. The first series of meetings were a combination of physical and virtual meetings from 3 February 2020 to 22 February 2020, after which all meetings were held virtually, with all 21 members attending despite coming from different time zones.

The 2020 Kuala Lumpur Declaration was adopted by members who pledged to work together on several priorities, namely: combatting and mitigating the impact of COVID-19; improving the trade and investment narrative; inclusive economic participation through the digital economy and technology; driving innovative and inclusive sustainability and; strengthening stakeholder engagement.

Other key priorities of the 2020 Kuala Lumpur Declaration that were adopted included support for agreed-upon rules of the World Trade Organisation in promoting the stability and predictability of international trade flows. Members also agreed to support the organisation's ongoing work while also further advancing economic integration in the region, including through the work on the Free Trade Area of Asia-Pacific agenda.

The 2020 Kuala Lumpur Declaration also took the stance of fostering an enabling environment for the development of the digital economy, including new opportunities for micro, small and medium enterprises (MSMEs) while pursuing inclusive economic policies that support the recovery and growth of MSMEs, women and others with untapped economic potential. Members also pledged to support advancing efforts to promote human resource development and strengthening economic and technical cooperation to expedite the economic recovery of affected economic sectors and workers.

The 2020 Kuala Lumpur Declaration also called to facilitate access to affordable energy, enhance energy resilience and energy security to ensure sustainable economic growth as well as strengthen stakeholders' engagement to support efforts towards economic recovery.

The members also pledged to support the APEC Putrajaya Vision 2040 based on the Bogor Declaration agreed upon by APEC members at the Bogor, Indonesia meeting in 1994 that called for free and open trade and investment in the region by 2020. The vision would be achieved through three economic drivers: trade and investment; innovation and digitalisation and; strong, balanced, secure, sustainable and inclusive growth. The APEC Putrajaya Vision 2040 will serve as the primary working document up to 2040.

Priority was given to bringing APEC closer to the people, with the objective of creating balanced and fair cooperation among economies towards a more inclusive and sustainable development of the Asia-Pacific region. To this end, Malaysia worked to achieve progress under the 'Optimising Human Potential towards a Resilient Future of Shared Prosperity'.

Despite the logistical challenges of the pandemic, much work was done and foundations were set for the next two decades of APEC's future. The summit ended on a high note, albeit virtually, with Malaysia handing over to New Zealand as the next host of the summit.

A Sustainable Way

United Nations-Supported Sustainable Development Goals (SDGs)

With Malaysia's dependence on international trade, staying aligned to global trends is important, with the shift to sustainability being one of the key trends of the past decade.

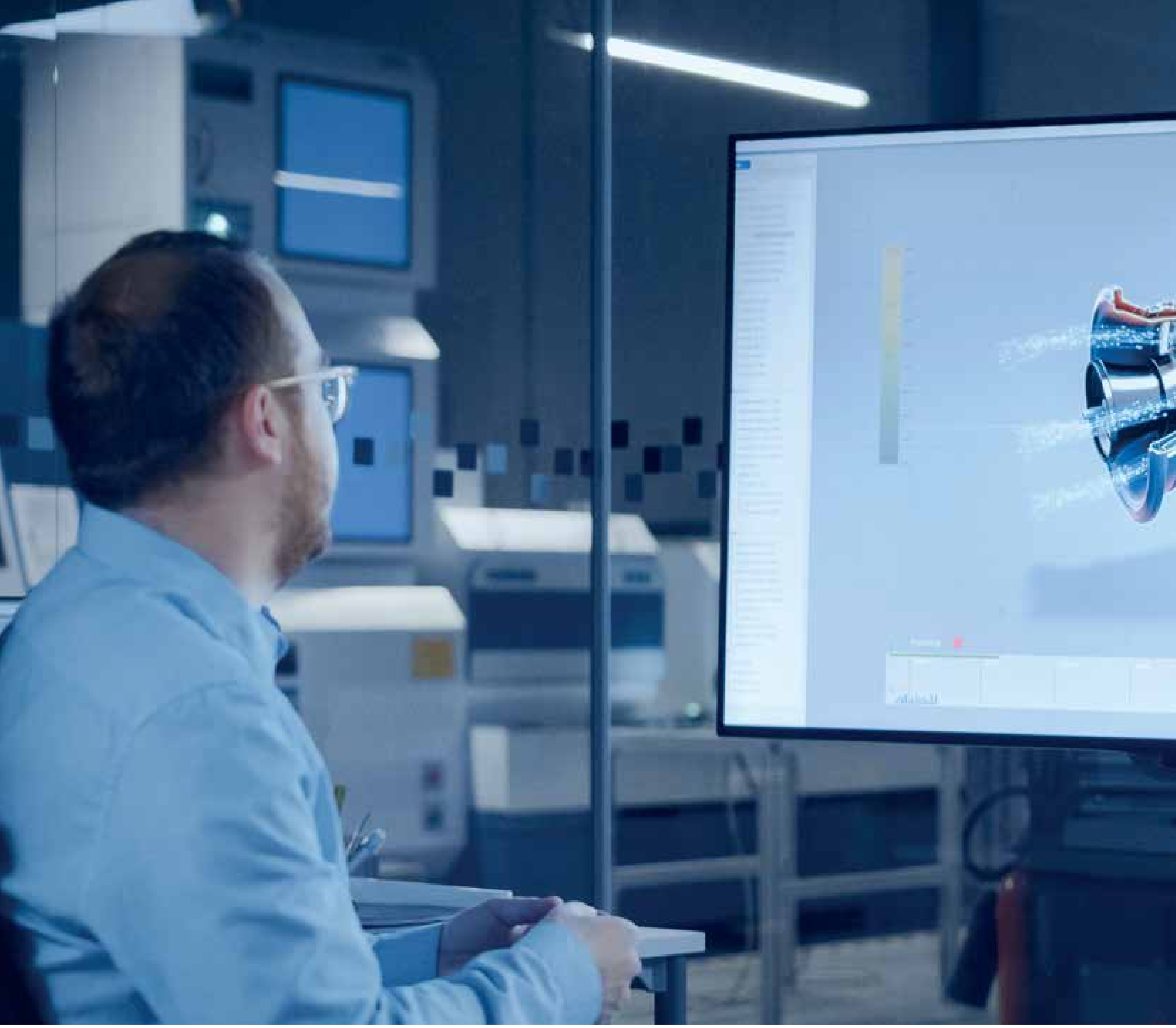
Malaysian exporters have taken steps to adopt the United Nations-supported Sustainable Development Goals (SDGs) through implementing environmental, social and governance (ESG) standards that meet the requirements on ethical impact and sustainability. Like all UN members, Malaysia adopted the SDGs in 2015 and have made progress towards these goals. According to the 2020 SDG Index, Malaysia ranked 60th out of 166 countries (third among ASEAN countries behind Thailand and Vietnam), improving from the 66th position in 2019. Malaysia continues to make progress with SDG 1– reducing poverty; SDG 7– affordable and clean energy; SDG 8– decent work and economic growth; and SDG 9– industry, innovation and infrastructure.

The Alignment of SDGs in Malaysia's Investment Policies

In addition to adopting a targeted approach to attract quality investments in hi-tech, knowledge-intensive and innovation-based industries, Malaysia is also placing greater importance on sustainable industries, as part of its strategy to sustain economic growth momentum and resilience of the economy. Malaysia continues to provide a conducive business environment for investors due to its alignment of SDGs and investment policies. The Eleventh Malaysia Plan (11MP) from 2016-2020 embodied these goals and policies, which will continue under the Twelfth Malaysia Plan (12MP) (2021-2025) and the Thirteenth Malaysia Plan (13MP) (2026-2030) as the country charts its path towards becoming a developed and high-income nation.

Many of the promotion programmes and initiatives undertaken by MIDA underscores the importance of sustainability in relation to attracting investments. Some of the latest initiatives and programmes were announced under Budget 2021, namely:

- Malaysia-SDG Trust Fund - The Government through cooperation with the UN will establish MYSDG Trust Fund with an initial allocation of RM20 million financed from both public and private sources to ensure that the SDGs are achieved by 2030.
- Sustainability Bond - Towards creating a Sustainable Financial Hub, and positioning Malaysia as a regional hub for a sustainable lifestyle, the Government issued in August 2020 the Sukuk Prihatin, in which subscriptions of RM666 million exceeded the target and will enable the Government to issue its first Sustainability Bond for environmental and social initiatives in 2021.
- Income Tax Exemption for Sustainable and Responsible Investment (SRI) - To further encourage the issuance of Sustainable and Responsible Investment (SRI) products and bonds that achieve green, social and sustainable standards in Malaysia, the existing income tax exemption for SRI green sukuk grant is extended to all types of sukuk and bonds, and would be valid until 2025.



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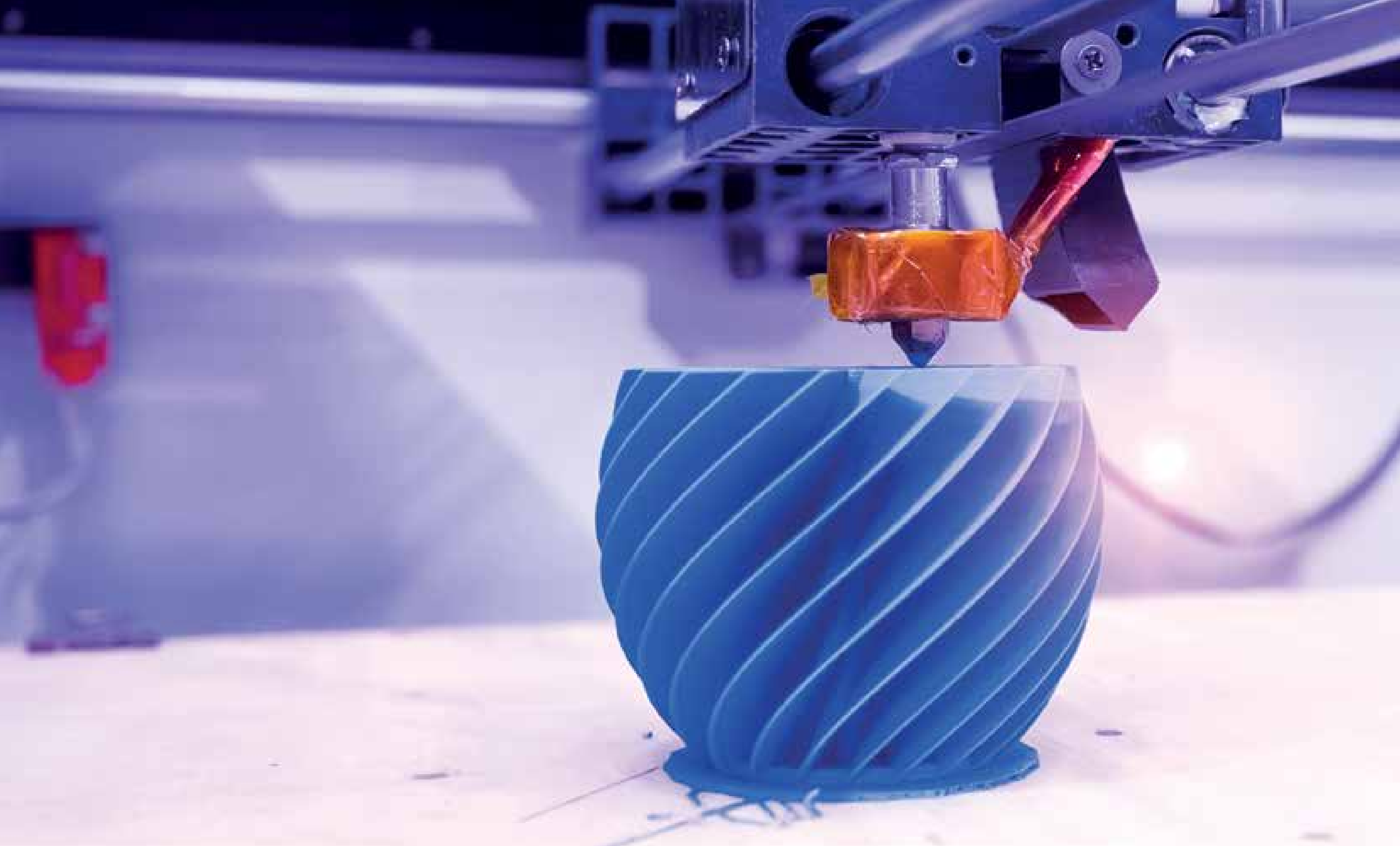
Performance of the Manufacturing Sector

“You must set your sights on high-value manufacturing activities. It is the only way to build long-term growth. It is the secret to moving beyond our borders and competing in the global market.”

Tan Sri Dato’ Soh Thian Lai, President, Federation of Malaysian Manufacturers



Resilient Rebound

Malaysia's manufacturing sector experienced promising and strong growth amidst COVID-19 headwinds, with an increase of 10.3 per cent in investments from 2019 and strong job creation figures, while both foreign and domestic investors retained their confidence in the nation's economy as domestic direct investments (DDI) received a substantial boost.

The year 2020 started out promisingly for Malaysia, as the country was recognised as the Most Vibrant Investment Ecosystem in Asia at the World Business Angels Investment Forum (WBAF) 2020's World Excellence Awards, edging out Thailand and Singapore, the other nominees under the same category. The award acknowledges countries and companies that stand out in imagining, discussing, and shaping the future of an entrepreneurial world. Malaysia received this award as a result of the consistent annual increase of foreign direct investments (FDI) inflows and the conducive business ecosystem within the country.

Then the COVID-19 pandemic struck, causing global production and consumption to plunge precipitously. Companies worldwide scrambled to reinvent their business models and diversify their manufacturing bases, as they sought to reduce global supply chain disruption risk through localism and regionalism.

As 2020 progressed, however, global manufacturers demonstrated a surprising level of resilience. Their business continuity and disaster recovery capabilities were further evidenced by the December Purchasing Managers Index (PMI) compiled for JPMorgan by IHS Markit, which revealed that global factory output and order book inflows continued rising – almost more rapidly than at any other time since 2010. According to IHS Markit, supply chain issues were practically the only major factors holding back growth.

To that end, manufacturers throughout the world accelerated the adoption of industrial automation and digitalisation as a way to transform their businesses in light of the pandemic and subsequent government-imposed lockdowns, leveraging technologies related to Industry 4.0. The World Economic Forum (WEF), in listing the various technology trends that accelerated during the pandemic, noted Industry 4.0's core technologies, such as big data, cloud computing, Internet-of-Things (IoT) and blockchain helped to build a more resilient supply chain management system. The KPMG Global Manufacturing Outlook 2020: COVID-19 Special Edition revealed that almost three quarters (72%) of chief executives in manufacturing prioritised investment in new technology, approximately three times the number (28%) who prioritised investment in workforce skills.

A Strong Finish

The manufacturing sector contributed RM25.2 billion or 67.4 per cent to the total approved investments of RM37.4 billion in the first quarter of 2020. In the second quarter, the manufacturing sector's share decreased to 55.1 per cent, whereby it only contributed RM10.5 billion to the total approved investments of RM27.4 billion.

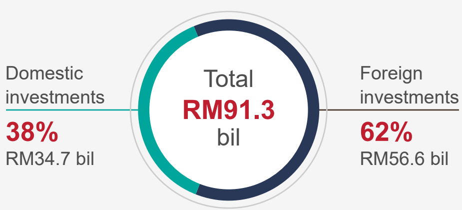
However, by the third quarter of 2020, the manufacturing sector saw a clear turnaround. From the RM35.7 billion worth of investments that it had brought in for the first half of the year, the third quarter alone had the manufacturing sector contribute an astonishing RM29.6 billion more, bringing the sector's total approved investments figure to RM65.3 billion at the end of the third quarter.

By the end of the year, Malaysia's manufacturing sector had brought in total investments worth RM91.3 billion across 1,049 projects. This is a significant increase from 2019's figures of RM82.7 billion across 988 projects; an incredible performance by any measure, much less in light of COVID-19. While FDI continued to form the majority of investments at RM56.6 billion (62%), domestic investors pumped in over RM6 billion more than they did in 2019, bringing domestic direct investments (DDI) in 2020 to RM34.7 billion (38%). Overall, new projects made up 66.9 per cent of approved manufacturing projects, a 12.2 percentage point increase from 2019. This underlined Malaysia's competitiveness as the preferred location for high-value-added manufacturing activities in the region, as supply chains realigned post-pandemic.

Key Highlights of the Manufacturing Sector for 2020

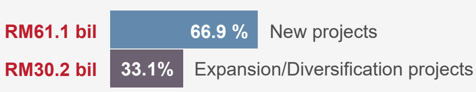
Domestic vs Foreign Investment

1,049 projects were approved



Expansion/ Diversification vs New Projects

RM91.3 bil Total investment



Foreign Investment Scenario

Foreign investments inflows continued to contribute capital, technology, and knowledge transfers to the country. Despite the pandemic's effects, Malaysia's fundamentals remain sound, attracting quality FDI investments. In 2020, foreign investments primarily went to fund new projects worth RM36.8 billion (65%) while the remaining RM19.8 billion (35%) were for expansion/diversification projects.

In particular, the basic metal products industry had been revitalised by FDI in 2020. Total investments for that industry increased from RM694.4 million in 2019 to RM14.1 billion in 2020. Aside from that, the bulk of total approved foreign investments for 2020 were from the electrical and electronic products (E&E) (RM13.6 billion), paper, printing and publishing (RM6.9 billion), machinery and equipement (M&E) (RM4.8 billion), and chemicals and chemical products (RM4.6 billion) industries.

Other sectors with high levels of investments included petroleum products (including petrochemicals) (RM2.9 billion), scientific and measuring equipment (RM1.9 billion), transport equipment (RM1.7 billion), as well as non-metallic mineral products (RM1.7 billion).

PRC was, like in 2019, Malaysia's largest source of FDI for 2020 at RM17.8 billion, followed by Singapore (RM8.8 billion), the Netherlands (RM6.5 billion), British Virgin Islands (RM5.5 billion), the USA (RM3.7 billion), Hong Kong (RM2.9 billion), Switzerland (RM2.8 billion), Thailand (RM1.9 billion), Japan (RM1.6 billion), Republic of Korea (RM1.4 billion), and Germany (RM1.2 billion). These 11 countries jointly accounted for a total of RM54.1 billion (95.6%) of total foreign investments.

Domestic Brief

Malaysia continues to support domestic players in embracing digitalisation and automation, as well as boosting innovation and adopting technologies pertaining to Industry 4.0. Approved DDI in the manufacturing sector were dominated by new investments, which contributed RM24.3 billion or 70 per cent to the total DDI of RM34.7 billion. Meanwhile, 30 per cent or RM10.4 billion of DDI in the manufacturing sector were from expansion/ diversification projects.

Industry Brief

Approved Domestic Investments

RM34.7 bil Total investments

70% — **RM24.3 bil** New projects

30% — **RM10.4 bil** Expansion/diversification projects

Domestic vs Foreign Investments

Total **RM91.3** bil

Domestic investments **38%** RM34.7 bil

Foreign investments **62%** RM56.6 bil

Approved Foreign Investments

RM56.6 bil Total investment

65% — **RM36.8 bil** New projects

35% — **RM19.8 bil** Expansion/diversification projects

Top 5 Domestic Investments

RM12.6 bil Petroleum products (including petrochemicals)

RM3.9 bil Rubber products

RM2.3 bil Food manufacturing

RM2.3 bil M&E

RM2.2 bil Transport equipment

Top 5 Foreign Investments

RM14.1 bil Basic metal products

RM13.6 bil E&E

RM6.9 bil Paper, printing and publishing

RM4.8 bil M&E

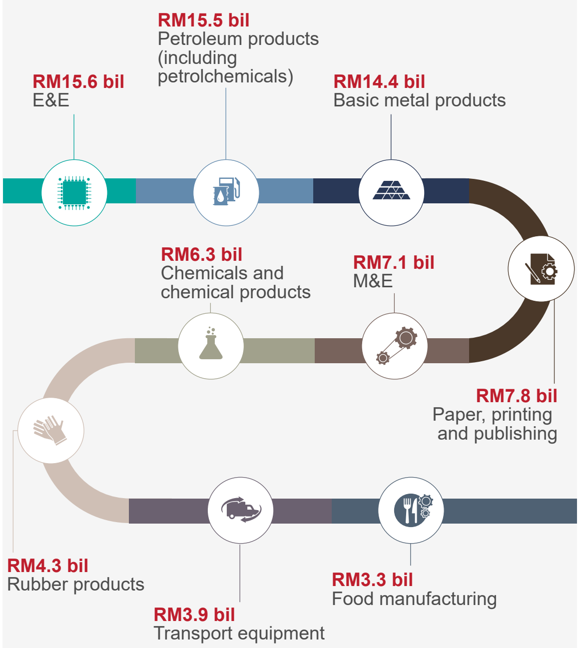
RM4.6 bil Chemicals and chemical products

The industry that attracted the most interest from domestic investors was the petroleum products (including petrochemicals) industry (RM12.6 billion), contributing 36.3 per cent of total approved domestic investments. This was followed by rubber products (RM3.9 billion), food manufacturing (RM2.3 billion), M&E (RM2.3 billion), transport equipment (RM2.2 billion), E&E (RM2.1 billion), fabricated metal products (RM1.9 billion), chemicals and chemical products (RM1.6 billion) and beverage & tobacco (RM1 billion) industries.

Industry Stars

In 2020, the total investments approved in the manufacturing sector were mainly from the E&E (RM15.6 billion), petroleum products (including petrochemicals) (RM15.5 billion), basic metal products (RM14.4 billion), paper, printing and publishing (RM7.8 billion), M&E (RM7.1 billion), chemicals and chemical products (RM6.3 billion), rubber products (RM4.3 billion), transport equipment (RM3.9 billion) and food manufacturing (RM3.3 billion) industries. These industries comprised 85.7 per cent of total approved investments.

Top Performing Industries of 2020



These industries comprised **85.7 %** of total approved investments.

Jobs Profiled

The projects approved in 2020 were expected to create a total of 80,190 employment opportunities, approximately 1,000 more jobs (in 2019= 78,606 jobs). Of these, 28,706 (35.8%) were in managerial, technical and supervisory (MTS) roles. Meanwhile 51,484 or 64.2 per cent of the jobs created were for sales, clerical, plant/machine operators and assemblers, and others.

The majority of employment opportunities created were from five sectors; namely, E&E (19,541 jobs), followed by rubber products (11,498 jobs), paper, printing and publishing (6,038 jobs), transport equipment (5,245 jobs) and food manufacturing (4,846 jobs).

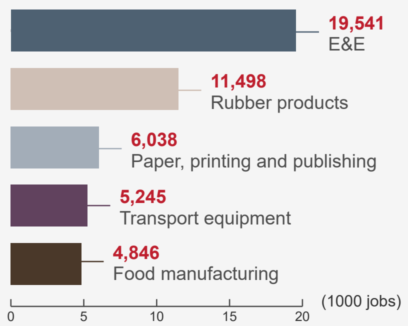
New Job Opportunites in the Manufacturing Sector 2020

80,190
Job opportunities

35.8%
28,706 are managerial, technical and supervisory (MTS) roles

64.2%
51,484 of the jobs are created for sales and clerical, plant/machine operators and assemblers and others

Sub-sectors with the Most Job Opportunities



MIDA also approved expatriate posts, particularly for MTS positions in Malaysian and foreign-owned companies alike. A total of 958 expatriate posts were approved in 2020, of which 144 were key posts that could be permanently filled by foreigners. The remaining 814 were term posts, generally granted for two to five years, during which time it is expected that Malaysians would be trained to eventually take over.

Additionally, the top three industries (E&E, chemicals and chemical products, and M&E) in the manufacturing sector contributed a significant proportion (4,499, or 45.6%) of the 9,862 high-income jobs with salaries of RM5,000 and above created in 2020 across the manufacturing sector, which represents an additional 871 high-income jobs created as compared to 2019's figures (8,991). The E&E industry recorded the highest number at 2,689, which accounted for 27.3 per cent of the overall total of jobs, followed by chemicals and chemical products at 908 (9.2%) and M&E at 902 (9.1%).

CIPE Goes Up

The capital-intensity (as measured by capital intensity per employee- CIPE)) of projects approved in the manufacturing sector in 2020 was RM1,138,055; an increase of 8.1 per cent as compared to 2019's CIPE of RM1,052,497. Petroleum products (including petrochemicals) recorded the highest CIPE of RM20,253,248, followed by basic metal products (RM3,146,288), beverages and tobacco (RM2,489,335), chemicals and chemical products (RM1,760,325) and scientific and measuring equipment (RM1,672,723).

3+2 Sub-sectors

The 3+2 sub-sectors outlined in the Eleventh Malaysia Plan (11MP) remained buoyant due to their strong inter-linkages to other sub-sectors, supported by the manufacturing sector's overall growth. The three catalytic sub-sectors are E&E, M&E, and chemicals and chemical products, while the other two areas with high-growth potential are medical devices and aerospace.

The CIPE of the 372 projects in the 3+2 sub-sectors in 2020 totalled RM895,031, which was a slight decrease from the CIPE of RM1,075,994 in 2019. A total of 39,292 jobs were created from the sub-sectors, with E&E contributing the most at 19,541 jobs (49.7%).

As for the MTS job category, 35.5 per cent of employment opportunities were created under the '3+2' sub-sectors in 2020, totalling 13,958 positions. Another 25,334 potential jobs were created in other categories such as plant/machine operators and assemblers.

Foreigners Take Front Seat

Despite international border closures and strict governmental lockdowns imposed worldwide in 2020 to contain the spread of COVID-19, Malaysia remained a strategic and attractive investment destination for foreign investors.

In 2020, a total of RM56.6 billion in foreign investments, comprising 62 per cent of total investments, were approved. Out of the 1,049 manufacturing projects approved, 260 projects were wholly-owned by foreign investors. Wholly-owned Malaysian companies invested RM29.4 billion or 32.2 per cent of total investments across 613 projects.

There were also 116 majority-Malaysian-owned projects, with 59 projects being foreign-majority-owned. In addition, there was one 50:50 joint venture project approved in 2020.

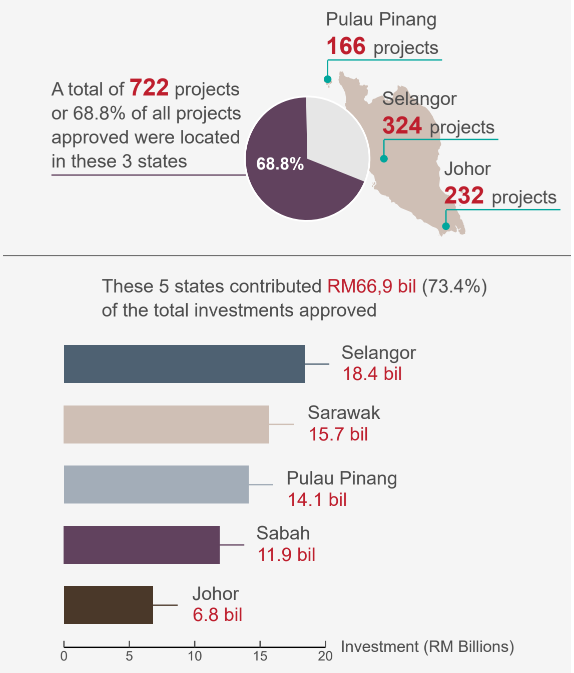
The Location Mix

Selangor (324 projects), Johor (232 projects), and Pulau Pinang (166 projects), continued to be the leading states in terms of number of projects approved in 2020. A total of 722 projects or 68.8 per cent of all projects approved were located in these three states.

In terms of value, Selangor (RM18.4 billion) received the largest investments, followed by Sarawak (RM15.7 billion), Pulau Pinang (RM14.1 billion), Sabah (RM11.9 billion), and Johor (RM6.8 billion). These five states contributed 73.4 per cent of the total investments approved in 2020.

Other states with high levels of investments included Negeri Sembilan (RM6.2 billion), Pahang (RM4.8 billion), Kedah (RM4.1 billion), Perak (RM3.3 billion), Melaka (RM2 billion) and Terengganu (RM1.9 billion), and Kuala Lumpur (RM1.3 billion).

Approved Project by Location in the Manufacturing Sector for 2020



Implemented Manufacturing Projects

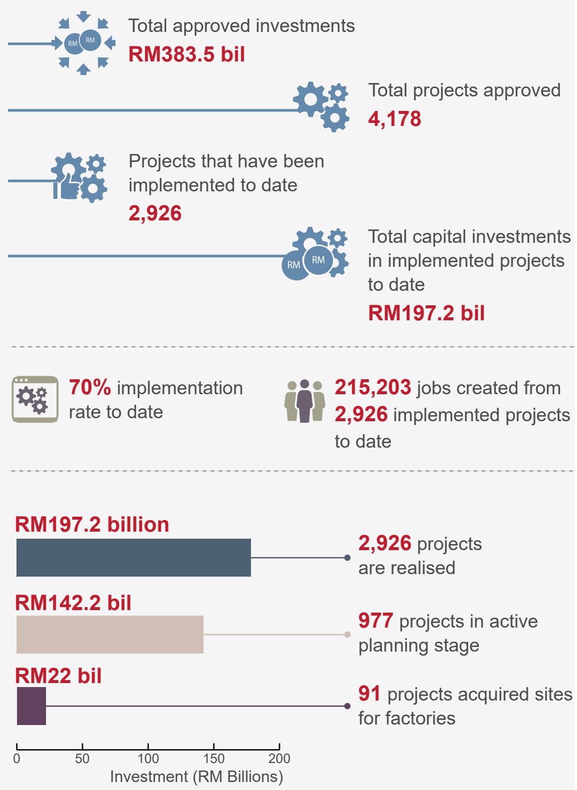
The 1,049 projects approved in 2020 brings the total number of manufacturing projects approved during the five-year period (2016 to 2020) to 4,178 projects, involving total investments of RM383.5 billion. Around 2,926 of these projects (70%) have been implemented thus far, with 2,739 projects in active production and 187 projects still undergoing factory construction and machinery installation. The total capital investments in these 2,926 projects come up to RM197.2 billion.

Another 91 projects with investments worth RM22 billion have acquired sites for factories, whereas 977 other projects worth RM142.2 billion are in the active planning stage. Once the 1,068 other projects are realised, total investments of these projects will amount to RM164.2 billion.

In terms of employment, the implemented projects contributed 215,203 jobs across the 2,926 projects.

The majority of projects implemented during the five-year period of 2016 to 2020 came from the major industries such as E&E, petroleum products (including petrochemicals), non-metallic mineral products, food manufacturing, and transport equipment.

Implemented Manufacturing Projects (2016-2020)



Industry Insights

Opportunities abound in the wake of COVID-19, as Malaysia's industry players respond to global needs by ramping up production of necessities. Automation and higher technologies related to the Fourth Industrial Revolution (Industry 4.0) take centre stage, empowering manufacturers to adapt to the conditions of the new realities.

Electrical and Electronic Products (E&E)

Malaysia's E&E industry remained the nation's largest export earner, and in 2020 had exported products worth RM386.1 billion, or 39.4 per cent of all manufactured goods. This is an increase of 3.5 per cent from the previous year, making it the biggest single contributor of exports in 2020. This is hardly surprising, as Malaysia is a major global manufacturing hub for the E&E industry, with a large number of multinational companies (MNCs) having a presence in Malaysia as their regional base. These MNCs have in turn seamlessly integrated local E&E companies into their operations, making them part of the global value chain.

Malaysia's comparative advantages in E&E are especially apparent in semiconductor device production, given industry players' long-standing experience and expertise in this field, Malaysian-based companies have an undeniable edge when it comes to meeting the demands of emerging and critical semiconductor markets.

Prospective investors should be heartened by the resilience of this industry in the face of the global COVID-19 pandemic, a clear sign of industry players' adaptability and agility. As the pandemic and governmental response caused tremendous disruptions in manufacturing operations – including E&E – it also resulted in significantly higher demand for specific E&E products. These include telecommunication devices, medical devices, auto parts, and communication-based stations, which in turn spurred the growth in overall demand for semiconductor and electronic products across the world.

The ongoing trade war between USA and PRC has also benefitted Malaysia, with greater investment inflows recorded in 2020 due to relocation and redeployment of production capacity.. In addition, Malaysia's E&E industry could also benefit from PRC's 14th Five-Year Plan (2021-2025), which is expected to emphasise technological innovation, given that the nation's E&E products form a large portion of exports to the world's second-largest economy. The PRC is likely to accelerate measures to ensure its future technological capabilities and competitiveness, which will continue to increase demand for semiconductors.

There are plenty of opportunities in Malaysia's E&E ecosystem for investors given the rise in demand for smart medical equipment/appliances, virtual telecommunication devices, and e-commerce. These opportunities abound in the areas of contactless solutions, including touch screens and elevator buttons; assisted-living devices, including sensors, which help the elderly and chronically-ill remain at home, rather than moving to facilities; automated logistics solutions for last-mile delivery, such as robots and drones; and digital work processes and the Internet of Things (IoT), especially in healthcare and government.

The Malaysian Government has also promulgated various industry-friendly policies aimed at increasing the growth and sustainability of the E&E industry, given its importance to the manufacturing sector. In particular, the Government had been promoting and facilitating research and development (R&D), and advancing the level of factory automation and digitalisation, which is moving the manufacturing landscape towards the 'smart factory' ideal. By adopting technologies related to Industry 4.0, flexible and efficient business models can optimise productivity and growth, while remaining agile in the face of rapid changes in technological cycles.

Investors should therefore make full use of the relevant government incentives and facilities related to R&D and design and development (D&D) vis-à-vis the creation of new (and improvements to existing) materials, processes, and products.

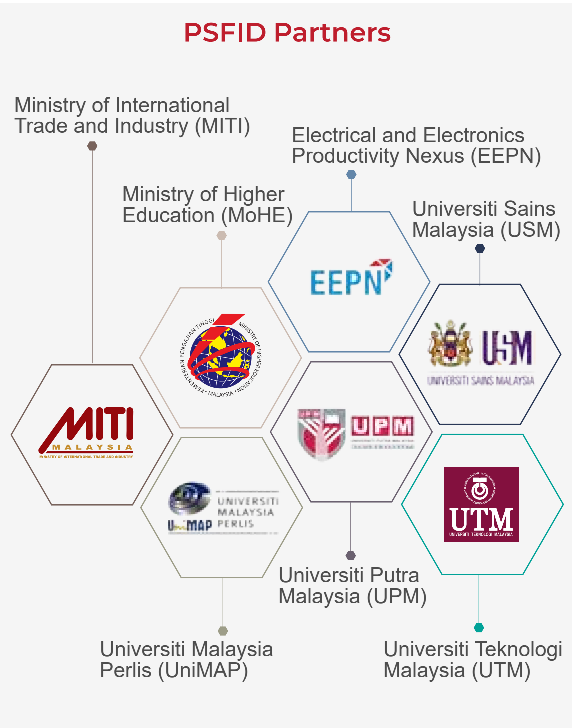
Talent management in the E&E industry is also a major priority for the Government, to ensure that the talent pool is sustainable and able to match the industry's growing needs. By emphasising science, technology, engineering, and mathematics (STEM) fields among students at all levels, the Government hopes to inculcate interest in STEM fields in the future to support the industry's rapid technological advancement.

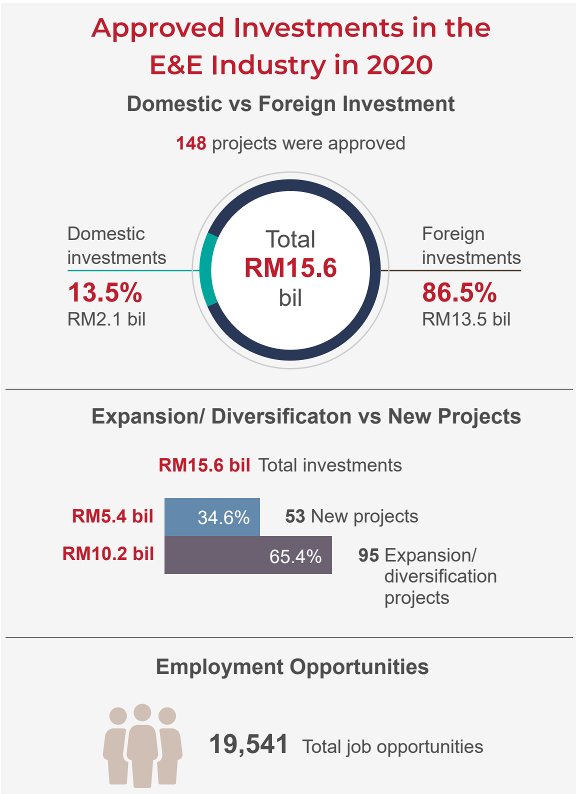
For instance, MIDA's Post-School Finishing Programme in IC Design (PSFID) initiative, a public-private partnership between government agencies, industry players, and academia, aims to produce up to 1,000 graduates to meet the local demand for integrated circuit (IC) designers. ICs are an integral part of semiconductors, and represent a high-value-added and highly-skilled area of expertise within the industry. This pilot programme represents the first concerted effort at the national level to develop local talent for the industry.

A total of 148 E&E projects with investments of RM15.6 billion were approved in 2020. There were 53 new projects bringing in investments amounting to RM5.4 billion, while 95 were expansion/diversification projects with investments worth RM10.2 billion. These projects were expected to add 19,541 jobs to the E&E industry.

Foreign entities accounted for the bulk of the total investments at RM13.5 billion (86.5%), while domestic investments brought in RM2.1 billion (13.5%). Existing E&E companies in Malaysia continued to expand and diversify their operations, a testimony of their continued confidence in the country's investment environment.

The major sources of foreign investments in this industry were from the Netherlands, Singapore, Taiwan, Hong Kong SAR, and PRC. Investments approved were mainly in the following sub-sectors: electronic components, consumer electronics, industrial electronics, electrical components, and electrical appliances (including industrial electrical).





Electronic Components

Electronic components formed the largest share of investments in the E&E industry at 67.9 per cent. A total of 49 projects involving investments worth RM10.6 billion were approved in 2020. The projects approved were for the production of electronic components such as capacitors, transducers, transceivers, light emitting diodes (LEDs), microcontrollers, semiconductor devices, semiconductor package subtracts, and printed circuit board (PCB) assemblies.

The sub-sector was largely driven by foreign investments, though domestic investments increased significantly compared to 2019. Of the total investments approved in the electronic components sub-sector, FDI amounted to RM9.6 billion (90.6%), while domestic investments totalled RM1 billion (9.4%), a 57 per cent increase over 2019's investments of RM637.2 million. Projects in this sub-sector were expected to generate 12,874 jobs, or over 6,000 more than 2019.

Consumer Electronics

There were 13 projects approved in consumer electronics in 2020 with investments amounting to RM224 million. Core activities of this sub-sector included amplifiers for musical instruments, built-in toll readers, digital video recorders, camera adapters, and speakers (including wireless speakers). Activities in the sub-sector were expected to create 768 jobs.

Industrial Electronics

A total of 42 projects were approved for the industrial electronics sub-sector with investments worth RM2.8 billion in 2020, representing an increase of approximately RM400 million from 2019. Of this, FDI totalled RM2.4 billion, with domestic investments bringing in RM417 million, or over RM250 million more than 2019's figure of RM163.6 million. These projects were expected to create up to 3,230 employment opportunities.

Electrical Components

There were 24 projects approved under this sub-sector in 2020, with total investments worth RM796 million. In this sub-sector, foreign investments amounted to RM456 million (57%), while DDI came to RM340 million (43%). Investments in this sub-sector were expected to create 1,656 job opportunities.

Electrical Appliances and Industrial Electrical

The electrical appliances and industrial electrical sub-sectors saw 20 projects approved in 2020 with investments totalling RM1.2 billion. These sub-sectors were mainly dominated by FDI with investments amounting to RM977 million (82%) and DDI totalling RM217 million (18%). These projects were expected to generate 1,013 job opportunities.

Approved Investments in the E&E Industry by Sub-sectors in 2020

E&E sub-sectors	Total investments	Approved projects	Job opportunities
Electronic Components	RM10.6 bil	49	12,874
Consumer Electronics	RM224 mil	13	768
Industrial Electronics	RM2.8 bil	42	3,230
Electrical Components	RM796 mil	24	1,656
Electrical Appliances and Industrial Electrical	RM1.2 bil	20	1,013
Total	**RM15.6 bil**	**148**	**19,541**

Nexperia R&D Malaysia Sdn. Bhd., a subsidiary of a company headquartered in the Netherlands, has diversified its activities in Malaysia from semiconductor assembly and testing services to IC design services. When completed, the Malaysian IC design centre will be Nexperia's first such centre outside the Netherlands. The knowledge-based operations will help enrich and upskill local talent capabilities, especially when it comes to mastering IC design technology.

