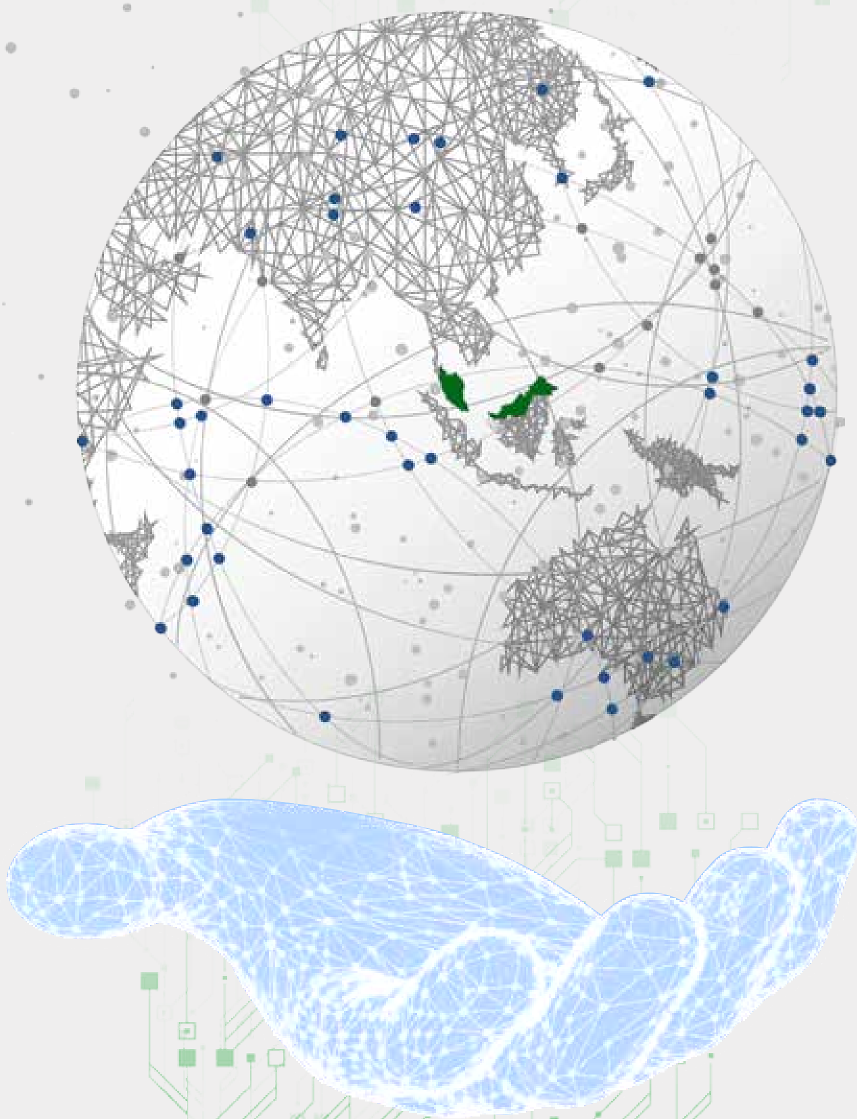
MIDA
MALAYSIAN INVESTMENT DEVELOPMENT AUTHORITY

POWERING RESILIENCE



2021 Malaysia Investment Performance Report

MIDA

MALAYSIAN INVESTMENT DEVELOPMENT AUTHORITY

Contents

1.0 Year in Review 2021

“While there are welcome signs of global recovery, the pandemic continues to inflict poverty and inequality on people in developing countries around the world. Globally coordinated efforts are essential to accelerate vaccine distribution and debt relief, particularly for low-income countries. As the health crisis eases, policymakers will need to address the pandemic’s lasting effects and take steps to spur green, resilient, and inclusive growth while safeguarding macroeconomic stability.”

David Malpass, World Bank Group President

Overcoming the Odds

Global growth is back, and the numbers back it with trade and investment data showing economies across the world benefitting from a year in which movement restrictions and curfews to curb the spread of COVID-19 remained a fact of life for many. Many challenges remained, a key one being vaccine rollout, as this would signal how rapidly economies can reopen. To ensure it remains an attractive investment destination, Malaysia has rolled out a growth framework together with strategic incentives that is forward-looking and focused on sustainability as well as technology.

Uneven Recovery

As vaccines rolled out, movement restrictions eased and borders tentatively reopened, the world entered the second year of the COVID-19 pandemic with strong economic growth momentum that slowed somewhat towards the middle of the year and has become uneven across countries due to a surge of infections from the Delta and Omicron variants of the virus. Access to vaccines and levels of policy support has also played key roles in supporting growth momentum, with emerging market and developing economies (EMDEs), which have less policy space and less access to vaccines, experiencing softer growth versus developed economies.

The labour market reflected the unbalanced growth recovery across the world, with EMDEs being hit harder than developed economies, even as the pandemic accelerated the adoption of automation. The second-half of 2021 also saw rising inflation that the International Monetary Fund (IMF), in the January 2022 update of the World Economic Outlook (WEO), expects to remain elevated over the near-term. The October 2021 update noted that much of the price increase has been due to supply chain bottlenecks caused by pandemic-induced supply-demand mismatches and rising commodity prices.

The IMF projected global GDP to grow by 5.9 per cent for 2021 in the January 2022 update of the WEO, which is unchanged from the October 2021 WEO update. Advanced economies are expected to grow by 5 per cent, which is 0.2 percentage points lower than the October 2021 WEO update, weighed down by growth downgrades for the USA, Germany and Japan. The IMF projected EMDEs to grow by 6.5 per cent, which is 0.1 percentage points higher than the October WEO update, reflecting upgrades among commodity exporters within this diverse group. The People's Republic of China (PRC) is expected to experience a GDP expansion of 8.1 per cent, 0.1 percentage points higher than the October WEO update, and India is forecasted to grow by 9 per cent, which is 0.5 percentage points lower than the October update. The ASEAN-5 is projected to grow 3.1 per cent, which is 0.2 per cent higher than the October WEO update. The IMF has revised upwards GDP growth for low-income developing countries by 0.1 percentage points to 3.1 per cent compared to the October update, which is still considerably lower than the July 2021 forecast of 3.9 per cent on concerns over the slow rollout of vaccines.

The January WEO update noted that supply disruptions in the second-half of 2021 hindering manufacturing activities in Europe and the USA together with the rise in COVID-19 cases, especially in Europe, held back a broader recovery. PRC's second-half slowdown was contributed by COVID-19 outbreaks, power outages interrupting manufacturing, declining real estate investment and a faster-than-expected withdrawal of public investment. While there were signs of a global turnaround in November, the pickup in global trade and upside surprises for services activity and industrial production only managed to partially offset earlier declines.

The wide gaps and the pace of recovery among economies will likely cause medium-term damage to EMDEs compared to advanced economies, as the IMF had noted. Economic and health outcomes across the world will depend on vaccine access, with most advanced economies able to look forward to normalisation in the near-term while many in the EMDEs will have to cope with resurgent infections. Global economic activities are expected to remain muted through 2023, with advanced economies' output projected to return to pre-pandemic trends by 2022, driven largely from additional policy support in the USA. Most of the rest of the world are expected to experience negative output gaps over the next three years. However, government action to address the speed of vaccination is key to limiting medium-term scarring of the economy as such measures are seen to improve output and employment outcomes that will boost growth.

The IMF also warned of visible immediate impact from weather-related disasters, with spillovers beyond the disaster regions, and long lasting implications such as cross-border migration pressures, financial stresses and rising healthcare costs. It noted the urgency in addressing climate change given the extreme weather conditions experienced across the world, including in Malaysia, which saw the worst flooding in 50 years in late December 2021 following continuous rain. The IMF recommended action to reduce greenhouse gas emissions be ramped up, more concrete action on aggregate policy measures such as tax revenue related to environmental policy objectives, that an ideal policy mix of an international carbon price floor reflecting country circumstances, as well as green public investment programmes and research subsidies supporting the development and deployment of new clean energies and low-carbon technologies be adopted and targeted transfer schemes ensuring fair and equitable transitions be implemented.

The January 2022 WEO update also warned of grave risks posed to the global economy from the ongoing climate emergency that witnessed extreme weather conditions across the world in 2021. It said the recurrence of such events would have the most negative impact on low-income and often, low-vaccination countries, besides straining global supply chains. The IMF believes current commitments under the 26th UN Climate Change Conference held in Glasgow to reduce greenhouse gas emissions fall short of limiting the increase in global temperature to two degrees Celsius above pre-industrial levels.

Improving Global FDI, Positive For Malaysia

Global foreign direct investment (FDI) grew strongly in 2021 to an estimated US$1.65 trillion compared with US$929 billion in 2020, surpassing even pre-COVID-19 levels. The United Nations Conference on Trade and Development (UNCTAD), in its Investment Trend Monitor released in January 2022, showed that overall, developed economies saw the biggest rise, with FDI of an estimated US$777 billion, which was three times more than in 2020. Developing economies saw FDI flows increased by 30 per cent to nearly US$870 billion, with East and Southeast Asia witnessing 20 per cent higher inflows; a recovery in Latin America and the Caribbean of inflows to near pre-pandemic levels and; an uptick in West Asia while Africa also saw FDI more than doubling. UNCTAD noted that of the total US$718 billion increase in FDI flows for 2021, more than US$500 billion or close to three quarters of the total, was recorded in developed economies. Developing economies, especially the least developed countries (LDCs), saw more modest recovery in FDI growth.

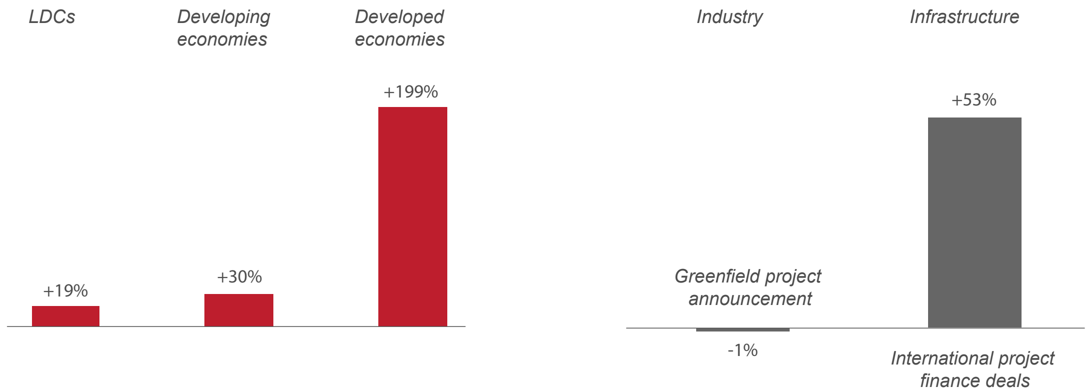
Inflows to the USA more than doubled to US$323 billion from a surge in cross-border mergers and acquisitions (M&As) valued at US$285 billion while FDI to EU was up 8 per cent although flows to the largest economies remained well below pre-pandemic levels. PRC saw a record 20 per cent increase in FDI to US$179 billion whereas India saw 26 per cent lower FDI due to a higher base in 2020 from large

M&As. ASEAN saw FDI inflows up by 35 per cent, with most members witnessing an increase, Brazil's FDI doubled to US$58 billion while FDI inflows to South Africa rose to US$41 billion due in large part to a share-swap deal.

Investors were most confident in the infrastructure sectors, with international project finance deals up by 53 per cent in number and 91 per cent in value backed by favourable long-term financing conditions, recovery stimulus packages and overseas investment programmes. Renewable energy and industrial real estate were the sectors that saw the most numbers. There were sizeable increases in project finance deals in most high-income regions as well as Asia, Latin America and the Caribbean. In comparison, investor confidence in industry and global value chains (GVC) remained weak, with greenfield project announcements down one per cent in number and only up 7 per cent in value while GVC-intensive industries such as electronics fell further. Across industrial sectors, greenfield investment activity remained 30 per cent below pre-pandemic levels on average while only information and communication under the digital sector has recovered. The boom in cross-border M&As were most pronounced in services while the number of deals in information and communication increased by more than 50 per cent to more than a quarter of the total number of M&As.