Experior Labs Sdn. Bhd., a company wholly owned by Experior Technology Sdn. Bhd., has also had its diversification project approved to provide semiconductor and system test design services. Since its inception in 2014, the Malaysian company has become part of the E&E ecosystem; providing one-stop services in test design, validation, and volume testing, including hardware and software design, for next-generation ICs. Experior has also branched out into adjacent markets by developing custom automation software as part of the company's journey to promote Industry 4.0 in Malaysia.

Another well-known local player, Globetronics Manufacturing Sdn. Bhd., has embarked on a full-fledged adoption of Industry 4.0 by investing an additional RM50 million to modernise, expand, and adopt an integrated end-to-end Industry 4.0 solution in its facilities; becoming a Malaysian smart factory to support the manufacturing of advanced semiconductor products for use in telecommunications globally. The expansion plan will see an upgrade of the technology production and talent resources in robotics, AI, system integration, IoT, cloud computing, and cybersecurity. This effort further supports the government's aspiration to encourage more local companies to manufacture complex and niche products by using the latest technologies.

Transport Equipment

Aerospace

Globally, the sector was adversely affected by the COVID-19 pandemic, with many suppliers facing closure due to OEMs such as Boeing and Airbus decreasing their aircraft production rates. This caused significant inventory losses and under-utilised machinery throughout the supply chain, with many industry players resorting to cost-cutting measures such as 'shorter working weeks' and even retrenchment.

Malaysian industry players have not been immune, being subjected to the same pressures and adopting many of the same measures. Many companies had made capital investments based on the increasing aircraft build rates prior to the pandemic. They faced real pressure to cut costs by managing their operational cash flow, while simultaneously working to retain skilled workers. With relatively high barriers to entry; insufficient industry support will result in job losses, companies exiting the industry, and the potential permanent closure of factories.

Prior to the pandemic and subsequent lockdowns and border closures, the Malaysian aerospace sector was growing at an average of five per cent over the past 10 years, and churning out high-skilled jobs, with the most important area being that for maintenance, repair and operations (MRO) activities. The sector remains a priority, with the Government having identified it as one of the '3+2' strategic sectors with high-growth potential.

As evidenced by the Malaysia Aerospace Industry Blueprint 2030 (MAIB2030), the industry is regarded as strategic for Malaysia, given its role in job creation and establishment of an aerospace supplier ecosystem. Despite all the short-to-medium term challenges, the country is still home to a vibrant aerospace industry, with foreign and domestic players among them.

There are 130 companies involved in MRO activities, 33 companies in aero-manufacturing, 53 companies in education and training and 11 companies in systems integration, engineering and design. There will be opportunities for Malaysian aerospace players to capitalise on after the situation returns to normal, as there will still be new airplane deliveries made. Given that Asia Pacific is expected to be the biggest airline market in the world in the foreseeable future, there is potential for MRO spending to grow too. To underscore how MRO activities has grown in Malaysia, turnover has grown to RM6.6 billion in 2018 from RM4.3 billion in 2009.

While COVID-19 may have temporarily set back growth, the aerospace sector still has potential over the longer term. Under the MAIB2030, the Government envisions the country to be the top aerospace nation in Southeast Asia by being an integral part of the global market by 2030, with a total revenue of RM55.2 billion and the creation of more than 32,000 high-income jobs (the industry currently employs 27,500 high-skilled workers). The blueprint projects revenues of RM20.4 billion for MRO, RM21.2 billion for aero-manufacturing, and RM13.6 billion for engineering and design services by 2030.

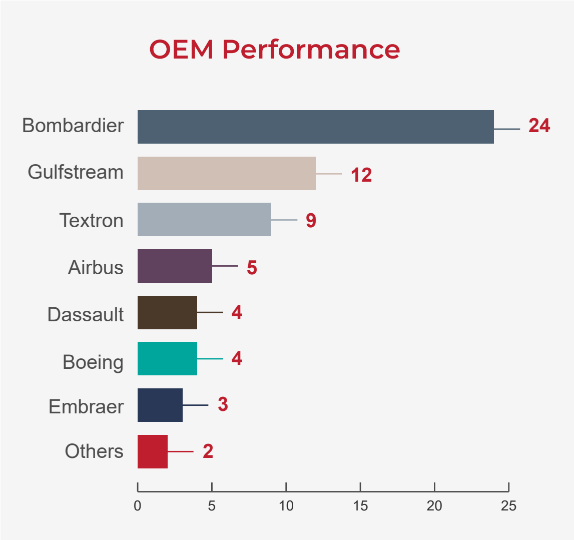
According to Moody's Investor Service, the demand for commercial flights will not see a substantial recovery before 2023, as a result of health concerns, changes in corporate travel policies, potential restrictions on international arrivals, and lower discretionary spending. As such, there is a need for prospective investors and aerospace industry players to consider new business models in light of the current situation. Two potential growth areas in the sector that is seeing traction are business aviation and drone production.

The US Federal Aviation Administration defines general aviation as all flights that are not conducted by the military or the scheduled airlines (commercial aviation). Business aviation is the part of general aviation that focuses on the business use of airplanes and helicopters, and is significantly expanding in the region.

According to a March 2020 GlobeAir press report, in comparison to commercial flights, flying private is 30 times less risky vis-à-vis COVID-19 spread and infection as it has only 20 touchpoints when it comes to exposing passengers to the risk of contagion versus the approximately 700 touchpoints of commercial flights. Coupled with the ability to fly long distances, private aviation has proven to be a reliable choice for people ranging from the typical working-class to business travellers and government officials.

While commercial aviation's two major manufacturers are Airbus and Boeing, business aviation sees many more OEMs competing in the region, including Gulfstream, Bombardier, Dassault, Embraer, Cessna, Pilatus and HondaJet. According to Asian Sky Group, RM15.8 billion worth of new and used business jets or private jets were traded in the Asia Pacific region in 2019. From the same data source, the following graph indicates how OEMs performed in terms of the number of aircraft and market share in Malaysia for 2019.

Unlike commercial aircraft, which are mass-produced with minimal customisation, business jets generally feature more handcrafting, especially when it comes to the aircraft's interior. These require high-value skills in fine detailing and build-up engineering work, and could potentially be a key growth area.



Based on the survey conducted by Frost and Sullivan in 2018, Sultan Abdul Aziz Shah Airport in Subang is the most favoured choice for the next business aviation hub in the region. It noted that the airport's business jet movement was at around 3,200 aircraft movements, ahead of Don Muang airport (Bangkok) and Ninoy Aquino airport (Manila). The city airport ecosystem, coupled with Malaysia's strategic location and cost-competitiveness in terms of labour and infrastructure, has contributed to Malaysia becoming a strong competitor in this area.

Besides MRO service providers, potential investors can also look into supporting businesses such as Fixed Based Operators (FBOs), ground handling, aircraft insurance and financing services, training institutions, and aircraft technical inspection.

The other area of potential growth is in the production of drones and supporting services. Drones, also known as unmanned aerial vehicles (UAVs), are aircraft that can fly in a fully- or partially-autonomous fashion, although they are often controlled remotely by a human pilot.

From their initial use in intelligence, surveillance, and reconnaissance, drones have gone beyond their military origin to become powerful business tools. They are widely used in commercial and civil government applications from aerial infrastructure inspection, firefighting, and agriculture, to initial forays into logistics for last-mile delivery, and inventory management. Drones have also been successfully integrated into surveying workflows to perform land surveys, 3D mapping, and topographic surveying.

Drones could also be used to carry passenger traffic in the near future. Advances in electric propulsion, autonomous technology, and high-speed mobile broadband communication networks (e.g. 5G) will drive on-demand air-taxi services and intercity flights. Aerospace companies and start-ups such as Airbus, Volocopter, and Ehang are competing with each other to develop autonomous flying taxis before 2025.

Drone Industry Insights has forecasted the global drone market's growth from US$22 billion in 2020 to US$43 billion in 2025 at a CAGR of 13.8 per cent, with the Asian market taking over the North American one as the largest regional drone market globally. Military contracts contributed about three-quarters of all UAV market revenue in 2019. Aerospace and defence industry market analysis firm Teal Group estimated worldwide R&D and procurement spending on military drones to rise from a projected US$11.1 billion in 2020 to US$14.3 billion by 2029.

In Malaysia, the players are predominantly drone service providers that employ drone technology for commercial applications. Companies such as OFO Tech Sdn. Bhd., Aerodyne Group Sdn. Bhd., Sky Futures (Malaysia) Sdn. Bhd. and Poladrone Solutions Sdn. Bhd. are some of the notable drone service providers in the local scene, with some of them venturing into international markets.

Rather than mass-production, Malaysian drone companies specialise in custom-building drone projects for specific jobs and data analytics. For example, local company Fourfang Sdn. Bhd. has developed a fully-autonomous drone with its own docking station to recharge its flight battery. Another example, Poladrone Solutions Sdn. Bhd., has developed the first pesticide-spraying drone specifically developed to combat the rhinoceros beetle, which is a major pest in oil palm plantations.

Prospective investors may choose to consider financing training centres to meet the increasing demand in drone-handling skills. Drone training centre, SG Education Group, is one of the few Malaysian training companies that are able to train and re-skill the workforce on the usage of drones. Developing future skills and certifying talents are important enablers for building Malaysia's drone ecosystem.

Through MIDA, the Malaysian Government will continue to support industry players through fiscal and non-fiscal incentives to enable potential drone-tech companies to invest in capability and technology development. Global drone manufacturers and other major industry players in aerospace are encouraged to explore the potential of leveraging Malaysia as their launch pad into Asia Pacific's huge drone market potential.

A total of seven projects were approved in the aerospace sector in 2020, bringing in investments worth RM149.7 million, with FDI bringing in RM91.7 million or 61 per cent of the total while RM58 million (39%) came from domestic investments. Out of the seven projects, five were new projects, while the other two projects were expansion/diversification projects. The approved projects were expected to generate 278 new jobs. All approved projects were from companies in the aerospace manufacturing and MRO sectors supplying and servicing Tier 1 and Tier 2 companies.

In 2020, MIDA approved a new project from Sapura Technics Sdn. Bhd. to undertake MRO for airframes, components, and engineering services. Established in December 2018, the company resulted from the MoU between Mercu Sapura Sdn Bhd and Dilog Training

& Services Sdn Bhd to establish an MRO services company for commercial flights based in Senai Airport Aviation Park, Senai International Airport, Johor Bahru. The company has obtained certification to conduct MRO activities from the Civil Aviation Authority of Malaysia, and currently employs 68 Malaysians, of which 94 per cent were staff from the management, technical, and supervisory (MTS) category.

The company offers MRO services for the A320 and B737 aircraft types and has complete aircraft maintenance capabilities including the ability to repair aircraft structures, composites, and fiberglass, a paint workshop, and conducting non-destructive testing (NDT) and aircraft battery charging. At the same time, the company also provides engineering and technical services for the Continuous Airworthiness Management Organisation (CAMO) and also Design Engineering Organization (DOA). This project is expected to contribute to domestic investment in the aerospace sector amounting to RM31.2 million for five years starting from 2019.

Automotive

Due to COVID-19, the sector faced a disruption in its supply chain, as well as a drop in demand and having to adopt a shorter working period. In Malaysia, the impact was initially severe, as sales crashed by 99 per cent in April 2020, when just 141 cars were sold. The Government-imposed MCO meant that nobody was out and about buying cars, with industry volume dipping by 41 per cent for the first two quarters despite a governmental stimulus package.

The National Automotive Policy 2020 (NAP2020) recognises the sector's significant contribution to Malaysia's economy. Hence, in order to get the industry restarted, the Government suspended sales taxes on locally-assembled cars in June 2020. In response, the June figures revealed a five per cent rise compared to earlier in the year, and new vehicle registrations were up by 92 per cent. Further, with consumers remaining uncertain of whether they *could* (because of MCO) or *should* (because of COVID-19-related risks) visit car dealerships in the near future, car companies and dealers will likely make it more convenient to purchase vehicles online, which should also help drive sales.

NAP 2020 is an enhancement of the previous NAP 2014, which aimed to continually develop the domestic automotive sector and its whole ecosystem in order to realise the National Automotive Vision.

The Government has indicated through NAP 2020 that it will concentrate efforts on developing the 'next generation vehicle' (NxGV) technology ecosystem to make Malaysia the regional hub for NxGV production; to expand the sector's participation in 'mobility as a service'; and to inculcate Industry 4.0 adoption within the sector. Hence, prospective investors should research and take full advantage of specific incentives that are applicable to their relevant projects.

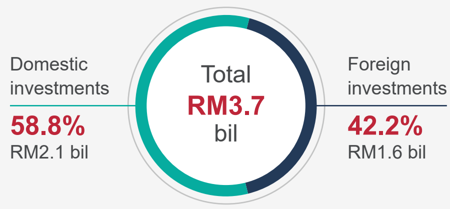
Throughout 2020, the Malaysian automotive sector produced 485,186 motor vehicles. This figure is further broken down to 457,755 passenger vehicles and 27,431 commercial vehicles. A total of 529,434 motor vehicles were sold, comprising 480,965 passenger vehicles and 48,469 commercial vehicles.

The automotive industry saw a total of 77 approved projects with investments worth RM3.7 billion. DDI made a significant contribution of 58.8 per cent of investments, totalling RM2.1 billion, with FDI being worth RM1.6 billion, or 42.2 per cent. The approved projects are expected to result in 4,768 jobs. Of the projects approved, there were 33 new projects worth RM1.7 billion or 45.7 per cent of the total investments, with 44 expansion/diversification projects that brought in RM2 billion or 54.3 per cent of the total.

Approved Investments in the Automotive Industry in 2020

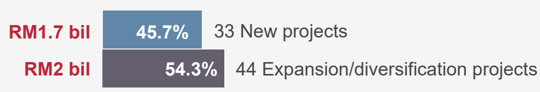
Domestic vs Foreign Investments

77 projects were approved



Expansion/Diversification vs New Projects

RM3.7 bil Total investments



Employment Opportunities

4,768 Total job opportunities

In 2020, Malaysia secured four key investment projects related to manufacturing and assembly of electric vehicles, transmission and module assembly of automotive components. These projects brought in investments worth RM1.3 billion and will create 1,243 employment opportunities.

A joint venture company between Japan and Malaysia, Akashi Kikai Industry (M) Sdn. Bhd., expanded its activities into the production of a new Continuously Variable Transmission (CVT) system at its existing facility in Sendayan, Negeri Sembilan. This expansion project kicked off in the fourth quarter of 2020 with additional investments totalling RM155 million.

The expansion project, a collaboration between PERODUA and two leading automotive companies from Japan, i.e. Akashi Kikai Industry Co. Ltd. and Daihatsu Motor Co. Ltd., will focus on supporting PERODUA's localisation activities. The company has previously supplied products related to vehicle engines such as electronic control automatic transmissions, manual transmissions, engine block cylinders, and timing chain covers for vehicle models such as the Myvi, Aruz, and Vios. To increase the localisation rate of critical components in the country, the company will produce and supply this new CVT for future vehicle models that will be introduced starting in 2021. This project will create an additional 200 employment opportunities in manufacturing operations, with majority of them for Malaysians.

The transmissions, engines, and motor components are critical components of the vehicle for the purpose of driving performance and fuel efficiency. Passenger vehicles produced in Malaysia use various types of transmission. CVT uses a power transmission system using a belt or chain, as compared to other types of transmission that use gears. This is the first CVT transmission manufacturing project in Malaysia. Malaysia is the second country after Japan to use the new CVT developed by Daihatsu Motor Co. Ltd. for future vehicle models of PERODUA. Apart from PERODUA, Toyota will also start using this new CVT for future vehicle models.

Rail

The COVID-19 pandemic and subsequent government measures undertaken had a significant impact on rail projects such as the East Coast Rail Link (ECRL), Mass Rapid Transit (MRT) and Light Rail Transit 3 (LRT3). The construction of the ECRL was temporarily halted in early 2020. when the Malaysian government implemented the MCO, although the delay was minimal (0.02%). The ECRL runs from Malaysia's largest transport hub, Port Klang and travels across the peninsula to Kelantan in north-eastern Peninsular Malaysia. The ECRL is described as a "game-changer" for the people of the East Coast, as it is expected to greatly enhance connectivity and bring more balanced growth to the country by linking the less-developed East Coast to the economic heartland on the West Coast.

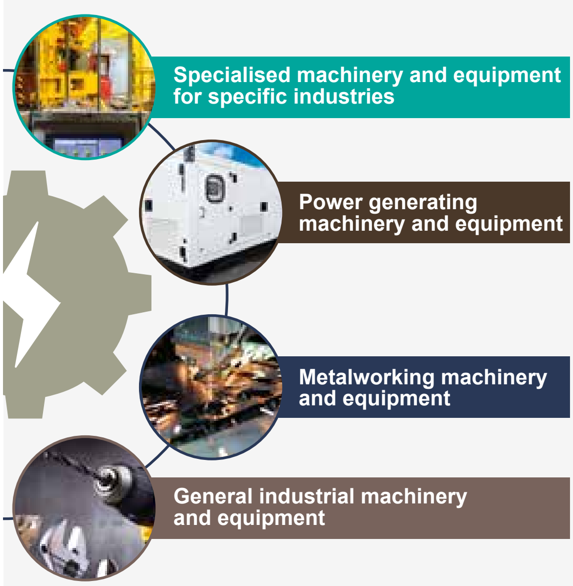
The LRT3 project is expected to be completed by February 2024. Once completed, the 37.8-km-long project will connect the West Corridor of the Klang Valley and Kuala Lumpur. The MRT project's Putrajaya Line is 79.2 per cent completed as of the end of August 2020. The second route under the Klang Valley MRT project will have 36 stations with nine being underground, running 56.2 km from Kwasa Damansara to Putrajaya Sentral.

Machinery and Equipment (M&E)

According to the United Nations Standard International Trade Classification, the M&E industry can be categorised into four main sub-sectors. Given its linkages to various large-scale economic sectors such as manufacturing, construction, and services, it is no surprise that Malaysia's M&E industry has catalysed the nation's transition into a high-technology nation ready for the Industry 4.0. The industry provides essential and highly-sophisticated technology used in the production of a wide range of goods that combine electronics, advanced materials, and software integration.

Prospective investors can rest assured in the capabilities of Malaysia's M&E industry – among the largest and strongest in ASEAN – to provide customised products and end-to-end manufacturing. Major M&E industry players are total solution providers, which offer the full gamut of services from design to logistics, to meet the high demand of domestic and international manufacturing industries alike.

M&E's Four Main Sub-Sectors



Malaysia's M&E industry has come a long way from its humble origins servicing equipment for the resource and agro-based industries in the 1970s. Today's industry players are focusing their capabilities on producing high-value-added and high-tech M&E, with emphasis on conducting modules manufacturing, R&D, and D&D activities for low-volume, high-complexity, and high-mixed products.

The industry's current state and direction augurs well for its resilience and sustainability, especially given global economic conditions. In their quest to become OEMs, Malaysian companies are investing heavily in R&D, engineering design, innovation, and system integration. These internationally-recognised companies have thoroughly integrated themselves into the global supply chain, highlighting their capabilities and involvement in higher-value-added activities throughout the M&E ecosystem.

The value of exported M&E products has increased from RM37.7 billion in 2016 to RM39.4 billion in 2020, showcasing the industry's robust growth, anchored by companies focusing in high-tech products such as semiconductors, intelligent machines, advanced metrology and analytical laboratory equipment, robotics, and autonomous guided (or 'self-driving') vehicles.

Due to the COVID-19 pandemic, governments worldwide have imposed tight movement restrictions, causing business disruptions at a near-unprecedented scale. As such, leveraging technology to develop better business practices and approaches has never been more urgent, and Malaysia's M&E industry is well-poised to undertake R&D and innovation activities, including adopting automation and smart manufacturing technology to increase productivity and competitiveness.

With automation no longer being an option but a necessity for survival given the changes in the manufacturing landscape, Malaysia's capability in the robotics and factory automation sub-sectors hold much promise for investors seeking development in the manufacturing sector as a whole. Malaysia is home to approximately 120 major companies that produce advanced, fully-automated handling systems that incorporate intelligent robotics and Machine-to-Machine (M2M) communication. Prospective investors should consider financing further research and commercialisation of disruptive technologies related to automation and digitalisation, which provide a much-needed boost for steady business continuity.

Investors can also consider opportunities in talent upskilling, as preparing the workforce to future-proof themselves is crucial. MIDA continues to engage and support relevant stakeholders that assist local students and talent to equip themselves with the technologically-developed skills needed to meet the industry's future needs. As Malaysia moves towards Industry 4.0, technology achievements are necessary to create a living environment that is fast, intelligent, and dynamic.

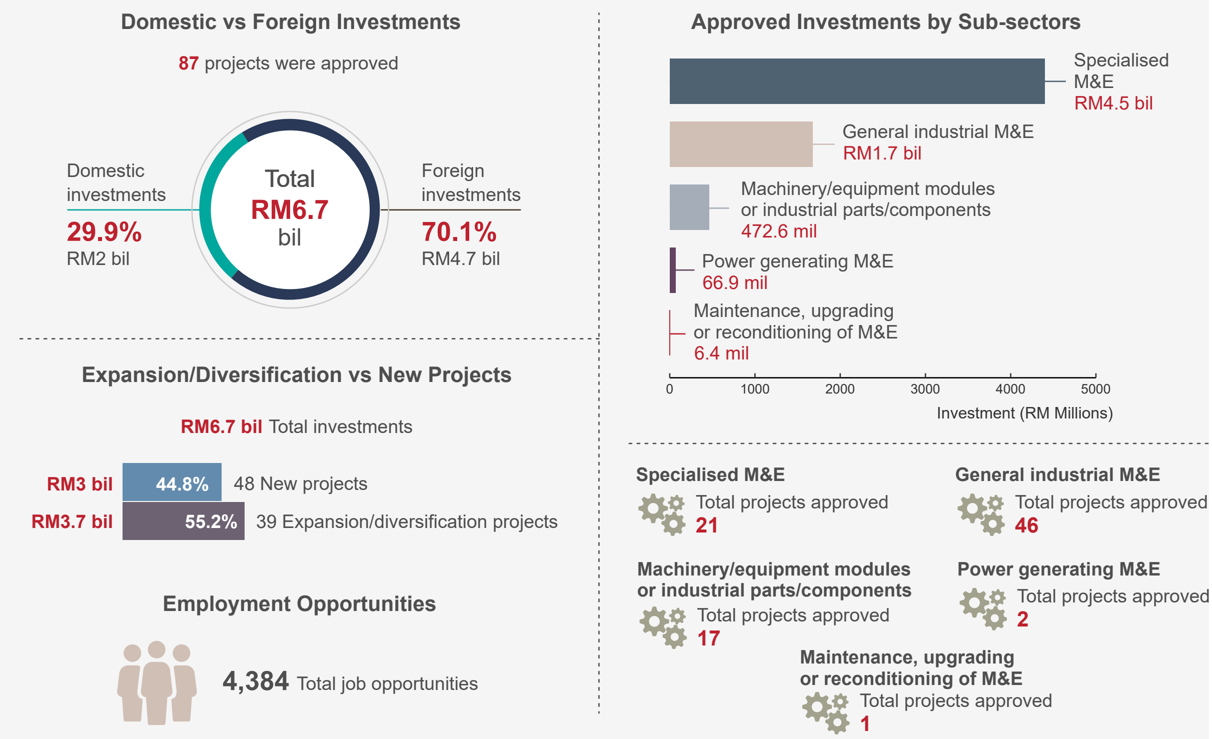
In 2020, a total of 87 M&E projects were approved, injecting investments valued at RM6.7 billion. This is a significant increase of over RM3 billion from 2019 (RM3.6 billion). Of these, 48 were new projects, with investments totalling RM3 billion (44.8%), while 39 were expansion/diversification projects involving the remaining RM3.7 billion (55.2%), a massive 440 per cent increase over 2019's figure of RM685 million. The majority of investments approved were from foreign sources amounting to RM4.7 billion or 70.1 per cent, while the remainder of RM2 billion (29.9%) were from DDI. These approved projects are expected to create 4,384 employment opportunities.

The specialised M&E for specific industries sub-sector was the biggest contributor of investments for 2020. A total of 21 projects with investments of RM4.5 billion (2019: RM2.52 billion) were approved, a substantial increase of RM2 billion from 2019 (RM2.5 billion). This comprises 11 new projects with investments of RM1.9 billion (42.2%) and 10 expansion/diversification projects with investments totalling RM2.6 billion (57.8%), or nearly six times that of 2019 (433.8 million). FDI in this sub-sector amounted to RM3.8 billion (84.4%), while domestic investments totalled RM700 million (15.6%).

The general industrial M&E ranked second in terms of investments approved amounting to RM1.7 billion, nearly RM1 billion more than 2019's figure of RM734.2 million, across 46 projects. Out of this, there were 26 new projects worth RM800.6 million (46.8%) and 20 expansion/diversification projects with a total investment of RM910.2 million (53.2%) representing an increase in excess of RM760 million from 2019's figure of RM147.9 million. Investments in this sub-sector were primarily driven by DDI totalling RM1.2 billion (69.6%), or nearly four times that of 2019 (RM305.4 million), while foreign investments came to RM500 million (30.4%).

The investments approved in the machinery/equipment modules or industrial parts/components sub-sector stood at third position with investments worth RM472.6 million. The approved projects include eight new projects with investments worth RM296.6 million (62.8%) and nine expansion/diversification projects with investments totalling RM176 million (37.2%), roughly doubling 2019's figure of RM88.3 million. Foreign investments amounted to RM371.4 million (78.6%), while domestic investments totalled RM101.2 million (21.4%).

Investments in Projects Approved in the Machinery & Equipment (M&E) Industry by Sub-Sectors for 2020



The investments approved in the power generating sub-sector came in at fourth position with investments totalling RM66.9 million from two new projects. This represented an increase of over 3.5 times that of 2019 (RM17.9 million). Investments from domestic investments totalled RM33.8 million (50.5%), while FDI amounted to over 10 times the RM3.3 million that 2019 brought in, or RM33.1 million (49.5%).

One new project came from the maintenance, upgrading or reconditioning of M&E sub-sector, generating investments of RM6.4 million with the majority of it being domestic investments.

One of the significant projects in the M&E industry came from a wholly-foreign-owned, NASDAQ-listed USA company, which set-up a manufacturing facility in the Batu Kawan Industrial Park, Pulau Pinang. The company is the leading developer and supplier of critical subsystems, as well as ultra-high-purity cleaning and analytical services primarily for the semiconductor industry. UCT's 300,000 square foot facility began construction in the third quarter of 2020. The new facility will potentially employ more than 650 personnel over the next five years, including roles in manufacturing, engineering, R&D, as well as quality management. This project provides a link across Malaysia's E&E industry. It will also enhance Malaysia's position as the ideal investment destination within the region, as the country offers a sustainable business environment to meet investors' overall growth strategies.

An expansion project by a wholly-Malaysian-owned company is adopting sophisticated high-precision manufacturing concepts in Computer Integrated Manufacturing (CIM) and process tracking models in a customised Enhanced Resource Planning (ERP) system, from the fabrication of tooling parts. The company transformed from producing moulds, tools; dies and parts thereof; and jigs and fixtures, to making automatic electro-mechanical servo reel-to-reel moulding systems for the back-end semiconductor industry. The machines serve to carry out the encapsulation of integrated circuits (ICs). This encapsulation process involves coating ICs with epoxy moulding compound (EMC), a type of plastic widely used in the semiconductor industry. The encapsulating process is to prevent physical or corrosion damage to the IC. With an estimated investment of RM36 million across five years for operating expenditure and raw materials, the project is estimated to employ approximately 269 staff including six dedicated R&D personnel.

Engineering Supporting Industry (ESI)

With dynamism and resilience, the Malaysian ESI has demonstrated its vital role in supporting the growth of the manufacturing and services sectors, 'mothering' all other industries as the fundamental base for their growth.

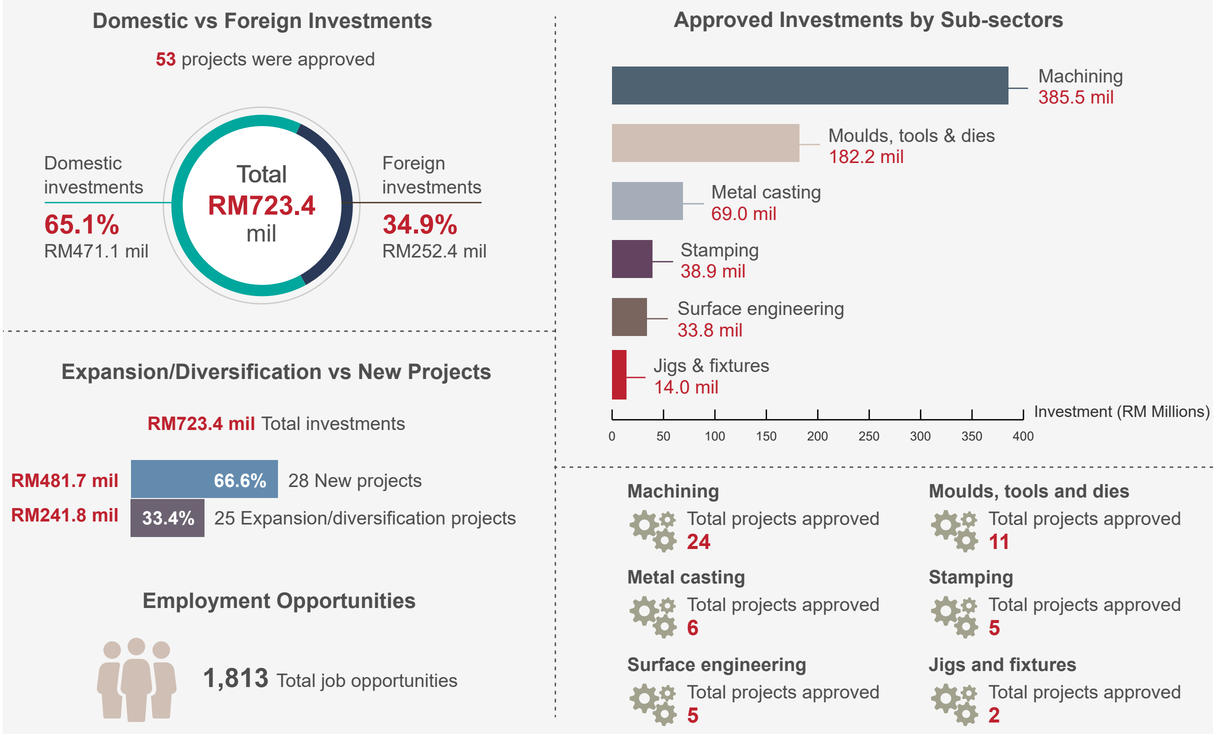
Growing in pace as the country develops economically, Malaysia's ESI players are well-known throughout the world for their diverse capabilities, maintaining consistent production quality, and ensuring fast and reliable delivery across a plethora of engineering activities; in particular, their precision machining and fabrication capabilities.

Given the current global economic situation, and the rise of various Southeast Asian countries with large labour pools, remaining competitive entails Malaysian ESI players producing high-value-added products and integrated services. Production focused on low-volume, high-mixed products, as well as emphasis on D&D, stringent QA, and on-time delivery, will ensure the industry can compete in niche market segments that demonstrate better profit margins and involve more technological advancement.

Prospective investors into Malaysia's ESI are encouraged to fund projects that enhance industry players' capabilities and capacities to create a higher value chain in the ecosystem, and provide total manufacturing solutions for high-technology industries, as part of Malaysia's overall efforts to become the preferred global outsourcing hub.

> "With dynamism and resilience, Malaysian engineering supporting industry (ESI) has demonstrated its vital role in supporting the growth of the manufacturing and services sectors, 'mothering' all other industries as the fundamental base for their growth."

Approved Investments in the Engineering Supporting Industry by Sub-sectors for 2020



A total of 53 ESI projects were approved in 2020, bringing in RM723.4 million of investments. Of those, 28 were new projects backed by RM481.7 million in investments (66.6%), while the other 25 were expansion/diversification projects with investments worth RM241.8 million (33.4%). Domestic investments totalled RM471.1 million (65.1%) and FDI made up the other RM252.4 million (34.9%). A total of 1,813 jobs were expected to be created.

The machining sub-sector's share came from 24 projects with investments of RM385.5 million. There was a total of 13 new projects with investments of RM271.1 million (70.3%) and 11 were expansion/diversification projects with investments worth RM114.4 million (29.7%). Investments from foreign sources amounted to RM167 million (43.3%) while DDI totalled RM218.5 million (56.7%).

The moulds, tools and dies sub-sector's 11 projects were backed by investments totalling RM182.2 million. Of these, there were seven new projects with investments worth RM115.2 million (63.2%) and four expansion/diversification projects with investments of RM67 million (36.8%). Foreign investments amounted to RM58.8 million (32.3%) while domestic investments totalled RM123.4 million (67.7%).

The casting sub-sector's investments totalled RM69 million with six projects; namely, four new projects with investments of RM52.5 million (76.1%) and two expansion/diversification project with investments worth RM16.5 million (23.9%). Investments from foreign sources amounted to RM15.2 million (22%) while DDI totalled RM53.8 million (78%).

The metal stamping sub-sector came next with five expansion/diversification projects totalling RM38.9 million originating from domestic sources.

The surface engineering sub-sector contributed five projects with investments of RM33.8 million. This consisted of three new projects with investments worth RM31.4 million (92.9%) and two expansion/diversification projects with investments totalling RM2.4 million (7.1%). The majority of investments came from domestic sources.

Two projects came from the jigs and fixtures sub-sector generating investments of RM14 million, with the majority coming from foreign investments.

Outsourcing of machinery operations to third parties, or investments via non-equity modes of international production is currently rising, with Malaysian ESI players setting themselves up as 'One Stop Centres', providing total solutions to their customers and offering end-to-end manufacturing processes and services. These companies intend to obtain international certifications for their products, empowering them to supply the global marketplaces vis-à-vis the O&G, aerospace, medical and solar/photovoltaic industries.

With the rapid growth of the global outsourcing market, the proliferation of total manufacturing solution providers will secure a larger share of the global outsourcing market in high-technology industries.

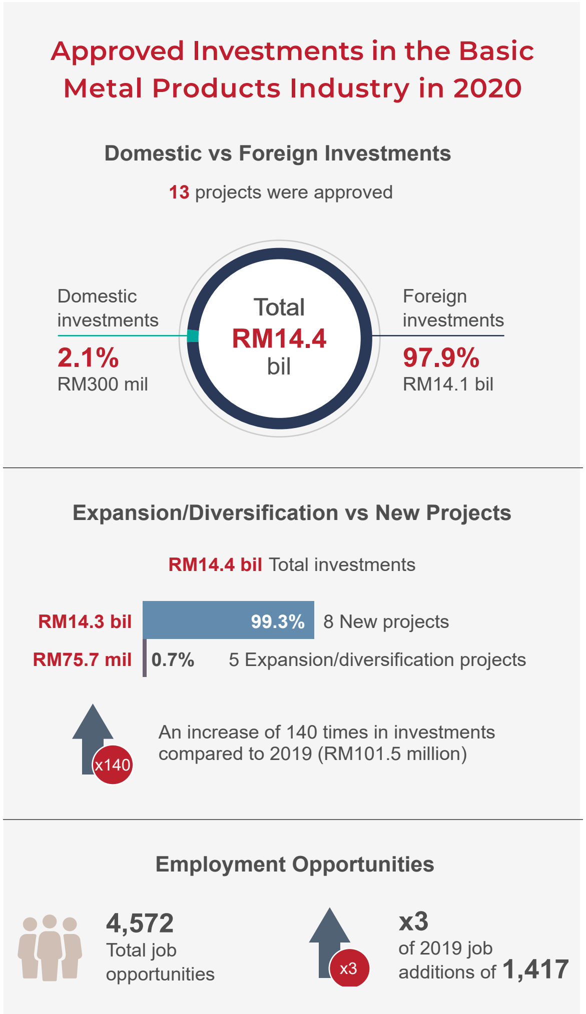
Basic Metal Products

The metal industry plays a vital role in economic development, as it processes metals that can be indefinitely recycled into products that are depended on by all economic sectors. In particular, the Malaysian basic metal products industry has played a major role in the development of the manufacturing (e.g. M&E, E&E, transport equipment) and construction sectors. The industry covers the manufacturing of both ferrous (iron and steel) and non-ferrous (aluminium, tin, copper, zinc, lead, etc.) metal products, with products classified into two major groups; namely, flat products and long products.

Flat products are used as intermediate raw materials for downstream applications in the E&E, transport, O&G, furniture, M&E and fabricated metal products sectors. Long products are primarily used for construction and civil engineering purposes.

The COVID-19 pandemic weighed on steel production in 2020, with production dropping by up to 10 per cent. However, the global steel price traded on the London Metal Exchange increased over the past 15 months, with significant impact on industry players.

The Malaysian basic metals industry recorded a resurgence in 2020. There were 13 projects approved involving the manufacture of basic metal products with investments totalling RM14.4 billion, an incredible jump from 2019's figure of RM694.4 million. Of these, new projects dominated the investments, with eight new projects involving investments worth RM14.3 billion, or an astounding 140 times of 2019's new investments of RM101.5 million, with the remainder being expansion/diversification projects involving investments worth RM75.7 million. The majority of the investments approved were from foreign sources amounting to RM14.1 billion. These projects are expected to generate 4,572 employment opportunities, or over triple that of 2019's job additions of 1,417. Most of these approvals are related to products for use in the construction sector.



The basic metal industry is transitioning from focusing on the construction sector towards higher-end industries such as medical devices, aerospace, O&G, advanced engineering, and others. The Government is undertaking a review to enhance and identify the way forward for this strategic sector. Given the Government's efforts, prospective investors can consider the production of higher-quality steel products that are both high-value-added and environmentally sustainable, which accommodates the needs of other higher-end niche industries.

Fabricated Metal Products

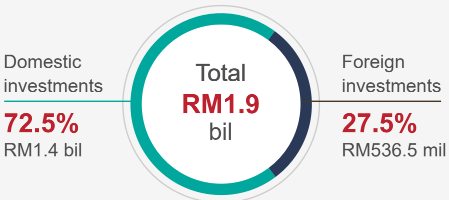
The generally mature fabricated metal products industry supports the growth of other economic sectors in Malaysia. The activities involve specific processes such as cutting, bending, welding, and assembly.

In 2020, a total of 48 projects were approved for the manufacture of fabricated metal products bringing in RM800 million more than 2019's investments of RM1.1 billion. Domestic investments amounted to RM1.4 billion (72.5%), while FDI totalled RM536.5 million (27.5%). Of the 48 projects approved, 35 were new projects with total investments amounting to RM1.7 billion or over RM200 million more than 2019 (1.5 billion), while 13 were for expansion/diversification projects with total investments of RM297.1 million. The approved projects were expected to generate 2,482 employment opportunities.

Approved Investments in the Fabricated Metal Products Industry in 2020

Domestic vs Foreign Investments

48 projects were approved



Expansion/Diversification vs New Projects

RM1.9 bil Total investments

RM1.7 bil	89.5%	35 New projects
RM297.1 mil	10.5%	13 Expansion/diversification projects

Employment Opportunities

2,482 Total job opportunities

Textiles & Apparels

The global textile market is expected to decline by 2.8 per cent from US$673.9 billion in 2019 to US$655.2 billion in 2020, mainly resulting from the global economic slowdown across countries due to the COVID-19 outbreak and the measures taken to contain it. The market is then expected to recover and grow at a CAGR of seven per cent from 2021 and reach US$795.4 billion in 2023.

As operational capabilities advanced across Asia, apparel manufacturers in the region shifted from simple 'cut, trim, and make' operations to full-package manufacturing, earning them a greater share of the global market. The next phase saw some manufacturers move up the value chain to develop in-house design capabilities, while others started selling branded products of their own for the local market (OBM companies).

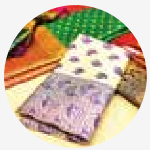
There are two main sub-sectors in the textiles and apparels industry:

Sub-sectors in the Textile & Apparels Industry

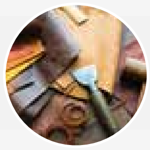
- **Textiles**

Cover upstream primary textiles and activities such as polymerisation, spinning, weaving, knitting and wet processing

- **Apparels**

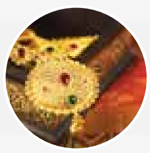


Clothing
Clothing including garments and clothing accessories (labels, buttons, zippers, packaging)



Leather
Leather is used to make a variety of articles, including footwear, automobile seats, clothing, bags, book bindings, fashion accessories and furniture

Footwear
Footwear including boots, shoes, scandals, slippers and clogs



Jewellery
Jewellery of precious metal and costume jewellery

The COVID-19 pandemic and subsequent government reactions have had an uneven impact on the textiles and apparels industry. However, most of the industry players have shifted focus to produce Personal Protective Equipment (PPE), as the demand for face masks and protective clothing has increased significantly.

Even before the pandemic struck, e-commerce has been steadily growing since 2019, putting pressure on physical stores. Consumers have easy access to online retail shopping sites that offer transparent pricing across a wide variety of affordable apparel and footwear. Malaysia's online retail sales surged 28.9 per cent in April 2020, although the total sales value of wholesale and retail trade dropped 36.6 per cent as compared with April 2019.

The latest data released by the Department of Statistics (DOSM) shows the textile, apparel, leather, and footwear sectors are still struggling to recover from COVID-19's impact. While the country's industrial production growth returned to positive territory in July 2020 by 1.2 per cent, the economically-important textile, apparel, and footwear industries shrunk by 12.9 per cent year-on-year, as compared to the 9.6 per cent negative growth experienced in June 2020.

In 2020, a total of 57 projects, or over double the number approved in 2019 (28) were approved in the textiles and apparels industry (including PPE production projects) with investments valued at RM1.2 billion providing 2,838 employment opportunities. This is 2.7 times the RM441 million invested in 2019, and nearly double the number of new jobs created (1,421). DDI dominated the industry with RM1.1 billion (91.7%) – 4.5 times 2019's figure of RM242.1 million – while FDI was worth RM159.4 million (8.3%).

The industry witnessed an expansion/diversification project by Ramatex Industries Sdn. Bhd. in Johor. The company currently produces knitted fabrics and undertakes the bleaching, dyeing and finishing of textiles fabrics. The company expanded to produce cotton yarn, with total investments worth RM197.3 million and providing 258 job opportunities.

Another approved project was undertaken by Notion Venture Sdn. Bhd., a majority-Malaysian-owned company producing PPE due to increasing demand resulting from the pandemic. Total investments came to approximately RM30 million, creating 72 job opportunities.

MIDA's efforts to promote Industry 4.0 and innovation within the textiles and apparels industry included organising the 'DesignDevt&Innovation 2020 virtual conference' in collaboration with Majlis Rekabentuk Malaysia and the Federation of Malaysian Fashion, Textiles & Apparels. Held on 3 November 2020 and themed 'Creating a Sustainable Fashion Brand', the event focused on the importance of creating a sustainable fashion brand, and the challenges faced by the fashion industry, stressing the need for a skilled workforce, high levels of digital technology, and new business models. The online event attracted more than 700 local and international participants including designers, manufacturers, institutions, and related Government agencies.

Non-Metallic Mineral Products

The non-metallic minerals products industry has undergone a paradigm shift over the years. The mines of the future are characterised by digitisation and innovative technologies such as drones and blockchain, and powered by renewable energy. End-customers are looking for low-environmental-impact products, while adopting social branding and enhanced public awareness. As a result, understanding and responding to changing market dynamics will be crucial.

Malaysia's Department of Mineral and Geoscience (JMG) recently published a study indicating that the country's mineral resources were estimated to be worth RM4.1 trillion, taking into account metallic minerals, non-metallic minerals, and energy minerals. The GDP for the mining and quarrying industry (excluding O&G), which operated 155 mines and 397 active quarries nationwide, was RM9 billion or 0.7 per cent of the country's total GDP.

Prospective investors in this industry are welcome to assist industry players accelerate the adoption of digital technologies, AI, and analytics, as well as increase the size of mining and quarrying operators. There is significant room for growth in the industry, as most activities are still undertaken on a small scale using existing technology. Additionally, the COVID-19 crisis has exposed the segmented nature of mining and non-metallic mineral companies, highlighting the need for integrated operations, so investors who specialise in that are also welcome to share their expertise.

To that end, the National Mineral Industry Transformation Plan Framework 2021-2030 (TIM

2021-2030) is an action plan to be implemented by the Ministry of Energy and Natural Resources under the 12MP and 13MP, aimed at cultivating natural resources as the country's new source of wealth.

TIM 2021-2030 will focus on generating income from a mineral-based economy, developing sustainable strategic mineral-based industries while at the same time strengthening the middle and downstream industries, attracting and increasing FDI especially in high-tech minerals, and increasing high-knowledge, high-skill employment opportunities.

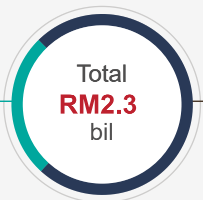
A total of 50 projects were approved in 2020, with investments worth RM2.3 billion. FDI still led the way with RM1.7 billion (74.1%) while DDI contributed RM583.6 million (25.9%), providing 2,774 employment opportunities. Based on the year's trade performance, the country's total exports of RM8.3 billion was higher than imports worth RM6.6 billion.

Approved Investments in the Non-Metallic Mineral Products Industry in 2020

Domestic vs Foreign Investments

50 projects were approved

Domestic investments
25.9%
RM583.6 mil



Foreign investments
74.1%
RM1.7 bil

Employment Opportunities

2,774 Total job opportunities

A significant project approved was from Nippon Electric Glass (Malaysia) Sdn. Bhd., a leading Japanese glass specialist, which also produces high-grade pharmaceutical glass tubing used for pharmaceutical containers such as ampoules and vials. The company's latest project has increased the group's production capacity of glass tubing for pharmaceutical use by about 1,000 tonnes per month, with total investments worth RM170 million.

An area of focus that investors into the non-metallic mineral products industry should keep in mind is the production of silica sand and its downstream products. Also known as white sand, quartz sand or industrial sand, silica sand is a combination of two materials; silica (silicon dioxide) and oxygen. Various industries utilise silica sand as their main feedstock to manufacture different products. The vast majority of its use is in glass products such as bottles, jars, flat glass for windows and automotive use, fibre glass, reinforcing glass fibre, light bulbs, fluorescent tubes, televisions, and computer screens.

In 2020, the global silica sand market reached a value of US$8 billion. The market is expected to grow further in the forecast period of 2021-2026 at a CAGR of 5.5 per cent to attain a value of US$11 billion by 2026.

Silica sand deposits in Malaysia are scattered across the country, many of which have yet to be explored. JMG has estimated that there are approximately 148.4 million tonnes of silica sand reserves. Presently, Malaysia is the world's sixth largest exporter of processed silica sand.

MIDA invites companies to set up integrated projects in the country to leverage the unexplored silica sand deposits in several highly strategic locations. Investors will be able to capitalise on the potential supply of this mineral to produce high-value-added end products for local and export markets. Competitive tax incentives are being offered to companies undertaking the production of high-grade silica sand in the country.

Industrialised Building System (IBS)

Prior to the outbreak of the COVID-19 pandemic, there was an acceleration in the growth of the global construction industry, i.e., from 2.6 per cent to 3.1 per cent in 2019. However, given the severe disruption in the PRC and other leading economies worldwide following the outbreak, the forecast for growth in 2020 has now been revised down to 0.5 per cent.

Repercussions stemming from the pandemic have severely impacted business and consumer sentiment across key global markets, leading to building construction sectors recording their lowest growth in years. Growth in the affordable housing segment is expected to bounce back faster than mid-tier and luxury segments, while office and retail segments are expected to witness a slower recovery. Infrastructure construction sector is expected to maintain growth momentum, supported by public spending.

From a national perspective, the construction industry, the oldest in Malaysia, has played a role in the nation's economic development. The Construction Industry Transformation Plan (CITP) 2016-2020 envisaged that the construction industry would focus on the usage of the Industrialised Building System (IBS).

The Construction Industry Development Board (CIDB) was established in 1994 to stimulate the industry's development. CIDB, which also developed the CITP, has always promoted the use of IBS to modernise the industry and improve quality, as well as increase the productivity of industrial workers. MIDA and CIDB signed a MoU to promote IBS's adoption in August 2016.

Initially, IBS's uptake was very slow. To ensure that the design of government and private buildings were more uniform, incurred lower costs, and required shorter construction time periods, the Government required its use in private construction projects in excess of RM50 million and government projects in excess of RM10 million. As of 2020, there were more than 100 companies approved to produce IBS components, with the most popular types of IBS used in Malaysia being precast components.

There were eight projects approved to manufacture IBS components in 2020, with investments valued at RM311.2 million providing 558 employment opportunities. Based on trade performance, this industry recorded RM890.3 million worth of exports, which is significantly higher than imports amounting to RM2.4 million.

The COVID-19 pandemic revealed that the existing, conventional, labour-intensive construction methods may no longer be feasible. Embracing new construction technologies through prefabricated construction methods is required for developers and builders. Prospective investors could assist industry players to adopt and develop innovative construction technologies by adopting digitisation and automation. This will boost knowledge levels and result in a fully-integrated, automated, optimal production flow within the industry.

Investors into the industry can also rest assured that MIDA works closely with the Ministry of Works and CIDB to promote Construction Revolution 4.0. Specifically, MIDA provides assistance in terms of incentives for IBS manufacturers and construction companies looking to embrace automation and cutting-edge technology such as Building Information Modelling (BIM), advanced materials and systems, 3D/4D/5D printing, and innovative systems that improve speed, flexibility, productivity, labour productivity, and product quality.

A new approved project in 2020 was from Skystone Asia Sdn. Bhd., located in Johor, to produce IBS modular systems. The company uses 3D BIM technology, which is a technology based on 3D intelligent modelling that enables architectural, engineering, and construction processes to become more planned and efficient as well as more organised and managed. The project's total investment was worth RM144 million, providing 74 job opportunities.

Medical Devices

The medical device industry is one of the biggest industries in healthcare, driven by innovation and new technologies. Globally, the medical devices market size was valued at US$456.9 billion in 2019, having increased at a CAGR of 4.4 per cent since 2015. According to the Business Research Company, the market was expected to decline by 3.2 per cent from US$456.9 billion in 2019 to US$442.5 billion in 2020, mainly due to lockdowns imposed by governments during the outbreak of the pandemic that hindered the supply chain in the medical devices industry. However, with the unprecedented increase in the manufacturing of ventilators (used to treat COVID-19 patients), the market is then expected to recover and grow at a CAGR of 6.1 per cent from 2021 and reach US$603.5 billion in 2023.

Prospective investors should take note of Malaysia's positioning as the medical devices manufacturing hub in Asia. The Malaysian medical devices industry boasts a solid ecosystem comprising over 200 manufacturers including MNCs and world-class supporting companies, as well as global conformity assessment bodies already present in thecountry.

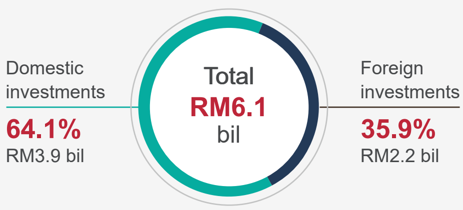
The medical devices industry in Malaysia manufactures a wide range of products, from the simplest to the most complex. These include stents, orthopaedic implantable devices, electro-medical, therapeutic, and monitoring devices. It was designated as one of the '3+2' high-growth sub-sectors under the 11MP, as it was expected to have a positive impact on the Malaysian economy.

Malaysia's medical devices industry recorded a stellar performance in 2020, bringing in over RM6.1 billion and 51 projects (substantially more than 2019's figures of RM4 billion across 31 projects respectively). Of the investments worth RM6.1 billion, the vast majority (RM5.5 billion) was invested into 22 new projects, with the remaining RM579 million (9.5%) invested into 29 expansion/diversification projects. In a reversal from 2019, where domestic investments (RM934.9 million) only made up 23.5 per cent of the total, DDI saw a resurgence in 2020 with investments worth RM3.9 billion (64.1%), with foreign investments totalling RM2.2 billion (35.9%). These projects are expected to generate 11,409 new jobs, or over 4,000 more potential jobs than in 2019. Of the projects approved, 19 projects (37.3%) with investments of RM2.2 billion were for the manufacturing of medical devices other than medical gloves and face masks. These projects were mainly for high-end and high-value-added products.

Approved Investments in the Medical Devices Industry in 2020

Domestic vs Foreign Investments

51 projects were approved



Expansion/Diversification vs New Projects

RM6.1 bil Total investments

RM5.5 bil	90.5%	22 New projects
RM579 mil	9.5%	29 Expansion/diversification projects

Employment Opportunities

11,409
Total job opportunities

4,000
more potential jobs created than 2019

Malaysia continues to receive interest from major MNCs in manufacturing high-complexity, high-technology and high-value-added products in the country. One of the more notable projects approved in 2020 was a new investment by DexCom Inc., a US-based company that develops, manufactures, and distributes Continuous Glucose Monitoring (CGM) systems for diabetes management, with an investment of RM1.8 billion. This wearable device tracks glucose levels continuously, transmitting the information to a compatible smart device or receiver every five minutes. The export-oriented projects will create approximately 680 jobs for Malaysians, with 264 positions in the managerial, technical, and supervisory category. Malaysia was Dexcom's preferred location for expansion and the company's first manufacturing facility in Southeast Asia, due to the quality of its infrastructure, skilled human resources, as well as the strong support from the Government.

Another approved investment was an expansion project to manufacture ventilators, medical consumables, pill planners/pill splitters, healthcare wearables, and oximeters by K One Resources Sdn. Bhd., a home-grown company. The investment worth RM24 million will generate 90 employment opportunities. K-One Resources has worked to meet the demand of ventilators by obtaining a Non-Exclusive License of the VITAL (Ventilator Intervention Technology Accessible Locally) ventilator from NASA-JPL. VITAL has been approved by the US FDA under Emergency Use Authorization (EUA), with K-One being the only successful licensee in Malaysia.

These and other world-class, high-technology projects will involve extensive R&D, technology transfer, and adoption of smart manufacturing elements. The projects are expected to provide new business opportunities for local vendors to supply equipment, machinery, machine tools, and packaging materials to meet global demand, boosting the development of the Malaysian medical devices ecosystem.

Pharmaceuticals

According to leading market and consumer data firm Statista, pharmaceutical revenues worldwide totalled US$1.25 trillion in 2019, of which up to one-fifth or more could be directed towards R&D programmes, thus demonstrating how dependent the pharmaceutical industry is on R&D. The top spenders on pharmaceuticals worldwide are the US, PRC, Japan, Germany, and France. International data company IHS Markit had forecast that global healthcare spending would decline 0.1 per cent to US$8.3 trillion in 2020, before growing 5.8 per cent to US$8.8 trillion in 2021, with the US pharmaceutical market forecast to grow by two per cent to US$524 billion in 2020 and seven per cent in 2021.

In the past decade, the Malaysian pharmaceutical industry has experienced steady, rapid growth with production capabilities running the full gamut of dosage forms such as sterile preparations, injectables, tablets, and time-release, and liquid medications. These products are accepted across the globe, particularly in Pharmaceutical Inspection Convention and Pharmaceutical Inspection Cooperation/Scheme (PIC/S) member countries, of which Malaysia is a member.

The industry saw demand increase in 2020 despite the pandemic, which led to industry players scrambling to deal with the pressure of border closures and stockpiling to ensure stable production and smooth operations through sourcing for active pharmaceutical ingredients from reliable parties. Prospective investors can therefore consider conducting research into how the heavy reliance on foreign countries for raw materials can be reduced or otherwise mitigated, perhaps by tapping into the country's sheer abundance of raw material from natural sources. Malaysia's rich biodiversity and having some of the world's oldest rainforests that potentially include more than 2,000 plants with medicinal value can be leveraged for R&D and commercialisation of pharmaceutical products.

According to data published by the National Pharmaceutical Regulatory Agency (NPRA), as of 2020 there were 230 manufacturers licensed by the Drug Control Authority (DCA) under the Ministry of Health (MOH), with 64.3 per cent or 148 of these manufacturers categorised as producers of traditional medicine and health supplements, 30.9 per cent or 71 being producers of pharmaceuticals, and 4.8 per cent or 11 companies being producers of veterinary products. As of 2020, a total of 23,762 new pharmaceutical products were DCA-registered, including natural products (52%), prescription medication (18%), health supplements (12.1%), non-prescription/OTC (6.5%), new chemical entity (6.1%), veterinary medicine (3.3%) and biologics (2%).

A total of 12 projects with investments of RM152.8 million were approved for the pharmaceutical industry in 2020. Of these, seven were new projects with investments of RM93.4 million (61.1%), or approximately RM34 million more than 2019's figure of RM59 million, with five expansion/diversification projects worth RM59.4 million (38.9%). Foreign investments came to RM20.9 million or 13.7 per cent of total investments, while DDI made up the remaining 86.3 per cent or RM131.9 million, an increase of over RM43 million from the DDI received in 2019 of RM88.1 million. The projects approved were expected to generate 416 new jobs.

Among the projects approved was an expansion project by a Malaysian-owned company, Malaysian Vaccines and Pharmaceuticals Sdn. Bhd, with investments of RM24 million to produce animal vaccines and human pandemic vaccines. This project will generate 14 employment opportunities in the science and technical fields. The project is in-line with the government's aspiration to further develop the biopharmaceutical industry ecosystem in Malaysia, particularly in vaccine development. By leveraging the company's expertise and experience since the 1980s in the development and manufacturing of animal vaccines, this project could strengthen the current ecosystem as well as the upskilling of Malaysia's expertise in vaccine production.

Another project approved was a new bio-pharmaceutical project by a foreign-owned company, CytoMed Therapeutics (Malaysia) Sdn. Bhd, with investments of RM20 million to research and produce GMP-clinical-grade cell-based therapeutics for cancer therapy (in particular Chimeric Antigen Receptor modified T-cells) and regenerative medicine. This project will generate 20 high-value knowledge-based employment opportunities in the highly-advanced biotechnology sector. The global cell therapy market is a high-growth, high economic value industry and is said to be the future of healthcare, especially due to the aging population. Such cell therapeutics projects in Malaysia are in line with the Government's aspiration to encourage further R&D and clinical trials in the biotechnology sector.

Prospective investors should be heartened as the recently-announced Budget 2021 has indicated the Government's commitment to strengthening MOH's Off-Take Agreement Programme as an attractive incentive for Malaysia to become a healthcare-related investment destination, especially for locally-produced vaccines and medicines. To encourage manufacturers of pharmaceutical products including vaccines to invest in Malaysia, the Government will provide further incentives, such as a preferential tax rate from zero to 10 per cent for 10 years.

Malaysia is an attractive investment location for pharmaceutical companies, given its emerging R&D centres, diverse patient population, as well as its highly-competitive clinical research costs. The financing and introduction of new and innovative projects, such as the production of vaccines and stem cells, will move the entire ecosystem towards producing more high-value-added products, and thus potentially increasing Return on Investment (ROI).

Biotechnology (Including BioNexus Projects)

Defined as the science that harnesses various biological processes to develop technologies and products, biotechnology (biotech) assumes an important role in sustainable development. From a reliance on traditional applications, Malaysia's biotechnology industry has moved on to the development of technologies for the sustainable production of green, renewable, non-toxic, and cost-competitive products. In recognition of biotech as a strategic sector to drive the economy, the Government launched the National Biotechnology Policy (NBP) in 2005. Since then, many achievements have been made in terms of job creation and FDI in the industry.

More and more industries in the circular economy are adopting biotech, harnessing it for longer and better product lifecycles, improved biodegradability and compostability, and the development or discovery of new materials. Hence, prospective investors should note that Malaysia's biotech industry has significant room for growth and development.

In particular, while the COVID-19 pandemic has and continues to have a profound impact on the global economy and the manufacturing sector in general, its effect on the biotech industry has been far more positive. According to New York-based investment management firm VanEck, recent developments in COVID-19 vaccines have lifted biotech companies' share prices, with the NASDAQ Biotechnology Index climbing more than 26 per cent by the end of 2020. Bloomberg further noted that the potential approval of an Alzheimer's medicine, new gene therapy data, and more late-stage clinical trial results for Covid-19 vaccines will keep the momentum up for biotech stocks in the next three months. Closer to home, approved investments in Malaysia's biotech industry had increased from RM73.1 million in 2019 to RM2.7 billion in 2020.

In 2020, a total of six biotech projects were approved, four being new projects with investments worth RM2.6 billion and two being diversification projects amounting to RM10.2 million. Of the total investments approved, RM2.6 billion (99.6%) was from FDI, while RM10.2 million was from domestic investments. Bionexus projects, on the other hand, saw seven approvals with investments totalling RM98.4 million. These projects were expected to generate 214 new job opportunities.

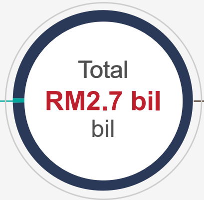
Among the notable investments approved by MIDA is a commercial scale-up project by Singapore-based Protenga Pte. Ltd., a leading global insect protein and insect technology company, and its subsidiary Protenga Sdn. Bhd. The investment will see Protenga's insect bioconversion and insect protein manufacturing capacities increase significantly, while contributing to the valorisation of Malaysian low-value agro-by-products and food waste/by-products through circular economy technologies. The company aims to set up 30 new smart insect farms across Malaysia by 2024 through a contract farming partnership model with local Malaysian agro-biomass and food waste producers, valorising in excess of 15,000,000 kg of food waste and by-products per year. This will strengthen Malaysia's high-quality protein production, and address the increasing global demand for sustainable animal nutrition.

Approved Investments in the Biotechnology (Including BioNexus Projects) Industry in 2020

Domestic vs Foreign Investments

6 projects were approved

Domestic investments
0.4%
RM10.2 mil



Foreign investments
99.6%
RM2.6 bil

Expansion/Diversification vs New Projects

RM2.7 bil Total investments

RM2.6 bil	99.6%%	4 New projects
RM10.2 mil	0.4%	2 Expansion/diversification projects

There were 7 Bionexus projects approved with investments totalling **RM98.4 million**

Employment Opportunities

214
Total job opportunities

Bioeconomy Corporation Sdn Bhd assisted and supported several BioNexus companies in developing products related to dealing with the COVID-19 pandemic. One of them received MOH approval to produce dual-target detection kits for SARS-COV-2 called LyteStartTM. This dual-detection kit is with a screening assay for SARS-related coronaviruses based on the E-gene and a highly-specific confirmatory assay only for 2019-nCov, based on the RdRP-gene. Another BioNexus company developed a new laboratory test kit for patient specimens of COVID-19, including influenza and influenza-like illnesses. The single-tube assay, called GenoAmp Real-Time RT PCR SARS – CoV – 2, can detect and differentiate Influenza A (H1N1, H3N2), Influenza B, COVID-19 (E gene, RdRP gene and spike gene), and Mers-CoV simultaneously from a single drop of a patient's specimen. There is also one BioNexus company in the midst of producing COVID-19 vaccines.

With such bright prospects, investors would do well to consider Malaysia as their preferred investment destination when it comes to biotechnology-related projects, such as the production of bio-plastic resins, bio-epoxies, and polyhydroxyalkanoates biodegradable polymers, particularly due to the availability of abundant, reusable, ecologically-friendly resources as inputs.

Food Industry

Agro-Food

Malaysia ranked 28th on the Global Food Security Index 2019, an improvement compared to the previous year. While Malaysia produced around 75 per cent of its own food supply, and despite increased local production, the supply of agro-food products still does not meet the country's demand. Aside from food availability, food security is defined by several other factors, including supply accessibility and stability, and food utilisation efficiency.

In 2020 and beyond, the modernisation of the agro-food industry is critical to ensure Malaysia's food security. The COVID-19 pandemic highlights the importance of food security. In a time of crisis, Malaysia needs to ensure staple foods are readily available and cheap. The inability to increase the nation's self-sufficiency in rice production, and reliance on imported raw materials and protein staples, illustrates the urgency in creating long-term resilient and sustainable food security policy in the face of economic shocks.

Prospective investors can explore ways to revamp food production 'from farm to fork' in order to achieve an optimal food security level. One way to achieve this is by modernising the agro-food industry with innovative applications and technologies leading to increased domestic production and reduced dependence on food imports.

Investors may also finance R&D that focuses on strengthening and supporting the food supply chain, crop diversification, food reserves, and technological development. The resulting technological transformation and modernisation of agricultural processes will attract younger farmers into the industry. In particular, the adoption of technologies based on Industry 4.0 would encourage sustainable agriculture growth, in line with the country's goal to uplift the income status of farmers, livestock breeders, fishermen, and agro-based entrepreneurs.

In addition, using AI and BDA for smart agriculture on a larger scale will help to elevate the industry. An intelligent cloud-based infrastructure for smart agriculture can optimise the food supply chain, boost yields, improve quality, and increase the industry's productivity. Over the next decade, Malaysia intends to transform the industry through the National Agro-Food Policy 2.0 (2021-2030), modernising the country's agricultural outlook.

Food Processing

The food industry's role in the global food chain is undeniable. By transforming raw agricultural commodities into end-products meeting the needs of increasingly-sophisticated consumers, the industry contributes tremendously to society's goals of ensuring food security and public health.

With rich tropical and agricultural resources, and diverse cultures, Malaysia's food industry has a fascinating range of processed foods from different Asian cuisine traditions, and each one is unique. The Malaysian F&B market has become increasingly sophisticated, well-supplied by both local and imported products. Lifestyle changes have also led to an increase in the demand for convenience and health foods.

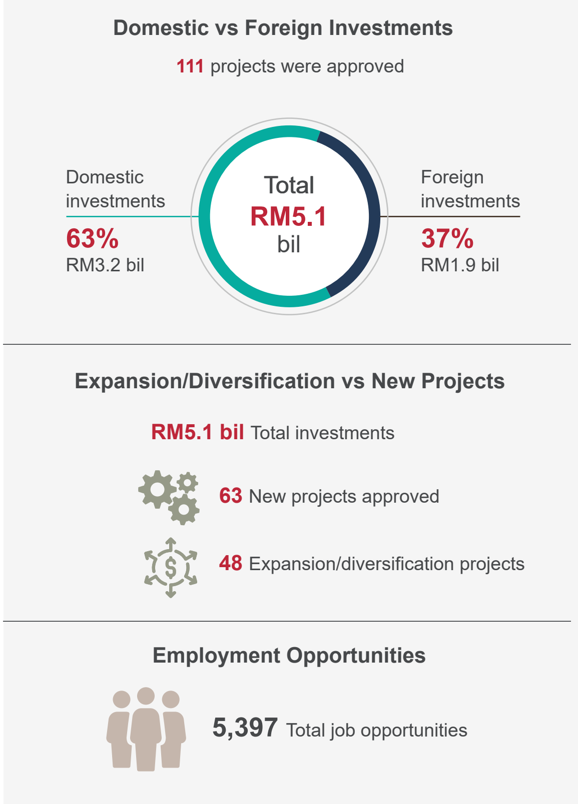
These days, Malaysian consumers look for foods high in nutrition. Plant-based 'fake meat' in the form of burgers and nuggets continue to rise in favour with consumers, as well as dairy milk substitutes from almonds, soya beans, cashews, and coconuts, among others. Likewise, there is an increase in demand for more healthful, higher-quality frozen food products as a result of changing lifestyles, particularly for the maturing millennial generation who are now balancing building careers and a healthy family.

The COVID-19 pandemic and subsequent Movement Control Orders (MCO) in 2020 had disrupted the supply chain, and influenced supplies of ingredients and raw materials. To ensure the consistent quality and safety of food products during this outbreak, many food processing companies follow current Good Manufacturing Practices (GMP), focusing their attention on their people, premises, processes, products, and procedures. These manufacturers also follow the risk-based food safety plans such as Hazard Analysis and Critical Control Points (HACCP).

Malaysian food-processing companies should revisit sourcing strategies, rationalise product ranges, and assess the resilience and agility of supply chains as well as their route-to-market channels for future opportunities. In particular, optimising and streamlining e-commerce and distribution networks would result in cost reductions and increased profitability.

In 2020, there were 111 food processing and beverage projects totalling RM5.1 billion in investments approved, an increase of almost RM2 billion from the RM3.4 billion invested in 2019. Both DDI and FDI increased compared to 2019, with domestic investments making up 63 per cent of these investments worth RM3.2 billion (RM600 million more than 2019), while foreign investments stood at RM1.9 billion or 37 per cent of the total, over RM1.1 billion more than 2019's DDI of RM574.8 million. The 63 new and 48 expansion/diversification projects resulted in 5,397 employment opportunities, or a slight increase of 258 from 2019's job creation figure.

Approved Investments in the Food Processing and Beverage Industry in 2020



Beverages contributed 24.3 per cent of the total number of approved projects. This was followed by food ingredients at 17.1 per cent, sugar and chocolate confectioneries with 13.5 per cent, cereals and flour-based products at nine per cent, processed meat products with 7.2 per cent, seafood products with 6.3 per cent, dairy products and animal feed each contributed 4.5 per cent, and fruits and vegetables with 3.6 per cent and other products with 9.9 per cent..

One of the significant projects approved in the sub-sector was an expansion project by Dutch Lady Milk Industries Bhd. (DLMI), a majority-foreign-owned company from the Netherlands producing well-known dairy and dairy-based products in Bandar Enstek, Negeri Sembilan. The expansion involves an additional investment of approximately RM400 million in building modern 'smart factory' facilities with high-technology fully-automated M&E, and adopting the Industry 4.0 smart manufacturing concept and green technology for increased sustainability.

Palm Oil Products

Palm Oil - Based Products

Oil palm's versatility makes it one of Malaysia's most important cash crops. Presently, at least 70 per cent or more of global palm oil output goes towards food purposes (e.g. cooking oil or in processed foods).

The use of palm oil as biofuel/renewable energy generation (see the Palm Biomass section on Page 54) is conservatively estimated at around 20 million MT of global palm oil output. Approximately 60 per cent of palm oil imported into the EU is used as biofuel and to generate renewable energy. Palm oil is also used in the oleochemicals industry (see the Oleochemicals section on Page 63).

According to MPIC's report on 12 November 2020, the Palm Oil Windfall Profit Levy was expected to add RM348 million to the Government's coffers. This represented a tremendous and highly-significant increase from 2019's figure of RM256,000 due to the low price of crude palm oil (CPO) at that time.

This significant jump in CPO prices can be attributed to several factors, most of which led to an increase in demand. One of the most important factors was the structural change in PRC's oils and fats supply, especially given the USA-PRC trade tension and African swine fever, both of which negatively impacted soybean oil supply. Simultaneously, the tension in the PRC-Canada relationship led to reduced imports of Canadian rapeseed and rapeseed oil. As a result, PRC palm oil imports increased; partly due to low import prices, and partly due to the price difference between soybean oil and palm oil, which increased palm oil consumption.

The increased revenue for both the Government and industry players is a strong indication of how resilient the palm oil products industry in Malaysia has been, despite the COVID-19 pandemic and the lockdowns imposed across most parts of the world. For instance, the CPO price has been rallying since May, being on an upward trend and peaking at RM3,854 per tonne for local-delivered spot prices on 24 December 2020, the highest figure recorded in over eight years.

In Malaysia, the MCO initially created significant disruptions to the food, transportation, and retail industries, with the palm oil products industry following suit. It restricted worker movement, causing the upstream sector to struggle as fresh fruit bunches (FFB), if left unharvested for two weeks, would rot or over-ripen and subsequently cause the oil quality to deteriorate as the free fatty acids count rises. After the industry appealed, and cognisant of the impact, the Government relaxed the restrictions on industry players, evading a potentially damaging RM1.6 billion of overall losses.

On the demand side, while trade movement was hit by the pandemic particularly during the first and early second quarters, the situation had been improving since. Many palm-oil-consuming countries have started importing palm oil to replenish their stocks, especially as demand from the hotel, restaurant and cafe (HORECA) sector picked up. In addition, competitive palm oil prices have triggered demand in major palm-oil-consuming countries, made evident by the higher palm oil imports of countries such as India and PRC. As economic activities improved due to movement restrictions being relaxed, it is projected that there will be increased palm oil use, especially in the food manufacturing and HORECA sectors.

During the pandemic, the government promoted the palm oil products industry through online webinar sessions and briefings. MIDA participated in several of these sessions, such as the webinar series organised by Malaysian Palm Oil Council (MPOC) from August to September 2020. These webinars were themed ‘China’s Palm Oil Demand & Recovery Post-Pandemic’, ‘Russian Palm Oil Market Recovery After Pandemic’, and ‘Prospects of Further Growth and Stimulating Malaysian Palm Oil Demand in Middle East and North Africa (MENA) Market’. The Palm Oil Refiners Association of Malaysia (PORAM) and MIDA collaborated to organise a webinar session on 23 November 2020, where MIDA gave an update on ‘Accelerating Economic Growth in the Pandemic Era: The Attractiveness and Ecosystem of the Malaysian Palm Oil Industry’ to over 130 participants.

The pandemic has brought issues of supply chain resilience, traceability, and end-to-end visibility into the limelight, with many enterprises increasingly committing themselves to traceability for regulatory compliance and to achieve sustainability goals. The palm oil products supply chain also finds these issues of paramount importance; many industry players spend millions of dollars annually to have last-mile visibility of their supply chains. As these individually-conducted initiatives do not take other stakeholders in the supply chain into account, the initiatives become unnecessarily complex and less successful than they should be. It is also impractical and prohibitively expensive for smaller stakeholders to take part in all these different initiatives.

Prospective investors therefore should consider the feasibility of constructing a ‘Collaborative Connected Digital Supply Chain Platform’ on a secured cloud. All stakeholders would conduct their supply chain transactions with minimum effort and low cost, powered by a proprietary energy-saving blockchain platform. Enterprises would connect to every stakeholder in their supply chain seamlessly, providing real-time digital traceability with geo-spatial analytics; making it a win-win proposition. For the first time, smallholders in the supply chain will be included at no cost to them, enabling them to embrace sustainability and be adequately remunerated for their efforts. This could be a great opportunity for the palm oil industry to prove that palm oil is indeed produced sustainably and conforms to No Deforestation, No Peat, No Exploitation (NDPE) norms. This should appease EU countries and the NGOs that have been critical of palm oil’s sustainability.

Investors should also take the opportunity to adopt new locally-developed technologies that are cost-effective both from the perspectives of both capital and operational expenditure (CAPEX and OPEX) to produce refined palm oil products that meet or exceed relevant food safety standards – yet another area of concern brought into stark relief by COVID-19. For instance, the European Food Safety Authority (EFSA) guidelines for refined palm oil products set the levels of food contaminants such as 3-MCPDE (3-monochloro-propanediol esters) and GE (glycidyl esters) at 2.5 & 1 PPM respectively. The new technologies can achieve 1.25 & 0.5 PPM respectively. This will enable palm oil to be on par with – or better than – other refined vegetable oils, thus capturing a bigger market share because of its superior quality, versatility, and price competitiveness.

In 2020, a total of eight projects with investment totalling RM139.9 million were approved in the oil palm products industry, with five new projects and three expansion/diversification projects. Domestic investments were predominant in the industry, totalling RM139.3 million, while FDI came to RM0.6 million, with all projects expected to create 241 employment opportunities.

Among the projects approved were the production of RDB palm olein, RDB palm stearin, RDB palm kernel oil, and other value-added products. These projects involved an investment of RM120.3 million and would create 214 employment opportunities.

Palm Biomass

Biomass is the use of natural materials from living or recently-dead organisms for fuel and in industrial production, especially in electricity generation. Malaysia has an estimated production capability in excess of 2400MW from biomass and 410MW from biogas. Based on 2020 data by the Sustainable Energy Development Authority, the country has managed to produce 70.7MW from biomass and 110.6MW from biogas.

As a leading agricultural commodity producer in Southeast Asia, Malaysia possesses abundant and readily-available agricultural waste or biomass crops. These include agricultural crops (sugarcane, cassava, and corn); agricultural residues (rice straw, cassava, rhizome, and corncobs); woody biomass (fast-growing trees, wood waste from wood mills, and sawdust); agro-industrial waste (rice husks from rice mills, molasses and bagasse from sugar refineries, and residues from palm oil mills).

Out of all these, oil palm biomass is Malaysia's primary biomass resource. The country has an estimated total of 5.89 million hectares of oil palm plantations, producing a total of approximately 94.7 million tonnes of biomass. Oil palm biomass is derived from a variety of oil palm by-products, including oil palm fronds (OPF) and oil palm trunks (OPT), oil palm empty fruit bunches (OPEFB), palm kernel shells (PKS), mesocarp-fibre (MF), and palm oil mill effluent (POME).

The oil palm biomass industry has been growing at a steady pace over the past few years, thanks to the interest and transition towards using low-carbon renewable energy. Many countries such as Japan, PRC, ROK, and European nations have worked towards reducing their dependence on coal or other fossil fuels. For instance, the March 2011 Fukushima disaster saw the Japanese government establish the fourth Strategic Energy Plan for 2030, with explicit policies to reduce nuclear power and fossil resources dependency and expand renewable energy generation. ROK implemented its Renewable Portfolio Standard (RPS) programme in January 2012, requiring the 13 largest power companies to steadily increase the proportion of renewable energy in their total power generation from 2012-2024.

In 2018 Northport (M) Bhd. established a biomass logistics hub in Port Klang, Selangor to support the biomass industry's increased demand for port facilities. It is an end-to-end logistics value chain with a centralised processing hub consisting of warehouses, open space for processing, and port-handling facilities. Malaysia's total trade in biomass products increased year-on-year from 2016 to 2019. For instance, total trade in 2019 was RM317.9 million, an increase of 9.8 per cent from 2018 (RM289.4 million).

MIDA approved several manufacturing projects with a moderate value of investment in 2020 compared to 2019, mainly from foreign investors from ROK as well as local investors.

A total of eight projects with investments of RM250 million was approved in 2020 for the production of oil palm biomass-based products. Domestic investments dominated the industry, bringing in RM214.9 million, or 86 per cent of the total. Overall, these investments were expected to generate a total of 418 employment opportunities.

Approved Investments in the Palm Biomass Industry in 2020

Domestic vs Foreign Investments

8 projects were approved

Domestic investments
86%
RM214.9 mil

Foreign investments
14%
RM35.1 mil

Employment Opportunities

418 Total job opportunities

A significant project approved was from IOI Palm Wood Sdn. Bhd., a majority Malaysian-owned company, that will produce lumber, blockboard, and wood panels from oil palm trunks with a proposed investment of RM80.7 million, and will provide 168 job opportunities.

Chemicals and Chemical Products

The chemicals and chemical products industry produces outputs that are used as raw materials in the manufacturing of E&E products, plastic products, agricultural goods, and construction materials. The industry is a key contributor towards Malaysia's GDP, and represents a sizeable segment of the country's manufacturing landscape. According to the Chemical Industries Council of Malaysia, the industry contributed approximately RM33.8 billion to the national GDP in 2019, primarily as a result of its strong linkages to other major manufacturing industries. Companies in the industry operate across a wide range of verticals, including agricultural chemicals, fertilisers, industrial gases, inorganic chemicals, paint, and printing ink.

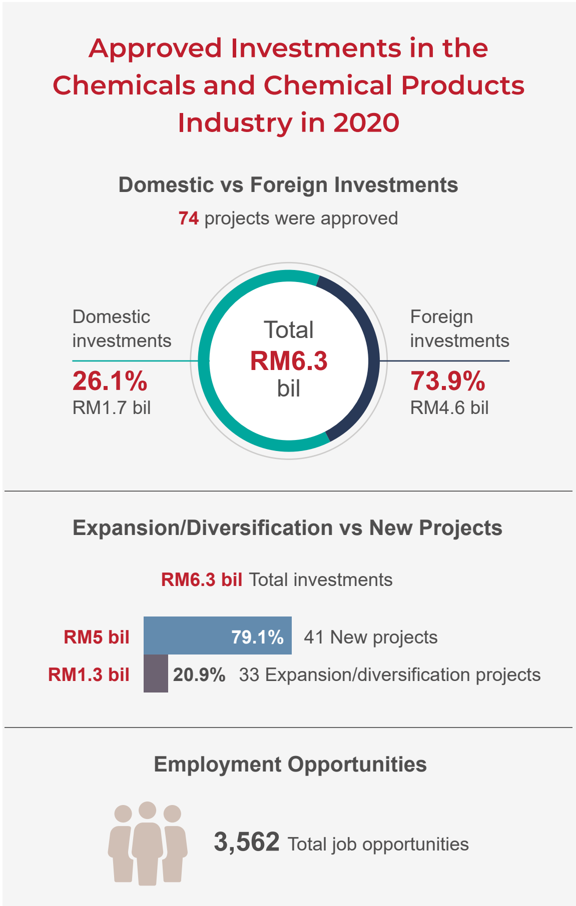
The ready availability of feedstock and resources, supportive Government policies, and a conducive business environment has encouraged the industry's steady growth. However, the recent global recession and the Government's response to the COVID-19 pandemic has adversely impacted the industry; primarily due to the MCO, which has imposed restrictions on manufacturers, thereby hindering them from operating at full capacity.