The recovery of FDI flows to Sustainable Development Goals (SDG)-relevant sectors in developing economies remained fragile, with almost all sectors suffering double-digit declines during the pandemic. The combined value of announced greenfield investments and project finance deals rose by 55 per cent mostly due to several very large deals in the renewables sector, specifically in renewable energy and utilities. The number of SDG-relevant investment projects in developing economies rose by only 11 per cent while in LDCs, the investment trend is less favourable, with SDG projects declining by a further 17 per cent after a 30 per cent fall in 2020.

GROWTH RATES FOR FDI BY REGION AND FOR INVESTMENT PROJECTS BY SECTOR 2021 VS 2020



Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics) for FDI, information from the Financial Times Ltd, fDi Markets (www.fDimarkets.com) for announced greenfield FDI projects and Refinitiv SA for international project finance deals
Note: FDI data in this Trends Monitor are estimated based on partial-year quarterly data. Greenfield project data is estimated based on eleven months

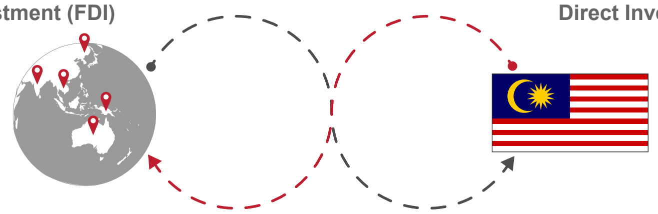
Source: UNCTAD, Global Investment Trends Monitor No. 40

Malaysia has benefitted from the recovery of global FDI flows, recording RM54.9 billion in net FDI inflows in 2021 compared to RM14.6 billion in 2020. The Department of Statistics Malaysia (DOSM) data showed the country receiving RM24.7 billion of net inflows in the fourth quarter of 2021, the highest inflow since the pandemic's outbreak. The inflows for the last quarter of the year were mainly from higher reinvestment of earnings. Net inflows for the third quarter stood at RM12.8 billion, with RM9.1 billion and RM8.2 billion registered for the first and second quarters respectively.

FDI AND DIA PERFORMANCE 2021

Foreign Direct Investment (FDI)

Net inflow RM24.7b
Q321:
Net inflow RM12.8b

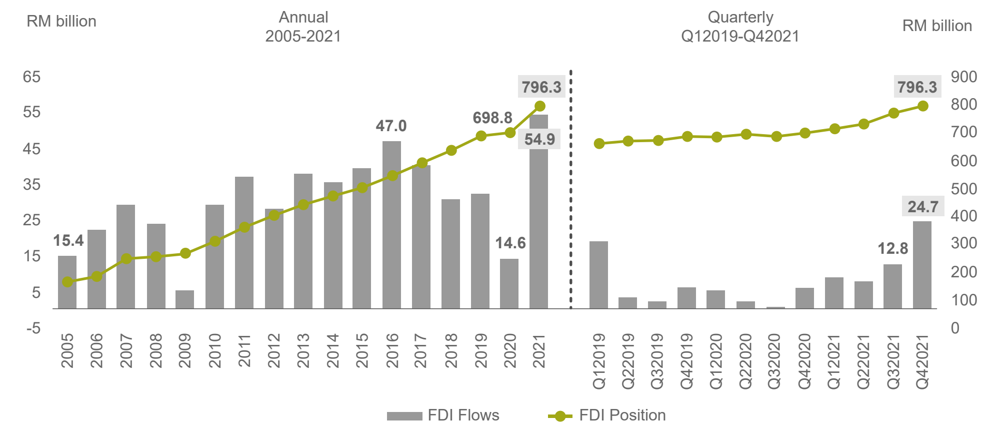


Direct Investment Abroad (DIA)

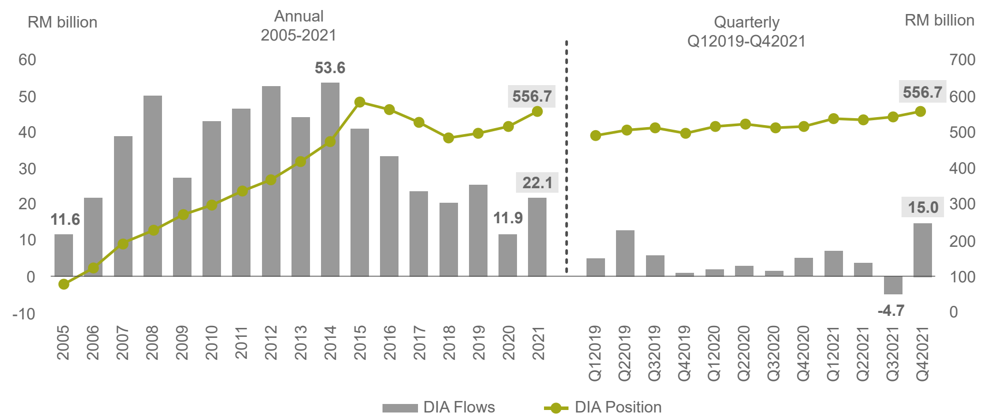
Net outflow RM15.0b
Q321:
Net inflow RM4.7b

Source: Department of Statistics Malaysia (DOSM)

FDI IN MALAYSIA FLOWS AND POSITION, 2005-2021 AND Q1 2019-Q4 2021



DIA FLOWS AND POSITION, 2005-2021 AND Q1 2019-Q4 2021



Source: Department of Statistics Malaysia (DOSM)

The total stock of FDI in the country expanded by RM26.7 billion to RM796.3 billion, with the manufacturing sector being the highest recipient of FDI at RM312.3 billion or 39.2 per cent of the total FDI position. Financial activities were the next highest recipient with a share of 24.7 per cent, followed by mining and quarrying with a share of 6.3 per cent. Singapore remained the top investor at 21.2 per cent, followed by Hong Kong at 10.8 per cent and Japan at 10.4 per cent.

Malaysia's total direct investments abroad (DIA) position improved to RM556.7 billion in the fourth quarter of 2021 compared to RM543.9 billion in the previous quarter largely contributed by financial activities, with a share of 46.1 per cent or RM256.7 billion. Mining and quarrying's share of DIA position stood at 11.7 per cent while agriculture's share stood at 7.9 per cent. The top three destinations were Singapore with a value of RM109.1 billion or 19.6 per cent, Indonesia with RM51.9 billion or 9.3 per cent and, the UK with RM35.2 billion or 6.3 per cent.

Recovery Intact Amid Challenges

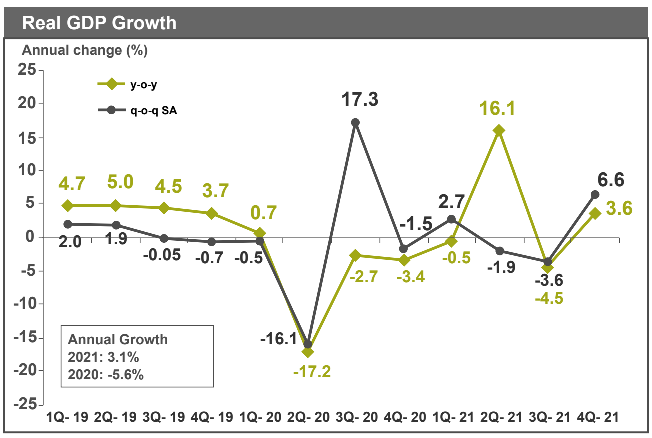
For the second year running, the Malaysian economy's performance has largely been dictated by the volatility of COVID-19 infections together with the measures imposed to contain the spread of the virus. In response to a spike in cases due to the third wave of the COVID-19, the Government reimposed the Movement Control Order (MCO) in June 2021 where a nationwide 'total lockdown' or better known as MCO 3.0 was announced for the social and economic sectors. To reduce the impact on the country's economic growth, the Government allowed five essential economic sectors to operate, namely the manufacturing, construction, selected services, trade and distribution, and agriculture and commodities sectors.

According to DOSM, GDP grew 3.1 per cent in 2021 compared to the contraction of 5.6 per cent in 2020. While economic performance in 2021 is still below 2019 levels, fourth quarter 2021 data showed that there is a gradual recovery as compared to the corresponding quarter of 2019. Overall, economic performance in 2021 was driven by recovery in the manufacturing, services and, mining and quarrying sectors while the agriculture and construction sectors registered declines.

DOSM noted that the growth momentum in the last quarter of 2021 signalled that a recovery is underway despite the surge in COVID-19 infections and the floods that affected parts of the country in late December. This was backed by growth in economic activities as more of the country transitioned into the fourth phase of the four-phase National Recovery Plan (NRP). Other factors supporting this recovery in activities include allowing inter-state travel as MCO restrictions eased, giving a boost to domestic tourism and domestic-related businesses led by entrepreneurs.

Bank Negara Malaysia's (BNM) Fourth Quarter 2021 review showed that the rebound in economic activity was supported by a recovery in the labour market as the unemployment rate declined to 4.3 per cent in 2021. Continued policy support, strong external demand and improvements in household spending also provided further support to the economy. BNM expects the country to continue benefitting from the expansion in global economic and trade activities.

GROSS DOMESTIC PRODUCT (GDP) 2019-2021



Real GDP Growth (2021)

Month	%yoy
July	-7.6
August	-4.7
September	-1.1
October	2.7
November	5.4
December	2.6

Key Factors

- Continued growth in external demand
- Easing of containment measures
- Recovery in the labour market
- Continued policy support

Source: Bank Negara Malaysia (BNM) and Department of Statistics Malaysia (DOSM)

As recognised by the IMF and other inter-governmental organisations, a successful rollout of the vaccination programme is key to a sustainable recovery of health and economic indicators. Malaysia boasts one of the fastest vaccination rollouts in the world, with almost the entire adult population fully vaccinated by the end of 2021 while close to 90 per cent of adolescents aged between 12 and 17 have been fully vaccinated (two doses). Overall, data from the Ministry of Health (MOH) showed that close to four-fifths of the population have been fully vaccinated by the end of the year under the National COVID-19 Immunisation Programme that kicked off in early 2021.

Malaysia employed a whole-of-government and whole-of-society approach involving not just government ministries but also non-governmental organisations and community organisations in the implementation of vaccination targets. Among important steps taken by the MOH were measures to ensure every adult in the economically important and densely populated federal capital of Kuala Lumpur and the surrounding state of Selangor be fully vaccinated through Operation Surge Capacity at the height of the third and most devastating wave of COVID-19 infections. This model of operations was replicated to other parts of the country to ensure faster and more efficient vaccine rollout in the second-half of 2021.

Besides the vaccine rollout, the Malaysian Government continued to be supportive of the economy, businesses and communities through several aid packages and measures. The RM150 billion National People's Well-Being and Economic Recovery Package or better known by its Malay acronym, PEMULIH, was unveiled in late June 2021 to back the NRP through sustaining previous aid programmes, supporting businesses, ramping up vaccination and complementing efforts to put the country back on the recovery path. Besides PEMULIH, an additional RM75 billion worth of aid was rolled out between January and May 2021 aimed at supporting businesses, healthcare, targeted assistance to individuals and wage subsidies under the PERMAI, PEMERKASA and PEMERKASA+ packages.

Gross Fixed Capital Formation (GFCF)

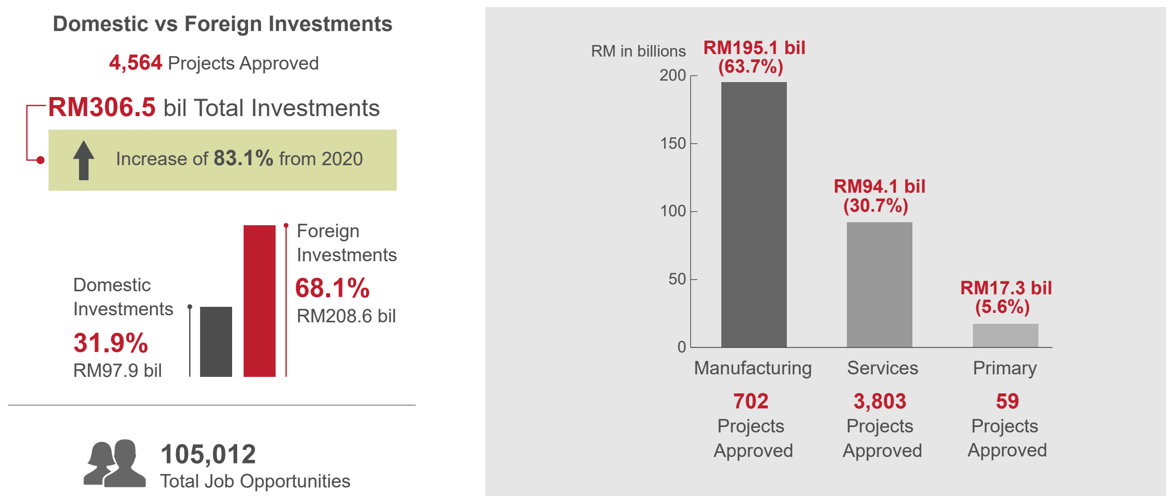
Malaysia's investment on fixed assets as measured through Gross Fixed Capital Formation (GFCF) stood at RM278.5 billion in 2021 compared to RM281.1 billion in the previous year. The final quarter of 2021 saw a decrease of 3.3 per cent in GFCF, although on a quarter-on-quarter seasonally adjusted basis, investment on fixed assets registered an increase of 10.9 per cent.

The private sector contributed 77.6 per cent to Malaysia's GFCF while the public sector contributed 22.4 per cent in 2021.

Overall Investments Approved in 2021

Malaysia recorded a total of RM306.5 billion worth of approved investments in the manufacturing, services and primary sectors for 2021, a surge of 83.1 per cent from 2020. These approved investments involved 4,564 projects and are expected to generate 105,012 job opportunities. The manufacturing sector led investments for the year, recording RM195.1 billion (63.7%), followed by the services sector at RM94.1 billion (30.7%) and the primary sector at RM17.3 billion (5.6%).

OVERALL PRIVATE INVESTMENTS IN MALAYSIA IN 2021



The country remains a competitive investment location for foreign investors despite the multiple headwinds on the global front. FDI contributed to more than 60 per cent of the total approved investments, valued at RM208.6 billion. In terms of ranking, the Netherlands, Singapore, PRC, Austria and Japan were the top five foreign investment sources accounting for RM185.5 billion or 89.9 per cent of the total approved FDI in the country. Domestic direct investment (DDI) accounted for RM97.9 billion of total approved investments. DDI was concentrated in the real estate, mining, financial services and utilities sectors while FDI was concentrated in the E&E, basic metal, global establishments and mining sectors.

Manufacturing Investments Rebounding

Approved investments for the manufacturing sector accounted for nearly two-thirds of the total approved investments in the country at RM195.1 billion from 702 projects, which is a significant improvement from 2020 when RM91.3 billion was approved from 1,050 projects. New projects made up 386 or 55 per cent of the total projects approved while the remaining 316 projects or 45 per cent were from expansion/diversification projects. These approved manufacturing projects are expected to create 74,575 job opportunities in various managerial, technical and skilled positions. This emphasis on creating quality jobs for Malaysia reflects the higher value chain transition of the manufacturing sector.

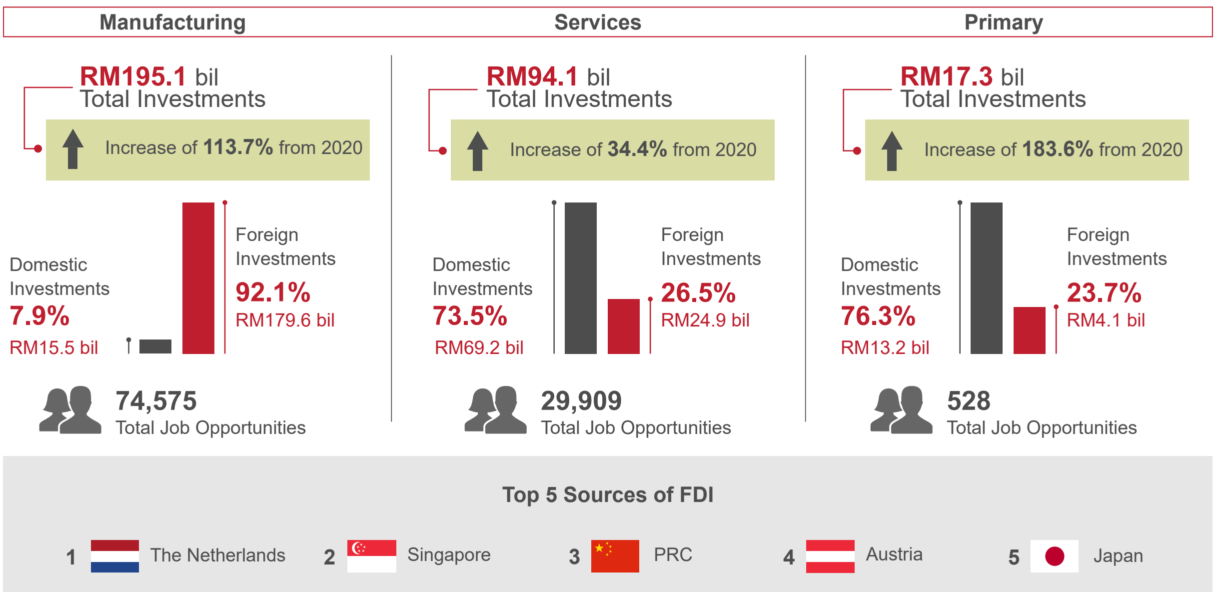
Increasing Interest in Services

The services sector was the second-largest contributor of approved investments for the year. A total of RM94.1 billion worth of investments were approved for this sector with 3,803 projects that are expected to create 29,909 job opportunities for the country. Due to the reopening of more services sub-sectors and relaxation of the MCO, the total approved investments recorded a positive growth of 34.4 per cent. Domestic companies contributed 73.5 per cent or RM69.2 billion of the approved investments, with foreign sources made up the balance of 26.5 per cent or RM24.9 billion. This performance underscores the importance of domestic services companies in fuelling local economies in these challenging times. Majority of the approved domestic investments were in the real estate, financial services, utilities, information and communications as well as support services.

Rising Primary Sector Investments

The primary sector comprises three major sub-sectors namely agriculture, mining and plantation and commodities. A total of 59 projects were approved in 2021 with investments of RM17.3 billion, a considerable increase from the RM6.1 billion approved in 2020. Of the approvals in 2021, RM13.2 billion (76.3%) was derived from domestic investments, while foreign investments contributed RM4.1 billion (23.7%). These investments are expected to provide 528 potential employment opportunities.

DOMESTIC VS FOREIGN INVESTMENTS BY SECTORS IN 2021



Advancing the Nation

To remain an attractive investment destination while committing to sustainability, Malaysia is taking a focused approach with supporting measures shaped by the National Investment Aspirations (NIA), a growth framework to coordinate all policies, strategies and blueprints, while ensuring that incentives and key strengths are up to date and enhanced.

Strengthening Domestic Resilience

As Malaysia gradually recovers from the latest wave of the COVID-19 pandemic resulting from the Omicron variant and eventually transition to endemicity, ensuring a conducive landscape for doing business becomes ever more urgent to support economic growth and sustainability. To that end, the Malaysian Government has introduced several new incentives to attract investors to locate or expand their operations in the country. MIDA, as an arm of the Ministry of International Trade and Industry, believes in working closely with investors and is willing to customise facilitation all the way to the project implementation stage.

To hone Malaysia's competitiveness as an investment destination, a number of value propositions unique to the country and key catalysts such as strategic incentives, strong domestic linkages, talented workforce, infrastructure, as well as regulatory and institutional mechanisms have been enhanced. The National Investment Aspirations (NIA), a forward-looking growth framework aimed at catalysing investments to boost economic recovery, was rolled out to bring a more focused and coordinated approach across all policies related to investments. The NIA is guided by the Shared Prosperity Vision 2030 (SPV 2030), which is a blueprint to bring more socio-economic cohesion and includes ESG standards in line with the sustainability and green growth agendas. (More information on NIA/ESG can be found in the Box Article on page 22-23)

Other incentives include the extension of the special tax incentive that was first offered to the manufacturing sector in 2020 to the services sector under Budget 2021. This incentive aims to spur the recovery of the economy by making the country a destination for high-value activities, among which is an RM42.2 billion project to produce solar modules and cells at Kulim Hi-Tech Park. To-date, three companies have accepted the offer of the special tax incentive out of 22 companies offered.

To accelerate the adoption of automation in 2021, the Government has allocated RM100 million for the Smart Automation Grant (SAG) under the PENJANA stimulus package and RM50 million under the PEMERKASA aid package. The SAG encourages small-medium enterprises and mid-tier businesses to adopt automation and digitalisation in production processes and operations. The SAG works on a 1:1 matching grant basis up to a maximum of RM1 million per company. As at November 2021, grants to 167 companies from the plastics, wood, furniture and textiles industries and services-related industries valued at RM99.5 million have been approved.

MIDA has also rolled out key investment enablers such as the Project Acceleration and Coordination Unit (PACU) and the One Stop Centre (OSC) for Business Travellers to facilitate a more conducive business environment. Responding to the dynamic global changes, MIDA also reviewed selected incentives to ensure they remain relevant and effective in attracting quality investments into the country. This includes the extension of a tax incentive for Shipbuilding and Ship Repairing (SBSR) and Principal Hub (PH) until 2022, the introduction of a Global Trading Centre (GTC) incentive to enhance and simplify tax incentives for trading activities, the expansion of the Special Tax Incentive under PENJANA to include selected services sectors, the expansion of the Green Technology tax incentive to include Rainwater Harvesting System (RHS) projects and the Digital Ecosystem Acceleration Scheme (DESAC) to attract quality digital projects into Malaysia.

The NRP is a four-phase roadmap to exit from the COVID-19 crisis and return to post-pandemic normalcy, which included the reopening of the economy in phases. The NRP also serves as a reference point for businesses to plan and have some certainty in really volatile times. MIDA has always employed an ecosystem approach to promoting the entire value chain of industry clusters and is positioning Malaysia as an alternative base in Asia by ensuring the resilience of companies' supply chains. Foreign companies are encouraged to locate or expand in Malaysia, with added support from domestic companies as reliable suppliers due to their integration into the global MNCs' supply chain networks.

MIDA will continue to attract quality investments with greater specialisation in eight strategic and high impact sectors under the 12th Malaysia Plan (12MP), namely E&E, global services, aerospace, creative, tourism, halal, smart farming and biomass. Given the current pandemic impact on health safety, work and business, the Government is also intensifying digitalisation to increase the ease of doing business for investors in the country. The 12MP will complement the New Industrial Master Plan (NIMP), a framework to share the next phase of economic growth for the period of 2021-2030. The NIMP has also placed greater emphasis on the services section, focussing on sub-sectors with relatively high value-added activities that are tradeable, have high knowledge intensity and linkages with the rest of the economy, and the potential to generate high income jobs.

Furthermore, MIDA has been targeting technologically advanced products and services projects by staying abreast of the latest developments, including Industry 4.0. Given the rapid evolution of industries in line with technological advances within cyber-physical systems, Malaysia must embrace this trend to remain competitive in the global business landscape. Collaborations with global players in high-value sectors such as ICT, data analytics, design and development will be instrumental in propelling Malaysian companies up through the global value chain while enabling the rise of local champions.

> “Collaborations with global players in high-value sectors such as ICT, data analytics, design and development will be instrumental in propelling Malaysian companies up through the global value chain while enabling the rise of local champions.

R&D and innovation are key enablers to the digital economy. To ensure that R&D policies are effective and spillovers are internalised, the Promotion of Investments Act (PIA) 1986 was amended to reflect a new R&D definition via the Finance Act 2018. This was further amended via the 2022 Finance Bill on 8 November 2021. The latest amendment includes information on the transitional provision for the applicability of the new R&D definition to the existing companies which has been approved with the R&D status and monitoring requirement for the R&D status every five years. This will ensure companies undertaking the R&D activities provide local solutions with the latest technology development that targets Malaysia's needs and priorities.