In 2020, imports of chemicals and chemical products were reduced by 10 per cent to RM73.5 billion as compared to 2019, while the total exports also declined by 11.8 per cent to RM50.7 billion. The chemicals and chemical products industry was Malaysia's fourth-highest exporting industry, contributing to 5.2 per cent of the nation's total exports, while remaining the second-highest contributor of total Malaysian imports.

In 2020, MIDA approved 74 projects in the chemicals and chemical products industry, with investments totalling RM6.3 billion. This represented a 75 per cent increase over the RM3.6 billion invested in 2019. Of these, 41 were new projects (RM5 billion), over double 2019's new investments of RM2.2 billion, while the remaining were expansion/diversification projects (RM1.3 billion). FDI continued to be the major source of investment amounting to RM4.6 billion (73.9%), just over double the RM2.2 billion of FDI brought in during 2019. These approved projects were expected to create 3,562 new jobs.

One notable new project approved in 2020 was by Master Builders Solutions Malaysia Sdn. Bhd. to produce advanced chemical solutions for construction purposes, with investments worth over RM100 million. With its vast experience and in-depth knowledge of local building needs to develop innovations, this project enables the company to offer its products as well as to establish a sustainable manufacturing facility in Malaysia and Southeast Asia. The investment consists of liquid, powder, and polymer manufacturing facilities, and a comprehensive Technical Competence Centre for Performance Flooring and Concrete. The facilities will position Master Builders Solutions Malaysia Sdn. Bhd. as one of Malaysia's market leaders in construction chemicals.

Another notable project approved in 2020 was an expansion/diversification project by Cabot Materials Research Sdn. Bhd. to produce engineered elastomer composite, with a heavy focus on tyre and industrial rubber applications. This project enables the company to establish a sustainable manufacturing facility in Southeast Asia, as the product was recognised by European Rubber Journal's inaugural Top 10 Elastomers for Sustainability List in July 2020.



The chemicals and chemical products industry still has significant room for growth, development, and improvement given the events of 2020. Future and strategic planning focusing on agility, resilience, and sustainability will allow industry players to maximise returns on investment, even in the face of future shocks. In particular, inculcating the spirit of innovation among industry players will be key to enhancing the industry's economic value. MIDA continues to be a strong supporter for the R&D, adoption, and commercialisation of new technologies for a more advanced, high-tech, and highly-automated industry.

One area in which potential investors can pursue with regards to innovation is the development of speciality chemicals, or effect chemicals as the market for it has surfaced as one of the top segments of the global chemical industry. These chemicals are used for their specific chemical effects, which can enhance the performance and functions of finished products such as cosmetics, F&B, and personal care. According to an Allied Market Research report in December 2019, speciality chemicals can be divided into seven major segments; food additives, cosmetic chemicals, textile chemicals, water treatment chemicals, construction chemicals, paper and pulp chemicals, and oil field chemicals.

Allied Market Research's report published in May 2020, "The Specialty Chemicals Report Outlook 2027", reports that the global specialty chemicals market value stood at US$711 billion in 2019, and is projected to reach US$953.9 billion by 2027, growing at a CAGR of five per cent from 2020 to 2027, mainly driven by pharmaceutical ingredients, agrochemicals, and end-user industries such as food additives, cosmetic chemicals, as well as pulp and paper.

Given that speciality chemicals require complex formulation and customisation, building expertise in understanding the chemical compositions, properties, and applications of various speciality chemicals is crucial, and in Malaysia, there is tremendous opportunity and room for growth in this area.

MIDA has been actively engaging with industry stakeholders to promote and facilitate investments in the speciality chemicals segment, offering various incentives under the Promotion of Investment Act (PIA), 1986. Potential investors are encouraged to take the opportunity to explore leveraging Malaysia as their launch pad into the speciality chemicals market in Asia Pacific.

Moving forward, Malaysia is looking to venture into new sub-segments within the speciality chemicals segment. Industry players have begun exploring the possibility to produce speciality chemical products directly from crude oil by using Crude Oil-To-Chemicals (COTC) technology. Non-fuel products such as catalysts, aromatics, white spirits (naphtha), wax, and white oil offer a huge market potential to be explored. These products can be used as additives for various industries such as food and beverages, construction and automotive.

Another area of development is in the reformulation of marketing and supply chain management policies, preparing the industry to further diversify both its sources of raw materials and its markets. This will empower industry players to choose from various suppliers and target markets, providing them greater flexibility and freedom when doing business. For instance, the Malaysian trade of chemicals and chemicals products that had previously been focused on the PRC was badly crippled as border restrictions hampered the movement of goods. However, the industry was able to pivot to a new market segment, shifting to service the domestic market instead with consumer products. Proving, in this way, that the domestic market has the potential to be developed. Similarly, identifying gaps in the local availability of required inputs will help the industry in the long term.

Petroleum Products (Including Petrochemicals)

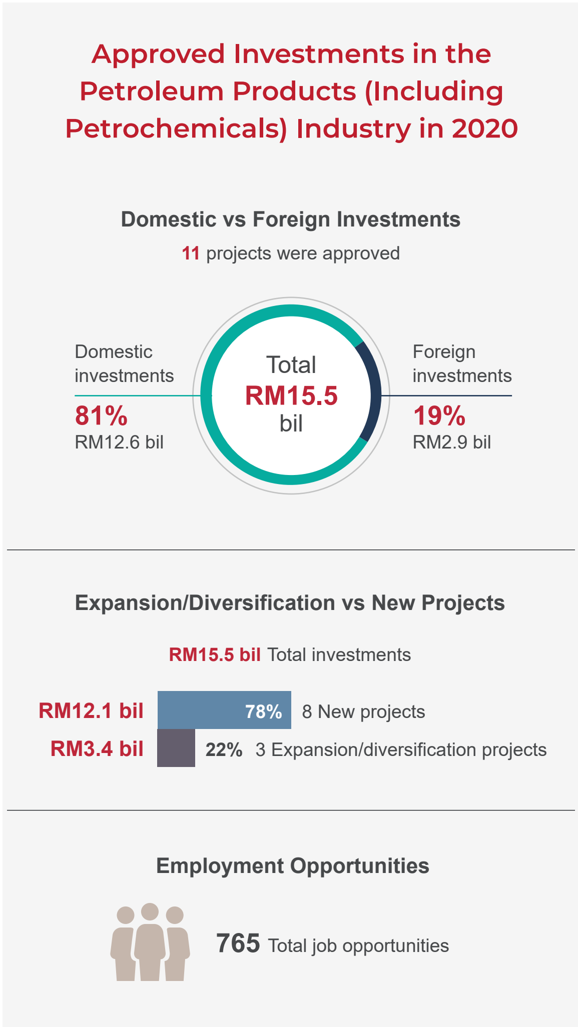
Companies in Malaysia's petroleum products (including petrochemicals) industry specialise in the production of natural gas, petroleum products, and petrochemicals. In 2020, petroleum products and liquefied natural gas (LNG) contributed 6.3 per cent or RM61.9 billion and 2.9 per cent or RM28.8 billion respectively to Malaysia's total exports of RM981 billion. Petroleum-related revenues however, declined by 40.3 per cent from the RM83.8 billion seen in 2019 to RM50 billion.

The industry is continuing to progressively recover from the repercussions of the COVID-19 pandemic, as it meets the rising demand for petrochemical products over time; products that include polymers such as polypropylene (PP) for key personal protective equipment (PPE) – face masks, surgical gowns and antibacterial wipes; polyethylene (PE) for food and equipment packaging; and polymethyl methacrylate (PMMA) for clear protective screens. Moderate growth is to be expected, mainly due to the high demand from the healthcare sector and lower feedstock cost resulting from low oil prices.

In 2020, a total of 11 projects were approved with investments totalling RM15.5 billion and creating up to 765 new jobs. The approved projects comprised eight new projects with investments worth RM12.1 billion and three expansion/diversification projects with investments of RM3.4 billion. These investments came primarily from DDI amounting to RM12.6 billion (81%), with FDI accounting for RM2.9 billion (19%).

The highlight for this year is the approval of the second floating LNG facility in the country with a substantial investment worth RM11.7 billion by PETRONAS Floating LNG 2 (L) Ltd (PFLNG2). The company was incorporated on 20 March 2014 under the Labuan Companies Act, 1990 to undertake an integrated LNG floating production, storage and offloading (FPSO) unit. The floating facility opens a new source of supply for cleaner energy as it is designed to extract gas from deep-water gas reserves in water depths of up to 1,500 meters. It is now moored at the Rotan gas field offshore from Sabah, and is expected to be commissioned in Q1 2021. The PFLNG2 is planned to be ready for commercial production by the second half of 2021 and is capable of producing 1.5 million tonnes per annum (MTPA) of LNG. Malaysia has one of the world's largest LNG production facilities in a single location with an installed capacity of 29.3 MTPA in Bintulu and PFLNG Satu of 1.2 MTPA capacity which is stationed at the Kebabangan (KBB) gas field offshore from Sabah.

Another highlight among the projects approved in 2020 is the expansion and diversification project by Kemaman Bitumen Company Sdn. Bhd. (KBC), a wholly-owned subsidiary of TIPCO Asphalt Public Company Limited, a conglomerate listed on the Stock Exchange of Thailand. KBC's ISO-certified refinery in Kemaman, Terengganu has been in operation since 2007. It is a unique processing plant in Asia, specially designed to process heavy naphthenic crude oils into high-quality asphalt using a straight-run process technology. While primarily designed to produce asphalt, the refinery also produces heavy vacuum gas oil (HVGO), light vacuum gas oil (LGVO), atmospheric gas oil (AGO), kerosene, and naphtha. The expansion and diversification project will increase KBC's crude oil processing capacity from 30,000 barrels per day to 60,000 barrels per day. This project approval involved an additional investment from KBC worth RM1.8 billion, and the creation of up to 50 new full-time job opportunities.



The 2021 completion of PETRONAS's Refinery and Petrochemical Integrated Development (RAPID) Project in the Pengerang Integrated Complex in Johor will see Malaysia's refining output surge to 300,000 barrels per day. This is a good situation for Malaysia's petroleum products exports, in addition to fulfilling domestic demand for petrol and diesel that comply with the EU's Euro 5 standards. The refining output – naphtha especially – would also cater as feedstock for its petrochemical complex to produce 3.3 million tonnes per annum of petrochemical products. This, along with the national development of differentiated and specialty chemicals, will be the central focus of the industry's growth.

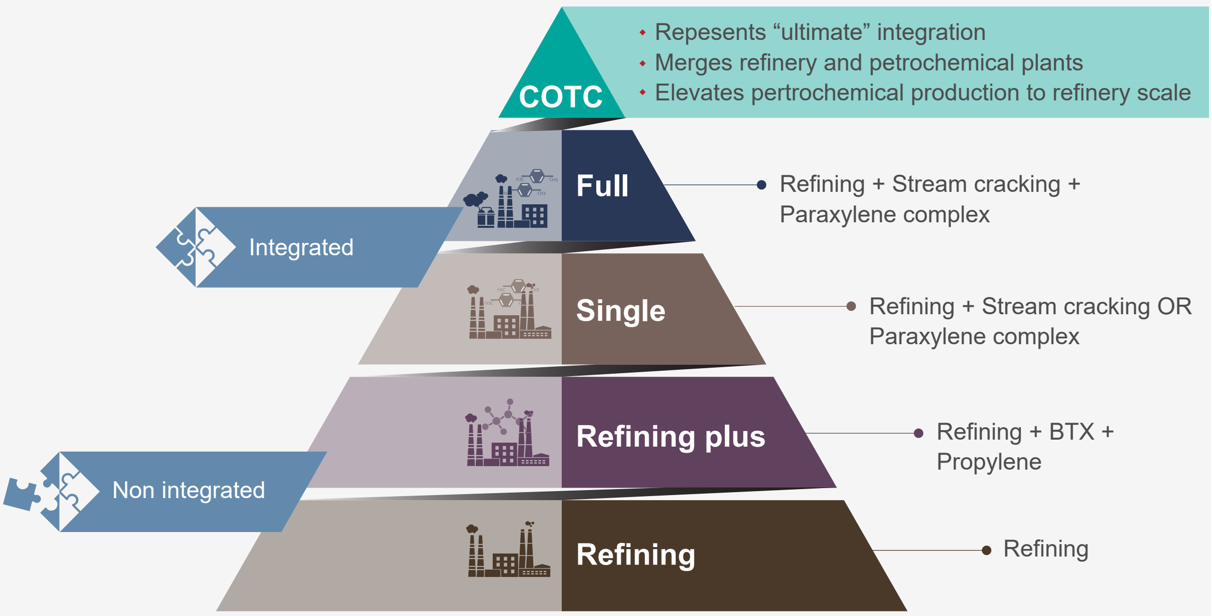
The current situation represents an opportune moment for industry players to assess their existing portfolio in response to the changes in market demands, availability of new technologies, as well as the shift in business landscape. Most industry players are now focused on developing the speciality chemicals segment– as it has higher margins and is able to provide players with better business sustainability– by using advanced technologies in order to access new markets and customers.

Furthermore, refineries are heading towards greater integration to produce downstream petrochemical products that have better value proposition, due to the volatility of crude oil prices and declining demand of fuel by the transportation sectors, as well as the cyclicality price exposure of the commodity and basic petrochemical products.

This can be achieved with Crude Oil-To-Chemicals (COTC) technology, which prospective investors are encouraged to take note of.

According to IHS Markit, COTC technology is a revolutionary technology advancement in refinery and petrochemical integration, which could double the profit derived from a barrel of crude oil. When a refinery is merged with a petrochemical plant to become one integrated processing plant, it can potentially bring higher profits to the operators.
The degree of refinery-petrochemical integration is classified into four levels, with COTC positioned at the top-most level of integration as the share of chemicals production exceeds 70 per cent in an oil refinery-petrochemical integrated plant.

COTC Technology



Source: IHS Markit

Currently, there are six non-integrated conventional refineries operating in Malaysia with the capacity of approximately 700,000 barrels per day. With investments into COTC technology, Malaysian refiners and petrochemical players could develop specialised facilities which could convert high-grade crude oil into higher percentage of chemicals, as opposed to their current fuel and refined products.

Crucially, integrated refineries with petrochemicals complexes stand to benefit from the adoption of emerging technologies such as IoT and Industry 4.0 to boost the efficiency of production processes and maximise the output of higher-value chemicals. The Industry 4.0 breakthroughs, among others, may result in the optimum usage of carbon; extraction and inclusion of hydrogen; low emission; smart usage of utilities and optimal capital expenditure. As the petroleum products (including petrochemicals) industry remains a significant sector for the country, MIDA has set in place several initiatives to strengthen the ecosystem of the petrochemicals industry, as it is crucial to attract the right technology providers to revamp and rejuvenate the process structures of petrochemicals complexes to resonate the industry's future-proofing efforts.

Plastic Products

The COVID-19 pandemic and the Government's subsequent imposition of the MCO has had a mixed impact on the plastic products industry. The surge in demand for packaging products, particularly from businesses involved in e-commerce and food delivery, benefitted plastic packaging manufacturers. This trend is expected to continue as homes and businesses alike adjust to home cooking, takeaways, and deliveries, instead of dining out at coffee-shops, eateries, or restaurants. According to ReportLinker.com's report, "Malaysia Plastics Market - Growth Trends and Forecast (2020-2025)", the plastic products industry in Malaysia is projected to grow at a CAGR of approximately four per cent from 2020 to 2025, arising from rising demand for food and beverage packaging.

Other plastic products categories that supply to non-essential sectors such as construction, automotive, household and consumer goods did not, however, fare so well as a result of the pandemic. According to the Malaysian Plastics Manufacturers Association (MPMA), the total loss during Phases 1, 2 and 3 of the MCO was about RM2.9 billion or equivalent to almost nine per cent of the total annual sales turnover of RM33.1 billion in 2019.

In 2020, the industry attracted approved investments amounting to RM1.1 billion across 64 projects, resulting in up to 2,639 employment opportunities. The approved investments comprised 35 new projects with investments totalling RM588.1 million and 29 expansion/diversification projects bringing in investments worth RM554.5 million. A large proportion of the total investments approved was from DDI of RM867.9 million worth of investments, which contributed 76 per cent, while the remaining RM274.7 million (24%) came from FDI.

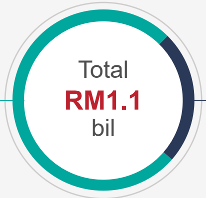
In light of the growing demand in the plastics packaging sub-sector, a wholly-foreign-owned company, EPE Packaging (Penang) Sdn. Bhd., had its expansion project to produce packaging material approved, bringing in investments worth RM74.7 million. This plant produces paper boxes, plastic boxes, and rigid boxes, and serves as a one-stop delivery hub for customers in Pulau Pinang. EPE Packaging Malaysia Group has been in this industry since 1994, establishing itself as one of the largest packaging companies in Peninsular Malaysia with factories in Shah Alam, Pulau Pinang, and Johor. The monthly sales revenue for the group's entire operation in Malaysia is over RM5 million. The group is a member of EPE International, a world leader in packaging for the last 45 years with 50 branches worldwide covering Asia, Europe, and the USA, whilst the headquarters is in Tokyo, Japan.

Approved Investments in the Plastic Products Industry in 2020

Domestic vs Foreign Investments

64 projects were approved

Domestic investments
76%
RM867.9 mil



Foreign investments
24%
RM274.7 mil

Expansion/Diversification vs New Projects

RM1.1 bil Total investments

RM588.1 mil	53%	35 New projects
RM554.5 mil	47%	29 Expansion/diversification projects

Employment Opportunities

2,639 Total job opportunities

A home-grown plastics company, Arita Plastics Industries (M) Sdn. Bhd., is also expanding its production capacity for extruded thermoplastic panels, with approved investments amounting to RM58.2 million. Its finished products are in high demand at this time, as the clear protective screen/shields are used as intubation boxes for medical purposes as well as protection shields for offices, restaurants and public areas. The Penang-based company has over 40 years of experience in producing thermoplastics and 27 years in plastics extrusion. It is amongst Malaysia's largest independent manufacturers and traders of plastic extrusion sheets. The company also offers anti-scratch and anti-microbial coating, thermoforming, and vacuum-forming services to meet a wide variety of custom requirements. Its own brand "A-PLAS" is well known for its a-Grade plastic sheets or optical-grade plastic sheets in South East Asia, Japan, ROK, PRC, Taiwan, Hong Kong SAR, India, Europe, and South Africa.

The plastic products industry faces both opportunities and challenges moving ahead. Opportunities abound in the efforts to diversify into high-end plastic products, engineering plastics, and bio-plastics for packaging. Capitalising on these opportunities will depend on industry players demonstrating strong capabilities throughout the entire value chain from R&D activities to product distribution, and engaging in collaborative activities with universities, research institutions, and suppliers. The industry would therefore be able to innovate more heavily and manufacture specialised plastic products to cater for niche markets such as automotive, E&E, medical devices, and aerospace. To this end, MIDA is working closely with MPMA and SIRIM to develop a designated centre of excellence to produce high-potential plastic manufacturers and products.

Industry players are being challenged to raise their performance in multiple ways. Regulatory SOPs put in place as part of the government's measures to combat the COVID-19 pandemic have reduced the level of manpower available. Companies are thus required to sustain smooth operations and production by becoming more productive, cost-efficient, and creative. Prospective investors can assist by empowering new and existing industry players to automate their operations as well as increase the adoption of technologies related to Industry 4.0.

Rubber Products

Rubber products are among the most versatile materials used in virtually all modern industries, including E&E, automotive, medical devices, construction, and industrial manufacturing, as well as for polymer modification and other applications. Tyres, latex products such as industrial gloves, and other general rubber products comprise common rubber products. Industrial rubber products including engineered rubber products are the new rubber products segment that has been growing rapidly recently. According to businessinsider.com, this new rubber product segment is forecast to grow at over five per cent from 2021 until 2027.

Malaysia ranked seventh in the world for natural rubber (NR) production and Malaysian rubber products are exported to more than 190 countries across the globe. The US and EU remained the largest destinations for export market of Malaysian rubber products. Malaysia is the world's leading supplier of examination gloves and surgical gloves, supplying more than 50 per cent of the global demand. Malaysia is also one of the world's leading suppliers of new tyres, catheters, condoms, and latex threads.

In 2020, the rubber products industry contributed 4.4 per cent or RM43.6 billion to Malaysia's total exports of RM981 billion. This is a remarkable increase in terms of value and percentage compared to 2019 (RM25.8 billion and 2.6% respectively). The rubber products industry has seen a significant spike in demand in 2020 as a result of the COVID-19 pandemic. Data from the Department of Statistics Malaysia (DOSM) indicated a growth of 6.3 per cent in the domestic consumption of NR in October 2020, over 76.1 per cent of which was used to produce rubber gloves as demand and usage of these products in hospitals and clinics rocketed upwards. The Malaysian Rubber Board (MRB) recorded the average price of concentrated latex at RM5.76 per kilogramme in October 2020.

A total of 42 projects were approved in 2020, with a total investment of RM4.3 billion, or approximately RM1.2 billion more than was invested in 2019. FDI contributed a total investment of RM406 million while DDI contributed a total of RM3.9 billion, over five times the RM718.52 million invested in 2019. These approved investments comprised 31 new projects amounting to RM3.9 billion and 11 expansion/diversification projects worth RM421 million. It is expected that 11,498 new job opportunities would be created from these investments, over 9,500 more jobs than were created in 2019.

Shah Alam, Selangor-based MSL Rubber Industries Sdn. Bhd. is a Malaysian company committed to manufacturing a broad range of technical engineered rubber products and completing the industrial and engineering rubber products ecosystem, with more than 20 years of experience and with a paid-up capital of over RM2.5 million. The company has invested RM100 million to produce a comprehensive range of rubber engineering solutions ranging from rubber rollers, marine fenders, anti-abrasion rubber linings, and anti-corrosion protection rubber linings.

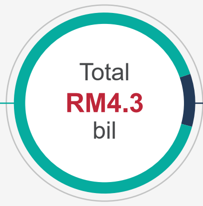
At present, aside from the pressing need for rubber gloves, the rubber products market is also experiencing greater near-term demand from industries such as automotive, consumer goods, clothing, and footwear. The near future presents the industry with an opportunity to take further advantage of the increasing demand for rubber products. Due to the industry being labour-intensive and foreign-dependent, with mainly manual and semi-automatic production, potential investors can bring in new technologies and high-capital investment necessary to adopt automation and digitalisation. While also taking advantage of the Enhanced Domestic Investment Strategic Fund (DISF) under MIDA and Automation CA incentives to upgrade their machinery and equipment, as well as undertake R&D and upskilling programmes to be more competitive and be resilient against future shocks.

Approved Investments in the Rubber Products Industry in 2020

Domestic vs Foreign Investments

42 projects were approved

Domestic investments
90.7%
RM3.9 bil



Foreign investments
9.3%
RM406 mil

Expansion/Diversification vs New Projects

RM4.3 bil Total investments

RM3.9 bil	**90.7%**	31 New projects
RM421 mil	**9.3%**	11 Expansion/diversification projects

Employment Opportunities

11,498
Total job opportunities

over **9,500**
more jobs
than 2019

The adoption of connectivity, automation, and digitalisation, as the industry transitions from being labour-intensive, will increase efficiency and productivity, enabling industry players to be more competitive and agile in transforming their manufacturing landscape.

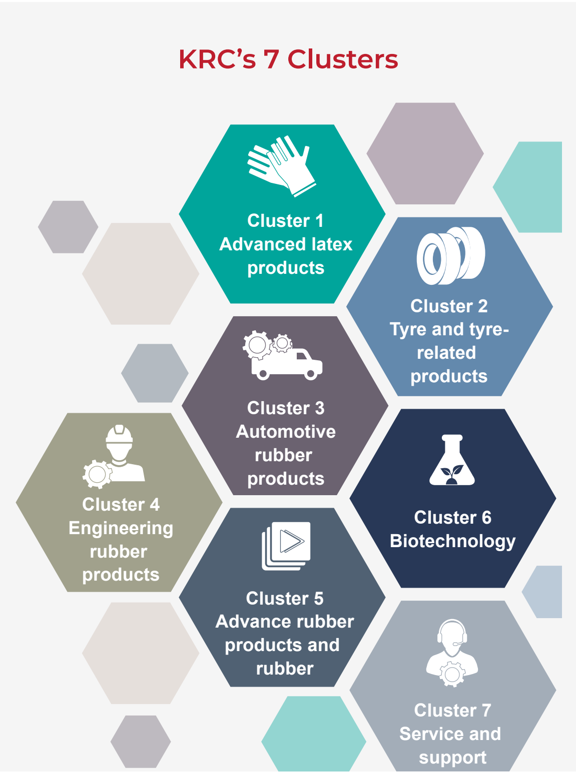
Investors can also take advantage of the expected transition from conventional rubber products into high-value engineered rubber products, or high-technology rubber products. For example, in 2019, Doshin Rubber

Products (M) Sdn. Bhd. a subsidiary of the Japan-based Kossan group of companies, had its project approved to produce engineering and industrial rubber products for use in the transport industry.

Prospective investors may also consider conducting R&D to make NR more cost-competitive and take on the characteristics of synthetic rubber. Synthetic rubber is used to increase the tensile strength of tyres, as well as to produce nitrile gloves because of its high puncture resistance and better chemical resistance than NR latex gloves.

The growing importance of the rubber products industry is not lost on the government; hence the establishment of the RM417-million Kedah Rubber City (KRC). KRC is the state's first dedicated rubber industrial park, covering an area of 1,244 acres. It is meant to accelerate the development of the Malaysian rubber industry, and is positioned to be the regional high-value rubber industrial hub in ASEAN.

As KRC is strategically located within the "Rubber Belt" of the Malaysia-Thailand border, KRC can leverage the abundance of raw rubber supply to develop a complete ecosystem for the rubber industry in the Indonesia-Malaysia-Thailand Growth Triangle area. Upon completion, KRC will provide a conducive ecosystem for sustainable rubber-based industry development.



Investors in KRC will have wide market outreach, including the ASEAN countries and Asia Pacific as a whole. They will also have access to technical support such as world-class testing facilities, up-skilling employees to meet Industry 4.0 requirements, as well as R&D support.

Looking ahead, to be more competitive in pace with the rapid evolution of technology, rubber industry manufacturers must now be more agile to transform their manufacturing landscape. There is a need for the rubber products manufacturers to take a step forward to adapt and adopt automation together with digitalisation to increase productivity and efficiency.

Oleochemicals

The oleochemicals industry witnessed healthy growth throughout 2020, as industries shifted toward using vegetable oils, such as palm and palm kernel oil, as their primary feedstocks instead of crude oil or naphtha. Market research and consulting firm Grand View Research, Inc. reported that globally, the oleochemicals market is expected to grow at a CAGR of 5.8 per cent from 2020, reaching a size of US$31.4 billion by 2027. This growth will be primarily driven by an increase in demand for biochemical products for various consumer applications, including detergents, soaps, cosmetics, pharmaceutical products, and bioplastics.

In Malaysia, natural-occurring oils from oil palm are the main source of oleochemicals. Industry players that produce basic oleochemicals have been seeking opportunities to invest further downstream, in the production of oleochemical derivatives such as fatty esters, fatty amines, metallic soaps and palm-based constituents. As of 2020, there were 21 oleochemical manufacturers in Malaysia, with an annual total production capacity of 2.7 million tonnes.

Additionally, palm biodiesel plays a significant role in the Malaysian palm oil industry. Globally, Carotino Sdn. Bhd.'s biodiesel plant is the first that produces palm biodiesel for normal and winter-grade fuel that comply with stringent EU and US regulations. This plant was built using technology developed by the Malaysian Palm Oil Board (MPOB). The ongoing R&D undertaken by MPOB, as well as substantial trial projects for blended petroleum diesel and palm biodiesel, have enabled the use of B5, B7, B10 and B20 biofuel for the transportation sector. There are 19 biodiesel plants in operation with an annual processing capacity of 2.23 million tonnes.

Other than its use in transportation, palm biodiesel can also be used as heating fuel in domestic and commercial boilers. MPOB reported that palm biodiesel generally leads to greenhouse gases (GHG) emission savings of over 70 per cent as compared to petroleum diesel if the palm oil mill effluent (POME)'s biogas is captured; otherwise, the GHG emission savings is more than 50 per cent.

Combating the COVID-19 pandemic requires a steady supply for hand sanitiser and disinfectant. As one of the initiatives to increase Malaysia's oleochemical utilisation, a new formulation for hand sanitiser was created, based on Malaysian-developed technology that employed glycerine, vitamin E, and ethanol.

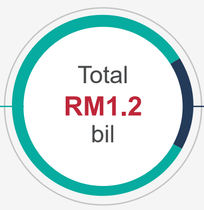
In 2020, a total of six projects were approved with total investments of RM1.2 billion, or an increase of nearly RM300 million (30.7%) from 2019's investments worth RM918.1 million; with 83.2 per cent of these investments coming from DDI (RM997.7 million), an 80.4 per cent increase from 2019, while the remaining came from FDI. These projects are expected to generate more than 456 new job opportunities.

Approved Investments in the Oleochemicals Industry in 2020

Domestic vs Foreign Investments

6 projects were approved

Domestic investments
83.2%
RM997.7 mil



Foreign investments
16.8%
RM202.3 mil

Employment Opportunities

456 Total job opportunities

A key project in oleochemicals was by LSChem Industry Sdn. Bhd., with approved investments worth RM103 million. The company produces isopropanol, diacetone alcohol, sodium methylate and solketal. Located in Tanjung Langsat Industrial Park, Johor Darul Ta'zim, the plant will further boost the oleochemical products development in the southern part of Peninsular Malaysia. As a producer of speciality oleochemicals, this project is expected to catalyse the rollout of biodiesel initiatives in Malaysia, which is in line with the Government's goal to increase the usage of biodiesel.

Another notable project approved in 2020 was undertaken by a wholly-local-owned company to produce biomethane from POME with a proposed investment of more than RM23 million. This biomethane project will provide additional job opportunities. Biomethane is a renewable fuel that can be used to complement intermittent renewable electricity, providing a fully-renewable power supply.

Opportunities abound in oleochemicals for prospective investors, as industry players come together and foster effective linkages between upstream, midstream, and downstream activities. Investors can consider collaborating with the public sector to identify and develop oleochemical products that are in high demand. Investors can also consider helping to finance the adoption of disruptive technology among oleochemical companies in their efforts to transition their production capabilities from basic oleochemicals to specialty oleochemicals or derivatives. Together with relevant stakeholders, MIDA has undertaken an exercise on product identification for the ecosystem's whole value chain, in order to fill in any missing gaps and encourage industry players to produce products that would cater to high-value niche markets.

Wood and Wood Products and Furniture and Fixtures

Malaysia's wood-based industry had been one of the major revenue contributors to the country's economic growth, over the past two decades. Employing approximately 240,000 workers, the industry encompasses the production of sawn timber, veneer, panel products (plywood, particleboard, chipboard, and fibreboard), mouldings, and builder joinery and carpentry (BJC), as well as furniture and furniture components.

In 2020, Malaysia's export of wood and wood products totalled RM22 billion. Of this, 48.3 per cent was derived from wooden furniture, and 12.9 per cent from plywood. Based on the International Trade Centre's 2019 report, Malaysian furniture exports ranked 8th in the world; an increase from the 12th spot in the previous year.

Notably, furniture companies in Muar, Johor played a critical role in contributing to Malaysia's exports of wood and wood products, accounting for 60 per cent of the export value. Muar is arguably Malaysia's furniture hub, and is home to 800 factories that account for some 55-60 per cent of Malaysia's furniture exports. Established in 1982, the Muar Furniture Association (MFA) represents all furniture and furniture parts manufacturers in Muar.

The onset of the COVID-19 pandemic saw the furniture companies shutting in compliance with strict lockdown measures and standard operating procedures (SOPs) to curb the spread of the virus as the industry was considered 'non-essential'. According to the MFA's President, furniture companies located in the area expected losses of RM500 million by not being in operation for 28 days, in addition to fines due to potential violation of agreements of approximately RM10 million. In addition, the supply of timber raw materials was disrupted.

The issue of not being able to operate was partly mitigated by the Ministry of Plantation Industries and Commodities (MPIC), which called on the Malaysian Timber Industry Board (MTIB) to evaluate and approve companies to operate during the lockdown period, especially for furniture companies to fulfil agreed-upon contracts. Compliance to SOPs were monitored by a combination of agencies such as the police (PDRM), MKN, local authorities, the National Security Council and the State Forestry Department.

Together with select industry players, MPIC also launched a 'Community Plantation' programme in Batu Kikir on 7 September 2020 in a move to increase the supply of declining wood species, as well as to ensure timber supply sustainability through planting of fast-growing tree species such as the batai and eucalyptus. This programme is also aimed at raising the income of the B40 (bottom 40 per cent of the household income group) and could reduce the nation's dependence on permanent forests for timber and other raw materials.

In the past, the PRC furniture industry dominated the market in the USA due to its mass-production and cost-competitive capabilities. Since 2019, the trade war between the two economies opened up business opportunities for the Malaysian furniture industry, with the USA seeing Malaysia as a new supplier, and PRC furniture companies using Malaysia as a gateway to the USA markets. The approval of 10 kitchen-cabinet production projects owned by PRC and Taiwan had also directly supported the increase of Malaysia's furniture exports since April 2020.

In 2020, Malaysia's exports for wood products totalled RM16.1 billion, of which 66.1 per cent came from wooden furniture and 17.7 per cent from plywood. A total of 29 projects were approved with investments of RM759 million in the wood and wood products industry, a slight increase of 7.2 per cent from the RM707.7 million invested in 2019. Of these, 21 were new investments amounting to RM663.1 million (87%), an increase of more than RM50 million compared to 2019 (RM612.3 million), and eight were expansion/diversification projects with investments of RM96 million (13%). Domestic investments accounted for RM267.3 million (35%), while FDI increased by over RM80 million from the RM407.4 million invested in 2019 to RM491.7 million (65%) in 2020. These projects were expected to create 2,092 employment opportunities.

The furniture sub-sector recorded investments amounting to RM719.2 million, or over RM95 million more than 2019's figure of RM623.6 million, across 47 projects. Of these, 30 were new projects with investments of RM636.1 million (88%) while the remainder were expansion/diversification projects worth RM83.1 million (12%), or over triple 2019's investments of RM26.7 million. Domestic investments amounted to RM365.5 million (50.8%), or over double 2019's DDI of RM179.5 million, and FDI came to RM353.7 million (49.2%). It was expected that the above approved investment projects will generate a total of 2,679 job opportunities.

A significant project approved in 2020 was from a wholly-foreign-owned company with an investment of RM155 million to produce wooden furniture in Johor. Another noteworthy project approved was for the manufacture of wooden furniture and parts by a majority-foreign-owned company with an investment of RM81.2 million.

Paper, Printing and Publishing

Malaysia's paper, printing and publishing industry received a substantial injection of vitality over the past few years thanks to PRC pulp and paper companies setting up their overseas operations in the country. Companies such as Best Eternity Recycle Technology Sdn. Bhd., Jianhui Paper Kuantan (Malaysia) Sdn. Bhd., Jingxing Holdings (M) Sdn. Bhd., XSD International Paper Sdn. Bhd., and ND Paper (Malaysia) Sdn. Bhd. invested an estimated RM10.4 billion in total. In the wake of the US-PRC trade tension, these and other PRC industry giants continued to invest significantly into Malaysia in 2020, either by establishing new pulp mills or acquiring existing ones.

PRC paper mills have adopted modern and sophisticated technologies, leading to fully-automated production processes with integrated systems, IoT, big data analytics, and cloud computing. Using Industry 4.0 technologies, their operations feature environmentally-friendly production, as well as efficient monitoring and maintenance. By having their Malaysian facilities adopt the same technologies and processes, the hope is that the local industry will develop further with modern techniques of production.

In light of some of the perennial issues affecting the industry such as insufficient supply of domestic raw materials, environment and waste management, and dependency on foreign workers, MITI is working together with MIDA, other relevant government ministries and agencies, as well as standards/technical agencies including industry associations to produce the best possible solutions. In 2020, the Malaysian government reviewed the policies that affect the industry, which includes strengthening the guidelines for importation of waste paper into the country, and revising the policy on exporting domestic waste paper overseas.

The COVID-19 pandemic and subsequent government reactions have had a substantial impact on the industry, especially vis-à-vis the packaging materials sub-sector. The pandemic led to increased demand for product safety, hygiene, and integrity. Current consumer trends are heading towards more, rather than less, packaging. With the closure of many retail stores during the MCO periods, as well as consumers conducting fewer physical purchases, online ordering is thriving. This resulted in the increase demand of packaging materials, especially eCommerce-specific packaging, to minimise the risk of product loss, damage, and contamination during delivery. In 2020, the packaging sector played an important role in the essential industries' supply chains.

A total of 70 projects in the paper, printing, and publishing industry were approved with investments totalling RM7.8 billion in 2020. These projects were expected to provide 6,038 employment opportunities. Of these, 38 were new projects with investments of RM6 billion, while 32 were expansion/diversification projects with investments worth RM1.8 billion. Foreign investments amounted to 88 per cent of the total or RM6.9 billion, while RM918 million or 12 per cent came from DDI.

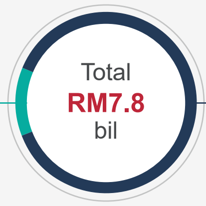
Project approvals in the pulp, paper, and paperboard products sub-sector accounted for 98.7 per cent of the industry's total investments, or RM7.7 billion, while the balance of RM169.2 million came from the printing and publishing sub-sector.

Approved Investments in the Paper, Printing and Publishing Industry in 2020

Domestic vs Foreign Investments

70 projects were approved

Domestic investments
12%
RM918 mil



Foreign investments
88%
RM6.9 bil

Expansion/Diversification vs New Projects

RM7.8 bil Total investments

RM6 bil	77%	38 New projects
RM1.8 bil	23%	32 Expansion/diversification projects

Employment Opportunities

6,038 Total job opportunities

> **"Project approvals in the pulp, paper, and paperboard products sub-sector accounted for 98.7 per cent of the industry's total investments, or RM7.7 billion, while the balance of RM169.2 million came from the printing and publishing sub-sector."**

Our Lighthouse

As part of the move to accelerate the transition of manufacturing and related services sectors to Industry 4.0, MIDA adopted Malaysia's Lighthouse Programme to further drive the Industry 4WRD initiatives and ensure Malaysia's place as a preferred investment hub. The Lighthouse Programme was launched on 21 May 2020 to facilitate and showcase companies that have adopted smart manufacturing technology and also to make them beacons to others who want to adopt artificial intelligence, big data analytics, cloud computing, Internet of Things (IoT), and additive manufacturing from the pilot phase to actual integration.

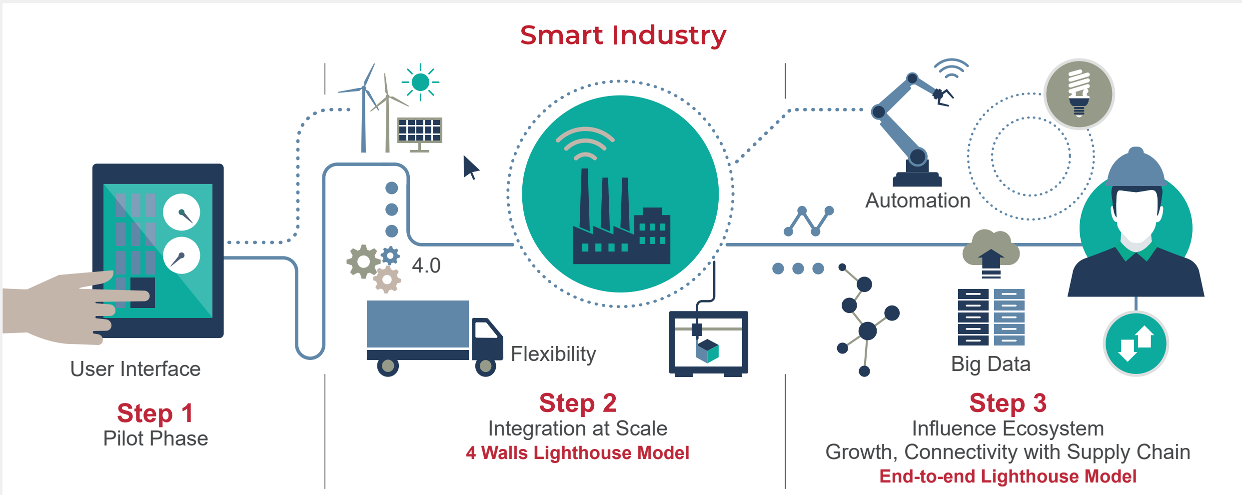
This is a local adaptation of the World Economic Forum and McKinsey's Global Lighthouse Project launched in 2018, a research collaboration bringing together the most advanced factories in the manufacturing world for a cross-company learning journey. MIDA envisions Malaysia to have its own role-model manufacturing and services projects that can be recognised as Lighthouses. Through this, manufacturers can embark on a unique learning journey that will also benefit Malaysia's production ecosystem.

The Lighthouse Programme ensures that companies who embark on adopting smart manufacturing processes and technologies do not stagnate at the pilot phase of their migration to Industry 4.0 standards. The COVID-19 pandemic had forced businesses to reshape how they run their day-to-day operations, shifting from traditional methods to more digital and consumer-centric approaches. Transformation is no longer an option, and it has pushed companies over the technology tipping point and transformed businesses forever in order to survive.

Malaysia's three-step Lighthouse Programme aims to accelerate industry transition towards the future of manufacturing by deploying technology, transforming the workplace and scaling an end-to-end supply chain beyond the pilot phase. These projects can act as beacons to guide the many others in the country that are still looking to apply technologies for transformation as well as to overcome challenges in upgrading existing production systems. By implementing Industry 4.0 adoption at the scalable integrated phase, it could make a big impact to businesses by resetting the benchmark of operational and financial impact to new levels. The Lighthouse Programme adopted by MIDA will also integrate the economic multiplier effects showcased in the DNA of companies in addition to Industry 4.0 Smart Manufacturing technology such as Innovations/ R&D, Ecosystems Collaborations, Socio Economic Development and Human Capital Development.

The Government recognises that the manufacturing and services sectors are the main drivers of Malaysia's economic growth, and MIDA would like to encourage industry stakeholders to leverage on the available Government support. MIDA is looking forward to having more companies integrate into the Lighthouse network.

With strong manufacturing and services sectors, productivity levels will improve, more jobs will be created, and there will be capacity for innovation and a larger skilled talent pool– all of which are critical success factors that lead to economic prosperity. They also attract global smart manufacturing and smart services projects to Malaysia, increasing the nation's high tech and quality investments.



Source: Information is obtained from the Global Lighthouse Network.

The One-Stop Centre (OSC) Keeps Business Travellers Safe Throughout COVID-19

For Malaysia to remain steady on the path of economic recovery and growth, balancing the needs of public health, livelihoods, and economic sustainability is of paramount importance. In early May 2020, the Malaysian Government began to reopen the economic sectors in phases, supported by compliance with strict SOPs. This has led to the gradual recovery of the economic sectors and approved FDI, which amounted to RM64.2 billion (39.1%) of the total approved investments of RM164 billion in the manufacturing, services and primary sectors for 2020.

A key part of that recovery consists of enabling executive and essential personnel to travel and continue their work in Malaysia, while ensuring that the necessary health measures are taken. As such, and pursuant to a decision made by the Economic Action Council on 14 September 2020, the One-Stop Centre (OSC) was set up to expedite business travellers' entry approvals into Malaysia. The OSC is managed by MIDA, with representation from Ministry of International Trade and Industry (MITI), Ministry of Health (MOH), and the Immigration Department of Malaysia (IMI).

The OSC Committee evaluates and recommends the approval of applications for business travellers' entry within three working days upon receiving complete information. The committee meets daily, being managed by MIDA with representatives from MITI, MOH, MIDA and IMI.

Long-term business travellers are in-country for more than 14 days, and are required to undergo a 10-day quarantine. Meanwhile, short-term business travellers are defined as those who are in-country for up to (and including) 14 days. Business travellers under this category need not undergo the mandatory quarantine, subject to the approval of the OSC Committee, but are subject to stringent SOPs.

As at 19 February 2021, the OSC Committee has evaluated a total of 6,766 applications for long-term business travellers and 57 applications for short-term business travellers. Business travellers approved by the OSC were from existing and potential investors; including Schneider Electric Industries (M) Sdn. Bhd., Schmidt + Clemens (Asia) Sdn. Bhd., SK Nexilis Co Ltd Korea, Dexcom Inc. USA, and Shenzhen Fastrain Technology Co., Ltd China mainly to finalise investment decision, site location, machine installation as well as commencing operation.

The Business Travellers Centre at KLIA includes a business lounge, a COVID-19 test lab, and duty/liaison officers for short-term business travellers.

The dedicated website (Malaysia Safe Travel) contains information and advisory services to facilitate the entry of business travellers. Both long- and short-term business travellers may apply for permission to enter Malaysia via the MyEntry system at safetravel.mida.gov.my. Business Travellers are required to submit the online application 14 days in advance of their travel. Business travellers must obtain relevant visas (if applicable) from the respective Malaysian Embassy or High Commission/Consulate General Offices abroad prior to their departure.

The OSC's comprehensive facilities will help to ease the movement of business travellers by expediting the approval of their entry into Malaysia, and assist Malaysia's economic recovery and growth, while prioritising people's safety. This is to ensure Malaysia will continue to be the preferred investment destination for foreign investors.

Despite the COVID-19 pandemic, MIDA has intensified efforts to ensure that Malaysia remains a primary destination of choice for foreign investors. MIDA is also committed to ensure that appropriate measures are in place to ensure that the business environment in the country is agile and responsive to the present and future needs of the private sector.

3.0

Performance of the Services Sector

Services sectors have been heavily affected by the COVID-19 pandemic. Tourism, transport, and distribution services, for example, have suffered as a result of mobility restrictions and social distancing measures imposed for public health reasons. At the same time, the crisis has underscored the importance of services that enable online supply, such as telecommunications and computer services, as well as the broader infrastructural role of transport, financial, distribution and logistics services in facilitating trade and economic growth.

Director-General Roberto Azevêdo, Trade Outlook 2020 World Trade Organisation (WTO)

A Bumpy Ride

It has been an eventful year for the services sector, globally and in Malaysia, with measures taken to curb the COVID-19 pandemic having a profound impact due to movement restrictions and lockdowns of varying degrees of harshness affecting the sector, which is heavily reliant on in-person interactions.

It has been an eventful year for the services sector, globally and in Malaysia. Measures such as movement restrictions and lockdowns, which have been taken to curb the COVID-19 pandemic, have had a profound impact on the sector, which is heavily reliant on in-person interactions.

Given the role of services in providing inputs for other economic activities, including connecting supply chains and facilitating trade in goods, the pandemic-related service supply disruptions had broad economic and trade impact.

The global services market faced a sluggish compound annual growth rate (CAGR) of 0.8 per cent from US$11.8 trillion in 2019 to US$11.9 trillion in 2020, mainly due to the decline in economic activities. However, the good news is that the market is expected to recover and grow at a CAGR of eight per cent from 2021, reaching US$14.7 trillion in 2023.

In Malaysia's case, the MOF's Economic Outlook Report 2021 projects that the services sector will rebound by seven per cent in 2021. The report notes that this rebound hinges on the normalisation of economic activities in 2021, which will see all sectors across the board record positive growth.

Similarly, the Bank Negara Malaysia (BNM) in its Economic and Financial Developments in Malaysia for the fourth quarter of 2020 also reported that the Malaysian economy will improve in 2021, backed by better external demand as well as the supportive policy measures including PENJANA, PRIHATIN, Budget 2021 and PERMAI.

As part of its strategy to spur the services sector, the Malaysian Government plans to launch and execute the New Services Sector Blueprint (NSSB) in 2021. NSSB is a national action plan under the Twelfth Malaysia Plan (12MP) to map out the future development of Malaysia's services sector over the next five years. The Government is also giving special focus on Industry 4.0 within the services sector through the development of other policies, namely the National Policy on Industry 4.0 and the recently launched Digital Economy Blueprint.

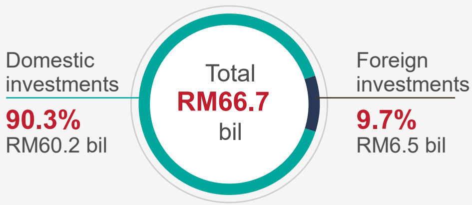
MIDA, as Malaysia's leading investment agency has assumed a pivotal role in the development of the services sector, particularly by working closely with the EPU and MITI to formulate the 12MP (2021 – 2025) and the New Industrial Master Plan (2021 – 2030) and also by providing inputs for various other national plans.

Total Investments in the Services Sector for 2020

Total approved investments
RM66.7 Billion

Total projects approved
3,527

Total job opportunities
33,652



The 45.2 per cent decrease in approved investments recorded in the services sector (RM121.7 billion in 2019 as compared to RM66.7 billion in 2020) signifies the impact of the pandemic and its subsequent economic consequences

MIDA will continue to focus on encouraging growth in the services sub-sectors with relatively high-value-added activities that are tradable; have high knowledge intensity and strong linkages with the rest of the economy; and can create high-income jobs. This will shift the entire services sector up the value chain and become more resilient and sustainable.

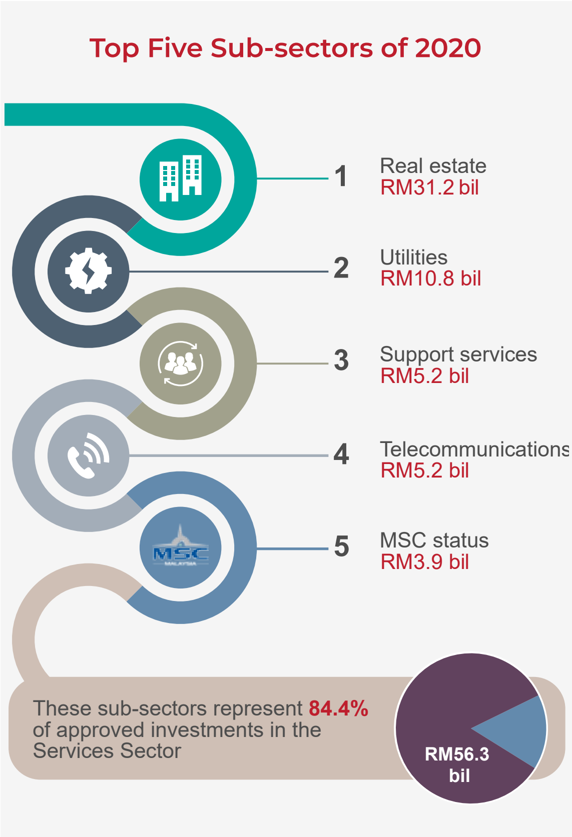
Performance of Malaysia's Services Sector

Despite the volatile business landscape, Malaysia's services sector managed to retain its position as the second-largest contributor of its approved investments in 2020. A total of RM66.7 billion worth of investments were approved for this sector across 3,527 projects and expected to create 33,652 job opportunities.

The 45.2 per cent decrease in approved investments recorded in the services sector (RM121.7 billion in 2019 as compared to RM66.7 billion in 2020) signifies the impact of the pandemic and its subsequent economic consequences. A large majority of the main services sub-sectors showed a reduction in the total of approved investments, with notable exceptions being MSC status projects and other services such as BioNexus status and software development projects.

Domestic companies demonstrated their domination over Malaysia's services sector, contributing 90.3 per cent or RM60.2 billion (2019: 79.7%, RM97 billion) of the total approved investments, with foreign sources making up the balance of 9.7 per cent with RM6.5 billion (2019: 20.3%, RM24.7 billion). Given the increase in localism and regionalism as a result of the pandemic, this reinforces the role of domestic industry players in the services industry when it comes to powering local economies. The bulk of approved domestic investments were in the real estate, utilities, telecommunications and support services (particularly in integrated logistics services and green technology).

> **"MIDA will continue to focus on encouraging growth in the services sub-sectors with relatively high-value-added activities that are tradable; have high knowledge intensity and strong linkages with the rest of the economy; and can create high-income jobs."**



With the proven resilience in Malaysia's highly diversified services-based economy, prospective investors have a lot of choice when it comes to taking advantage of the business opportunities in the various services sub-sectors. For 2020, the top five contributors of approved investments in the services sector were real estate (RM31.2 billion), utilities (RM10.8 billion), support services (RM5.2 billion), telecommunications (RM5.2 billion) and MSC status (RM3.9 billion). Collectively, these sub-sectors represent 84.4 per cent of approved investments in the services sector during the period.

Inside Services

Malaysia's diversified services sector is embracing technology to move up the value chain and to boost operational efficiency at a time when remote-working and automation trends have accelerated in the wake of the COVID-19 pandemic. New services built around the Internet of Things, artificial intelligence and the cloud network will increasingly define how the services sector works.

Global Establishments

Principal Hubs

COVID-19 has driven companies all across the globe to transform and adopt a remote-first, globalised model. This dramatic shift is necessary to support the increasingly remote workforce of tomorrow.

The situation has acted as a wake-up call for businesses, shining a light on the necessity to recalibrate current rigid business structures. Now more than ever, businesses must establish dynamic supply chains, enabling them to respond rapidly to unexpected changes and disruption. It is during these uncertain times – when global supply chains everywhere are disrupted – that regional hubs can be a key differentiating factor. Its structure allows for MNCs to be within the reach of their customers and supply chains to boost the efficiency of their operations.

Given the current business landscape, the Government's announcement on an updated Principal Hub (PH) Incentive Scheme in November 2020, could not have come at a more opportune time. The revised scheme– branded as PH3.0– will accelerate the string of improvements initiated during PH2.0. The PH2.0 itself is an updated version (having been improved in October 2019) of the initial PH Scheme which saw its debut in 2015.

Under PH3.0, companies will see a relaxation of current conditions. Furthermore, during the launching of Budget 2021, it was announced that in order to encourage the establishment of more Headquarter Hubs, the application period for the PH incentive for companies that manage/control key strategic qualifying services will be extended for another two years. This will serve to entice an influx of new companies to make Malaysia their regional base of operations. Through the PH Scheme, Malaysia seeks to become the preferred choice of location for headquarters in the Asia Pacific region, challenging other regional competitors such as Singapore and Hong Kong SAR.

The revised incentive scheme is also expected to further accelerate the creation of more high-value jobs in the nation, which will in turn further refine the local talent pool. The PH Scheme has a proven track record in encouraging companies to move up the value chain and undertake services that involve a higher degree of management, decision making, and risk management activities. This shift has led to the creation of more knowledge-based jobs, particularly in key economic sectors such as electrical and electronics (E&E), aerospace, oil and gas (O&G), chemical and food and beverage.

By housing their regional or global operations in Malaysia, the multinationals (MNCs) and local conglomerates will also increase the utilisation of local support services, thereby strengthening the role of local companies in the business ecosystem.

To further entrench Malaysia's position as a Distribution or Procurement Hub of choice, the Global Trading Centre (GTC) Scheme was also announced in Budget 2021. The scheme will support the PH agenda by providing tax incentives and additional facilitation to ease import and export activities. The new tax incentive scheme for GTCs, with an income tax rate of 10 per cent for a period of five years and renewable for another five, is set to improve and simplify tax incentives for trading activities formerly parked under PH incentives.

These updated and new incentives will be particularly alluring to attract companies in key manufacturing and services sectors venturing into procurement, distribution and trade activities to further strengthen their global supply chain.

Approved Projects

To date, MIDA has approved a total of 38 PH projects since the scheme was first introduced back in May 2015. These projects committed to a total business spending of RM47.8 billion over the next 10 years. Local ancillary services worth RM5.7 billion are expected to be used, while at least 3,282 high-value jobs are expected to be created in sectors such as E&E, aerospace, O&G, chemicals, and information technology (IT).

In 2020, one more PH project was approved, with a committed business spending of RM384 million. Local ancillary services usage is expected to amount to RM29 million, while 300 high-value jobs are expected to be created over the next decade.

Approved Principal Hub Projects since 2015 (As at December 2020)

38
Total project approved

RM47.8 bil
Business spending

RM5.7 bil
Local ancillary services

3,282
High value jobs

Regional / Representative Offices (ROs/REs)

Malaysia has established itself as a base for Regional/Representative Offices (ROs/REs) to coordinate and support their operations in the Asia Pacific region. These ROs/REs were established to let companies undertake feasibility studies on investment opportunities in Malaysia and coordinate business activities for their parent companies regionally. With these ROs/REs, companies will be able to set up their regional operations for the long-term.

From January to December 2020, a total of 140 ROs/REs were approved with investments worth RM211.2 million. These investments are expected to create employment opportunities for a minimum of 269 Malaysians, out of the total 404 jobs created.

Of the 140 ROs/REs approved, 50 projects (36%) were ROs, while 90 projects (64%) were REs. Companies from 30 different countries expressed an interest in establishing ROs/REs, including the USA, Japan, PRC, Singapore, Hong Kong SAR, Germany, UK, France, Japan, Korea, Australia, and India. The highest number of REs/ROs approved were from Singapore, with 17 approvals. This was followed by Republic of Korea (ROK) (12), Japan (11), France (10) United Kingdom (9), PRC (8), the USA (8) and Spain (7).

The approved projects were for companies in machinery and engineering support, O&G, E&E, chemical, medical devices, and IT and software industries.

Approved ROs/REs Projects for 2020

140
New ROs/REs approved projects

RM211.2 mil
Total approved investments

404
Job opportunities

Business and Professional Services

Malaysia is proud to offer a solid and diverse base of highly skilled and tradable professional services. Business and Professional Services has been recognised as one of the key value-add sectors, as it brings companies a range of high-value services related to engineering, legal, architectural and telecommunications.

These industries, with distinct policies and strategies across the sub-sector, have a huge potential for growing the economy, creating jobs, raising productivity and enhancing competitiveness. Together, this contributes significantly to the increase of services exports and investment dollars for Malaysia.

> "The world is becoming increasingly more digital, with opportunities opening in local and regional markets as digital for people, business, and governments becomes the new normal."

Digital Services

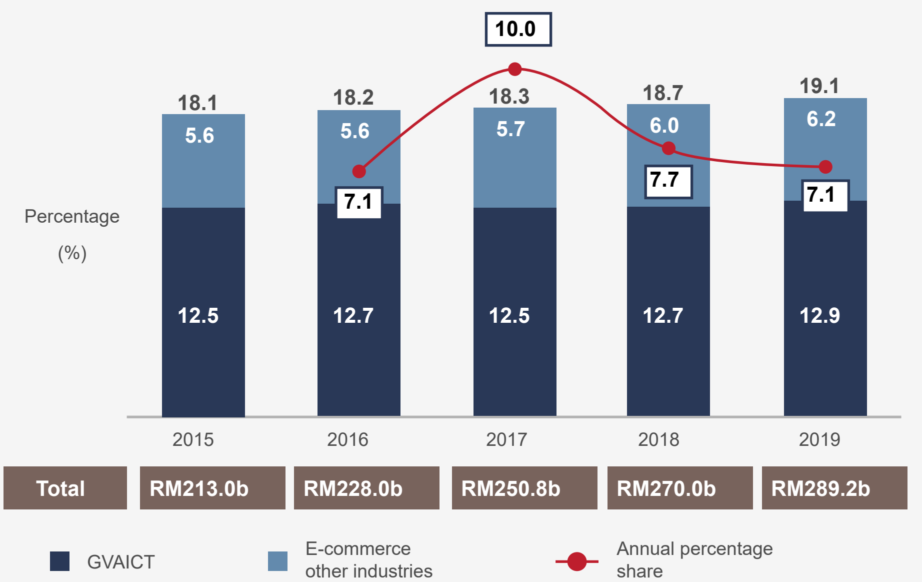
As Malaysia establishes itself as a digital nation, it needs to prepare to adapt and innovate to sustain its economic growth. Information and communications technology (ICT) services assume a central role in empowering these digital economic goals. The world is becoming increasingly more digital, with opportunities opening in local and regional markets as digital for people, business, and governments becomes the new normal.

New business segments built around innovative technologies such as artificial intelligence (AI), machine learning, cybersecurity and cloud are leading to a growth of highly skilled jobs and productivity in communities large and small. Our modern industrial strategy relies on building a more resilient economy to support these key industries of the future.

In 2020, six digital projects were approved with a committed business spending of RM305.7 million and with creation of 222 high-value job opportunities.

Locally, the contribution of the ICT industry to the economy has been expanding over the last five years. In 2019, according to the Department of Statistics' (DOSM) Information and Communication Technology Satellite Account, its contribution grew by 7.1 per cent in 2019 to RM289.2 billion (versus RM 270 billion in 2018). This contributed 19.1 per cent to the GDP (18.7% in 2018), and comprised Gross Value Added of ICT (12.9%) and e-commerce of other industries (6.2%).

ICT Contribution to Economy



Source: Department of Statistics Malaysia DOSM

To move the nation further along its trajectory of becoming a high-technology country, and to move away from being mere technology users to technology developers, the Government introduced the National Policy on Science, Technology and Innovation (DSTIN) 2021-2030 in December 2020. In so doing, Malaysia hopes to reduce its dependency on foreign technology and labour.

Digital Initiatives to Grow Quality Investments

Digital Infrastructure and Connectivity

To become a top digital nation in the region, Malaysia needs to accelerate the implementation of cohesive digital infrastructure and high connectivity. Infrastructure like data centres are important to encourage cloud adoption. By welcoming more data centre companies to establish their operations in the nation, Malaysia will move up the value chain in key industries, including services sectors such as ICT, data analytics, and design and development.

MIDA assisted in the establishment of the Data Center Investment Coordination Task Force (DCICTF) to develop the data centre ecosystem in Malaysia. The establishment of DCICTF will help with formulating strategies for the development of the data centre industry and will further strengthen Malaysia's digital infrastructure and connectivity. DCICTF, which is led by the Secretary General of MITI, includes representatives from Ministry of International Trade and Industry (MITI), Ministry of Finance (MOF), Kementerian Komunikasi dan Multimedia Malaysia (KKMM), Kementerian Tenaga dan Sumber Asli (KETSA), Malaysian Administrative Modernisation and Management Planning Unit (MAMPU), Malaysian Communications and Multimedia Commission (MCMC), Malaysia Digital Economy Corporation (MDEC), and MIDA.

National Initiative: Establishment of National Digital Economy and Fourth Industrial Revolution (4IR) Council

By setting up the National Digital Economy and Fourth Industrial Revolution (4IR) Council, the Government has shown its dedication to ensuring the digital economy grows in line with Industry 4.0 technology, under the Shared Prosperity Vision 2030 and the 2030 Agenda for Sustainable Development. The council acts as the highest administrative body in establishing policies and implementing and monitoring the nation's strategies and initiatives for the digital economy and Industry 4.0.

Research and Development (R&D)

The Twelfth Malaysia Plan (12MP) will highlight R&D as a key focus area, signifying Malaysia's continued aspiration to become an innovation – driven economy. The 12MP will inherit the initiatives stipulated in the Eleventh Malaysia Plan (11MP), which sought to strengthen relational capital in order to foster stronger linkages, collaboration and trust among stakeholders.

The 11MP emphasised that innovation is to be pursued at the enterprise and societal levels instead of the national level (unlike previous initiatives). Stronger relational capital will help to improve coordination and enable the sharing and testing of ideas across multiple stakeholders and disciplines, all of which will serve to improve the national research ecosystem.

Ranking and Performance

According to the Global Innovation Index (GII) 2020 report, Malaysia improved its rank from 35th place to 33rd place in 2020. This puts the nation ahead of all ASEAN peers except Singapore. The GII comprises two sub-indices: innovation input and innovation output. Malaysia's rank increased in the innovation output sub-index (36th, up by 3) and remains stable in the innovation input sub-index (34th) – but the R&D pillar, located under the innovation input sub-index, recorded a decline of two places (from 27th to 29th).

Although Malaysia strengthened its overall GII position amongst the 131 economies in the world, a biennial study undertaken by Malaysia Science and Technology Information Centre (MASTIC) showed that Gross Expenditure on R&D (GERD) per GDP (also known as R&D intensity) dropped from 1.44 per cent in 2016 to 1.04 per cent in 2018. This latest score is below the target of 2.0 by 2020, which was set by the National Policy on Science, Technology and Innovation (NPSTI). The decrease of GERD is primarily due to the reduction of R&D allocation or budget cuts within the business sector.

An article published in October 2020 by the World Bank Group, titled 'Assessing the Effectiveness of Public Research Institutions (PRIs),' highlights that some of the major challenges facing public R&D institutions are problems within the monitoring and evaluation framework, need for better implementation of incentives provided for technology transfer and commercialisation, and funding consistency.

Setting an Appropriate Ecosystem

The Malaysian Government recognises the importance of innovation and provides funding throughout the creation, research, development and commercialisation stages of R&D through its ministries.

> "In 2019, the Ministry of Science Technology and Innovation (MOSTI) also launched the Researchers-Industry Scientific Exchange (RISE), to enable the industry to tap into the expertise of public researchers, thereby allowing all economic players in the country to access the numerous resources that the Malaysian Government is investing into R&D."

Alongside financial assistance, the Government has also introduced multiple initiatives to strengthen the nation's R&D ecosystem.The Government's economic recovery plan (PENJANA), introduced in 2020, announced the establishment of the National Technology and Innovation Sandbox (NTIS) to drive talent development and accelerate R&D and commercialisation through simplified policies and regulations.

In 2019, the Ministry of Science Technology and Innovation (MOSTI) also launched the Researchers-Industry Scientific Exchange (RISE), to enable the industry to tap into the expertise of public researchers, thereby allowing all economic players in the country to access the numerous resources that the Malaysian Government is investing into R&D. In the long term, the Government plans to slowly reduce its allocation to public research institutions (PRI) and public higher learning institutions (PHLIs), in the hopes that they will become self-sustainable through these collaborations.

In Budget 2021, the Government also expanded the incentive for investor companies and subsidiaries that commercialise the R&D findings of PRIs and PHLIs. The scope now includes non-resource-based work – a deviation from previous guidelines which limited incentives to resource-based undertakings.

Framework to Stay Resilient

The Academy of Sciences Malaysia (ASM) has developed the 10-10 Science and Technology, Innovation and Economy (STIE) framework which integrates and promotes 10 technological and 10 socioeconomic factors via a systematic approach to transform Malaysia into a knowledge-intensive economy.

The technological drivers were identified by analysing globally – trending technologies which have the potential to impact Malaysia's socioeconomic development. By following this 10-10 STIE Framework, the Malaysian Government will ensure more focused and targeted investments so that Malaysia can retain and increase its regional and global competitiveness.

Investments in the R&D Industry from 1995 to 2020

	1995-2020				
Status	No	Employment	Domestic investments (RM mil)	Foreign investments (RM mil)	Total investments (RM mil)
Contract R&D	80	1,535	397.3	207.3	604.7
R&D company	30	631	87.7	109.9	197.6
In-house R&D	46	2,161	543.1	845.9	1,388.9
R&D status	26	1,244	149.3	139.6	288.9
R&D (customised incentive approvals)	17	1,378	213.6	423.7	637.3
Grand total	**199**	**6,949**	**1,390.9**	**1,726.5**	**3,117.4**

Performance of the R&D Sector

As of 31 December 2020, a total of 199 projects were approved incentives under the Promotion of Investment Act, 1986, amounting to a total of RM3.1 billion of capital investment, and creating 6,949 high-skilled employment opportunities. These comprised 30 R&D Companies, 80 Contract R&D Companies, 46 Companies with In-House R&D Facilities, 26 R&D Status Companies as well as 17 National Strategic R&D Projects (which were approved customised incentives).

The top five sectors in which the R&D projects were approved were E&E, automotive and transport, machinery and equipment, chemical and chemical products and, agriculture, forestry and fishing, which contributed about 65 per cent of the total approved projects.

Fifteen per cent of the approved R&D projects were in the research areas of computer science, industrial engineering and advanced technology inclusive of hydrogen fuel cells, robotics, Internet of Things (IoT) and Artificial Intelligence (AI).

In 2020, six companies had R&D projects approved. This was made up of two In-house R&D Companies, one Contract R&D Company, one company approved the customised incentive, and two R&D Status Companies. Total investments amounted to RM 90.9 million, which comprised domestic investments of RM50.2 million and foreign investments of RM 40.7 million. A total of 220 employment opportunities are expected to be created by these projects.

One notable R&D project is by a renowned Japanese company that manufactures and sells insecticides, garden supplies, sanitary agents, and household goods. The company has chosen Malaysia as its centralised regional R&D Centre to complement its manufacturing activities in Malaysia, Vietnam, Myanmar and Thailand and expand its product offering for the Asian market. The R&D project in Malaysia, with investments of more than RM2 million, will create 33 job opportunities for locals.

Green Technology

Beyond the immediate impact on health, the COVID-19 pandemic has had a pronounced effect on the energy use and carbon dioxide (CO2) emissions of global economies. Based on the International Energy Agency's (IEA's) World Energy Outlook 2020 (WEO 2020) analysis, global energy demand dropped by an estimated five per cent in 2020 as a result of the pandemic. CO2 emissions are expected to drop by a further five per cent, while conventional power sources are seeing falls of five per cent (coal-fired), four per cent (nuclear), and two per cent (gas-fired).

The IEA findings reveal renewables as the global arena star during the pandemic, with solar in the lead. The supportive policies of governments and multinational enterprises and corporations, coupled with maturing technologies, enabled greater access to cheaper capital in leading markets. Solar photovoltaic (PV), in particular now, offers the cheapest electricity ever, and is expected to remain at a lower cost than new coal or gas-fired power plants in most nations. The visible fall in costs for solar PV in recent years is due primarily to the improvement in the manufacturing process and efficiency rate on solar panel products, alongside ease of access to credit and the supportive policies of governments.

This is especially evident in Malaysia, where the battle to come out on top in sustainable energy is becoming more competitive. The bidding for large scale solar (LSS) projects in 2020 saw 56 out of 93 bidders offering prices below 20 sen/kWh for capacities between 30-50 MW, and the lowest bid rate was 13.99 sen/kWh. A remarkable difference to average gas generation costs of around 23.22 sen/kWh.

Malaysia's Energy Drive

Rising global warming levels and the climate change phenomenon have led to the growing global imperative to implement green technology as a solution for balancing economic development and environmental sustainability.

Malaysia, in particular, has been pursuing a low-carbon future since 2001 via these initiatives:

- The Eighth Malaysia Plan (8MP, 2001–2005); the Four-Fuel Policy (oil, gas, coal, and hydropower) was expanded to a Five-Fuel Diversification Policy– renewable energy was added as the fifth source of fuel
- The Sustainable Energy Development Authority (SEDA) was established in 2011 to promote the use of renewable energy in power generation
- The Renewable Energy Transition Roadmap (RETR) 2035; covers targets to increase the share of committed renewable energy by 2025 from 20 per cent to a higher rate; and plans for Peer-to-Peer Energy Trading, options for 100 per cent sourcing from renewable energy electricity, and mobilising the renewable energy certificate (REC) market in Malaysia
- Forging the current 17 Sustainable Development Goals (SDGs) in Malaysia's long-term plan; Malaysia restated its commitment through the Shared Prosperity Vision for 2021-2030
- The National Energy Efficiency Action Plan (NEEAP) 2016-2025; to enhance consumer awareness on energy efficiency, targets to reduce electricity consumption by 8 per cent (or 52,233 GWh) with a total projected GHG reduction of 34 million tonnes of CO2 by 2025
- Waste management via waste to energy efforts to mitigate GHG emissions; The Ministry of Housing and Local Government (KPKT) plans to set up six waste-to-energy (WTE) plants by 2025, including a biogas plant and thermal treatment in phases; in 2019, the KPKT introduced the National Cleanliness Policy

Facilitation for Green Technology Activities

As announced in Budget 2020, the Government continues to provide the Green Investment Tax Allowance (GITA) for the purchase of green technology assets and Green Income Tax Exemption (GITE) on the use of green technology services until year of 2023. By extending the tax incentive period, the nation hopes to achieve its renewable energy targets by propelling investments in green technology projects, either for business purposes or own consumption, and also for the adoption of green technology by service providers.

Incentives such as these are the main factors encouraging companies to undertake or further extend the adoption of green technology related to renewable energy sources (such as solar, biomass, biogas and mini-hydro), energy efficiency (EE), green building, green data centre, and integrated waste management.

Other than incentives, financing has been a crucial determining factor for the success of green projects. To date, solar project developers in need of assistance have received more financing options, such as green financing, green sukuk, project loans, and portfolio financing.

Shining a Light on New Business Opportunities

Solar power has become one of the most significant sources of renewable energy in Malaysia. Under the 11MP, the Government introduced the LSS and Net Energy Metering (NEM) as initiatives to increase the growth of the solar energy generation sector, leveraging on the potential to harness solar PV in Malaysia all year round. LSS projects were initially allocated a total of 370MW for LSS 1. This was swiftly followed by an allocation of 530 MW under LSS 2, 500 MW for LSS 3, and 1,000 MW under the LSS@ MEnTARI. The NEM was introduced with an allocation capacity of 500MW in 2016 and an additional capacity of 500MW was allocated effective from 2021 to 2023.

Untapped Opportunities in Biomass Industry and Waste Management

The palm oil industry is one of the biggest sources of biomass in Malaysia. According to the Malaysian Palm Oil Board's (MPOB's) data, there were 457 fresh fruits bunches (FFB) mills in Malaysia, with a total capacity of 117 million metric tonnes (as of December 2020). The Government is cognisant of the environmental impact associated with conventional palm oil mill effluent (POME) treatments. There is huge potential from the biogas trapping and methane capturing activities from POME and this will indirectly create business opportunities for renewable biomass energy projects and services.

The Government is also establishing sustainable policies that underscore the importance of creating a circular economy. Under this ideal, the Roadmap Towards Zero Single-Use Plastics was established with the aim of reducing the amount of waste that goes to landfill. Plans are underway to target at least one WTE incineration plant per state, in a move to do away with solid waste disposal sites. This will create opportunities for local and foreign companies, with unlimited potential for future projects.

Renewable Energy

In 2020, a total of 597 renewable energy projects were approved with total investments of RM1.25 billion, of which 85.7 per cent was contributed by domestic investments and 14.3 per cent by foreign investments.

Solar energy projects made up the bulk, at 581 projects with investments amounting to RM978.4 million, comprising 578 solar self-consumption projects worth RM633.2 million, and three LSS projects by Redsol Sdn. Bhd., UiTM Solar Power Dua Sdn. Bhd. and I2 Solarpark One Sdn. Bhd. with total capital investments of RM345.2 million.

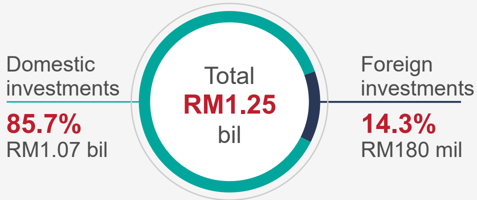
Other renewable energy projects approved include 13 biogas projects with total capital investments of RM129.3 million, one mini-hydro project by Selama Hidro Sdn. Bhd. with capital investment of RM107.1 million at Selama, Perak and two biomass projects worth RM 32.5 million.

A total of 733 employment opportunities were created from these projects

Approved RE Projects for 2020

Domestic vs Foreign investments

597 projects were approved



733 Total job opportunities

Table of Approved RE Projects in 2020

Types of renewable energy (RE)	Projects approved	Investments (RM Million)	Employment
Solar	581	978.4	604
Biogas	13	129.3	90
Mini hydro	1	107.1	14
Biomass	2	32.5	25
Total	**597**	**1,247.3**	**733**

Energy Efficiency

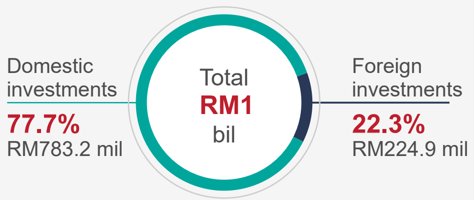
In recent years, investment into energy efficiency (EE) / energy conservation (EC) projects has been very promising, primarily due to the fact that the demand and consumption for energy is growing rapidly for both the industrial and commercial sectors. Investing in EE offers a great opportunity for more competitive industries to undertake energy cost savings through the implementation of new energy-efficient technology.

In 2020, a total of 24 EE/EC projects were undertaken by the industrial and commercial sectors, involving total investments of RM1billion. The bulk of these investments came from domestic sources, amounting to RM783.2 million of total investments approved, while RM224.9 million was contributed by foreign investors. A total of 164 employment opportunities were created by these projects.

Approved Energy Efficiency Projects for 2020

Domestic vs Foreign Investments

24 projects were approved



164 Total job opportunities

Waste Management

In 2020, Kualiti Alam Sdn. Bhd. was approved to develop a Waste Eco Park (WEP) project, with capital investment of RM67.2 million. To address the issue of sporadic recycling facilities around Malaysia, the WEP incentive for developers, managers and operators was introduced to centralise recycling companies from various industries under the same location. This scheme aims to encourage investments in facilities and infrastructure towards more holistic waste management. This will be a boon to the Government's circular economy efforts, as businesses will be expected to undertake the activity of recycling, recovery, and treatment by reusing or reducing waste that is generated. This will also help achieve the national target for a recycling rate of 40 per cent by year 2025.

Green Services

For the year 2020, six green services projects with total capital investment of RM22.9 million were approved. These projects will create 44 high-quality job opportunities. The green services activities approved were solar PV system integrators and service providers related to energy efficiency and green building.

Aside extending the GITE incentive by another three years (up to 2023), the Government has also expanded the scope of the incentive to cover solar leasing activity as a new business growth area, offering income tax exemption of 70 per cent for a period of up to 10 years. This expansion could further spur the growth of electricity generation from solar sources in Malaysia

Oil and Gas Services and Equipment

The COVID-19 pandemic accelerated several trends, one of which is the transition from fossil fuels to cleaner zero-carbon options due to sustainable energy use and climate change concerns. Despite the uncertainties surrounding the outlook for the global oil market from the decline in demand and also production stoppages, Malaysia's natural gas sector sees a robust uptrend buoyed by market liberalisation policies allowing third-party suppliers to operate, which in turn will lead to more competitive prices and sustainable supply.

Low crude oil prices present a good opportunity for the further development of the midstream segment, such as oil-storage facilities, as stockpiles rise on lower demand for all categories of oil-derived products, including refined petroleum products. The increased refining capacity of Pengerang Integrated Petroleum Complex in Johor and Sipitang Oil and Gas Industrial Park in Sabah – almost double of what it was before (from 588,000 barrels per day (bpd) to 1.15 million bpd, nationwide) – will further propel the need for greater storage facilities.

MIDA participated actively in numerous virtual conferences and exhibitions such as the Offshore Technology Conference (OTC) Asia, the Malaysia Oil & Gas Services Exhibition (MOGSEC), and an Industry Talk organised by the Malaysian Gas Association (MGA) in 2020 to spur interest and encourage investment in the oil, gas and energy industry.

Foreign companies with expertise and technology in the upstream sector were encouraged to invest in Malaysia by establishing collaborative ventures with local oil and gas services equipment companies. Malaysia also offers ease of access to domestic and regional oil and gas markets, along with a treasure trove of untapped resources. Based on the Petronas Activity Outlook 2020-2022, Malaysia has more than 12 billion barrels of oil equivalent (bboe) of undeveloped resources waiting to be monetised.

All this and more makes the nation a fantastic investment choice for both new entrants and existing players to invest in marginal fields or Discovered Resource Opportunities (DRO). The shallow water assets that will be decommissioned and up for retirement after 2020 offer another avenue of investment into the oil and gas sector in Malaysia.

Approved Projects

Owing to the pandemic and the ripple effect it has and continues to have on oil demand, there was much cuts to upstream capital expenditure budgets. Malaysian industry players also cut down on capital and operational expenditures in order to sustain the business, with cuts in the production and exploration segment particularly apparent, while focusing on maintenance services activities.

In 2020, there were a total of six projects approved, with domestic investments of RM353.6 million for the O&G industry. Of these, three were for O&G services worth RM321.5 million, while the remainder three projects were for O&G machinery and equipment (worth RM32.0 million). These projects are expected to generate a total of 204 employment opportunities.

One notable services project was from Serba Dinamik Sdn. Bhd, an international energy services group providing integrated engineering solutions to the O&G, petrochemical, power generation, water and waste water, and utilities industries. The scope of the project involves maintaining, repairing and overhauling rotating equipment, as well as inspecting, repairing, and maintaining static equipment and structures. In total, the project involved an investment of RM270.5 million and will create jobs for 50 locals.