Building the Economy Together

The role of domestic investments is crucial for the growth of Malaysia's industrial development. The 12MP and the 10-year NIMP provide strategic measures in strengthening and transforming domestic players. MIDA continues to identify potential partnerships between foreign MNCs and domestic companies by encouraging these MNCs to harness outsourcing opportunities offered by Malaysian companies, intensifying technology acquisition support for Malaysian-owned companies and scaling-up local companies to achieve international standards/certifications compliance through its wide range of local and global networks.

MIDA's strategies to encourage domestic investments include assisting domestic companies to adopt IR4.0 technologies by offering various incentives, encouraging the digitalising of business processes, growing domestic linkages through the use of domestic inputs and expansion of domestic supply chains and, increasing economic complexity through the development of sophisticated products and services.

To implement these strategies, a framework was formed to complement the growth of domestic companies through the Domestic Investment Coordination Platform (DICP) initiative, the Triple Helix Cooperation Programme, the SME Investment Desk, engagements with trade associations and chambers of commerce, domestic investment seminars, and Industry Linkages.

The Domestic Investment Strategic Fund (DISF) is focused on assisting Malaysian-owned companies in targeted industries to get into high value-added, high technology, knowledge-intensive and innovation-based industries. The DISF's aim is to harness and leverage outsourcing opportunities created by MNCs operating in Malaysia, intensifying technology acquisition by domestic companies and enabling them to obtain international standards/ certifications in strategic industries.

The DICP provides a range of advisory services and types of facilitation that includes business match-making, access to sources of capital (debt and equity), assisting in an initial public offering in addition to coordinating and arranging for mergers and acquisition, divestments and takeovers.

The Supply Chain Coordination Programme promotes strategic collaborations between domestic companies with MNCs, financial institutions and technology providers, to upgrade the local supply chains with technological capabilities.

MALAYSIA'S COMMENDABLE GLOBAL RANKINGS

1st
Top country in emerging Southeast Asia for Foreign investment
Global Opportunity Index, Bloomberg 2022

3rd
Most innovative upper middle-income economy in the world
Global Innovation Index 2021, World Intellectual Property Organization (WIPO)

2nd
Most competitive country in ASEAN

25th
Most competitive country in the world
World Competitiveness Yearbook 2021, IMD

9th
Top city in Asia Pacific Region, Kuala Lumpur
Global Technology Industry Survey 2021, KPMG

13th
On infection management, vaccine roll outs and social mobility
Nikkei COVID-19 Recovery Index

Malaysia Remains A Preferred Destination

Despite the economic turbulence resulting from the continuing COVID-19 pandemic and subsequent movement restrictions imposed by governments worldwide, Malaysia remains an attractive location in Asia for investors both foreign and domestic, especially when it comes to high-value manufacturing and global services. The nation's strong fundamentals, coupled with the Government's pro-business policies, have ensured that strong levels of investments into these areas have been maintained.

This is evidenced by the total approved investments and the announcement of major projects in 2021. Malaysia recorded a total of RM306.5 billion worth of approved investments in the economy (manufacturing, services and primary sectors) in 2021. These investments involved 4,564 projects and the generation of 105,012 jobs. FDI accounted for almost 68.1 per cent (RM208.6 billion), while DDI made up for the remaining 31.9 per cent, or RM97.9 billion.

In the past two years alone, Malaysia has attracted investments from several MNCs including Fortune 500 companies in high-end and high-technology industries. Existing MNCs also continue to undertake major reinvestments into high-end products and activities in the country, illustrating Malaysia's on-going value proposition to investors. These reinvestments by existing companies bear witness to the continued success to retain and encourage high-value operations by MNCs in Malaysia.

Examples of High Value Investments in Malaysia

Risen Solar Technology Sdn. Bhd.

Location: Kulim, Kedah

Origin: PRC

Product/Service: Design, development and manufacturing of solar module and solar cell

LG Petronas Chemicals Malaysia Sdn. Bhd.

Location: Pengerang, Johor

Origin: ROK and Malaysia

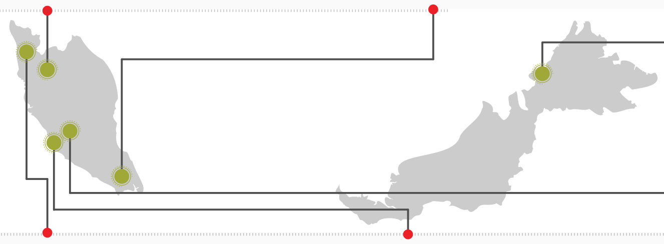
Product/Service: Nitrile butadiene latex (NBL)

SK Nexilis Malaysia Sdn. Bhd.

Location: Kota Kinabalu, Sabah

Origin: ROK

Product/Service: Electro deposited copper foil



Solarpack Suria Sungai Petani Sdn. Bhd.

Location: Sungai Petani, Kedah

Origin: Malaysia and Spain

Product/Service: Renewable Energy - Large Scale Solar

ILM Logistics (M) Sdn. Bhd.

Location: Port Klang, Selangor

Origin: Malaysia

Product/Service: Cold chain facilities and services for food products

Berjaya Alam Murni Sdn. Bhd.

Location: Hulu Selangor, Selangor

Origin: Malaysia

Product/Service: Integrated waste management project

The Government is at the forefront to entice more high-value investments in the areas of technology and innovation to position Malaysia as an alternative supply chain hub in Asia. Companies based here can leverage Malaysia's trade and investment complementarity with its regional peers to create opportunities for further growth and development.

MIDA continues to uphold its critical and pivotal roles in contributing significantly to Malaysia's rapid industrial development, particularly in the manufacturing and services sectors, by promoting both FDI and DDI. Through policy reviews and targeted approaches, the Government will ensure that Malaysia remains as a preferred investment location in Asia with a favourable environment for quality investments. MIDA has ongoing negotiations with several world-renowned companies from various sectors such as automotive, chemical, advanced electronics and deep-tech to make Malaysia a high-value manufacturing and global supply chain hub as well as a services and regional operations hub.

The Malaysian Advantage

Availability of **excellent** infrastructure, telecommunication, financial and banking services, supporting industries, and a skilled and trainable workforce

Strategically located in the Asia Pacific rim and the **centre of ASEAN**

Market opportunities offered through **16 Free Trade Agreements**

Globally recognised as an **attractive investment destination**

Malaysia is globally recognised as an **attractive business location** - affirmed by IMD World Competitiveness Yearbook 2021 (25th) and Global Opportunity Index by Bloomberg 2022 (Top Country in Emerging Southeast Asia for Foreign Investment)

One of the **most comprehensive ecosystems** in the region in the E&E, M&E, aerospace, automotive, and medical devices industries, among others

Ongoing strategies to **foster the development** of local businesses

Favourable policies for technology collaborations such as Industry4WRD, JENDELA, and the National Fourth Industrial Revolution (4IR) to explore emerging technologies such as Big Data Analytics, cloud computing, Artificial Intelligence and the Internet of Things

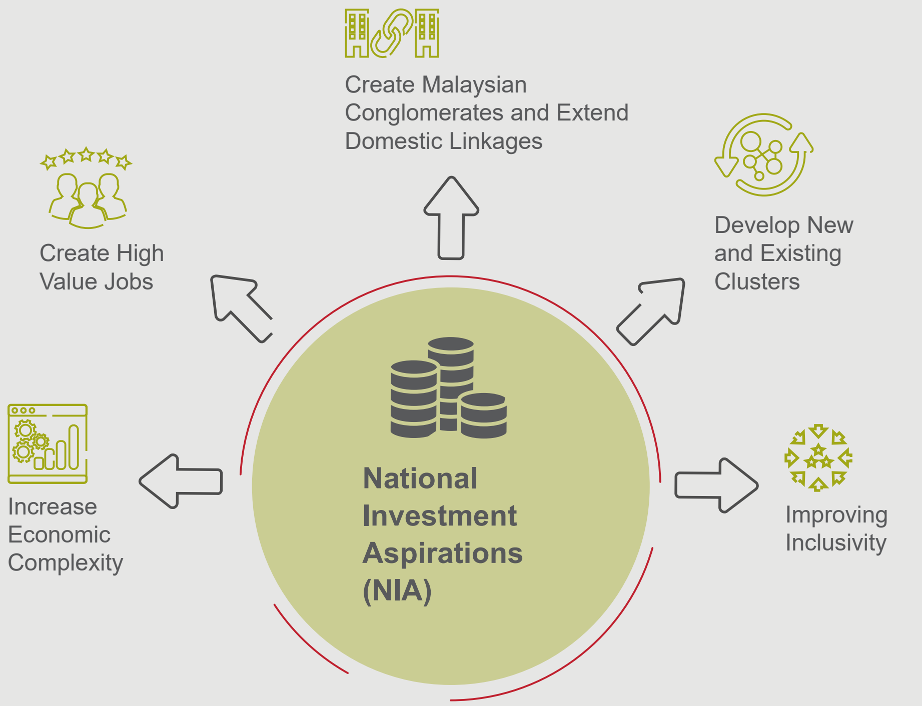
Built Upon ESG Principles

The National Investment Aspirations (NIA) is a set of priorities that serves as a framework for attracting investments which have high economic impact value and at the same time, comply with environmental, social and governance (ESG) standards.

The NIA is guided by the Shared Prosperity Vision 2030 (SPV 2030), a comprehensive socio-economic blueprint seeking to raise the income levels of Malaysians through sustainable development with fair and equitable distribution of wealth. The NIA's focus is cohesion across all national policy and initiatives related to investments, which include the New Industrial Masterplan (New IMP) and the 12th Malaysia Plan (12MP).

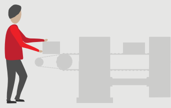
Under the NIA, investment strategies will prioritise high technology and sustainable investments while intensifying innovation to strike a balance between economic and environmental sustainability anchored on global ESG benchmarks to support growth along the supply and value chains.

- The NIA highlights **five core parameters**, as follows:



These five core parameters aim to develop high value-added products and services with high local R&D inputs and innovation; provide higher incomes through high-skilled jobs; create sustainable domestic businesses that can expand and integrate domestic linkages into regional and global supply chains; develop new and existing industrial clusters and; improve inclusivity that supports the SPV 2030 agenda. These core parameters will not only support the country's long-term growth but also provide a pathway for investors to access new market opportunities.

The transforming strategic sectors that have been identified following ESG-based practices include:

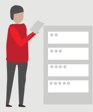


Manufacturing

Transformation to drive increased manufacturing of sustainable products e.g. EVs and adoption of ESG practices such as having a positive social impact

Services Sector

Incorporation of latest ESG practices into services such as corporate governance standards and sustainable investing



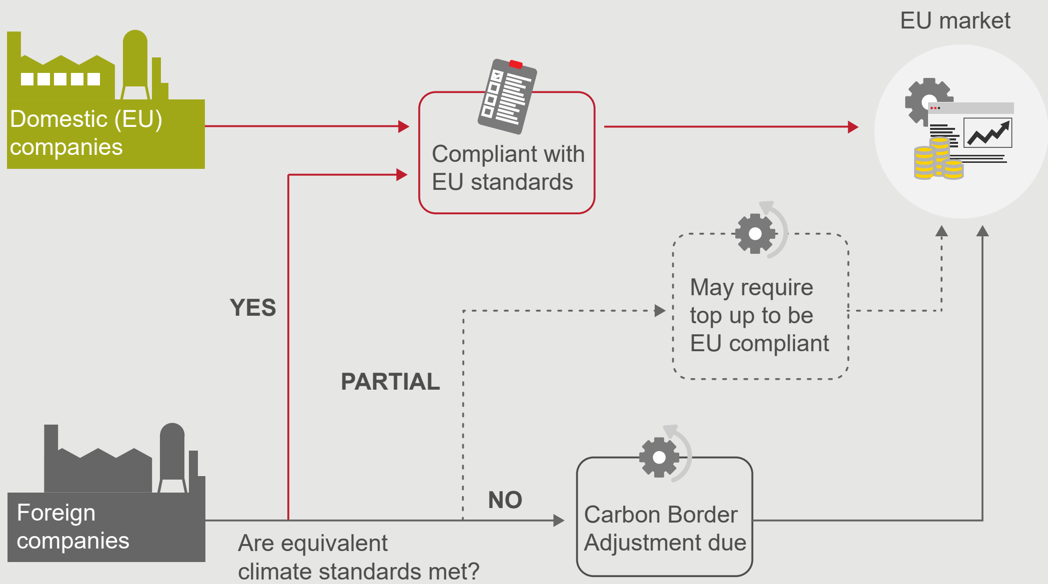
High-Tech Sectors

Integration of advanced technologies with latest ESG trends such as green data centres

Energy and Power

Accelerated transition of energy and utility industries towards renewable sources

Investors are increasingly focusing on the ESG agenda as a deciding factor when seeking for a suitable manufacturing hub. It makes good business sense to adopt ESG standards as this will lead to sustainable growth. One key area that will decide where FDI goes and therefore, the decision to set up manufacturing operations, is access to renewable energy. This is vital as more than 68 per cent of Malaysia's exports go to Singapore, PRC, the USA, Japan, Hong Kong, Thailand, Republic of Korea and Vietnam, countries that are actively considering a price on carbon. Malaysian businesses must also consider that an EU carbon border tax is slated for implementation by 2023.



Source: BCG analysis

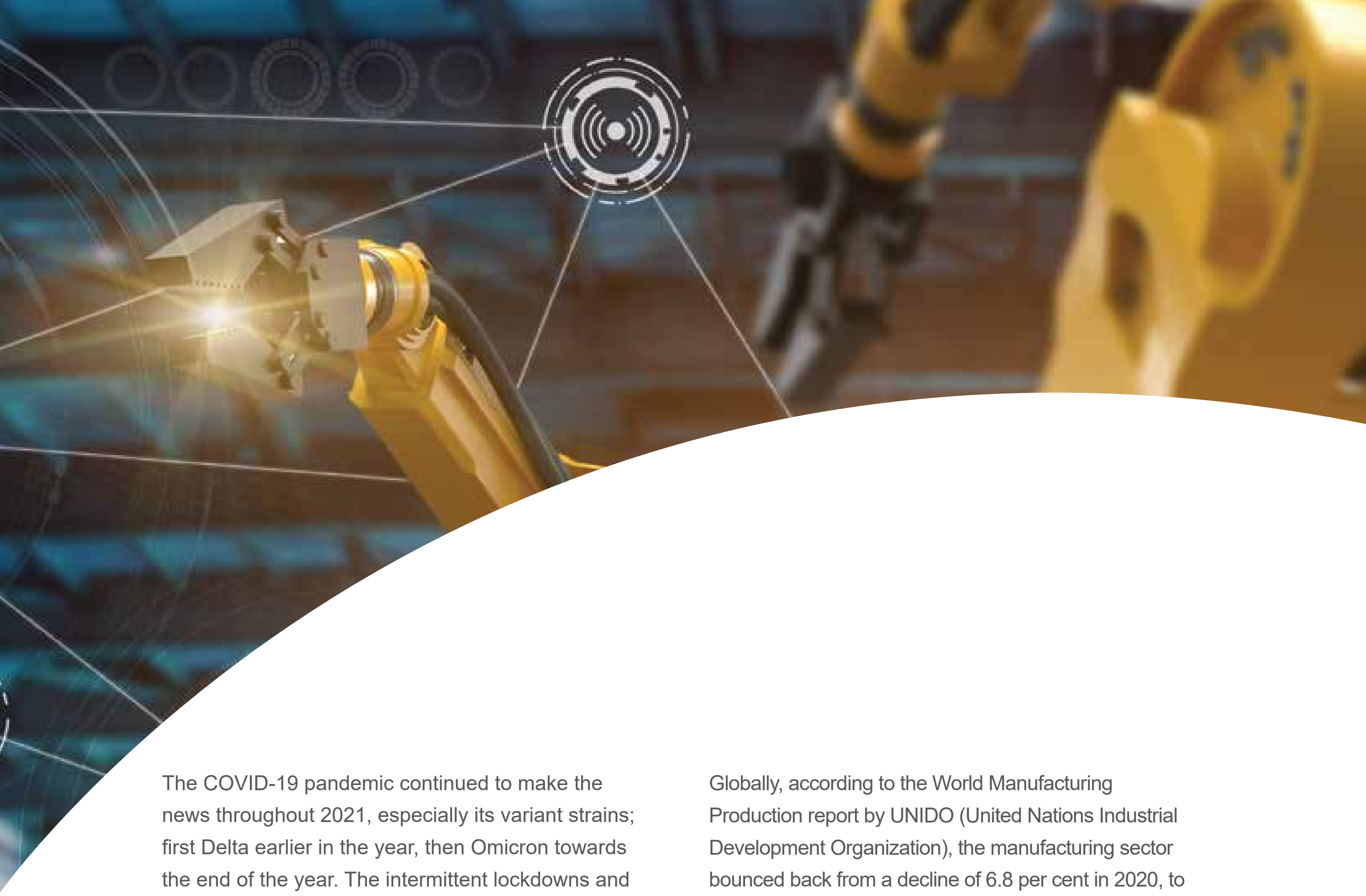
2.0 Performance of the Manufacturing Sector

“Manufacturers should now focus on a twin transformation: intelligent digitisation and ambitious ESG goal-setting. If they are executed effectively, they are likely to reinforce each other to create a more competitive enterprise and a more habitable planet.”

Stéphane Souchet
Global Sector Head, Industrial Manufacturing
KPMG International

Resurging Performance

Malaysia's manufacturing sector sees yet another year of incredible growth, with over double the investments seen in 2020. Foreign investors in particular demonstrated their deep confidence in the nation, bringing in over 90 per cent of total investments into the manufacturing sector.



The COVID-19 pandemic continued to make the news throughout 2021, especially its variant strains; first Delta earlier in the year, then Omicron towards the end of the year. The intermittent lockdowns and movement restrictions have accelerated several trends to sustain business continuity and resilience in the manufacturing sector worldwide.

These trends include the increased use of automation and smart manufacturing technologies related to the Fourth Industrial Revolution (IR4.0), such as Internet of Things (IoT), Artificial Intelligence (AI), machine learning and big data analytics. While using such technologies can increase efficiency and reduce reliance on manpower, especially foreign labour, this also entails upskilling and reskilling of workers.

Another trend is the adoption of 3D or additive manufacturing, which is especially useful when it comes to rapid prototyping, as well as faster production of components across the entire manufacturing sector, particularly in the aerospace, defence, and automotive industries. Additive manufacturing also allows for design freedom, improved productivity, and a faster time-to-market.

Green manufacturing is also on the rise. More companies, as well as governments, are paying greater attention to ESG requirements as energy and material costs increase and regulations become more stringent. Products are now being designed and engineered for greater durability, ease of repair, and recycling, as well as energy efficiency.

Globally, according to the World Manufacturing Production report by UNIDO (United Nations Industrial Development Organization), the manufacturing sector bounced back from a decline of 6.8 per cent in 2020, to grow by 12 per cent in the first quarter of 2021, 17.7 per cent in the second quarter, and 5.7 per cent in the third quarter, as compared to the same quarter in 2020.

Another Magnificent Year

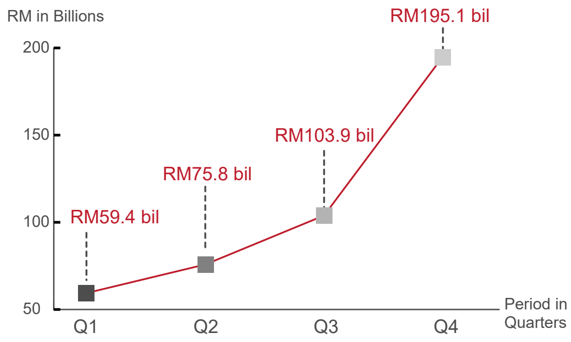
Malaysia's manufacturing sector continued to be resilient throughout the year despite the various headwinds in its way. For instance, of the RM98.7 billion worth of approved investments in the first quarter of 2021, the manufacturing sector accounted for RM59.4 billion, or a noteworthy 60.2 per cent of the total. Foreign Direct Investments (FDI) inflows remained strong at 89.1 per cent of total investments into the sector.

While growth in the manufacturing sector slowed in the second quarter of 2021, with fresh investments of RM16.4 billion, it picked right back up in the third quarter, bringing in RM28.1 billion worth of investments. By the end of 2021, at RM179.6 billion (92.1%), FDI more than tripled when compared to 2020's figure of RM56.6 billion, while DDI brought in the remaining RM15.5 billion (7.9%).

Contributing more than half of all total approved investments into Malaysia, the manufacturing sector benefitted from the use of automation and other IR4.0-related technologies.

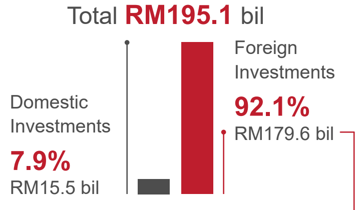
KEY HIGHLIGHTS OF THE MANUFACTURING SECTOR FOR 2021

Manufacturing Sector in 2021



While growth in the manufacturing sector slowed in the second quarter of 2021, with fresh investments of RM16.4 billion, it picked right back up in the third quarter, bringing in RM28.1 billion worth of investments

Domestic vs Foreign Investments



3X FDI more than tripled when compared to 2020's figure of RM56.6 billion

INDUSTRY BRIEF

Domestic vs Foreign Investments

RM195.1 bil Total Investment

702 Projects Approved

Expansion/ Diversification vs New Projects

- 78.6% — RM153.4 bil New Projects
- 21.4% — RM41.7 bil Expansion/ Diversification Projects

74,575 Total Job Opportunities

Approved Domestic Investments

RM15.5 bil Total Investments

- 56.1% — RM8.7 bil New Projects
- 43.9% — RM6.8 bil Expansion/ Diversification Projects

Approved Foreign Investments

RM179.6 bil Total Investments

- 80.6% — RM144.7 bil New Projects
- 19.4% — RM34.9 bil Expansion/ Diversification Projects

Top 5 Domestic Investments

- **RM4.9 bil** Rubber Products
- **RM2.3 bil** Chemicals and Chemical Products
- **RM1.7 bil** E&E
- **RM1.6 bil** Food Manufacturing
- **RM1.2 bil** Fabricated Metal Products

Rubber products, chemicals & chemical products and E&E **made up 57.4% of approved DDI**

Top 5 Foreign Investments

- **RM146.3 bil** E&E
- **RM19.2 bil** Basic Metal Products
- **RM3.8 bil** Food Manufacturing
- **RM3.5 bil** Chemicals and Chemical Products
- **RM2.0 bil** Scientific and Measuring Equipment

These top 5 industries comprise **97.3%** of total FDI

According to the International Institute for Management Development's (IMD) World Competitiveness Yearbook 2021, Malaysia ranked 25th (out of the 64 economies benchmarked). This is an improvement from 2020's ranking of 27th and places Malaysia second among the five ASEAN member states ranked by the Yearbook, ahead of Thailand (28th), Indonesia (37th), and the Philippines (52nd).

Malaysia's strong performance and improvement in rankings demonstrate the nation's competitiveness as the preferred location for high-value-added manufacturing and global services hubs, buoyed by its strong presence in the ASEAN region and its vibrant, sustainable post-pandemic economic recovery.

Foreign Direct Investment (FDI) Demonstrates Robust Performance

FDI continued to be the mainstay of total approved investments in Malaysia, illustrating that the Malaysian Government's pro-business policies and initiatives to encourage foreign investments met with resounding success. These included the One-Stop-Centre (OSC) and Business Travelers Centre. MIDA's 'Welcoming Investors, Keeping You Safe' programme is an integral part of the OSC designed to expedite the process of investors planning to do business in Malaysia.

Throughout 2021, foreign investors contributed mostly to the total new investments of RM153.4 billion while the remaining RM41.7 billion went towards expansion/diversification projects.

Foreign investors concentrated on the high-value-added E&E industry, bringing in RM146.3 billion, or 81.5 per cent of total FDI. Other industries with high levels of FDI were basic metal products (RM19.2 billion), food manufacturing (RM3.8 billion), chemicals and chemical products (RM3.5 billion), scientific and measuring equipment (RM2 billion) and transport equipment (RM1.2 billion).