Shipbuilding and Ship Repair (SBSR)

Malaysia's SBSR industry provides the backbone for the development of the maritime sector and complements the O&G industry. Malaysian shipyards are capable of building various types of small-to-medium-sized vessels, and have repairing capabilities of more than 600 tonnes of displacement to meet the demand from various sectors.

> “Malaysian shipyards are capable of building various types of small-to-medium-sized vessels, and have repairing capabilities of more than 600 tonnes of displacement to meet the demand from various sectors.”

Like many other industries, Malaysia's SBSR industry was adversely affected by the economic slowdown, as it is heavily dependent on the O&G industry. The limitations to the movement of ships and their crews also contributed significantly to the challenges faced by the shipyards. Most ship owners postponed the surveyance of their offshore support vessels (OSVs), preferring instead to dock at locations where repair specialists are based. The rising competition from foreign yards offering products and services at highly competitive rates also added to the challenge.

Nonetheless, the outlook is not all bleak; there is a steady demand for marine vessels to support PETRONAS' production operations and drilling projects throughout Malaysian waters.

Despite the economic downturn and global pandemic, there is still a strong demand for the production of new OSVs to replace aging models. The PETRONAS Activity Outlook 2020-2022 revealed that nearly 150 vessels across all weight categories would be needed to support production operations.

The global turn to greener technology has also impacted the SBSR industry. The transition to a lower carbon future is paving the way for LNG-powered vessels where demand is growing rapidly with the new technology projected to be a strategic prospect for Malaysian shipyards.

Various strategies and facilitation have been introduced to further encourage industry players to invest in emerging technologies for high value-added activities and services. These include the Industry4WRD Intervention Fund and Industry4WRD Domestic Investment Strategic Fund (DISF). These financial support facilities will enhance the local industry's competitiveness in the regional and global markets.

The incentive package for the SBSR industry, introduced in 2016 for new and existing companies, will still be available beyond 2020. Companies are encouraged to grab this opportunity to benefit from the incentive to undertake modernisation exercises.

In 2020, MIDA had an active engagement with the Association of Marine Industries of Malaysia (AMIM) and other ministries and agencies to review the SBSR policy proposals. This included SBSR incentive package extensions and bona fide status approvals. Two other activities carried out during the year were the Third Industrial Master Plan (IMP3) performance review and the formulation of the new IMP for the SBSR industry.

Approved projects

In 2020, a total of eight projects were approved, with investments totalling RM47.7 million. Out of this, six were for new projects, one was an expansion project, and one was for the manufacture of marine products and equipment. Seven of the projects were wholly Malaysian-owned, while one was majority foreign-owned. The investments were driven by demand for defence, security, and commercial vessels, and are expected to create 204 employment opportunities.

One notable project was an investment by a Malaysian company to upgrade and modernise its yard facilities in order to cater to domestic and international clients. The project would allow for the construction of modern fishing trawlers and ultra-high-speed crew boats. The company has adopted the latest technology by developing its own tracking portal for the operation. This portal enables the company to specify areas that are lacking or have poor productivity, as well as to develop forecasts for the completion date and final cost of products or services. The project involves investment of RM8 million and is expected to create 90 employment opportunities.

Logistics

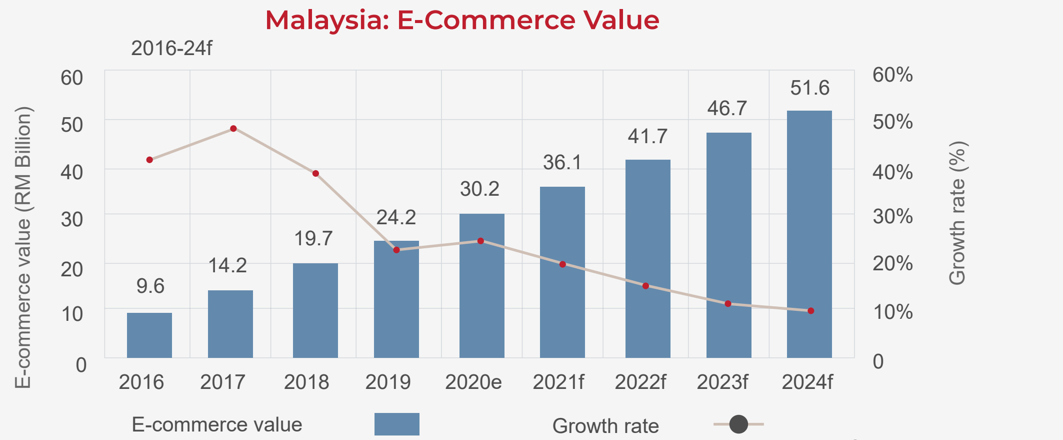
Globally, the logistics industry is a critical enabler of any given economy. Fulfilling the needs of businesses and consumers alike, it is a key enabler for the advancement of industrialisation, international trade and competitiveness. In Malaysia, where the industry is highly integrated across various sectors, it has contributed immensely to production and distribution processes as well as to the facilitation of trade activities. In 2019, the logistics industry expanded by 6.8 per cent, contributing RM53.7 billion to the country's GDP (Department of Statistics Malaysia, 2020).

Historically, the industry has faced various challenges that inhibit it from reaching its full potential and efficiency. In 2020, this was thrown into sharp relief as many smaller logistics companies faced an unprecedented challenge as a result of the boom in e-commerce. The pandemic had led to a drastic increase in online shopping in the nation; according to GlobalData's e-Commerce Analytics, Malaysia's e-commerce market, among the fastest growing in Southeast Asia, is estimated to have experienced a growth of 24.7 per cent in 2020 (from a total transaction value of RM24.2 billion in 2019 to an estimated RM30.2 billion in 2020). The market is forecast to hit MYR51.6 billion (US$12.6 bil) by 2024, increasing at a compound annual growth rate (CAGR) of 14.3 per cent between 2020 and 2024.

Although the incline in demand was music to the ears of these smaller players, there was a natural concern that they might lose out in the long run– due to delivery fulfilment issues, stemming from a lack of resources. Some of their last-mile delivery challenges included the lack of new technologies and automation in their operations. Adding to the challenge was the continuous change in the e-commerce landscape as a result of big global technology conglomerates, such as Amazon and Alibaba, which are capable of offering numerous delivery options to consumers. In response to this threat, stakeholders had to re-evaluate and re-strategise their operations in order to boost efficiency, productivity, and enhance business flows. What they landed upon was the fact that digitalisation was the only way forward, and that it was fundamental to long-term business sustainability.

As an active member of the National e-Commerce Council (NeCC) – MIDA has a role in ensuring that companies are enabled to carry out their business operation in a smooth and unencumbered manner. The National e-Commerce Strategic Roadmap (NeSR), which is presented by the NeCC, focuses on good infrastructure, governance framework, and empowering key players across the e-commerce supply chain.

Early in 2020, MIDA also organised a Logistics and E-Commerce seminar on 'Investment Opportunities in Logistics and E-Fulfilment' in Penang. The seminar – which featured sessions by MIDA, the Northern Corridor Implementation Authority (NCIA), Malaysia Digital Economy Corporation (MDEC), and MIMOS – attracted more than 200 participants. Business clinics session by key Government agencies were also conducted to discuss issues pertaining to the logistics industry.



Source: www.globaldata.com

Post-2020, the industry is focused on developing the capability and efficiency of logistics service providers in order to help them cater to the diverse needs of the online shopping market. The global pandemic accelerated the e-commerce market growth in Malaysia, but what has changed has changed forever. Hence, logistics companies are urged to invest in advanced and cutting-edge technologies such as Warehouse Management Systems (WMS) and smart logistics to enhance their efficiency and competitiveness.

Various initiatives such as the Digital Free Trade Zone (DFTZ) were introduced by the Malaysian Government in order to further develop the technology and logistics infrastructure which forms the backbone of Malaysia's e-commerce ecosystem. MIDA will continue its active role in transforming Malaysia as the regional e-Fulfilment Hub by promoting and facilitating investment in this sector through continuous collaboration and engagement with relevant Government ministries, agencies, industry players and stakeholders.

Integrated Logistics Services (ILS)

Integrated Logistics Services (ILS) comprise activities provided by logistics companies along the logistics supply chain. This includes freight forwarding, warehousing, transportation, and other related value-added services such as distribution, product assembly / installation, consolidation, procurement, quality control, and supply chain management. In 2020, a total of 12 ILS projects were approved with investments totalling RM1.4 billion. These projects are expected to create 1,878 employment opportunities.

Electronic commerce or e-commerce has been the fastest-growing sector of the global trade landscape and has become an integral component of the world's largest economies. Malaysia has the advantage of linking businesses to over 620 million consumers, due to its strategic geographical location in the heart of ASEAN. Out of the total ILS projects approved, three projects have the element of e-commerce/e-fulfilment activities.

Approved ILS Projects for 2020

12
New ILS approved projects

RM1.4 bil
Total approved investments

1,878
Job opportunities

One noteworthy approved ILS investment is an expansion and diversification project by GD Express Carrier Berhad (GDEX), through its wholly-owned subsidiary GD Express Sdn. Bhd. (GDSB). GDSB is the last mile door-to-door express delivery and logistics services for business-to-business and business-to-consumer. The project will see GDEX expanding its warehouses, distribution centres and transportation fleet to cater to the tremendous increase in e-commerce volumes due to the booming growth of the e-commerce sector in Malaysia. The project is expected to create more than 1,000 employment opportunities.

International Integrated Logistics Services (IILS)

The International Integrated Logistics Services (IILS) status is granted to logistics companies 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. Qualified IILS companies are issued a Customs Agent Licence upon approval of IILS status.

In 2020, a total of 45 projects were approved IILS Status with investments totalling RM991.3 million. The total number of employment opportunities that are expected to be created for these projects is 3,053.

Healthcare

Malaysia's public healthcare is widely regarded as a successful system in delivering equitable and effective healthcare at a relatively low cost. This is achieved entirely through government funding, whereby RM30.6 billion (US$7.4 billion) was allocated in Budget 2020 towards healthcare development.

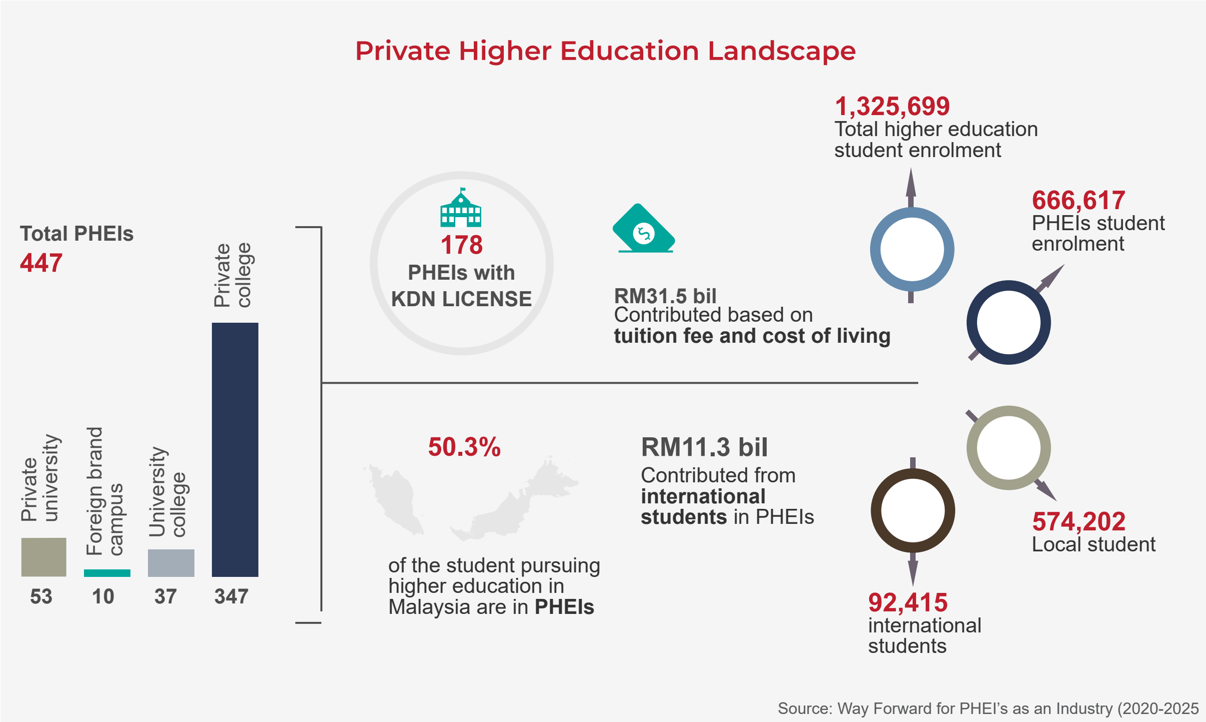
Private healthcare demand has increased exponentially due to its speedy admissions and world-class quality, so much so that Malaysia has become a leading destination for healthcare tourism. Private hospital outpatient attendance was recorded at 13 per cent of overall outpatient care provided in the country, and private hospitals command 30 per cent of total hospital admissions. Malaysia recorded 1.26 million healthcare tourist arrivals in 2019 compared to 880,000 in 2014, which is an indication that the country has become a leading choice for foreign patients seeking medical treatment abroad. In addition, the nation has bagged many accolades including winning the fourth successive 'Medical Travel Destination of the Year' award by the International Medical Travel Journal (IMTJ) Medical Travel Awards 2020.

Malaysia had big plans for its medical tourism industry in 2020. However, the COVID-19 pandemic strongly impacted the economy, trade and tourism industries in 2020. The Association of Private Hospitals Malaysia reported that the number of patients seeking in-patient treatment at private hospitals dropped by 70 to 80 per cent. With border closures and uncertainties created by the pandemic, the number of medical tourists dropped significantly, and foreign businesses have halted their investment plans.

Despite the challenges of COVID-19, MIDA is anticipating that local demand for quality healthcare will drive the demand for a few quality projects in the future.

A slow recovery

In these challenging times, the Government continues its commitment to enhancing the quality of healthcare services by providing incentives in 2020 to attract investment in private healthcare facilities. Potential investors can explore numerous incentives introduced under the National Economic Recovery Plan, known by its Malay acronym PENJANA, including an extension of the Domestic Investment Strategic Fund (DISF) to the services sector, PENJANA Smart Automation Grant and full tax exemption and Investment Tax Allowance for companies relocating their projects to Malaysia.



In Budget 2021, the Government allocated RM31.9 billion to MOH, an increase of 4.3 per cent compared to 2020, focusing on empowering its healthcare sector. In addition, the Malaysia Healthcare Tourism Council (MHTC) was allocated RM35 million to promote the country's healthcare tourism industry. Over the next five years, MHTC will focus on three key initiatives, namely the Fertility and Cardiology Hubs, the Centre of Excellence for Oncology, and the Flagship Medical Tourism Hospital Programme. MIDA will continue to encourage investment in private healthcare facilities and undertake policy advocacy with relevant stakeholders including MHTC, MOH, MPC and MOF while supporting various healthcare investment promotions.

The Government has given the green light for a medical travel bubble beginning 1 July 2020 with Malaysia Healthcare Travel Council as the agency responsible to facilitate the entry of healthcare travellers. Armed with strong governance and COVID-19 pandemic management methods, Malaysia is strategically positioned to gain a foothold in revitalising the nation's economy by implementing this travel bubble. With strict SOPs in place, travel bubble patients pose minimal risk in the COVID-19 transmission. A majority of these patients tend to suffer from cancer or cardiovascular diseases and seek out Malaysia's affordable world class health services.

Education

Malaysia's higher education system has made substantial gains in the numbers of students enrolled, global recognition for published research, patents registered, institutional quality and being a preferred destination for international students. These achievements have been due to the close working relationship between the academic community, the private sector and the Government.

The future of higher education is promising in Malaysia despite the pandemic, with more than 1.3 million tertiary students enrolled in higher education institutions (HEIs) in Malaysia, as at 30 September 2019. A total of 666,617 (51.0%) were enrolled in over 400 PHEIs, and the remaining 49 per cent were in the public universities and branch campuses. The majority of international students, at over 70 per cent (92,415) enrolled in PHEIs, with 30 per cent registered in the public universities. Malaysia aims to continue positioning itself as an international education hub, targeting 250,000 international students by2025.

The unprecedented COVID-19 pandemic has had a huge impact on higher education as universities had to close their premises and countries shut their borders in response to lockdown measures. In-person teaching was rapidly replaced with various e-learning delivery methods, which have not been as successful for some as others who have had more experience in online teaching. Closures have also affected examination and graduation schedules as well as put in jeopardy the safety and legal status of international students in their host country. The crisis raises concerns of the value of education offered by a university, including networking and social opportunities and educational content. To maintain its relevance, universities and institutes of higher education must quickly respond to the changing learning environments and equip themselves with innovative ways to teach in the new digital contactless era.

The MOHE has imposed a moratorium on new PHEIs until 31 December 2020 in order to encourage mergers, acquisitions, cooperation, and restructuring to ensure the industry remains viable and provide quality. In 2020, a total of 429 private education projects were approved, comprising 404 new projects and 25 expansion projects with total investments of RM195 million. Selangor received the highest number of approved projects (56.9% or 244 institutions) followed by Perak (10.7% or 46 institutions) and Sarawak (9.1% or 39 institutions). These projects ranged from elementary education centres, private schools, to colleges and universities. Local private investors are backing 100 per cent of the total value of the investments, and a total of 1,887 high-value jobs are expected to be created.

In 2020, MIDA approved one technical and vocational education and training (TVET) project related to the aviation industry under the Domestic Investment Strategic Fund (DISF) with an investment value of RM2.2 million that will create 23 job opportunities. This TVET project provides professional training development to new and existing pilots by offering courses, namely management of aviation, flight operation, aviation safety, and aircraft maintenance engineering technology.

Outlook

PHEIs have contributed directly to economic empowerment and social restructuring as outlined by the country's Shared Prosperity Vision 2030 (SPV 2030). Malaysia has targeted 250,000 international students in 2025 and 335,000 in 2030. With this target, international students will contribute RM11.6 billion in tuition fees and another RM14.2 billion in cost of living in Malaysia, totaling an estimated RM25.7 billion contribution to Malaysia's GDP and economic growth in 2025 and RM33.5 billion in 2030, respectively.

While COVID-19 poses huge challenges, it is also an opportunity to be a catalyst for transforming education delivery in the future. The Industry 4.0 has highlighted the need to reform the higher education system in Malaysia as well as to enhance, reskill and elevate talent. It is vital for Malaysian PHEIs to produce talent that are adaptive to the changing demands of the job landscape, which values creativity, originality and imagination. PHEIs must play their role in investing in education technology infrastructure and corporate industry collaborations, producing future-proof graduates. Education will take on new immersive dimensions combining simulators and sophisticated digital media to effectively harness new learning trends helping students get first-hand knowledge of topics, concepts, and situations.

To this end, MIDA encourages local and foreign investors to tap on investment opportunities and available incentives in online education including DISF and the Smart Automation Grant under PENJANA to support the adoption of technology

and innovation in teaching and courses offered. The objectives of the funds are to upgrade the company's technological capabilities to be more competitive internationally and be an active participant in the global ecosystem. A total of RM6 billion including RM30 million for the Skills Development Fund Corporation (PTPK) and RM60 million in providing RM1,000 monthly allowance for National Dual Training System Plus has been put in place by the Government under Budget 2021 to further empower the TVET sector.

The Government has extended the incentives for commercialisation of R&D findings by PHEIs, which hopes to create a competitive R&D ecosystem and encourage new R&D activities by the institutions, as well as enhance their role in producing high-quality researchers and quality R&D.

Hospitality – Hotel & Tourism

Domestic tourism was the focus in 2020 with borders closed due to the COVID-19 pandemic. The Ministry of Tourism, Arts, and Culture Ministry (MOTAC), through Tourism Malaysia, announced a detailed recovery plan in late November 2020 following losses estimated at RM100 billion as well as expecting a 75 per cent drop in tourist arrivals compared to 2019.

MOTAC's recovery plan included tax incentives, restructuring or postponement of loan repayments along with an RM1 billion allocation under the Penjana Tourism Financing programme to ease cashflow of tourism businesses. In addition, tourism businesses were also able to tap into the wage subsidy programme introduced by the Government in June 2020 in which these businesses received a wage subsidy of RM600 a month per retained employee earning RM4,000 or less up to a maximum of six months.

Contributing approximately 15.2 per cent, the tourism industry is an important contributor to Malaysia's economy, the third largest after manufacturing and commodities. To boost domestic tourism, several measures were implemented, including personal income tax relief of up to RM1,000 and digital vouchers valued up to RM100 per person for domestic flights, rail travel and hotel accommodation.

The Government also pushed for the adoption of digitalisation and innovation among hospitality players to gain a better competitive edge including the creation of virtual experiences, having flexible cancellation policies and campaigns encouraging tourists to plan their journeys in advance. Over the long term, the tourism and hospitality industries will need to look at structural changes supporting the transition to low-carbon practices and sustainability. There were also initiatives under the recovery plan to promote gastronomy, ecotourism and island holidays while there were programmes involving collaborations with airline companies and other tourism-related agencies to maximize resources and rejuvenate the industry.

“The Government also pushed for the adoption of digitalisation and innovation among hospitality players to gain a better competitive edge including the creation of virtual experiences, having flexible cancellation policies and campaigns encouraging tourists to plan their journeys in advance.”

In the Budget 2021 announcement, MOTAC was allocated RM50 million for maintenance work and for the overhaul of tourism facilities nationwide. Besides that, RM35 million was allocated to the Malaysia Healthcare Travel Council to enhance the competitiveness of the local health tourism industry while the income tax exemption for the export of private healthcare services was extended until 2022.

For the first nine months in 2020, Malaysia recorded 4,299,419 tourist arrivals, marking a decrease of

36.3 per cent compared to the same period in 2019. Correspondingly, tourist receipts for the first nine months amounted to RM12.6 billion, a drop of 80.9 per cent compared to RM66.1 billion registered for the same period in 2019.

The bulk of tourist generating markets came from these 10 countries from January to September 2020

Top 10 Countries of Tourist Arrivals in January- September 2020

Singapore
1,543,627

Indonesia
710,118

China
403,055

Thailand
372,075

India
155,448

Brunei
135,848

South Korea
119,364

Japan
73,891

Australia
72,369

Philippines
65,601

The setbacks notwithstanding, for the period January to December 2020, a total of 36 projects were approved by MIDA with total investments amounting to RM2.8 billion, which included 25 new projects expected to create 1,929 jobs and 11 expansion and refurbishment projects with 113 employment opportunities.

Real Estate

The real estate sub-sector comprises housing and service apartment projects under the purview of the Ministry of Housing and Local Government. In 2020, the outbreak of COVID-19 brought uncertainty and further challenges to an already sluggish property market. The problem was two-fold: developers faced difficulties in completing their projects within stipulated time frames due to the supply chain interruption, while consumers also became more cautious in their spending on big-ticket items. Realising the challenges faced by developers, the Government unveiled several initiatives to stimulate the sub-sector. This included the reintroduction of the Home Ownership Campaign (HOC), which offers stamp duty exemption on the instruments of transfer for the purchase of properties priced up to RM1 million; three per cent stamp duty for properties priced between RM1 million and RM2.5 million, from four per cent previously. The HOC stamp duty exemption/reduction is valid from 1 June 2020 to 31 May 2021. In addition, under the National Economic Recovery Plan announced in June 2020, Malaysian owners can dispose of up to three residential properties between 1 June 2020 and 31 December 2020 and get an exemption from paying the real property gains tax.

In 2020, a total of 1,045 projects were approved, with total investments of RM31.2 billion exclusively from domestic players. Although approvals contracted by 23.5 per cent, it is notable that the sub-sector continued to play an important role in the country's economy despite the challenging economic conditions, sustaining its position as the largest contributor (46.9%) to approved investments in the services sectors.

Utilities

The utilities sub-sector covers energy and water utilities services. Energy services encompass power generation, transmission and distribution of electricity by Tenaga Nasional Berhad, Sarawak Energy Berhad and Sabah Electricity Sdn. Bhd. (SESB). Water utilities services include those provided by Suruhanjaya Perkhidmatan Air Negara and Pengurusan Aset Air Berhad.

In 2020, the sub-sector registered a total of RM10.8 billion of approved investments – all of which were from domestic sources. The bulk (88.0%) of these approvals were for the generation, transmission, and distribution of electricity. Although overall number of approvals were reduced by 67.5 per cent, the utilities sub-sector was the second biggest contributor to overall approved investments in the services sector during this period.

To keep the sub-sector going during this difficult period, utilities received an additional boost under the Budget 2021, with an allocation for infrastructure improvement programmes and projects in remote areas, Sarawak and Sabah. This provision is to help reduce the urban-rural development gap across the nation.

Telecommunications

The telecommunications sub-sector includes activities related to communications and multimedia (telecommunications, broadcasting and postal) regulated by the Malaysian Communications and Multimedia Commission (MCMC).

Based on the investment approval data provided by MCMC (which covers only the first nine months of 2020), a total of RM5.2 billion of investments were approved, compared to the RM8.0 billion registered in 2019. These investments originated entirely from domestic sources. Unlike other sub-sectors, the telecommunications sub-sector performed fairly well in 2020, due to the surge in household demand – particularly internet consumption – as a result of the nation's increased video conferencing, e-learning and online shopping activities. The global pandemic also opened up revenue opportunities for the industry, with higher demand for cloud services, managed solutions, cybersecurity services and wholesale bandwidth. The telecommunications sub-sector is expected to grow for the foreseeable future in line with the Government's policy on encouraging digital transformation and investments in the ICT space. MCMC, through the National Digital Infrastructure Lab, formulated the National Digital Network (JENDELA) to improve coverage and quality of service.

JENDELA will assist in setting the foundation for 5G implementation across the country. The execution of the plan will not only provide access to better quality digital connectivity, but will also strengthen MIDA's efforts in encouraging more companies – especially local players – to adopt IT and automation technologies to achieve more sustainable growth.

Financial Services

Banking, insurance and capital markets (fund management, investment advisory, financial planning, venture capital and brokerage) are components within the financial services sub-sector.

The sub-sector recorded approved investments of RM2.5 billion in 2020, compared to RM4.1 billion recorded in 2019. Domestic sources contributed RM1.7 billion (69.7%) while foreign sources totalled RM0.8 billion(30.3%).

BNM announced several proactive measures to assist the public and business community in mitigating the impact of the pandemic. These included the deferment and restructuring of loans, along with refinancing options. Through these measures, financial institutions have been able to address the potential deterioration in profitability and asset quality due to the pandemic. BNM is also exploring options to improve the business potential of the nation's insurance businesses, introducing measures such as de-tariffication of fire and motor insurance business as well as promoting digitisation to enhance customer interaction and improve the operational practices of insurers.

MSC Status Companies

Multimedia Super Corridor (MSC) Status is granted to companies through the Malaysia Digital Economy Corporation, the lead agency established since 1996 to promote the MSC initiative and the objectives of Vision 2020.

Today, MSC Status encompasses the ideals of digital adoption, digital entrepreneurship, and innovation, and investment approvals for activities such as ICT, global business services, and creative content and technology.

In 2020, a total of 45 MSC Status projects were approved with investments worth RM3.9 billion. This will pave the way for 3,794 new employment opportunities for Malaysians. Out of the total, RM2.6 billion (66.2%) came from domestic investments, while RM1.3 billion (33.8%) came from foreign investments.

"Today, MSC Status encompasses the ideals of digital adoption, digital entrepreneurship, and innovation, and investment approvals for activities such as ICT, global business services, and creative content and technology."

The sub-sector performed better than the preceding year, following the successful enhancement of the MSC Status package to comply with the requirements under the Forum on Harmful Tax Practices in the early part of 2020.

Distributive Trade

Distributive trade covers wholesale and retail trade, hypermarkets and supermarkets, department stores and direct selling, franchising as well as other distributive trade projects approved under the Petroleum Development Act 1974, all of which come under the purview of the Ministry of Domestic Trade and Consumer Affairs (MDTCA).

In 2020, the pandemic dealt a huge blow to the sub-sector. Fear of infection from crowded places and government-mandated closures led to consumers adapting their shopping patterns by making fewer shopping trips, buying in larger quantities, and purchasing online. This had a marked impact on sellers – particularly those trading in non-essential goods.

Consequently, approved investments in the sector declined by 68.1 per cent in 2020, from RM11.7 billion in 2019 to RM3.7 billion in 2020. The bulk of these investments (79.9%) originated from foreign sources. Nonetheless, the silver lining is the promising number of new jobs that will become available: a total of 18,186 new jobs will be created by these approved investments.

To revive domestic demand and assist the sector, MDTCA launched the 'Buy Malaysian Products' campaign and the 'Mega Sales Programme' initiatives in July 2020. The pandemic also amplified the need for brick-and-mortar retail businesses to extend their service offerings online and embrace e-commerce activities in order to thrive during these challenging times. To support these efforts, the Government introduced the Automation Capital Allowance (Automation CA) for the services sector and the Smart Automation Grant (SAG), under MIDA.

Transport

The transport sub-sector consists of maritime transport, aviation (including airport infrastructure and maintenance, repair and refurbishment – MRO), and highway construction and maintenance.

Unsurprisingly, the transport sub-sector remained subdued throughout the year, following a curb on travelling by consumers and border closures. As a result, only seven projects were approved in 2020, with investments worth RM432.5 million. Of this, 91.3 per cent or RM394.9 million came from domestic sources. All of these approvals are related to aviation, which encompasses aircraft and airport infrastructure.

To rejuvenate the transport sub-sector and help it to weather the storm, the Government announced several assistance packages. This includes the further extension of tax incentives until 2022 for Ship Building and Ship Repair (SBSR) and for MRO related to the aerospace industry.

Call to Digital

The world economy is transforming due to the rapid evolution and growing use of information and communication technologies (ICTs). These technologies are reshaping services and businesses through the improvement of processes and productivity, creating new trade opportunities for companies to sell more products to bigger markets, thereby resulting in countries diversifying their export baskets.

The impact of the COVID-19 pandemic has underscored the critical need to further accelerate Malaysia's digital adoption, particularly among small and medium-sized enterprises (SMEs), which make up more than 98 per cent of business establishments. For these companies, going digital presents many opportunities; beyond global economy participation, it also enables them to align their business strategies for survival and sustainability.

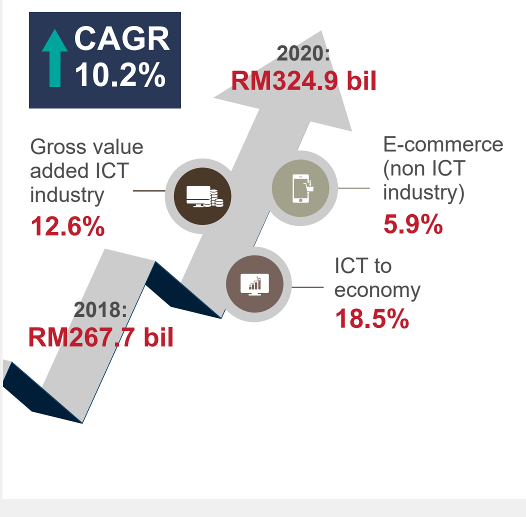
Malaysia ranks favourably among other digital economies, as demonstrated by its 26th position out of 63 countries – ahead of Japan, Luxembourg and Lithuania – in the IMD World Digital Competitiveness Ranking 2020 which comprises three factors namely knowledge, technology and future-readiness.

The rapid expansion of Malaysia's digital economy is proof of its vast potential. Even so, there is room for improvement in order for local companies to reap the full potential and benefits of digital technologies. According to the World Bank's Digital Adoption Index (DAI) 2018 , Malaysia scored a DAI of 0.69. Malaysia's lower index compared to leading Asian countries such as Singapore, South Korea and Japan was attributed to several factors, including deficits in digital applications by businesses.

To drum up digital adoption, MITI together with its agencies including MIDA took proactive measures to develop and execute Industry4WRD: National Policy on Industry 4.0 aimed at transforming the Malaysian manufacturing and related services sectors to be smart, systematic and resilient. The National Policy Framework for the Fourth Industrial Revolution and the Digital Economy Blueprint were also formulated as complementary policies to help drive growth for an inclusive, responsible, balanced and sustainable socio-economic development. MIDA was involved in the design of these frameworks and will continue to play an active role in executing the proposed initiatives due for phased implementation from 2021-2030.

Although businesses responded positively to digital adoption, SMEs remain cautious due to the costs involved. To counter this barrier to adoption, MIDA has several packages to facilitate the digital transformation journey. SMEs, especially those highly concentrated in the services sector (89.2 per cent), should leverage on these facilities to kick-start their digitalisation journey, graduate to higher value-added activities and sharpen their competitive edge.

Contribution of Digital Economy in Malaysia



(RM billion)

	2015	2016	2017	2018
Gross value added ICT industry	146.5	158.4	171.8	182.4
E-commerce (non ICT industry)	66.4	69.6	78.6	85.4
Total of gross value added ICT industry and E-commerce	213.0	228.0	250.4	267.7
GDP	1,176.9	1,249.7	1,371.6	1,446.9
Share to GDP (%)	18.1	18.2	18.3	18.5

Source: Malaysia Digital Economy Report, DOSM

MIDA'S Incentives to Encourage Digital Transformation Among Services Companies

No	Facility	Description
1	Domestic Investment Strategic Fund (DISF) (established in 2012)	♦ Provides a matching grant (50:50) to accelerate the shift to high value-added, high technology, knowledge-intensive and innovation-based industries ♦ Aside from manufacturing, the priority sectors include these services sub-sectors: ► Design and Development ► Research and Development ► Testing and Calibration ► Quality and Standard Certification ► Architecture / Engineering Services ► Technical and/or Skills Training ► Logistics Service Providers (3PL) ► ICT Solutions Providers related to Automation and Industry 4.0 ► Integrated Green Technology
2	Industry4WRD Intervention Fund:	♦ A financial support facility for Malaysian SMESs in the manufacturing and manufacturing-related services (MRS) sectors to embrace Industry 4.0 ♦ Matching grants of 70:30 based on eligible expenditures, up to a maximum grant of RM500,000. ♦ Provided to support companies for implementing intervention projects based on the recommendation of the Industry4WRD Readiness Assessment (RA) Report – on the shift factors of people, process and technology
3	Digital Transformation Accelerated Programme (DTAP)	♦ A strategic partnership initiative between MIDA and MDEC to spearhead Malaysia's digital agenda ♦ Provides Malaysian companies with global experts via Digital Transformation Labs (DTL) to kickstart their digital transformation journey ♦ Offers grants with a maximum of RM 500,000.00 per project or up 50% of the approved DTAP Pilot expenses, whichever is lower
4	Automation Capital Allowance (Automation CA) for Services Sector	♦ Under the National Budget 2020, the existing Automation CA for the manufacturing sector was expanded to cover the services sector to drive automation and to encourage services companies to engage in innovative and productive activities ♦ Automation CA of 200% on the first RM2 million qualifying expenditures incurred between YA 2020 until YA 2023.
5	Smart Automation Grant (SAG)	♦ Introduced under the PENJANA, SAG aims to assist and incentivise SMEs and Mid-Tier Companies (MTCs) to digitalise operations and trade channels, to compete globally ♦ Eligible companies will receive matching basis (1:1) grants based on eligible expenditures, up to a maximum grant of RM1 million per company

4.0

Performance of the Primary Sector

The COVID-19 pandemic is a shock to global commodity markets that presents a challenge to policy makers in commodity exporters: to the extent that it is short-lived, policy stimulus can buffer its impact; to the extent that it is lasting, policy makers need to allow their economies to adjust smoothly to a new normal.

Executive Summary of World Bank Commodity Markets Outlook October 2020

Primary Notes

The commodity markets have experienced a most volatile year in 2020, with prices plunging in the first quarter amid the drop in demand stemming from strict lockdown measures to then recovering in the third quarter as demand recovered and governments spent to support the economy.

In March 2020, oil prices registered their most significant plummet since 1991, caused by a double-blow: a shrinking demand from the pandemic, and the OPEC and Russia price war. However, after the sharp price contractions of global commodities early on in the year, almost all of them registered upticks in the third quarter, as reported in the World Bank's Commodities Market Outlook 2020. Given the turn of events with the global coronavirus pandemic and the hurdle in March, 2020 marks as a tumultuous year for the global commodity market. The year however ended on a positive note due to recovery in demand buoyed by widespread stimulus packages buoying prices.

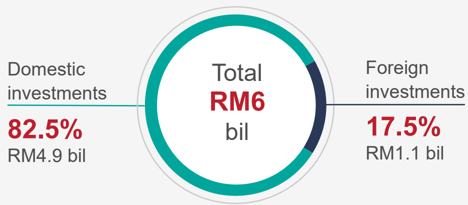
In Malaysia, primary sector exports experienced shockwaves in the first half of 2020 amid reeling global commodity prices alongside coping with a never-before-seen pandemic. However, during the second half, some commodities like palm oil and palm oil-based agricultural products witnessed strong export expansions and price rebounds.

As for the sector's private investment front, in 2020, a total of 23 projects were approved in the primary sector with investments of RM6 billion. This is a decline of 13.9 percent from the RM7 billion approvals in 2019. Of the approved projects in 2020, RM1.1 billion (17.5%) were derived from foreign sources, while domestic investments contributed RM4.9 billion (82.5%). It is expected that together, these investments will open up 831 potential job opportunities for Malaysians.

Performance of the Primary Sector for 2020

Domestic vs Foreign Investments

23 projects were approved



Agriculture

Crops, livestock, agriculture and deep sea fishing make up the agricultural sub-sector in Malaysia. Connecting farm production to the final consumer, the sub-sector was one of the most directly impacted by the implementation of MCO in 2020. Challenges like labour shortage, limited access to the agricultural sources and markets and, logistical and supply chain disruptions, led to across the board financial losses.

In 2020, one project was approved with a total investment of RM2.4 million, a decrease of 98.2 per cent from RM135.1 million approved in the same period 2019.

If anything, the pandemic has amplified the need for digital technology as a necessity rather than a luxury to improve agricultural productivity, reduce labour dependency, and link farmers to buyers and logistics services. Cognisant of this, to aid and empower the sector, the Government announced the following measures during the Budget 2021 speech:

- The extension of the Community Farming Programme : RM30 million for equipment to benefit 60,000 participants with equipment like fertigation kits and crop media
- The implementation of the Organic Agriculture Project : A community project with an allocation of RM50 million to benefit 1,000 communities
- The implementation of the e-Satellite FarmProgramme : With an allocation of RM 10 million, matching grants up to RM30,000 to the Pertubuhan Peladang Kawasan (PPK) for purchasing agriculture equipment based on Internet of Things (IoT) including drones are expected to benefit more than 300 PPKs with memberships of nearly one million farmers and planters
- The Vessel Modernisation and Capture Mechanisation Programme of up to RM 5 million at a rate of 3.5 per cent for 10 years to fishermen in zone A and B to upgrade equipment, nets and boats. Agrobank to allocate RM150 million
- The Agrofood Value Chain Modernisation Programme of up to RM1 million at a rate of 3.5 per cent for a period of 10 years for agricultural entrepreneurs to procure equipment and technology based on Industry 4.0 Agrobank will provide RM60 million ringgit for this purpose.
- The implementation of Aquaculture Development Programme: An allocation of RM10 million for matching grants of up to RM20,000 for micro entrepreneurs to purchase equipment for developing high-value aquaculture livestock
- The implementation of impactful and high-value farming projects: An allocation of RM 100 million through collaborative efforts with state governments (for example, pineapple farming in Johor and freshwater prawns in Negeri Sembilan)

Mining

In the year 2020, mining and metals companies everywhere faced entire value chain disruptions due to travel restrictions as well as limited access to offices, mines and manufacturing facilities. Given that the situation's severity and impact is yet unknown, companies are employing medium to long term strategies as they develop new capabilities and work frontiers for a smooth transition towards longer operational changes.

The mining sub-sector in Malaysia– which covers oil and gas exploration as well as mining in other minerals– experienced the same ripple effect. The sub-sector witnessed a total of 11 projects approved with investments of RM6 billion in 2020. These heavyweight projects contributed 99.5 per cent to the total investments in the primary sector. There were nine projects in oil and gas which contributed RM6 billion. Foreign investments amounted to RM1.1 billion (17.6%) while domestic investments charted RM4.9 billion (82.4%). All in all, these projects are expected to provide 24 potential employment slots for Malaysians.