The Netherlands topped the list of foreign investing countries at RM74.9 billion, followed by neighbouring Singapore (RM46.6 billion), Austria (RM18.9 billion), the People's Republic of China, PRC (RM16.6 billion), and Japan (RM7.5 billion). These five countries jointly accounted for RM164.5 billion (91.6%) of total foreign investments approved in the manufacturing sector for 2021.

Resilient Domestic Champions

While FDI formed the vast majority of investments into the manufacturing sector in 2021, domestic direct investment (DDI) also played a crucial role in Malaysia's economic growth.

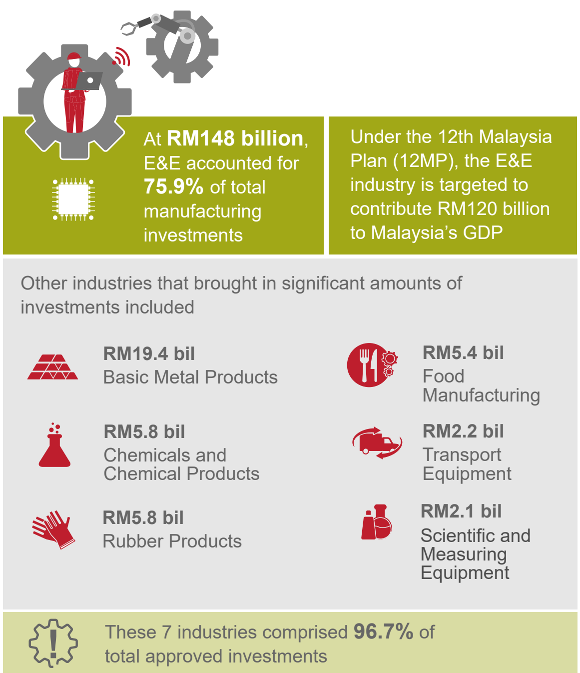
In 2021, DDI in the manufacturing sector was worth RM15.5 billion spread across mainly new projects. The three industries that attracted the most DDI were rubber products at RM4.9 billion, followed by chemicals and chemical products (RM2.3 billion), and E&E (RM1.7 billion). These industries made up 57.4 per cent of total approved domestic investments. This was followed by the food manufacturing (RM1.6 billion); fabricated metal products (RM1.2 billion); transport equipment (RM992.1 million); M&E (RM576.9 million); plastic products (RM488.6 million); paper, printing and publishing (RM329.8 million); non-metallic mineral products (RM311.3 million); basic metal products (RM264.7 million); and furniture and fixtures (RM203.4 million) industries.

Leading Industries

As a major global manufacturing hub for E&E, it is no surprise that the industry secured the highest number of investments into the Malaysian manufacturing sector. At RM148 billion, E&E accounted for 75.9 per cent of total manufacturing investments. Under the 12th Malaysia Plan (12MP), the E&E industry is targeted to contribute RM120 billion to Malaysia's GDP.

Other industries that brought in significant amounts of investments included basic metal products (RM19.4 billion), chemicals and chemical products (RM5.8 billion), rubber products (RM5.8 billion), food manufacturing (RM5.4 billion), transport equipment (RM2.2 billion), and scientific and measuring equipment (RM2.1 billion). These seven industries comprised 96.7 per cent of total approved investments.

LEADING INDUSTRIES OF THE MANUFACTURING SECTOR IN 2021



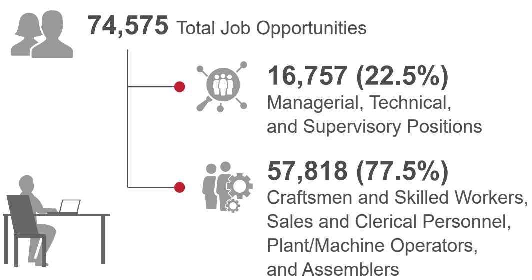
A Solid Talent Pipeline

The projects approved in 2021 are expected to create a total of 74,575 employment opportunities. Of these, 16,757 (22.5%) were for managerial, technical, and supervisory positions. Meanwhile, 57,818 (77.5%) job opportunities were created for craftsmen and skilled workers, sales and clerical personnel, plant/machine operators, and assemblers.

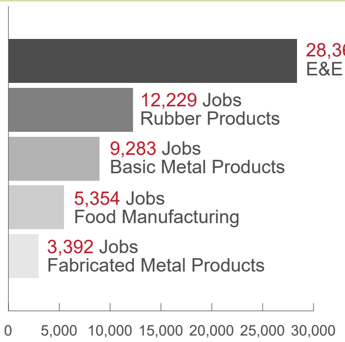
The top five industries in terms of providing employment opportunities; namely, E&E (28,362 jobs), rubber products (12,229 jobs), basic metal products (9,283 jobs), food manufacturing (5,354 jobs), and fabricated metal products (3,392 jobs), contributed a significant proportion (58,620 jobs or 78.6%) of the overall total potential employment for 2021.

The Government also continued to grant approvals for expatriate posts, particularly for managerial and technical positions for both Malaysian- and foreign-owned companies. A total of 508 expatriate posts were approved in 2021, of which 160 were key posts that could be permanently filled by foreigners. The remaining 348 were term posts, generally granted for three to five years where Malaysians are trained to eventually take over the posts.

NEW JOB OPPORTUNITIES IN THE MANUFACTURING SECTOR IN 2021



Sub-Sectors with Most Job Opportunities



The top 5 industries contributed a significant proportion (**58,620 jobs or 78.6%**) of the overall total potential employment for 2021

CIPE Complementing Quality and Notable Projects

The capital intensity (as measured by Capital Investment Per Employee, CIPE) of projects approved in the manufacturing sector in 2021 was RM2,615,996 – a noteworthy increase of 130 per cent from last year (2020 CIPE: RM1,137,447). E&E recorded the highest CIPE of RM5,217,439, followed by scientific and measuring equipment (RM2,623,045), basic metal products (RM2,093,934), chemicals and chemical products (RM1,889,722), and petroleum products including petrochemicals (RM1,530,994).

The investments and projects with higher CIPEs are generally those associated with industries that are high-value-added, high-technology, knowledge-intensive, involve significant amounts of research and development and design (R&D&D), skills-intensive, and provide high-income jobs.

Some of these projects are from companies that have selected Malaysia as their expansion base into the Southeast Asia market, for example, Risen Solar Energy Co. Ltd. as well as AT&S Austria Technologie & Systemtechnik AG, have invested RM42.2 billion and RM10.8 billion respectively into building mega plants in Kulim Hi-Tech Park. Another prominent company, Nine Dragons Paper, the largest paper producer in Asia, invested RM5.4 billion into its facilities in Banting, Selangor.

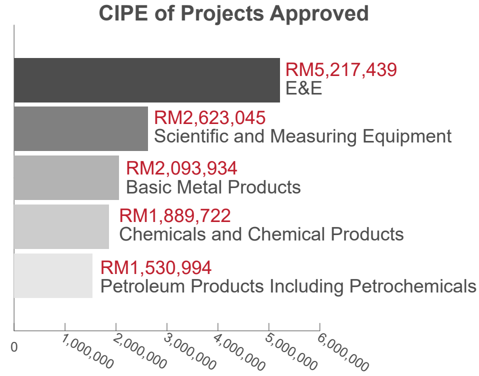
Other quality investments likewise included projects to develop new growth areas, introduce new and emerging technologies, and transform Malaysia into a regional and global production and service hub.

CIPE 2021

RM2,615,996
CIPE of Projects Approved in the Manufacturing Sector

Increase of **130%** from last year
(2020 CIPE: RM1,137,447)

Sub-Sectors with the Highest CIPE of Projects Approved



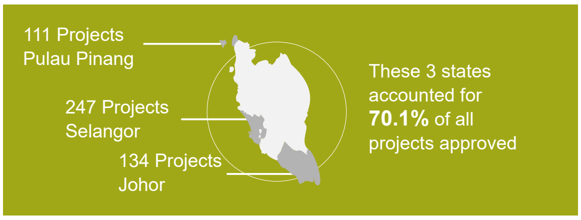
Investments by Location

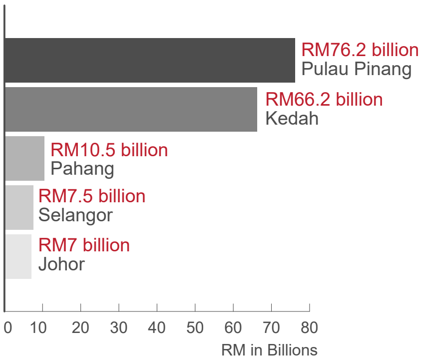
Selangor (247 projects), Johor (134 projects), and Pulau Pinang (111 projects) remained the states with the highest number of projects approved in 2021. These three states accounted for 70.1 per cent of all projects approved.

In terms of investment value, Pulau Pinang received the most investments valued at RM76.2 billion, followed by Kedah (RM66.2 billion), Pahang (RM10.5 billion), Selangor (RM7.5 billion), and Johor (RM7 billion). These five states collectively contributed 85.8 per cent of the total investments approved in 2021.

Other states with high investment value include Perak (RM6.1 billion), Sarawak (RM5.7 billion), Sabah (RM4.9 billion), Melaka (RM3.9 billion), and Terengganu (RM3.8 billion).

APPROVED PROJECTS BY LOCATION IN THE MANUFACTURING SECTOR IN 2021





These 5 states contributed **RM167.4 bil** (85.8%) of the total investments approved

Implemented Manufacturing Projects

To accelerate the necessary approvals for manufacturing licences, incentives, and customs duties exemptions, and to expedite project execution, MIDA set up the Project Acceleration and Coordination Unit (PACU), as well as enabled companies to apply for these approvals online via e-Manufacturing Licence (e-ML), e-Incentive, and JPC Online Application.

Through this, MIDA has managed to continue assisting companies to hasten project implementation. In particular, PACU's establishment is part of MIDA's efforts to strengthen facilitation by providing proactive support services, as well as intensifying end-to-end assistance to expedite project implementation and accelerate the realisation of investments.

The 702 projects approved in 2021 takes the total projects approved during the five-year period (2017-2021) to 4,147 projects, involving total investments worth RM520.1 billion. Of these, 2,766 projects (66.7%) worth RM383.2 billion have been implemented, creating 230,593 jobs. Another 1,173 projects with investments worth RM123.3 billion have acquired sites and/or are in the active planning stage.

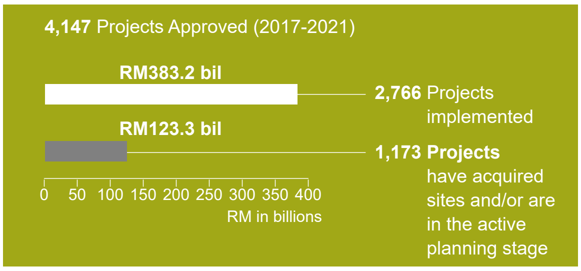
The major industries; namely, E&E (RM195.5 billion); petroleum products (including petrochemicals) (RM46.8 billion); basic metal products (RM24.9 billion); chemicals and chemical products (RM14.6 billion); non-metallic mineral products (RM13.7 billion); and M&E (RM13.4 billion), made up 80.6 per cent of the implemented projects' total investment value.

IMPLEMENTED MANUFACTURING PROJECTS (2017-2021)

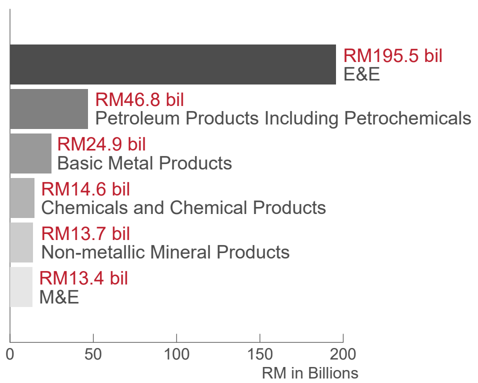
RM520.1 bil Total Approved Investments

4,147 Projects Approved

349,125 Job Opportunities



The major industries that made up **80.6%** of the implemented projects' total investment value



Supporting Sustainability

The circular economy and sustainable performance take centre stage as the world adapts to the new realities. Automation and other advanced Industry 4.0 technologies support Malaysia's manufacturing industry players as they enhance productivity and efficiency, and venture into new and emerging markets.

Electrical and Electronic Products (E&E)

Global demand for E&E surged in 2021 spurred by the need for devices and technology for remote activities involving entertainment, education, and meetings, as well as cybersecurity purposes. The increased demand was particularly marked in the case of E&E products using semiconductor chips or integrated circuits (ICs) related to smartphones and other smart devices particularly in the consumer, computing, 5G, big data, IoT, and automotive markets.

The Semiconductor Industry Association (SIA) projected annual chip sales and units shipped to reach all-time highs in 2021, with moderate annual growth expected in 2022. The World Semiconductor Trade Statistics estimated worldwide sales to reach US$553 billion in 2021, a 25.6 per cent rise from 2020. Closer to home, Malaysia exported RM455.7 billion worth of E&E products in 2021, an increase of 18 per cent as compared to 2020.

Malaysia remains one of the biggest semiconductor hubs in the region. Over the years, the country has nurtured reliable back-end local equipment suppliers to support MNC operations in the country. Many of them provide support services in design, assembly, testing and engineering solutions that further help to increase local sourcing and reduce imports.

For example, local IC design players such as Infinecs, Oppstar, Symmid and Skyechip are serving the global value chain. Other renowned local champions include ViTrox Corp Bhd., SRM, Pentamaster Corp. Bhd., Greatech Technology Bhd., Mi Technovation Bhd., Aemulus Holdings Bhd., Elsoft Research Bhd., MMS Ventures Bhd. and VisDynamics Holdings Bhd. These Malaysian machinery and equipment producers are concentrated in the production of automated test equipment (ATE) mainly to serve the needs of specific IC packaging processes. Furthermore, Malaysian companies are also capable of providing design and engineering solutions such as Testhub (designing, developing, and producing test boards) and JF Tech (designing and manufacturing high-performance test sockets).

Opportunities abound for the local E&E industry to be further developed. The 12MP identifies this industry as strategic and high-impact, with policies to support the move up the value chain through the strategic adoption of advanced technologies and efficient production of new sophisticated products. Aside from boosting front-end activities in the critical semiconductor, LED, and solar sub-sectors, Malaysia is also actively promoting further integration into back-end activities, including design, assembly, testing, and engineering.

MITI and MIDA are encouraging existing domestic industry leaders to ramp up their production and diversify their operations in the face of the COVID-19-induced global semiconductor chip shortage. Meanwhile, prospective investors are urged to

E&E INDUSTRY HIGHLIGHTS IN 2021

RM148 bil Total Investments

849% From the RM15.6 bil recorded in 2020

Domestic vs Foreign Investments

Total **RM148** bil

Domestic Investments **1.1%** RM1.7 bil

Foreign Investments **98.9%** RM146.3 bil

Employment Opportunities

28,362 Total Job Opportunities

9,000 more jobs than was created in 2020

RM78 bil Potential Production Value

The major sources of foreign investments

- The Netherlands
- Japan
- Singapore
- PRC
- Austria

Electronic Components

To produce: advanced material wafers, IC substrates, printed circuit board (PCB) assemblies, test interface products, sensors and semiconductor devices

31 Projects Approved
RM92.9 bil Total Investments
12,471 Total Job Opportunities

Domestic Investments **0.6%** RM0.6 bil

Foreign Investments **99.4%** RM92.3 bil

Consumer Electronics

Core activities include: production of smart audio, smart speakers, instrument amplifiers and headsets

12 Projects Approved
RM4.2 bil Total Investments
2,984 Total Job Opportunities

90% export-oriented

Industrial Electronics

14 Projects Approved
RM0.5 bil Total Investments
1,015 Total Job Opportunities

Domestic Investments **50.9%** RM0.28 bil

Foreign Investments **49.1%** RM0.27 bil

Electrical Components

19 Projects Approved
RM47.4 bil Total Investments
8,965 Total Job Opportunities

Domestic Investments **1.3%** RM0.6 bil

Foreign Investments **98.7%** RM46.8 bil

Electrical Appliances

8 Projects Approved
RM1.3 bil Total Investments
2,526 Total Job Opportunities

Domestic Investments **7.7%** RM0.1 bil

Foreign Investments **92.3%** RM1.2 bil

Industrial Electrical (including computers)

10 Projects Approved
RM1.7 bil Total Investments
401 Total Job Opportunities

Domestic Investments **5.9%** RM0.1 bil

Foreign Investments **94.1%** RM1.6 bil

fill in gaps in the E&E ecosystem. One such area is in the provision of electronics manufacturing services (EMS) which involves the manufacturing of modules up to finished products. EMS companies provide a wide range of value-added engineering and manufacturing outsourcing solutions to original equipment manufacturers (OEMs), allowing them to improve operational efficiencies and focus on core activities like research and development (R&D). By undertaking EMS activities, emerging and new products could be manufactured in Malaysia.

Prominent E&E projects approved in 2021 were mainly from the electronic components sub-sector. These include companies such as Risen Solar Technology Sdn. Bhd., Taiyo Yuden (Sarawak) Sdn. Bhd., and AT&S Austria Technologie & Systemtechnik (Malaysia) Sdn. Bhd. Risen Energy is a pioneer in the solar industry, with extensive expertise in photovoltaic R&D and provision of end-to-end solutions for the entire solar value chain manufacturing. Its subsidiary, Risen Solar Technology Sdn. Bhd. is expanding its global presence by opening its latest production base in Kulim Hi-Tech Park, Kedah. The project is under construction and progressing smoothly. The commercial activities are expected to begin in April 2022. Over 3,000 employment opportunities, with 800 Managerial, Technical and Supervisory (MTS) positions, including 500 engineers will be offered. This new facility in Malaysia will contribute 3GW solar cells and modules capacity annually.

Taiyo Yuden (Sarawak) Sdn Bhd, is allocating RM680 million for an expansion of its multilayer ceramic capacitors manufacturing facility in Kuching, as a strategic move to increase its production capacity in the ASEAN region. This marks another milestone for Malaysia as the preferred hub for global manufacturers and an ASEAN gateway.

AT&S Austria Technologie & Systemtechnik (Malaysia) Sdn. Bhd. has committed an investment of RM8.5 billion to construct a new plant in Malaysia, producing its new IC substrates in Kulim Hi-Technology Park, Kedah. The project involves cutting-edge technologies and is expected to create 5,000 high-skilled job opportunities in Malaysia.

Aerospace

The aerospace industry expects a gradual turnaround in aircraft demand with a rise in passenger traffic as borders reopen. This will have a positive spillover effect for the manufacturing and MRO segments of the industry. According to Roland Berger, travel demand will recover by 2024 largely due to global vaccination programmes, the use of travel certificates, the easing of domestic restrictions and border openings.

AEROSPACE INDUSTRY INITIATIVES

Developing a sustainable ecosystem

Upgrading the National Aerospace Industry Coordinating Office into an agency to create a conducive ecosystem for industry development

Clustering and zoning of aerospace activities

Realigning the development of the aerospace industry to create specialised capabilities through the clustering and zoning of aerospace activities (MRO, aerospace manufacturing, systems integration, and engineering and design services) in selected economic areas based on their strengths

Establishing an aerospace digital system and venturing into sustainable energy

Setting up a central data repository for aircraft operations, MRO, and aerospace manufacturing in Malaysia to facilitate stakeholders and industry players to gain access to real-time information regarding demand and supply to increase the competitiveness of the local aerospace industry

Asia Pacific remains the biggest airline market in the world for new deliveries of aircraft. The Boeing Commercial Market Outlook 2021-2040 notes that by 2040, 43,610 new aeroplanes valued at US$7.2 trillion will be needed. In particular, Boeing has announced that it would boost its production of 737 MAX jets to 42 per month by the fourth quarter of 2022, and Airbus plans to produce 70 family jets per month by 2024. This represents massive opportunities for Malaysian aerospace players as both manufacturers rely heavily on their supply chains.

Given the growing demand, the aerospace industry was identified in the 12MP as one of the strategic industries propelling Malaysia into a high-technology trajectory. Under the 12MP, this industry is projected to generate RM30 billion in revenue and 30,000 job opportunities by 2025. Strategies are created to align with the National Investment Aspirations (NIA) framework with a focus on improving industry capabilities and global competitiveness.

> Given the growing demand, the aerospace industry was identified in the 12MP as one of the strategic industries propelling Malaysia into a high-technology trajectory.

There are three growth areas when it comes to new business models in the aerospace industry; namely, the space economy, drone production, and business aviation. Prospective investors and industry players should note that the Government desires high-quality investments in all three areas, and through MIDA, supports the industry by providing access to various fiscal and non-fiscal incentives.

The space economy can be divided into upstream, (e.g. R&D, manufacturing and launch), downstream (space infrastructure operations, and products and services that directly rely on satellite data and signals to operate and function), and derivative activities (e.g. technology transfers from the space economy to the automotive or medical industries).

According to Space Foundation, the global space economy increased by 4.4 per cent in 2020 to US$447 billion. Commercial space activity grew 6.6 per cent to nearly US$357 billion, representing nearly 80 per cent of the total space economy. The space economy is well-positioned for growing investment, market development, and employment opportunities across multiple sectors. Looking into the future, Morgan Stanley estimated that the global space industry could generate revenue of more than US$1 trillion or more in 2040. Leveraging these growth trends, Malaysia's National Space Policy 2030 aims to contribute about 0.3 per cent or RM3.2 billion to the country's GDP and create up to 5,000 jobs by 2030.

As for drones, also known as unmanned aerial vehicles (UAVs), the domestic drone market is growing steadily. The Drone Service Provider Ranking 2021 Report placed Aerodyne Group Sdn. Bhd. (Aerodyne) as first in the Remote-Sensing Drone Service Provider segment. Aerodyne beat 800 other global companies in the same line of business and is poised to boldly enter new markets around the world.

Locally, various zones are dedicated to drone development. This includes Felda Mempaga in Pahang; the Drone and Robotic Zone in Iskandar Puteri, Johor; and the Urban Drone Delivery Sandbox in Cyberjaya. The latest such zone is Area 57 at Technology Park Malaysia in Bukit Jalil, Kuala Lumpur. Covering a size of two hectares, Area 57 provides various facilities, such as drone hangars and runaways, netted flying areas, testing mockup sites, design and simulation infrastructure.

For the business aviation segment, Honeywell's 30th Annual Global Business Aviation Outlook projects 7,400 new business jets worth US$238 billion to be delivered from 2022 to 2031 and noted minimal effects of the pandemic on this segment in 2021. The positive outlook bodes well for Malaysia's business aviation landscape.

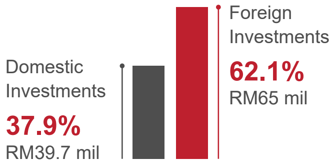
Malaysia has the fourth-largest business jet fleet base in the Asia Pacific. Leveraging this position, the Sultan Abdul Aziz Shah Airport (LTSAAS) developed a regeneration plan for Terminal 2, which will act as a catalyst to grow the local business aviation market by almost threefold over the next 10 years. The Subang Airport Regeneration plan is a demand-driven one, with a significant pipeline of tenants already in place.

APPROVED INVESTMENTS IN THE AEROSPACE INDUSTRY IN 2021

Domestic vs Foreign Investments

2 New Projects Approved

Total **RM104.7** mil



Employment Opportunities

247 Total Job Opportunities

All approved projects are from companies in the aerospace manufacturing sub-sector supplying **Tier 1** and **Tier 2** companies

Among efforts to attract more aerospace investors to Malaysia, the Selangor Aviation Show 2021 was held in November at the Skypark Regional Aviation Centre. The event focused on business and general aviation including helicopters and served as a networking platform for industry players to explore potential investment partners globally and domestically.

One of the significant projects approved was by Delta Industrial Sdn. Bhd., a home-grown company that designs, develops, and manufactures amphibious aircraft in Malaysia. Delta Industrial is fully owned by Delta Aerospace, which initially established a distribution and support centre for two seaplane aircraft; namely, the eight-seater LA-8L and the two-seater 'Borey' Aircraft. The company then expanded, establishing Delta Industrial to manufacture and produce the LA-8 Seaplane, along with the associated technology and IP transfer. The company's design and engineering facility will collaborate with Aéronautique Design & Service

Bureau SA, the original Type Certificate and IP owner and the Original Equipment Manufacturer (OEM) from Samara, Russia. The LA-8 range of seaplanes will be aircraft produced in Malaysia for the world market for the next three decades.