Plantation and Commodities

Malaysia's plantation and commodities sub-sector; namely oil palm, rubber, forest plantation, kenaf and pepper has contributed significantly to Malaysia's economic rise for half a century. In 1970, commodities contributed to 54.9 per cent of Malaysia's GDP, constituting 80 per cent of total exports (mainly from rubber and tin). Over the next few decades, oil and gas along with oil palm overtook rubber and tin as major commodities. The industrialisation of the mid-80s led to its share reducing to 14.3 per cent in 2019. Notwithstanding its dive in GDP contribution, commodities continues to cushion the nation's economy from external shocks as proven especially during the crises of 1998, 2009 and COVID-19.

In 2020, investments valued at RM27 million were approved in 11 projects under the plantation and commodities sub-sector, all of which were sourced domestically. These projects are expected to generate 804 employment opportunities. The majority of the projects are from pepper and forest plantations which contributed total investments worth RM25.8 million.

Some announcements in Budget 2021 to boost the sub-sector include:

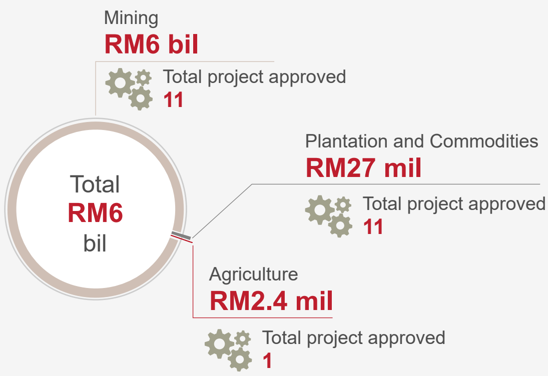
- Malaysian Sustainable Palm Oil Certification or MSPO: An allocation of RM20 million to boost growth and enhance the competitiveness of the industry. Matching grants of RM30 million to encourage the industry's investment in mechanisation and automation
- Incentive of RM16 million for latex production: To encourage latex production, which requires longer working hours, compared to cuplump production, which will debut in Pahang, Terengganu and Kelantan
- Forest Plantation Development Loan (PPLH) Programme: Under the Twelfth Malaysia Plan, the Government will provide RM500 million for the development of forest plantations with an area of four hectares and above

Moving forward, predicting future demand and prices with accuracy will be a challenge for policy makers globally. The Commodities Market Outlook Report 2020 in 2021 however, has projected crude oil prices (CPO) to inch up gradually at an average of US$44 per barrel of oil (bbl) in 2021, up from an estimated US$41 bbl in 2020. Metal and agricultural prices are expected to gain modestly by two per cent and one per cent respectively in 2021. On the plus side, the ongoing fiscal and monetary stimulus from governments globally and vaccine rollouts are hopeful reasons for stronger fuel demand in 2021.

In Malaysia, the Government's ongoing measures and initiatives to help boost the primary sector, the progressive opening of the economy, and the gradual recovery of external demand are all boons for the sector in the year ahead.

Performance of the Primary Sector for 2020

Approved Investments by Sub-sectors



5.0

Collaborations Towards Attracting Quality Investments

“MIDA continues to provide the impetus for domestic and foreign direct investors in expanding their business portfolios and accelerate investments despite the challenging time due to the COVID-19 pandemic.”

Dato’ Azman Mahmud, CEO of MIDA

Malaysia Digital Economic Corporation (MDEC)

MIDA and MDEC are leading the way to attract digital tech investors to Malaysia, with the country's strategic location; the young and digitally-savvy population; multicultural and multilingual tapestry as well as business operating environments, and the legal system as attractive propositions. These investments will drive shared prosperity and reinforce the country's role as the Heart of Digital ASEAN.

In an effort to heighten interest in digital investments, the Digital Investment Summit 2020 (DIS 2020) was organised by MDEC in collaboration with MIDA and other key Investment Promotion Agencies (IPAs), and other ecosystem partners such as Cybersecurity Malaysia, Malaysian Global Innovation & Creativity Centre (MaGIC), PIKOM - The National Tech Association of Malaysia, and Contact Centre Association Malaysia (CCAM). The DIS 2020 was held virtually from 23 to 27 November 2020 as part of the month-long celebration of Malaysia Tech Month DIS 2020. The summit aims to elevate Malaysia's position as the preferred digital investment hub by exhibiting the country's strengths as a home for digital innovations. The event showcased the best of Malaysia's technology, talent and location ecosystems, covering various digital technology focus areas, from cybersecurity to fintech and data center to global test beds in emerging technologies such as artificial intelligence, automation and drone technology.

Since the inception of the Multimedia Super Corridor (MSC) Malaysia initiative 25 years ago, the country continues to attract interest from various global and regional multinational companies (MNCs). The synergistic collaboration between MIDA and MDEC will continue to play a leading role in attracting digital investments and introducing emerging technologies as essential tools in the new vision of Malaysia 5.0 and the digital economy. Malaysia 5.0 will enable the nation to contribute to a sustainable and circular economy, where greater well-being is possible for all Malaysians.

InvestKL

InvestKL joined MIDA's Project Acceleration and Coordination Unit (PACU) as a committee member to facilitate project approvals and support the launch of the National Apprenticeship Scheme– an initiative led by the Ministry of Youth and Sports– aimed at substantially reducing the proportion of unemployed youth through talent upskilling and development.

Talent Corporation Malaysia Berhad (TALENTCORP)

As an agency under the Ministry of Human Resources (MOHR), TalentCorp works to attract, nurture and retain the right talent and expertise to support Malaysia's journey towards greater economic progress. To complement the Malaysian talent pool, foreign talent with the right professional skills is needed to catalyse the transfer of knowledge, skills and advanced technologies.

The Malaysia Expatriate Talent Service (MYXpats) Centre, a joint initiative between TalentCorp and the Immigration Department of Malaysia (JIM) overseen by the Ministry of Home Affairs (MOHA), uses a 'one-stop' approach to Immigration services by processing and issuing related passes enabling eligible expatriates to work in Malaysia. As of September 2020, applications by companies under the MIDA and the Iskandar Regional Development Authority (IRDA) must be made through the Expatriate Services Division (ESD) Online platform and processed by the MYXpats Centre.

SIRIM

SIRIM Berhad, the national organisation for promoting high quality standards and technological excellence, has assumed a significant role in driving Malaysia's agenda for Industry 4.0 and the adoption of automation. MIDA and SIRIM Berhad have collaborated on the implementation of the Automation Capital Allowance (Automation CA) scheme since 2015. The Automation CA scheme aims to encourage manufacturing companies to engage in innovative and productive activities, hence spurring the adoption of automation particularly in labour- intensive industries. As part of this collaboration, SIRIM Berhad undertakes technical verification, including site visits to verify areas of automation and measurement, whereas MIDA undertakes non-technical verification, to determine the eligibility of companies for the Automation CA.

As at 31 December 2020, a total of 361 companies have been considered for the Automation CA. These companies operate in various manufacturing industries such as the Food and Beverage, Building

Technologies, Machinery and Metals, Chemical, Electrical & Electronics, Transportation and Life Sciences industries. As at 31 December 2020, 324 companies have utilised the Automation CA and have jointly invested a total of RM538.7 million for the purchase of automation machinery and equipment. These companies have reduced the number of their unskilled foreign workers by 1,947 people and their automation adoption has also replaced the need for 4,179 employees, who would otherwise have been required for manual or semi-automation processes. Furthermore, these investments have helped boost their operational productivity levels by astounding percentages. On a cumulative basis, they have witnessed production volumes increase by 1,899 per cent as well as defect rates and man-hours reduce by 65 per cent and 58 per cent respectively.

MIDA and SIRIM Berhad foresee that the positive impact of the Automation CA will continue throughout the scheme's implementation, which will be until the year 2023.

In the Pipeline - Machinery Manufacturing Innovation Centre (MMIC)

To lend support to the strategic direction of the M&E industry, MIDA and SIRIM are working together to establish a Machinery Manufacturing Innovation Centre (MMIC), an effort which represents as one of the research and development (R&D) collaborations for technology creation. The MMIC will act as an innovation platform to link industry players, academia and technology providers alongside local and international experts.

MMIC will spearhead innovation activities and the adoption of smart manufacturing technologies, and also the development of human resource to cater to the needs of the high technology industries in Malaysia. This is in line with the Government's aspiration to ensure sustainable economic growth through high-impact investments.

The MMIC should:

- Strengthen the capabilities of the M&E industry
- Address the challenges in the M&E ecosystem
- Answer the call of industry4WRD initiative
- Act as a repository centre for selected manufacturing innovation centers in Malaysia

Therefore, it is hoped that the MMIC will aid in fulfilling Malaysia's national initiatives to:

- Transform the M&E industry landscape to focus on high value-added activities
- Boost the development of innovation-based industries
- Increase company R&D expenses
- Increase productivity per employee
- Increase spending on the adoption of Smart Manufacturing activities
- Increase salaries for workers in the field of 'tech skills' and 'frontier tech skills'

Engagement with Industry Associations

MIDA's Chemical and Advanced Material Industry Division and the Malaysian Plastics Manufacturers Association (MPMA) have been working together to update all MPMA members on the latest Government policies, facilitations and assistance available through various seminars, engagement programmes and development initiatives with the objective of enhancing the industry's operation efficiency and trade facilities.

In addition, MIDA, MPMA and SIRIM have plans to set up a dedicated Plastic Centre of Excellence (PCoE) with the aim of developing engineering plastic and also enhancing bioplastic materials for the critical components within the automotive, medical devices and E&E sectors. The PCoE is envisioned to be a Public Private Innovation Network (PPIN) platform that will both propel innovation and boost the industry's growth. The Government will administer and govern the policies related to this initiative. Support from the private sector is however crucial for the PCoE to succeed.

Industries and Associations Automation Project Initiatives (API)

Automation is no longer an option but a necessity for companies to survive in this new norm. It enables businesses to improve their performance by reducing errors, enhancing the quality of their goods and services and reducing their time to market. In some cases, it can even help companies achieve outcomes that go beyond human capabilities. Automation also contributes to productivity gains.

As a testament to MIDA's commitment in supporting automation within the manufacturing sector, an event on Automation Project Initiatives (API) was organised on 15 September 2020 at the Perdana Hall in MIDA. This event focused on how to enable Malaysian businesses to adapt to the new normal in the post COVID-19 era. API is a physical platform where MIDA will connect labour intensive / low productivity companies with potential System Integrators (SI) or Factory Automation (FA) players.

Some of the companies that attended the event are, Continental Resource Sdn. Bhd., Ecava Sdn. Bhd., XTS Technologies Sdn. Bhd., Sky-Tag Robotics Sdn. Bhd., Vepro Group Sdn. Bhd., TXMR Sdn. Bhd., I-Stone Group Berhad, IME Group, and Packaging Sales and Service (M) Sdn. Bhd.

The event had the following objectives:

- To assist companies in automating their processes, particularly those heavily dependant on unskilled labour (foreign labour).
- To disseminate the latest information on Government facilitation and programmes for automation or industry4WRD projects.

Human Capital Enhancements In the Science & Technical (S&T) Field

According to the National Study on Human Capital (2012), Malaysia needs eight million STEM workers by 2050. Taking a cue from the Government's call for alignment to this projection, MIDA's M&M division initiated a collaboration with Vitrox Corporation Berhad to enhance human capital in the Science and Technical (S&T) fields for technological development to support the high technology industries in Malaysia.

Preparing the workforce for future industries is not a straight forward strategy. MIDA will continue to offer support and to engage relevant stakeholders in mapping out possible schemes for local students and talents to equip themselves with technologically advanced skills in line with the future needs of industries. As Malaysia heads into the Fourth Industrial Revolution, technology achievements are imperative in creating a living environment which is fast, intelligent and dynamic.

Automation Project Initiatives (API)

R&D Collaborations for Technology Creation

The pandemic has amplified the challenges for many companies who lack the capacity and resources to undertake full-fledged R&D activities. Fortunately for industries in Malaysia, there is a way out as most can collaborate with established public and private R&D entities.

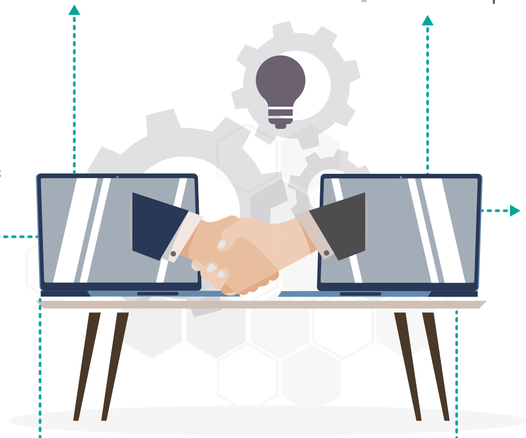
The Government has always been supportive of synergies between Malaysia's industries and research institutions. The collaboration model could also enable research carried out in universities to find its way into commercialisation enabling high-quality job creation, company expansions and diversifications thereby spurring economic growth. The Eleventh Malaysia Plan (11MP) has outlined an innovation strategy targeted at the enterprise and societal level, which is a shift from the previously practiced, conventional top-down approach. Malaysia plans to strengthen and improve the collaboration between the key stakeholders of the Government, Academia, Industry and People.

As the principal investment promotion agency of the country, MIDA is responsible for ensuring Malaysia's industrial landscape and future sustainability is in line with the fast-changing technological world. Here are some of the platforms that companies can look forward to leveraging on:

MIDA has promoted collaborations with **Collaborative Research in Engineering, Science and Technology (CREST)**– which originally focused on the E&E sector– to diversify into R&D&C on digital innovation in healthcare delivery and solutions, joint cluster development activities, industry network engagement, manufacturing alliance, talent development, and digital health innovation hubs

National Institute of Biotechnology Malaysia (NIBM) further collaborate with MIDA to generate or commercialise more native biotech products and facilitate R&D collaborations with private Biotech companies

MIDA partners with **Taiwan's Industrial Technology Research Institute (ITRI)** to promote economic cooperation in the areas of trade, investments and Small & Medium Enterprise (SME) development, particularly in the field of smart manufacturing, Industry 4.0, the Internet of Things and Circular Economy



MIDA also works with **Cradle Fund** to channel potential tech startup companies for project incubation before exploring further potential local supply chain connectivity with MNCs

MIDA is working with **SIRIM** to setup the Manufacturing Innovation Center (MIC)/ Centre of Excellence (COE) to attract more companies, in particular local players, to undertake innovation. On top of providing Malaysia with vast opportunities for technology enhancement and innovation, the proposed

MIDA has strengthened its strategic collaboration with **Cyberview** on attracting global tech companies to invest in Cyberjaya through smart mobility, smart healthcare and digital service and innovation

MIDA's 360° Comprehensive Business Facilitation and Support Services

The Malaysian Government's efforts to overcome the COVID-19 pandemic has led to various measures such as the MCO being implemented. These measures have had a significant impact on businesses and the economy as a whole.

As the principal agency that promotes the manufacturing and services sectors, MIDA's main focus is to provide holistic assistance and support to business communities in the country from every angle. This includes digital transformation initiatives, intensifying engagements with stakeholders, partnering with financial services, encouraging more R&D collaborations, and facilitating more companies to be part of the global supply chain network.

Digital Transformation Initiatives

Various efforts were undertaken to improve SOPs, by simplifying business processes and inculcating digitalisation for speedy approval and project implementation.

An example is the Project Acceleration and Coordination Unit (PACU), which was established by MIDA to provide end-to-end facilitation for speedy approval of investments right up to accelerated project implementation by working closely with the relevant stakeholders.

Under PACU, Manufacturing Licence (e-ML 2.0 module), selected tax incentives (e-Incentive 2.0 module) and Import Duty Exemption on raw materials and components as well as machinery and equipment (eTRANS JPC Module) have been introduced as online applications.

The Implementation Tracking and Monitoring System (ITMS)

The ITMS is a database is a database of companies approved with a manufacturing license from 1 January 2019. This PACU initiative was launched in November 2020 to track and monitor the implementation progress of approved projects. The ITMS helps to speed up the implementation of projects by tracking and monitoring in real-time to ensure approved projects are implemented within 12 months from the approval date. It also captures the issues and challenges investors face during their project implementations, so that they can be addressed immediately. There were a total of 1,921 projects approved from 2019 to 2020, of which 1,132 projects (58.9%) have been implemented.

One Stop Centre (OSC) for Business Travellers

MIDA's OSC commenced operations in October 2020 to ease the movement of business travellers by expediting entry approvals. The OSC committee evaluates and approves eligible business travellers to enter Malaysia for trade and investment purposes.

Aside from MIDA, the dedicated OSC is supported by panels from the Immigration Department, Ministry of Health, and MITI. Meetings are held regularly to cater to the needs of business travellers. A decision for each application is made within three working days upon receiving complete information. Eligible business travellers who wish to submit their entry permission applications may apply online via a new dedicated website known as the 'Malaysia Safe Travel Website' at url: http://safetravel.mida.gov.my/.

Online Applications

e-Manufacturing licence (e-ML 2.0)

- Companies can submit and track the status of their applications for new manufacturing, expansion, or diversification projects, and confirmation letters for manufacturing license exemptions (ICA 10)
- Processing time is now reduced from 7 to 2 business days for non-sensitive industries.

Duty Exemption Online

- Covers applications for import duty and/or sales tax exemptions and the issuance of the confirmation letter.
- New applications, extensions, additional applications, and appeals can be submitted via JPC Online.
- Integrated with the relevant ministries and agencies for a seamless flow of data, information, and speedy approvals.
- All the online portals are accessible via e-services at MIDA's official website

e-Incentive 2.0

- Applications for incentives (eg Pioneer Status and Investment Tax Allowance for new, expansion, and diversification projects) for promoted activities and products under the Promotion of Investment Act 1986, can now be submitted online through the e-Incentive 2.0 module.

For more information, interested investors can contact PACU@MIDA at +603-2267 3633/3473 or email pacu@mida.gov.my

Virtual Engagements with Stakeholders
MIDA currently engages digitally with various stakeholders including industry associations and business chambers through webinars and online meetings. MIDA is able to offer first-hand information on the latest incentives offered by the Government, such as special tax incentives and grants meant to boost domestic and foreign investment, as well as attract multinational companies to relocate their operations or undertake new investments to Malaysia.

Some of the latest updates announced were the extension of the Industry4WRD Intervention Fund and Industry4WRD DISF until 31 December 2021 as well as the execution of the Automation CA until 31 December 2023.

Financial Support to Boost Business Growth and Development
Together with United Overseas Bank and Standard Chartered Bank, MIDA helped provide end-to-end banking services to potential foreign investors. By attracting targeted investments from technology-driven industries such as E&E, M&E, medical devices, aerospace, and renewable energy, MIDA hopes to help facilitate the transfer of technology and knowledge to local companies and create opportunities to develop a highly-skilled domestic workforce.

The collaboration will enable more global companies to seize investment opportunities in Malaysia by having better access to financial services.

Encouraging R&D Collaborations for Successful Commercialisation
MIDA encourages companies to invest in R&D and focus on commercialisation, and assists companies to convert their R&D into high-demand products or services.

One such successful commercialisation project with MIDA's involvement is the technical cooperation between BiON Group of Companies, an environmental engineering and renewable energy solutions provider, and SIRIM Tech Venture (STV) to strengthen the growth of the bio-energy ecosystem. The cooperation will include the distribution of gas energy through a virtual pipeline system, and the establishment of a bio-energy hub to monetise agricultural and industrial waste. It also paves the way for BiON to merge with Green Lagoon Technology, thus becoming Malaysia's biggest biogas power plant operator.

Facilitating Access to Global Supply Chains
MIDA assists global companies to leverage Malaysia's sturdy and reliable local supply chain network. This in turns promotes the access of domestic companies to global supply chains through outsourcing opportunities, and accelerates the shift of Malaysian companies to become more technology-driven.

Through the Domestic Investment Coordination Platform (DICP), MIDA empowers domestic investors seeking to become key players in global supply chains. The DCIP team works closely with local regulators, technology providers, financial institutions, as well as equity and corporate advisory firms, to facilitate strategic development plans that boost local industrial development.

MIDA has successfully engaged and facilitated several multinational and local anchor companies such as II-IV Incorporated (formerly known as Finisar), Bromma (Malaysia), Honda Malaysia, Jabil, BASF (Malaysia), and Perodua in strengthening their local supply chain. In 2020, MIDA has successfully organised 78 engagement programmes and facilitated more than 1,000 multinational and local companies to establish their presence in Malaysia or undertake expansion and diversification projects.

6.0

What’s Next?

“While the global economy appears to have entered a subdued recovery, policymakers face formidable challenges—in public health, debt management, budget policies, central banking and structural reforms—as they try to ensure that this still fragile global recovery gains traction and sets a foundation for robust growth,” said World Bank Group President David Malpass. “To overcome the impacts of the pandemic and counter the investment headwind, there needs to be a major push to improve business environments, increase labour and product market flexibility, and strengthen transparency and governance.”

World Bank Press Release dated 5 January 2021

A Time to Heal

The world as we know it is moving into 2021 with apprehension amid talks of a year of exceptional uncertainty and one with gradual but uneven recovery, among other economic predictions. The good news is that although much needs doing as we brave the unknown as communities and countries, we are in positive growth territory in 2021 as opposed to 2020. In Malaysia's case, it goes beyond "we still have strong economic fundamentals and fiscal muscle", and our "economic base is diversified" but it is going to be "our strategy and indomitable spirit to brave the unknown as one" that will pave the way for the economic rebound in 2021 and beyond, according to YB Senator Tengku Dato' Sri Zafrul Tengku Abdul Aziz, Minister of Finance, Malaysia.

The IMF, in its latest issue of the World Economic Outlook (WEO) dated January 2021 highlighted that while vaccine approvals provide hope for a global economic turnaround, the world economy still faces "exceptional uncertainty" due to the fresh waves and new variants of the virus which loom as counterpoints to the global economy outlook. Amid this, the IMF has forecasted that global GDP will grow to 5.5 per cent in 2021 and 4.2 per cent in 2022.

In tandem with the resumption in global activity, trade volumes are projected to be at eight per cent in 2021 before tapering to six per cent in 2022. Services trade will mend slower than merchandise volumes, given muted cross-border tourism and business travel until infections decline. The IMF called for effective and supportive policy actions until recovery is certain, and recommended emphasis on the development of key imperatives to raise potential output, ensure a hands-on approach to benefit all, and speed up the transition to lower carbon dependence. As highlighted in the October 2020 WEO report, a push for green investment along with slow but steady rising carbon prices will not only produce the needed reduction in emissions but also support the recovery from the pandemic-led recession.

On a bright note, should the health crisis end and bring progress, the world's economy could gain US$9 trillion between 2020 and 2025, according to Chief Economist at IMF, Gita Gopinath, at a news conference in January 2021. As advanced economies are turning around faster, she urged those with deep pockets to throw a lifeline to poorer nations by offering low-interest loans and debt relief. She also noted, "There is still much, much to be done, but we're certainly at least in positive growth territory this year, as opposed to last year."

Over the next two years, as nations contend with the arduous task of keeping the virus in check in their backyards, they can expect a "gradual but uneven recovery", according to the Organisation for Economic Cooperation and Development (OECD). In its December 2020 Economic Outlook report, global GDP will rise to 4.25 per cent in 2021, and a further 3.75 per cent in 2022. China's strong recovery is expected to bolster this upturn and by the end of 2021, global GDP is expected to resume to pre-crisis levels. Other main economies are projected to deliver varied performances, leaving long lasting changes to the world economy.

Countries that will do better than others are those with effective test, track and isolate systems that enable vaccines to be deployed swiftly. The key contributing factors for improved global GDP are vaccination campaigns, concerted health policies and government financial support.

As PRC recovered earlier, OECD's report predicts that the nation will bounce back strong (8% in 2021), ahead of other countries and will account for one-third of the world's economic growth in 2021.

The OECD economies are expected to grow at 3.3 per cent as they rebound partially from their deep recession in the previous year. Both Europe and North America's contributions will be smaller, juxtaposed against their weight in the world economy.

In the trade and investment front, UNCTAD's latest Investment Trends Monitor Issue No 38 predicts weak global FDI in 2021. According to the organisation's World Investment Report 2020 forecast, a further five to 10 per cent slide is to be expected in 2021. In spite of the uncertain and uneven global economic recovery and GDP growth in 2021– along with growth in gross fixed capital formation and trade– investors are still cautious on committing capital to new overseas assets. FDI recovery is not expected to start before 2022 as the impact of the recession will loom on due to uncertainties pertaining to the state of the pandemic and the global policy environment for investment.

Although the forward trends of M&As, greenfield investments and project finance paint a mixed picture, they do confirm the weak outlook. The drop in greenfield project announcements in 2020 (35% lower than 2019) does not augur well for new investments in industrial sectors in 2021. UNCTAD has noted that any increase in global FDI flows is likely to be contributed by cross-border M&As, as opposed to new investments in productive assets.

Economic Outlook

Malaysia, My Home

Malaysia is projected to experience GDP growth of 6.5 per cent to 7.5 per cent in 2021 after the 5.6 per cent contraction of 2020. Some of the factors cited as boosters to the favourable growth projection are: the spill-over effects of the four economic stimulus packages– namely PRIHATIN, PRIHATIN SME PLUS, PENJANA and KITA PRIHATIN– along with the Budget 2021, which were all rolled out expediently in 2020; the anticipated improvement in global growth and international trade; and the nation's strong economic fundamentals and a well-diversified economy. The strong rebound of GDP growth in 2021 also hinges on successful containment of the pandemic and sustained recovery in external demand.

The four stimulus packages totalling RM305 billion, or 21 per cent of the nation's GDP, comprise both fiscal and non-fiscal measures and together are expected to contribute to more than four percentage points to GDP growth.

Pursuant to the contraction in all sectors in 2020, the improved momentum gained during the third quarter in the manufacturing and services sectors is projected to nudge both sectors forwards and upwards. The services sector is forecasted to rebound by seven per cent in 2021. All its subsectors are projected to record positive growth mainly driven by wholesale and retail trade, information and communication as well as finance and insurance. In particular, improved demand in both the imports- and exports- together with domestic-led industries are anticipated to drive the manufacturing sector to a seven per cent growth.

With 'Work From Home (WFH)' and virtual communications as trends in the new norm, the electrical and electronics (E&E) segment is projected to accelerate in line with the nation's digital transformation agenda. Higher demand for memory and microchips within the global semiconductor market will propel the industry further. Likewise, the demand for more sanitisers, disinfectants, rubber gloves and all things COVID-19 will contribute to the rapid production and expansion of the chemical and rubber products industries.

Private investments are projected to bounce back by 6.7 per cent in 2021, propelled by the spill over effects of the stimulus packages alongside various policies and measures in place such as; funds to support digitalisation, especially for SMEs; tax incentives to attract FDI; and the establishment of the Project Acceleration and Coordination Unit (PACU) by MIDA to stem bureaucracy, facilitate business operations and boost private investment activities.

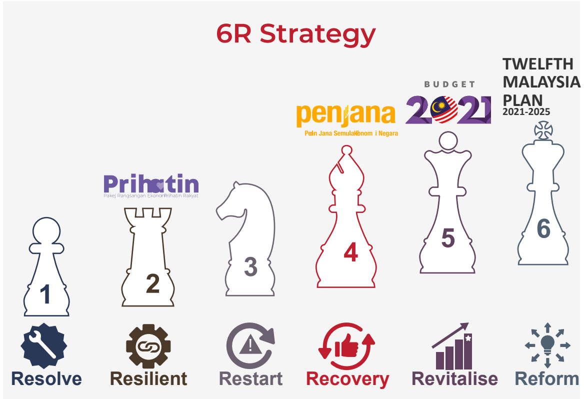
On a positive note, some growth opportunities have also surfaced amidst the pandemic, including accelerating the adoption of certain trends such as digitalisation. Hence a "new growth trajectory" has presented itself for many service-based industries and supporting sectors like E&E, e-commerce and the gig economy have presented itself. It is estimated that if fully realised, the economic value of digital trade-enabled benefits to the Malaysian economy could rise to RM222 billion by 2030 from RM31 billion in 2019. Healthcare and its ancillary sectors, medical products, services and equipment are all expected to grow in the coming years.

Another bright spark to come is Malaysia's recent signing of the RCEP, the world's biggest FTA, which is expected to pave the way for Malaysian businesses to have access to more than a third of the world's market, attracting FDI as well as lifting Malaysia's export growth. Additionally, in the coming days, Moody's latest stamping of Malaysia's local and foreign currency long-term issuer ratings at A3, with a stable outlook, is bound to help boost investor confidence in Malaysia. This development, which speaks volumes of Moody's confidence in Malaysia's credit standing, is a testimony of the Government's strong fiscal discipline and robust-medium term growth prospects.

Economic Recovery Plan
Taming the Pandemic

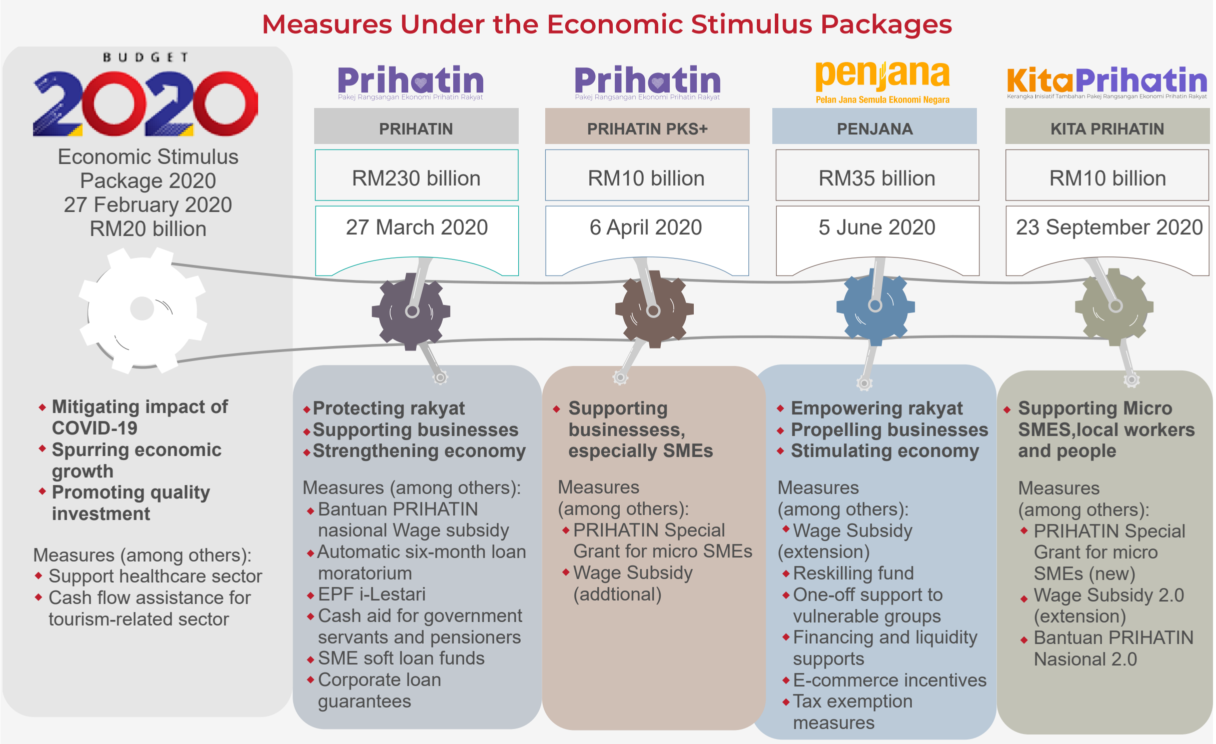
What initially began as a mere health crisis brought on by the Coronavirus has now caused significant global and financial ramifications. When the disease first battered Malaysia's shores in early 2020, the nation's economy bled approximately RM2 billion daily during the Movement Control Order (MCO), which was instituted from 18 March to 12 May 2020 to curb the virus's transmission.

Cognisant of the fact that containment measures must run parallel to the economy's reopening to prevent long term structural scarring, the Government set out on a decisive mission to find solutions to mitigate the health, economic and social impact of the pandemic. In record time, the forces that be put together a unique 6R Strategy (comprising six stages) namely: Resolve, Resilient, Restart, Recovery, Revitalise and Reform, to help the rakyat cope with the virus and uplift the nation's economy. Since March 2020, the Government has launched a line-up of stimulus measures revolving around the 6R Strategy totalling RM305 billion, or 21 per cent of Malaysia's GDP, through a combination of fiscal and non-fiscal measures. The four economic stimulus programmes which are aimed to protect the people, support businesses and fortify the economy are as follows:



Source: Ministry of Finance Malaysia

At the fifth stage of the 6R Strategy is the "Revitalise" level as represented by Budget 2021. The four focus areas of the budget to revitalise post-crisis economic growth are: Caring for the people, steering the economy, sustainable living and enhancing public service delivery. And finally, at the last stage of the 6R approach is "Reform", the stage where medium-term strategies for economic reforms are to be outlined in the upcoming 12th Malaysia Plan (12MP), 2021-2025 towards a more sustainable and higher value-added economy.



Source: Ministry of Finance Malaysia

The Break Down

PRIHATIN

The Prihatin Rakyat Economic Stimulus Package or PRIHATIN, targeted at cushioning the impact of the crisis, is an enhancement to the former Economic Stimulus Package announced on 27 February 2020. As for the distribution of disbursements, of the RM250 billion expected to ease the burden of the rakyat, almost RM128 billion is for their protection and welfare, RM100 billion for supporting businesses (including Small and Medium Enterprises - SMEs) and RM2 billion for strengthening the economy. The remaining RM20 billion was announced during the previous stimulus package.

The details of the PRIHATIN initiatives listed according to the their three cornerstones, namely Protecting People, Supporting Businesses and Strengthening the Economy are as follows:

Protecting People (RM128 billion)

Amount	Details	Beneficiary
RM100 billion	Moratorium on loan repayment for 6 months	Loan account holders
RM40 billion	Withdrawal from EPF Account 2 – RM500 per month up to RM6,000 for 12 months	Employees
RM10 billion	Bantuan Prihatin Nasional	B40 and M40 income groups
RM6 billion	Wage Subsidy Programme with payments of RM600 to employers for 3 months to retain their employees with salary below RM4,000	Employers
RM1.5 billion	Purchase of medical equipment, special allowance for frontliners, purchase of equipment and services from private hospitals	Frontliners
RM1.2 billion	Assistance to civil servants and pensioners – RM500 one off payment	Grade 56 and below and pensioners
RM1 billion	Free internet and widened coverage	All households
RM1 billion	Establishment of the Food Security Fund	All Malaysians
RM530 million	TNB discount between 15-50%	All households
RM270 million	One-off cash assistance of RM200	Students at Higher Learning Institutes (HLIs)
RM25 million	Assistance to vulnerable groups through NGOs	Vulnerable groups
RM8.7 million	Rental Exemption	PPR and Perumahan Awam
	Suspension on premiums for family takaful and insurance for 3 months	All households

Continued on the next page

Amount	Details	Beneficiary
	Widening the scope of MySalam coverage with income replacement of RM50 per day during the quarantined period for up to 14 days	Eligible individuals
	Private Retirement Scheme - Withdrawal from Account B PRS up to RM1500 for each member without tax penalty	Retirees
	One-off cash assistance of RM500	e-Hailing full-time drivers

Supporting Businesses (RM 100 billion)

Amount	Details	Beneficiary
RM50 billion	Guarantee scheme under Danajamin of up to 80% of total loans with minimum amount guaranteed at RM20 million	Companies
RM10 billion	Employer Advisory Services including deferring, restructuring and rescheduling employers' contribution	Employers
RM440 million	Exemption of HRDF levy	HRDF-registered employers
	Various forms of assistance including an allocation of RM100 million for infrastructure development in food storage and distribution, crop integration programmes, and RM64.4 million to develop short-term agrofood projects	Farmers and fishermen
	Postponement of income tax instalment payments for 3 months	SMEs
	Loan/financing moratorium for 6 months	All affected businesses

Strengthening the Economy (RM2 billion)

Amount	Details	Beneficiary
RM2 billion	Implementation of small projects	G1 to G4 contractors
	Implementation of projects worth RM2 billion previously announced including: ▸ Infrastructure projects in FELDA and other areas (RM600 million) ▸ Upgrading dilapidated schools in Sabah and Sarawak (RM350 million) ▸ Upgrading the Perumahan Rakyat Termiskin (RM150 million)	Contractors
	To continue, bring forward and implement projects allocated under Budget 2020, for example: ▸ The East Coast Rail Line (ECRL) project ▸ The Mass Rapid Transit 2 (MRT2) project ▸ The National Fiberisation and Connectivity Plan (NFCP)	Contractors

PRIHATIN (SME+)

In April 2020, the PRIHATIN SME Economic Stimulus Package (or PRIHATIN SME+) worth RM10 billion was implemented to help Small and Medium Enterprises (SMEs) and micro SMEs deal with the negative impact of the pandemic and the subsequent MCOs. An additional RM7.9 billion for the Wage Subsidy Program and RM2.1 billion for the Special Prihatin Grant was bundled in to safeguard the survival of SMEs and alleviate their financial strain.

The breakdown of the initiatives is as follows:

Initiative	Allocation	Details
Enhancement of Wage Subsidy Program	RM7.9 billion	Subsidies for affected employers earning between RM600 and RM1,200 per month per employee earning less than RM4,000 for a period of 3 months
Special Prihatin Grant	RM2.1 billion	A grant of RM3,000 provided to each company, thereby benefitting almost 700,000 micro SMEs
Micro Credit Scheme		▸ Abolition of 2% interest to 0%, totaling a funding of RM500 million under Bank Simpanan Nasional (BSN) ▸ Extended to TEKUN Nasional, with a maximum loan limit of RM10,000 per company with 0% interest – total funding of RM200 million
Rental waiver / discount by owner of private premises		▸ For SMEs in retail sector ▸ Duration: During and 3 months after the MCO period ▸ Further tax exemption equal to the amount of rental discount for April-June 2020 ▸ Rental discounts at least 30% of the usual rates
Reduction of foreign workers levy		▸ A reduction of 25% on work permit levies for foreign workers that had expired between 1 April 2020 and 31 December 2020
Automatic Moratorium		▸ An automatic moratorium from the last day of the MCO for 30 days granted for companies that are required to file any statutory documents to the Companies Commission of Malaysia (CCM)
Extension of deadline to submit company's financial statements to the CCM		▸ Companies with financial years ending from 30 September 2019 to 31 December 2019 received an extension of three (3) months from the last day of the MCO to submit financial statements to the CCM subject to application. No late charges will be imposed.

PENJANA

The Malaysian Government announced the PENJANA or Pelan Jana Semula Ekonomi Negara on 5 June 2020 as a strategy to revive the economy after the COVID-19 curve flattened. PENJANA is a RM35 billion stimulus package with 40 initiatives under three key thrusts targeted at empowering people, propelling businesses and stimulating the economy. Besides hiring incentives and expanded wage subsidies, the package promotes employment by introducing reskilling and training initiatives, ensuring the Malaysian workforce maintains or upgrades its skills.

In its recovery plans, the Government has included incentivising technology adoption to facilitate remote learning and working from home, as it recognises the importance of providing an enabling ecosystem to help workers return to work and adapt to new ways of working. Further consideration has also been given to vulnerable members of society such as the elderly, the differently abled, students in rural areas, the B40 community and the urban poor as they continue to be supported and their general welfare cared for.

Empowering People

Amount	Details	Beneficiary
RM3 billion	Internet Connectivity for education and productivity	All Malaysians
RM2 billion	Reskilling and Upskilling Programmes	200,000 youth and unemployed workers
RM1.5 billion	Incentives to encourage hiring and training of the unemployed	128,778 employees have secured jobs (as of 5 December 2020), mostly in manufacturing, services, wholesale and retail trade (including motor vehicle and motorcycle repair), accommodation and food services, and construction.
RM800 million	Flexible Work Arrangement Incentives	Employees working from home
RM200 million	MY30 Public Transport Subsidy	200,000 Malaysian public transport users
RM200 million	Child Care Subsidy	► 8,000 childcare centres ► 5,000 households ► An estimated 10,000 new early education practitioners
RM108 million	Social Assistant Support for vulnerable groups to benefit	► OKUs ► Single mothers ► Related NGOs
RM75 million	Gig Economy Social Protection and Skilling	30,000 gig economy employees
RM50 million	PEKA B40 Healthcare Support	B40 aged 40 and above
RM 5.3 million	Extension of Wage Subsidy Programme (WSP) for another 3 months from July 2020 until 30 September 2020 with a subsidy of RM600 per employee	2.7 million workers
	Upgrading the National Employment Services Job Portal under PERKESO	50,000 unemployed workers

Propelling Businesses

Amount	Details	Beneficiary
RM2.4 billion	Financial Stress Support	Businesses
RM2 billion	PENJANA SME Financing (PSF) with maximum loan size of RM500,000 per SME at a concession rate of 3.5%	▸ Adversely affected businesses ▸ A total of 5,764 SME applications have been approved with a financing value of RM1.12 billion (as of 25 December 2020)
RM1.6 billion	SME Go-Scheme for Liquidity Support under the SME Bank	SME contractors
RM700 million	Technical and Digital Adoption for SMEs and MTCs via: ▸ SME Digitalisation Matching Grant worth RM100 million ▸ SME Technology Transformation Fund worth RM500 million loan ▸ Smart Automation Grant worth RM100 million, capped at up to RM1 million per company	All SMEs and MTCs
RM600 million	Tax relief of COVID-19 related expenses	All companies
RM500 million	Bumiputera Relief Financing under PUNB and MARA	Bumiputera businesses
RM400 million	PENJANA Microfinancing with aggregated approved financing capped at RM50,000 per enterprise at an interest rate of 3.5%	▸ Micro enterprises ▸ SMEs
RM300 million	▸ Incentives to encourage mergers & acquisitions (M&As) to spur the setup of new businesses and transactions. ▸ Financial relief via income tax rebate and stamp duty exemptions on M&A documents	▸ New businesses ▸ SMEs involved in M&A
RM70 million	Micros and SMEs e-Commerce Campaign	▸ Micro businesses ▸ SMEs
RM70 million	Shop Malaysia Online for Online Consumption	Malaysian SMEs with e-Commerce
RM10 million	Social Enterprises Elevation under MAGIC (matching grant)	Relevant social enterprises
RM5 million	MyAssist SME One Stop Shop	▸ Micro enterprises ▸ SMEs
	Accelerated Payment Terms for GLCs and Large Corporates' Supply Chain	Companies in supply chains of selected GLC and large corporate

Stimulating the Economy

Amount	Details	Beneficiary
RM1.2 billion	Dana PENJANA Nasional	► Start-ups ► Local private sector venture capitalists
RM1.8 billion	Tax Incentives for Tourism Sector	Tourism sector
RM1 billion	Incentives for Property Sector	► Homeowners ► Prospective homebuyers
RM897 million	Tax Incentives for Purchase of Passenger Cars	► Automotive sector ► Consumers
RM750 million	ePENJANA Credit in e-wallet worth RM50 for each Malaysian	15 million Malaysians
RM400 million	Dedicated funding and support	► Agriculture ► Food sector
RM225 million	Dedicated funding and support	► Arts ► Culture ► Entertainment ► Events ► Exhibitions sectors
RM200 million	Support for the commodity sector through 100% export duty exemption from 1 July 2020 to 31 December 2020	Commodity sector
RM100 million	National Technology and Innovation Sandbox	All start-ups
RM50 million	Malaysia As an Attractive Horizon for Businesses via: ► Tax incentives for companies relocating into Malaysia ► Special Reinvestment Allowance for manufacturing and selected agriculture activities from YA2020 to YA2021 ► Additional OPEX for MIDA to undertake marketing and promotional activities ► Establishment of Project Acceleration & Coordination Unit (PACU) at MIDA ► Enhancement of Domestic Investment Strategic Fund (DISF) ► Manufacturing Licence approval for non-sensitive industries within 2 working days	All eligible companies
RM20 million	Digitalisation of Government Service Delivery	All Malaysians
RM20 million	National 'Buy Malaysia' Campaign	Local businesses
RM 20 million	Extended Service Hours in the new normal for Urban Transformation Centres (UTC) and Klinik Kesihatan	All Malaysians
	Proposed COVID-19 Temporary Measures Act	► Affected individuals ► Companies
	Sukuk PRIHATIN	► Retail ► Corporate investors

KITA PRIHATIN

The PRIHATIN Supplementary Initiative Package or KITA PRIHATIN was rolled out on 23 September 2020 to assist lower and middle-income households, (B40 and M40) income groups, local workers and micro companies. The KITA PRIHATIN package worth RM10 billion comprises the Bantuan Prihatin Nasional 2.0 (BPN 2.0)– RM7 billion, the RM2.4 billion Wage Subsidy Programme 2.0 and the Prihatin Special Grant– RM600 million.

The breakdown of initiatives under the KITA PRIHATIN is as follows:

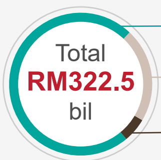
Initiative	Allocation	Details	Beneficiary
Bantuan Prihatin Nasional 2.0 (BPN 2.0)	RM7 billion	Payout period : Phase 1 – October 2020 Phase 2 – January 2021	10.6 million people for B40 and M40 income group
Extension of Wage Subsidy Programme (WSP 2.0)	RM2.4 billion	► Subsidy worth RM600 for each worker ► Application period : 1 October - 31 December 2020	A total of RM12.68 billion wage subsidy was approved under PRIHATIN, PENJANA and KITA PRIHATIN to benefit 322,177 employers and 2.6 million employees (1 April - 25 December 2020)
Prihatin Special Grant	RM600 million	► One-off assistance of RM3,000 per micro SME ► Application period: 1 - 31 October 2020 ► Payout period : November 2020	200,000 micro SMEs

Budget 2021

On 6 November 2020 Malaysia's Minister of Finance, YB Senator Tengku Dato' Sri Zafrul Tengku Abdul Aziz, unveiled the nation's expansionary and comprehensive Budget 2021. Themed "Resilient As One, Together We Triumph" with a strong focus on economic recovery through various financial aids, subsidies and incentives alongside opportunities for job creation and upskilling, the RM322.5 billion budget is anchored upon three core objectives; the "Rakyat's Well-being", "Business Continuity" and "Economic Resilience". In essence, Budget 2021 is a continuity of the PRIHATIN, PRIHATIN SME PLUS, PENJANA, and KITA PRIHATIN stimulus packages.

Budget 2021 Highlights

At RM322.5 billion, Budget 2021 is the largest expenditure in Malaysian history



Operation expenditure **RM236.5 bil** (73.3%)

Development expenditure **RM69 bil** (21.4%)

Allocation for COVID-19 fund **RM17 bil** (5.3%)

The 2021 fiscal deficit is projected at 5.4% of GDP

Government`s statutory debt level to be temporarily raised up tp 60% of GDP, from 55%

Source: Budget 2021 Speech

	2020 (estimate)	2021 (forecast)
Total revenue	RM227.3 bil	RM236.9 bil
Tax revenue	RM153.3 bil	RM174.4 bil
Direct tax	RM115.1 bil	RM131.9 bil
Indirect tax	RM38.2 bil	RM42.5 bil

- The impact of the pandemic is reflected in the total revenue revision for 2020 from RM244.5 billion to RM227.3 billion (a reduction of almost RM18 billion)
- Nonetheless, the Government`s revenue collection in 2021 is expected to increase by 4.2% to RM236.9 billion

Source: Ministry of Finance, Fiscal Outlook, Federal Government Revenue Estimates 2021

Pressing in on Services

Much emphasis is placed on the services sector as it is the primary driver of the country's economy. These are some notable initiatives strengthening Malaysia as a destination for modern and high-value service activities:

	Initiative/ Incentive	Features	Benefits
1	Extension of the Principal Hub (PH) Incentive and Relaxation of Related Conditions	Relaxation of conditions and extension for the PH incentive for another 2 years until 31 December 2022	► Enhance Malaysia's competitiveness among neighbouring countries ► Fortify Malaysia's position as a Global / Regional Hub ► Create high value jobs ► Support the shift to strategic and high value-added services ► As the highest FDI contributor for the services sub-sector under MIDA, it also forges linkages to the local economy through the usage of local professional services
2	Introduction of the Global Trading Centre (GTC) scheme	The GTC scheme with an income tax rate of 10% for a period of 5 years, renewable for another 5 years	► To enhance and simplify tax incentives for trading activities previously covered under the Principal Hub incentives ► Enhance Malaysia's competitiveness among neighbouring countries ► Encourage multinational companies (MNCs) and local conglomerates to centralise their strategic sourcing, procurement and distribution activities at the regional or global level
3	Special Tax Incentive for Relocation of Services Activities to Malaysia and Special Individual Income Tax Rate for Key Post Holders	► Expansion of Special Tax Incentive under PENJANA (Budget 2021) previously allocated to companies relocating their manufacturing businesses to Malaysia to also cover the services sector– especially for those adopting Industry 4.0 and digital technology. ► For new companies: From 0 % - 10% For existing companies with services segment: 10% for up to 10 years ► Focused on investments with significant multiplier effect in digital transformation, employment opportunities and technology transfer ► Individual income tax at a flat rate of 15% for non-residents holding key positions / C-suite positions	► Ease the entry of foreign talents into Malaysia and encourage the transfer of knowledge to Malaysians ► Attract new breeds of investments as new sources of growth to accelerate the recovery of the economy
4	Extension of the Shipbuilding and Ship Repairing (SBSR) Incentive	The tax incentive for SBSR which will expire on 31 December 2020 has been extended until 2022	► Raise industry players' capabilities and competitiveness globally to cope with the economic downturn and falling crude oil prices ► Support Malaysia's aspiration to become an Asian hub for shipbuilding and ship repair activities

The Twelfth Malaysia Master Plan (12MP, 2021-2025) and The New Industrial Master Plan (New IMP, 2021-2030)

Malaysia has much to offer for companies seeking business opportunities in the ASEAN region. To keep Malaysia foremost in investors' minds as their preferred investment destination, the nation's principal investment promotion agency, MIDA, strives to prepare companies to be future-ready and future-proof, thereby ensuring they remain competitive in an era of new and emerging technologies.

Beyond being the driving force facilitating and supporting the country's investment growth, the agency is also advisor to the Government on matters pertaining to the industrial development of both the manufacturing and services sectors. The agency is responsible to ensure the main principles outlined in both the 12MP and New IMP are aligned to future comprehensive policies and regulations.

To develop these two major plans, Working Groups and Focus Groups– comprising the Malaysian think tank, business associations, foreign and local Chambers, Investment Promotion Agencies (IPAs) and private and public agencies– communicate to reach an understanding on the issues and challenges each one faces and work together to formulate the right business agenda towards sustainable business development.

Some of the key strategic directions recommended by the Working Groups and Focus Groups include to:

- Encourage companies' transitions towards digitisation or Industry 4.0
- Strengthen Malaysia's ecosystem
- Promote supply chain sustainability and sectoral self-sufficiency
- Whole-of-government approach and facilitation
- Improve Infrastructure
- Intensify talent development
- Encourage local companies to become 'local champions' and 'technology and innovation creators'
- Tighten technology and innovation collaborations between industries and research institutes by establishing a center of excellence platform.
- Prepare the country's move from a labour intensive economy to a productivity driven and knowledge-based economy
- Create linkages between domestic firms and MNCs in frontier and future technology technologies
- Deepen collaborative and synergistic efforts between Government, industry and academia to outline potential and new key growth areas, strategies, actions plans and policies that will determine the future direction of Malaysia's industrial development.

Report Card on the 12MP

Following the outbreak of COVID-19, the 12MP 's launch has been postponed to early 2021. This will allow for more inputs from all stakeholders concerned as due consideration should be given to policy adjustments and economic reforms needed to rebuild and restructure the economy in this post-pandemic era.

The Government aims to ensure that the 12MP, at its final stage of preparation, is cogent in enabling economic recovery and competitiveness. The rakyat's well-being is foremost, hence appropriate measures will be taken to support economic growth while ensuring prosperity and wealth is shared among all layers of the community.

Some new economic sectors will be earmarked under the 12MP to propel the economy forward, thereby opening up more opportunities for everyone. The focus areas are:

- The development of high potential industries such as aerospace, advanced electrical and electronics,
- The halal industry, creative industry, biomass, and smart farming which have been identified based on their prospects in generating high value-added activities and products
- Advanced technology adoption
- Research and development, and the contributions of innovation and high-skilled employment towards achieving the green agenda

RCEP: An Opportune Connection

The Regional Comprehensive Economic Partnership (RCEP) agreement was finally signed on 15 November 2020 at the 37th virtual ASEAN Summit hosted by Vietnam. Comprising 15 countries from ASEAN and the grouping's dialogue partners (but excluding India), the RCEP is one of the world's largest trade, investment and cooperation partnership which represents 30 per cent of the world's population, and collectively contributes to 30 per cent of global economic activities, as measured by GDP. The signed agreement is the culmination of eight years of negotiations involving 31 rounds of negotiations, eight ministerial meetings and four summits. The Agreement was enforced 60 days after six ASEAN member states and three ASEAN dialogue partners submitted their instrument of ratification to the ASEAN Depositary.

The RCEP, launched in November 2012, consolidates and amalgamates the existing six ASEAN+1 agreements into a single regional trade agreement, tying up many overlapping issues among the participating economies. The aim is to establish a modern, comprehensive, high quality and mutually beneficial economic partnership that will strengthen the regional value chain, and contribute to global economic growth and development. The region covered by the RCEP is a critical FDI location due to the highly integrated global value chain (GVC) that binds all members – from less developed economies to developed economies – together and make it a trade and investment bloc with huge potential.

For Malaysia, the partnership has many opportunities and benefits; especially as a platform to propel recovery in the wake of the COVID-19 pandemic, as the agreement ensures access to markets and an uninterrupted supply chain. Malaysian companies will benefit from the elimination or reduction of tariffs on goods, while a single consolidated tariff and rules governing it will facilitate export and import of goods among RCEP countries. Service providers, including e-commerce companies and small medium enterprise, will be able to enjoy greater market access in terms of cross-border supply and establish a commercial footprint in the RCEP markets.

The RCEP's negative list approach adopted by its 15 members (ASEAN's 10 members together with five of its free-trade partners, namely: Australia, PRC, Japan, ROK and New Zealand) for both trade in services and investments provides transparency on rules, laws and regulations in relation to investments to member countries. The agreement also covers protection, facilitation, liberalisation and promotion of investments.

Within the RCEP agreement is a chapter on economic and technical cooperation, in which members aim to narrow the development gaps and maximise mutual benefits among each other through capacity building and technical assistance.

Appendix 1: Approved Manufacturing Projects, 2020 and 2019

	2020			2019		
	NEW	EXPANSION/ DIVERSIFICATION	TOTAL	NEW	EXPANSION/ DIVERSIFICATION	TOTAL
Number	547	502	1,049	535	453	988
Potential Employment	56,003	24,187	80,190	47,000	31,606	78,606
Total Capital Investment (RM million)*	61,058.7	30,201.9	91,260.6	45,203.4	37,529.1	82,732.5
- Domestic (RM million)	24,305.9	10,374.8	34,680.7	17,425.1	10,863.4	28,288.5
- Foreign (RM million)	36,752.8	19,827.1	**56,579.9**	27,778.3	26,665.8	**54,444.1**

Appendix 2: New Manufacturing Projects Approved by size of Capital Investment, 2020 and 2019

SIZE OF CAPITAL INVESTMENT	2020					2019				
	NO.	EMPLOYMENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	EMPLOYMENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*
Less than RM 2.5 million	11	166	17.1	2.2	**19.3**	20	451	29.6	1.4	**30.9**
RM 2.5 million - < RM 5.0 million	30	529	108.7	9.3	**118.0**	50	1,872	158.1	31.2	**189.3**
RM 5.0 million - < RM 10.0 million	109	3,444	648.8	150.3	**799.1**	116	4,157	682.5	181.5	**864.0**
RM10.0 million - < RM 50.0 million	308	19,890	4,751.8	1,728.4	**6,480.2**	241	15,134	3,378.1	1,985.7	**5,363.8**
RM50.0 million - < RM100.0 million	40	6,261	1,436.4	1,421.1	**2,857.5**	50	5,657	2,060.6	1,499.6	**3,560.1**
RM100.0 million - < RM500.0 million	32	8,234	2,295.5	3,775.9	**6,071.4**	37	8,454	2,860.0	4,556.4	**7,416.4**
RM500.0 million - < RM 1.0 billion	8	6,773	3,392.2	2,018.5	**5,410.6**	10	3,310	4,012.7	2,908.0	**6,920.7**
RM 1.0 billion and above	9	10,706	11,655.5	27,647.1	**39,302.6**	11	7,965	4,243.6	16,614.5	**20,858.1**
TOTAL	**547**	**56,003**	**24,305.9**	**36,752.8**	**61,058.7**	**535**	**47,000**	**17,425.1**	**27,778.3**	**45,203.4**

Note :* Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided

Appendix 3: Approved Manufacturing Projects by Industry, 2020 and 2019

INDUSTRY	2020					2019				
	NO.	EMPLOYMENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	EMPLOYMENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*
Food Manufacturing*****	102	4,846	2,325.4	967.0	**3,292.4**	98	5,065	2,490.0	1,306.6	**3,796.6**
Beverages & Tobacco	17	792	1,027.5	944.0	**1,971.6**	6	477	274.1	0.0	**274.1**
Textiles & Textile Products	53	2,486	979.5	129.2	**1,108.7**	28	1,421	242.1	198.9	**440.9**
Leather & Leather Products	2	40	8.9	30.2	**39.1**					
Wood & Wood Products******	29	2,092	267.3	491.7	**759.0**	34	1,649	300.4	407.4	**707.7**
Furniture & Fixtures	47	2,679	365.5	353.7	**719.2**	40	3,671	179.5	444.0	**623.6**
Paper,Printing & Publishing	70	6,038	918.9	6,918.7	**7,837.6**	47	6,587	515.6	10,239.3	**10,754.9**
Chemical & Chemical Products**	74	3,562	1,636.5	4,633.8	**6,270.3**	88	2,880	2,103.3	2,648.6	**4,751.9**
Petroleum Products (Inc. Petrochemicals)	11	765	12,551.1	2,942.6	**15,493.7**	19	1,095	2,066.8	1,099.0	**3,165.8**
Rubber Products***	42	11,498	3,889.8	405.8	**4,295.6**	27	7,122	1,562.1	3,018.5	**4,580.5**
Plastic Products	64	2,639	867.9	274.7	**1,142.6**	90	4,309	1,537.7	941.5	**2,479.2**
Non-Metallic Mineral Products*******	50	2,774	583.6	1,670.3	**2,253.9**	44	3,279	2,551.7	4,305.2	**6,856.9**
Basic Metal Products	13	4,572	331.1	14,053.7	**14,384.8**	10	1,417	263.3	431.1	**694.4**
Fabricated Metal Products	101	4,241	1,882.2	788.9	**2,671.1**	104	4,759	1,345.5	625.7	**1,971.2**
Machinery & Equipment	93	4,569	2,321.6	4,764.1	**7,085.7**	103	4,559	1,581.1	2,880.9	**4,461.9**
Electrical & Electronics	148	19,541	2,087.6	13,550.8	**15,638.4**	157	22,936	3,866.1	21,793.5	**25,659.6**
Transport Equipment****	91	5,245	2,155.8	1,721.4	**3,877.2**	66	4,276	6,499.1	1,547.3	**8,046.4**
Scientific & Measuring Equipment	30	1,343	347.7	1,898.8	**2,246.5**	14	1,998	110.3	2,409.4	**2,519.8**
Miscellaneous	12	468	132.8	40.4	**173.2**	12	953	293.0	20.5	**313.5**
Natural Gas						1	153	506.8	126.7	**633.5**
TOTAL	**1,049**	**80,190**	**34,680.7**	**56,579.9**	**91,260.6**	**988**	**78,606**	**28,288.5**	**54,444.1**	**82,732.5**

Note : * Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided
** Includes oleochemicals, pharmaceuticals, cosmetics and biotechnology
*** Includes gloves and contraceptives
**** Includes shipbuilding and ship repair
***** Includes oil palm products
****** Includes palm biomass
******* Includes Industrialised Building System (IBS)

Appendix 4: Approved Manufacturing Projects with Investments of RM100 million and above, 2020

INDUSTRY	NEW					EXP./DIV.					TOTAL				
	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*
Food Manufacturing*****						7	702	1,083.7	689.7	**1,773.4**	7	702	1,083.7	689.7	**1,773.4**
Beverages & Tobacco						3	120	860.4	857.1	**1,717.5**	3	120	860.4	857.1	**1,717.5**
Textiles & Textile Products						2	1,036	306.6	0.0	**306.6**	2	1,036	306.6	0.0	**306.6**
Wood & Wood Products******	2	764	0.0	307.4	**307.4**						2	764	0.0	307.4	**307.4**
Paper,Printing & Publishing	2	2,170	0.0	5,254.9	**5,254.9**	4	1,130	244.1	1,206.9	**1,451.0**	6	3,300	244.1	6,461.8	**6,705.9**
Chemical & Chemical Products**	6	941	0.0	4,208.6	**4,208.6**	2	165	801.2	98.8	**900.0**	8	1,106	801.2	4,307.4	**5,108.6**
Petroleum Products (Inc. Petrochemicals)	3	453	11,822.8	137.8	**11,960.6**	2	39	615.8	2,733.6	**3,349.4**	5	492	12,438.6	2,871.4	**15,310.0**
Rubber Products***	8	7,461	3,149.3	144.5	**3,293.8**	1	377	145.8	37.4	**183.2**	9	7,838	3,295.1	181.9	**3,477.0**
Plastic Products						1	65	122.8	15.2	**138.0**	1	65	122.8	15.2	**138.0**
Non-Metallic Mineral Products*******	3	538	28.8	932.2	**961.0**	1	8	0.0	170.0	**170.0**	4	546	28.8	1,102.2	**1,131.0**
Basic Metal Products	3	4,313	201.0	14,051.0	**14,252.0**						3	4,313	201.0	14,051.0	**14,252.0**
Fabricated Metal Products	3	544	633.7	353.2	**986.9**						3	544	633.7	353.2	**986.9**
Machinery & Equipment	3	1,237	0.0	2,345.7	**2,345.7**	7	638	1,485.6	2,192.7	**3,678.3**	10	1,875	1,485.6	4,538.4	**6,024.0**
Electrical & Electronics	12	5,178	424.9	3,769.0	**4,193.9**	18	8,002	767.0	8,353.2	**9,120.2**	30	13,180	1,191.9	12,122.2	**13,314.1**
Transport Equipment****	3	1,434	1,082.6	102.6	**1,185.3**	3	209	147.6	1,247.5	**1,395.1**	6	1,643	1,230.3	1,350.1	**2,580.4**
Scientific & Measuring Equipment	1	680	0.0	1,834.6	**1,834.6**	1	200	110.0		**110.0**	2	880	110.0	1,834.6	**1,944.6**
TOTAL	**49**	**25,713**	**17,343.2**	**33,441.4**	**50,784.5**	**52**	**12,691**	**6,690.7**	**17,602.1**	**24,292.8**	**101**	**38,404**	**24,033.9**	**51,043.5**	**75,077.3**

Note : * Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided
** Includes oleochemicals, pharmaceuticals, cosmetics and biotechnology
*** Includes gloves and contraceptives
**** Includes shipbuilding and ship repair
***** Includes oil palm products
****** Includes palm biomass
******* Includes Industrialised Building System (IBS)

Appendix 5: Approved New and Expansion/Diversification Manufacturing Projects by Industry, 2020 and 2019

INDUSTRY	2020						2019					
	NEW		EXP./DIV.		TOTAL		NEW		EXP./DIV.		TOTAL	
	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*
Food Manufacturing*****	60	1,085.6	42	2,206.9	102	**3,292.4**	67	1,775.6	31	2,021.0	98	**3,796.6**
Beverages & Tobacco	8	191.4	9	1,780.2	17	**1,971.6**	5	262.2	1	11.9	6	**274.1**
Textiles & Textile Products	12	320.2	41	788.5	53	**1,108.7**	14	265.9	14	175.1	28	**440.9**
Leather & Leather Products	1	35.1	1	4.0	2	**39.1**						
Wood & Wood Products******	21	663.1	8	96.0	29	**759.0**	23	612.3	11	95.4	34	**707.7**
Furniture & Fixtures	30	636.1	17	83.1	47	**719.2**	31	596.9	9	26.7	40	**623.6**
Paper,Printing & Publishing	38	6,041.3	32	1,796.3	70	**7,837.6**	31	8,036.0	16	2,718.9	47	**10,754.9**
Chemical & Chemical Products**	41	4,962.1	33	1,308.2	74	**6,270.3**	47	2,728.5	41	2,023.4	88	**4,751.9**
Petroleum Products (Inc. Petrochemicals)	8	12,134.3	3	3,359.4	11	**15,493.7**	13	2,471.9	6	693.9	19	**3,165.8**
Rubber Products***	31	3,874.5	11	421.2	42	**4,295.6**	10	3,069.8	17	1,510.7	27	**4,580.5**
Plastic Products	35	588.1	29	554.5	64	**1,142.6**	54	1,912.9	36	566.3	90	**2,479.2**
Non-Metallic Mineral Products*******	35	1,780.7	15	473.2	50	**2,253.9**	33	4,223.7	11	2,633.3	44	**6,856.9**
Basic Metal Products	8	14,309.2	5	75.7	13	**14,384.8**	5	415.2	5	279.2	10	**694.4**
Fabricated Metal Products	63	2,132.1	38	539.0	101	**2,671.1**	63	1,464.3	41	506.9	104	**1,971.2**
Machinery & Equipment	51	3,091.2	42	3,994.5	93	**7,085.7**	62	3,701.3	41	760.6	103	**4,461.9**
Electrical & Electronics	53	5,439.1	95	10,199.3	148	**15,638.4**	42	7,089.7	115	18,570.0	157	**25,659.6**
Transport Equipment****	44	1,776.8	47	2,100.4	91	**3,877.2**	23	4,246.3	43	3,800.0	66	**8,046.4**
Scientific & Measuring Equipment	5	1,956.2	25	290.2	30	**2,246.5**	5	1,613.3	9	906.5	14	**2,519.8**
Miscellaneous	3	41.7	9	131.5	12	**173.2**	6	84.0	6	229.5	12	**313.5**
Natural Gas							1	633.5			1	**633.5**
TOTAL	**547**	**61,058.7**	**502**	**30,201.9**	**1,049**	**91,260.6**	**535**	**45,203.4**	**453**	**37,529.1**	**988**	**82,732.5**

Note : * Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided
** Includes oleochemicals, pharmaceuticals, cosmetics and biotechnology
*** Includes gloves and contraceptives
**** Includes shipbuilding and ship repair
***** Includes oil palm products
****** Includes palm biomass
******* Includes Industrialised Building System (IBS)

Appendix 6: Approved Manufacturing Projects with Malaysian Majority Ownership by Industry, 2020 and 2019

INDUSTRY	2020						2019					
	NEW		EXP./DIV.		TOTAL		NEW		EXP./DIV.		TOTAL	
	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*
Food Manufacturing*****	50	859.7	33	1,226.8	83	**2,086.4**	57	997.7	21	1,303.5	78	**2,301.1**
Beverages & Tobacco	6	122.9	7	451.3	13	**574.2**	5	262.2	1	11.9	6	**274.1**
Textiles & Textile Products	9	229.1	34	767.0	43	**996.2**	6	117.5	11	119.9	17	**237.4**
Leather & Leather Products			1	4.0	1	**4.0**						
Wood & Wood Products******	14	249.9	7	35.6	21	**285.5**	15	257.3	7	43.5	22	**300.8**
Furniture & Fixtures	20	286.7	15	67.5	35	**354.2**	23	173.0	8	9.0	31	**182.0**
Paper,Printing & Publishing	29	442.8	23	490.3	52	**933.0**	22	407.6	6	134.4	28	**542.0**
Chemical & Chemical Products**	28	582.0	21	1,158.4	49	**1,740.3**	37	1,728.8	21	683.9	58	**2,412.7**
Petroleum Products (Inc. Petrochemicals)	5	11,935.3			5	**11,935.3**	10	1,801.0	3	585.4	13	**2,386.4**
Rubber Products***	26	3,797.1	8	313.8	34	**4,110.9**	9	184.8	11	976.6	20	**1,161.4**
Plastic Products	31	486.3	23	423.3	54	**909.7**	39	1,530.2	26	233.1	65	**1,763.3**
Non-Metallic Mineral Products*******	20	443.6	8	134.2	28	**577.8**	18	936.9	4	1,590.1	22	**2,527.0**
Basic Metal Products	6	258.2	4	75.6	10	**333.8**	3	262.2	1	6.0	4	**268.2**
Fabricated Metal Products	48	1,520.6	26	415.4	74	**1,936.0**	46	866.6	33	472.3	79	**1,338.9**
Machinery & Equipment	42	639.9	33	1,729.6	75	**2,369.4**	42	1,346.2	27	275.5	69	**1,621.6**
Electrical & Electronics	28	997.9	23	1,017.3	51	**2,015.2**	21	3,120.9	30	841.5	51	**3,962.4**
Transport Equipment****	38	1,474.5	32	631.7	70	**2,106.2**	13	3,716.0	35	3,592.8	48	**7,308.8**
Scientific & Measuring Equipment	4	121.7	20	233.5	24	**355.2**	3	87.2	5	27.7	8	**115.0**
Miscellaneous	2	21.5	5	106.3	7	**127.8**	5	64.5	6	229.5	11	**294.0**
Natural Gas							1	633.5			1	**633.5**
TOTAL	**406**	**24,469.7**	**323**	**9,281.5**	**729**	**33,751.2**	**375**	**18,494.3**	**256**	**11,136.6**	**631**	**29,630.9**

Note : * Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided
** Includes oleochemicals, pharmaceuticals, cosmetics and biotechnology
*** Includes gloves and contraceptives
**** Includes shipbuilding and ship repair
***** Includes oil palm products
****** Includes palm biomass
******* Includes Industrialised Building System (IBS)

Appendix 7: Approved Projects in the Engineering Supporting Industries by Sub-Sectors, 2020

SUB-SECTOR	NEW					EXP/DIV					TOTAL				
	NO.	EMPLOY-MENT	DOMESTIC INVEST-MENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVEST-MENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVEST-MENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*
Casting	4	261	37.3	15.2	**52.5**	2	0	16.5	0.0	**16.5**	6	261	53.8	15.2	**69.0**
Jigs & Fixtures	1	33	0.0	11.4	**11.4**	1	0	2.6	0.0	**2.6**	2	33	2.6	11.4	**14.0**
Machining	13	859	211.4	59.8	**271.1**	11	92	7.2	107.2	**114.4**	24	951	218.5	167.0	**385.5**
Moulds, Tools & Dies	7	254	57.3	57.9	**115.2**	4	0	66.1	0.9	**67.0**	11	254	123.4	58.8	**182.2**
Stamping						5	121	38.9	0.0	**38.9**	5	121	38.9	0.0	**38.9**
Surface Engineering	3	191	31.4	0.0	**31.4**	2	2	2.4	0.0	**2.4**	5	193	33.8	0.0	**33.8**
TOTAL	**28**	**1,598**	**337.4**	**144.3**	**481.7**	**25**	**215**	**133.7**	**108.1**	**241.8**	**53**	**1,813**	**471.1**	**252.4**	**723.4**

Note :* Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided

Appendix 8: Approved Projects in the Machinery & Equipment Industry by Sub-Sectors, 2020

SUB-SECTOR	NEW					EXP/DIV					TOTAL				
	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*
Power Generating Machinery & Equipment	2	140	33.8	33.1	**66.9**	.	.	.	.	**.**	2	140	33.8	33.1	**66.9**
Machinery Specialized For Specific Industries	11	1,315	131.7	1,742.4	**1,874.1**	10	489	528.0	2,087.7	**2,615.7**	21	1,804	659.7	3,830.1	**4,489.7**
General Industrial Machinery, Equipment & Parts	27	1,417	365.9	465.7	**831.6**	22	512	1,142.0	55.2	**1,197.2**	49	1,929	1,507.9	520.9	**2,028.9**
Machinery/Equipment Modules or Industrial Parts/Components	10	464	66.2	246.0	**312.2**	10	216	50.7	130.9	**181.6**	20	680	116.9	376.8	**493.8**
Maintenance, Upgrading or Reconditioning of M & E (Refurbishment)	1	16	3.3	3.1	**6.4**	.	.	.	.	**.**	1	16	3.3	3.1	**6.4**
TOTAL	**51**	**3,352**	**600.9**	**2,490.3**	**3,091.2**	**42**	**1,217**	**1,720.7**	**2,273.8**	**3,994.5**	**93**	**4,569**	**2,321.6**	**4,764.1**	**7,085.7**

Note :* Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided

Appendix 9: Approved Projects in the Electrical & Electronics Industry by Sub-Sectors, 2020

SUB-SECTOR	NEW					EXP/DIV					TOTAL				
	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL CAPITAL INVESTMENT (RM MILLION)*
Consumer Electronics	3	161	35.1	31.4	**66.4**	10	607	53.5	104.4	**157.9**	13	768	88.6	135.8	**224.3**
Electrical Appliances	4	383	35.1	133.9	**169.0**	3	79	8.7	0.0	**8.7**	7	462	43.7	133.9	**177.6**
Electrical Components	10	892	291.8	181.9	**473.7**	14	764	48.8	273.8	**322.6**	24	1,656	340.5	455.7	**796.3**
Electronic Components	18	4,931	435.1	2,307.3	**2,742.4**	31	7,943	589.2	7,278.4	**7,867.5**	49	12,874	1,024.2	9,585.7	**10,609.9**
Industrial Electrical	6	401	154.6	192.6	**347.2**	7	150	18.6	650.7	**669.3**	13	551	173.2	843.3	**1,016.5**
Industrial Electronics	12	2,284	118.4	1,522.0	**1,640.4**	30	946	298.9	874.4	**1,173.3**	42	3,230	417.3	2,396.5	**2,813.8**
TOTAL	**53**	**9,052**	**1,069.9**	**4,369.2**	**5,439.1**	**95**	**10,489**	**1,017.7**	**9,181.7**	**10,199.3**	**148**	**19,541**	**2,087.6**	**13,550.8**	**15,638.4**

Note :* Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided

Appendix 10: Approved Manufacturing Projects with Foreign Participation by Source, 2020 and 2019

COUNTRY	2020			2019		
	NO	EMPLOYMENT	FOREIGN INVESTMENT (RM MILLION)*	NO	EMPLOYMENT	FOREIGN INVESTMENT (RM MILLION)*
China	71	10,376	17,752.4	79	14,174	15,300.3
Singapore	120	9,080	8,832.6	118	9,297	5,614.2
Netherlands	14	4,995	6,536.9	11	838	997.4
British Virgin Islands	12	2,460	5,494.8	6	4,723	1,940.2
USA	28	3,136	3,664.1	37	4,578	14,226.2
Hong Kong	27	4,093	2,932.0	24	2,959	1,186.0
Switzerland	9	727	2,762.4	2	113	126.2
Thailand	6	290	1,858.6	3	27	94.0
Japan	59	2,508	1,650.6	53	2,789	3,792.2
Korea,Rep.	8	686	1,379.3	15	695	914.1
Germany	8	171	1,183.5	22	534	848.3
Cayman Islands	5	1,038	920.5	10	1,260	191.3
Taiwan	20	1,831	760.8	28	3,642	5,235.9
Swaziland	1	300	135.3	0	0	0.0
Australia	6	312	94.6	9	294	144.7
France	4	111	75.5	5	400	259.4
Philippines	2	73	64.1	0	0	0.0
Samoa	2	281	60.3	0	0	0.0
Indonesia	2	70	56.2	3	87	41.5
United Kingdom	6	313	52.9	8	1,093	1,765.5
British Indian Ocean Terr.	1	85	47.3	0	0	0.0
Italy	2	83	38.0	5	98	379.4
Belgium	1	32	35.0	0	0	0.0
Belize	1	69	14.1	0	0	0.0
United Arab Emirates	1	32	9.8	1	32	4.5
Saudi Arabia	1	60	7.7	0	0	0.0
Egypt	1	57	6.8	0	0	0.0
Syria	1	57	6.8	0	0	0.0
Sweden	1	17	4.7	0	0	0.0
Canada	1	46	3.9	2	359	102.9
Sri Lanka	1	7	3.1	0	0	0.0
Turkey	1	25	1.1	1	18	106.8
Bermuda	1	0	0.9	1	0	0.9
India	3	55	0.6	13	473	236.2
Nepal	1	0	0.0	1	0	0.3
Others	46	1,048	132.6	86.0	7,491.0	935.7
TOTAL	**474**	**44,524**	**56,579.9**	**543**	**55,974**	**54,444.1**

Note :* Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided
** Number is not totaled to avoid double counting

Appendix 11: Approved Manufacturing Projects by State, 2020 and 2019

STATE	2020						2019					
	NEW		EXP./DIV.		TOTAL		NEW		EXP./DIV.		TOTAL	
	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*	NO.	TOTAL CAPITAL INVESTMENT (RM MILLION)*
W.P. - Kuala Lumpur	9	115.8	8	1,190.7	17	**1,306.5**	10	87.6	2	86.6	12	**174.2**
W.P.- Labuan	2	70.2			2	**70.2**						
Selangor	200	10,323.0	124	8,102.2	324	**18,425.2**	196	8,912.6	119	8,127.6	315	**17,040.2**
Pulau Pinang	70	8,604.0	96	5,509.0	166	**14,113.0**	74	7,352.6	92	9,502.7	166	**16,855.4**
Perak	30	1,914.5	30	1,412.7	60	**3,327.1**	33	2,308.0	39	4,285.2	72	**6,593.2**
Johor	124	3,898.2	108	2,886.1	232	**6,784.3**	103	6,992.8	106	4,462.5	209	**11,455.2**
Negeri Sembilan	24	1,407.0	24	4,771.5	48	**6,178.6**	28	568.6	16	2,997.1	44	**3,565.7**
Melaka	10	518.3	31	1,437.8	41	**1,956.1**	17	322.9	18	556.5	35	**879.3**
Kedah	30	3,086.9	45	975.9	75	**4,062.8**	31	5,701.3	23	5,775.6	54	**11,476.9**
Pahang	16	3,088.0	14	1,696.5	30	**4,784.5**	21	4,350.4	13	592.6	34	**4,943.0**
Kelantan	1	37.1	1	6.7	2	**43.9**	1	5.8	4	12.7	5	**18.5**
Terengganu	5	56.2	4	1,855.2	9	**1,911.4**	4	561.1	4	77.7	8	**638.8**
Perlis	3	599.9	1	13.0	4	**612.9**			1	53.3	1	**53.3**
Sabah	8	11,727.9	7	225.8	15	**11,953.7**	10	6,319.5	5	136.6	15	**6,456.2**
Sarawak	15	15,611.7	9	118.8	24	**15,730.5**	7	1,720.1	11	862.4	18	**2,582.5**
TOTAL	**547**	**61,058.7**	**502**	**30,201.9**	**1,049**	**91,260.6**	**535**	**45,203.4**	**453**	**37,529.1**	**988**	**82,732.5**

Note :* Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided

Appendix 12: Approved Investments in Various Services Sector, 2020 and 2019

SERVICES SECTOR	NUMBER		POTENTIAL EMPLOYMENT		TOTAL CAPITAL INVESTMENT (RM MILLION)**	
	2020	2019	2020	2019	2020	2019
Real Estate	1,045	1,279	NA	NA	31,250.0	40,852.6
Utilities	NA	NA	0	3	10,762.3	33,083.7
Support Services	745	536	6,278	4,065	5,177.8	5,656.7
Telecommunications*	426	537	NA	NA	5,158.9	7,979.0
MSC Status	45	0	3,794	0	3,917.0	0.0
Distributive Trade	613	1,136	18,186	30,379	3,736.6	11,697.8
Hotel &Tourism	38	71	2,088	5,625	2,833.7	5,117.3
Financial Services	28	24	221	119	2,500.9	4,144.6
Global Establishments	141	169	704	1,058	595.2	11,751.4
Transport	7	9	0	0	432.5	501.4
Education Services	429	463	1,887	2,360	195.0	469.8
Health Services	0	7	0	772	0.0	338.1
Other Services	10	2	494	60	138.1	40.2
TOTAL	**3,527**	**4,233**	**33,652**	**44,441**	**66,698.0**	**121,632.6**

Note :NA - Data is not available
* Data for telecommunications is only up to September 2020
** Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided

Appendix 13: Approved Investments in Primary Sector, 2020 and 2019

PRIMARY SECTOR	NUMBER		POTENTIAL EMPLOYMENT		TOTAL INVESTMENT (RM MILLION)*	
	2020	2019	2020	2019	2020	2019
Mining	11	38	24	106	6,011.5	6,591.7
Plantation & Commodities	11	19	804	513	27.0	291.6
Agriculture	1	9	3	407	2.4	135.1
TOTAL	**23**	**66**	**831**	**1,026**	**6,040.9**	**7,018.3**

Note :* Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided

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