Automotive

Malaysia is the third largest automotive market in ASEAN, making the automotive industry a strategic part of the country's manufacturing sector. There are currently 28 manufacturing and assembly plants in Malaysia producing motor vehicles (passenger vehicles, commercial vehicles, motorcycles, and scooters), and automotive parts and components. The automotive ecosystem also encompasses research and design, product and process development, materials management, and after-sales services. This industry contributes significantly to the development of engineering, auxiliary, and supporting industries as well as skills development and the upgrading of technological and engineering capabilities of the domestic workforce.

Automotive giants such as Toyota and Mercedes-Benz have made Malaysia their operations home, while taking advantage of buoyant consumer demand. International component manufacturers, such as Continental, Denso, and Bosch, also base themselves in the country to launch their products regionally.

More recently, Porsche and Stellantis selected Malaysia to host their production plants due to their confidence in the nation's automotive ecosystem, given its ability to support their long-term growth on top of the availability of a capable local talent pool of highly-skilled engineers and technicians.

Plans are underway for Porsche AG (Porsche) to establish its first production plant outside of Europe in Kedah, in partnership with Sime Darby Berhad. This signifies Porsche's commitment to build a long-term presence in the region with Malaysia as its ideal base in ASEAN. Stellantis Group, established in 2021 as a 50-50 merger between PSA Group (makers of the Peugeot and Citroen brands among others) and Fiat Chrysler Automobiles Group, and is expected to make its existing production facility in Gurun, Kedah its main production and export hub for the region.

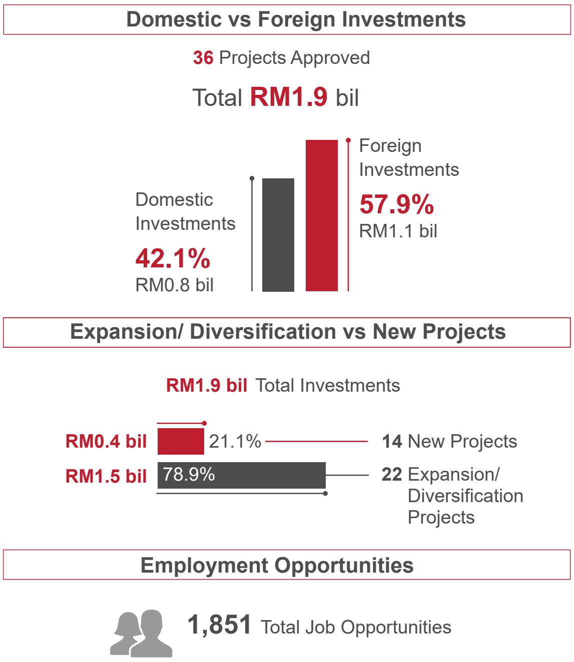
As technology-driven trends such as diverse mobility, autonomous driving, electric vehicles and connectivity shape the industry over the next 10 to 15 years, the National Automotive Policy 2020 was developed to advance Malaysia as a regional leader in automotive manufacturing, engineering, technology, and sustainable development.

Potential investors are welcome to make strategic investments into the areas of Next-Generation Vehicles (NxGV), electric and autonomous vehicles and their related components, core and critical components such engines, powertrains, Light and Radio Detection and Ranging (LIDAR and RADAR), Advance Driver Assistance System (ADAS), EV batteries, and battery management systems.

In particular, Malaysia's automotive industry has been focusing on Energy Efficient Vehicles (EEVs) since 2014. EEVs include fuel-efficient vehicles, hybrids, electric vehicles (EVs) and vehicles using alternative fuels such as Compressed Natural Gas (CNG), Liquefied Petroleum Gas (LPG), biodiesel, ethanol, and hydrogen. There is still room for expansion in Malaysia's EV ecosystem, as the deployment of EVs is still low. Given the growing demand for green transportation within ASEAN, EVs will likely gain popularity and become more mainstream in the coming years.

In 2021, the Malaysian automotive sub-sector produced 481,651 motor vehicles. This figure is further broken down to 446,431 passenger vehicles and 35,220 commercial vehicles. A total of 508,911 motor vehicles were sold, comprising 452,663 passenger vehicles and 56,248 commercial vehicles.

APPROVED INVESTMENTS IN THE AUTOMOTIVE INDUSTRY IN 2021



As of December 2021, MIDA has approved over 50 projects within the EEV ecosystem with an approved investment value amounting to RM8 billion. More specifically, Malaysia secured seven investment projects related to the manufacturing and assembly of electric vehicles and their components. These projects brought in investments worth RM1.2 billion, and will create 766 employment opportunities.

One notable project approved was from a wholly-owned subsidiary of Samsung SDI Co. Ltd. from the Republic of Korea, Samsung SDI Energy Malaysia Sdn. Bhd. The company expanded its activities into the production of automotive batteries for EVs at its existing facility in Sungai Gadut, Negeri Sembilan. Founded in 2011, the company produces lithium-ion batteries (cell and pack form factors) for IT and electronic devices such as mobile phones, tablets, and notebooks. The company will set up two additional production lines for this expansion project, kicking off in mid-2022. The EV batteries are produced solely for the export market, and will be a pioneer project in Malaysia as the first local EV battery manufacturer for passenger vehicles. The project is also the company's first production plant in Southeast Asia.

Rail

The East Coast Rail Link (ECRL) project is expected to meet the scheduled completion deadline by 2026 despite experiencing a delay due to the imposed Movement Control Order (MCO) during the pandemic. Upon its completion, the ECRL aims to cut travelling time from Kota Bharu to the Klang Valley area to approximately four hours. This will encourage greater investments and growth in economic activities situated in the East Coast.

NATIONAL RAIL CENTRE OF EXCELLENCE (NRCOE) OBJECTIVES

- Human Capital Development
  - A centralised training centre and industry lead body for the sub-sector
- Development of the Rail Industry Development Programme (RIDP)
  - To enhance local supplier capabilities in the areas of MRO/systems/components
  - To carry out technical assessments on local companies to help them penetrate the global rail supply chain
- Testing and Certification
  - To develop a Malaysian and ASEAN rail standard
- Research and Technology
  - To produce domestic rolling stock/systems in a local refurbishment programme

Phase 1 of the MRT Putrajaya line, which covers the Kwasa Damansara and Kampung Batu stations, is nearly complete, and is expected to become operational in the second quarter of 2022. Phase 2, which covers the Kentonmen to Putrajaya Sentral stations, is 94 per cent complete and is expected to become operational in January 2023. Additionally, the LRT Shah Alam line (previously LRT3), is set to be fully-operational by February 2024.

Meanwhile, work has commenced on the Rapid Transit System Link (RTS Link), a four-kilometre cross-border railway connecting the Bukit Chagar Station in Johor Bahru with Woodlands North Station in Singapore that can serve up to 10,000 passengers an hour in each direction. The RTS Link is expected to be completed in December 2026.

To brace the industry for both local and regional demand, the National Rail Centre of Excellence (NRCOE) was established in July 2020. The NRCOE serves as a centralised platform to create a sustainable value chain across the rail ecosystem, facilitating coordination between ministries, Government agencies, and industry players.

The rail sub-sector saw one new project by a Malaysian-owned company approved in 2021, with RM97.3 million worth of investments to undertake the assembly/integration of rolling stock.

Shipbuilding and Ship Repairing (SBSR)

The SBSR industry in Malaysia is supported by policies framed under the Malaysia Shipping Master Plan 2017-2022, and is the backbone of maritime development which complements the oil and gas industry. There are approximately 100 shipyards nationwide capable of building various types of small-to-medium-sized vessels and repairing vessels of more than 600 tonnes of displacement.

The industry's performance has been resilient despite headwinds from 2020 continuing to echo through in 2021. Industry players have also been affected by the price increase in raw materials such as steel and aluminium. According to the Association of Marine Industries of Malaysia, the price of steel has increased from US$750 per metric tonne (MT) in January 2021 to US$1,100/MT as of October 2021.

Nevertheless, domestic companies have been buoyed by PETRONAS's decision to launch a tender to construct 16 offshore support vessels (OSVs) to replace its ageing fleet. This is because among the requirements for the new OSV contracts, there is a mandate that the OSVs must be built in local shipyards, and successful bidders must obtain financing from Malaysia-based banks. The 16 OSVs are the first batch of a series of contracts as PETRONAS plans to build 100 vessels over four years; phasing out its old vessels along the way.

PETRONAS's tender also portends well for the industry, foreshadowing a steady outlook for demands for new-built vessels supporting the upstream activities in the country. The PETRONAS Activity Outlook 2020-2022 reveals a steady demand for OSVs, with nearly 150 vessels needed across all weight categories, 70 fast crew boats, 56 platform/straight supply vessels, and 30 landing craft tanks, among others.

The global SBSR industry is also set to rebound over the next few years. According to a report by ResearchAndMarkets.com, the global SBSR market is expected to recover and grow at a CAGR of 3 per cent from 2021 and reach US$191.9 billion in 2023. This presents an opportunity for the local shipyards to offer innovative services for global markets leveraging Malaysia's strategic location along the Straits of Malacca and the southern South China Sea.

Prospective investors should take note of the shift towards environmental sustainability as global shipping companies have started to shift towards the use of LNG-powered vessels. Hence, investments into the mass usage of this technology continue to be a strategic prospect for Malaysian shipyards.

Both new and existing SBSR investors can avail themselves of the incentive package for the SBSR industry until the end of 2022. Introduced in 2016, the incentives in the form of Pioneer Status (PS) and Investment Tax Allowance (ITA) signal the Government's commitment to enhance the sophistication level of this industry, making it the right time for industry players to undertake modernisation exercises and embrace new technologies.

APPROVED INVESTMENTS IN THE SBSR INDUSTRY IN 2021

Machinery & Equipment (M&E)

Malaysia's M&E industry comprises over 2,000 companies that employ approximately 90,000 workers. It is a crucial industry that enables the efficient functioning of industries in the primary, manufacturing, and services sectors. There are more than 50 domestic companies that are well-known locally and abroad for their capabilities and expertise operating in this industry, with the top 10 companies having a total market value of more than RM25 billion. These companies include Pentamaster Corporation Berhad, Greatech, Vitrox, Genetec Technology Berhad, Cheng Hua Engineering Works Sdn. Bhd., TXMR Sdn. Bhd., Vepro Group Sdn. Bhd., and XTS Technologies Sdn. Bhd.

The M&E industry is recognised as a high-impact industry under the 12MP to accelerate growth through the manufacturing of innovative products with elements of electronics, robotics, advanced materials and software integration. The Government continues to encourage investors to adopt state-of-the-art technologies which will support the requirements of advanced manufacturing processes such as automation across the supply chains to improve operations while reducing costs.

Prospective investors are welcome to explore the possibilities of developing and providing integrated solutions that allow production processes to be up-scaled, using advanced technologies and automation. This includes the provision of enterprise resource planning systems that connect cyber and physical systems, in addition to remote monitoring, machine-to-machine communication, and robotics. Ultimately, the Government seeks to ensure that Malaysian M&E companies continue to be sustainable and relevant in this highly-competitive industry.

Launched in September 2020, the ongoing Automation Project Initiative (API) programme is a platform that allows MIDA to connect labour-intensive or low-productivity companies with potential system integrators or factory automation experts. MIDA has so far organised several API programmes with E&E industry players and various business associations. MIDA has also organised several webinars regarding government facilitation for companies undertaking automation and digitalisation initiatives.

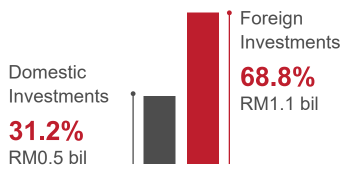
As automation increases, there will be a commensurate need for talent upskilling and reskilling to ensure the current workforce remains relevant, in line with the country's move towards a high-income economy. In 2020, the World Economic Forum (WEF) published a report revealing the rise of machines and automation that would eliminate 85 million jobs by 2025; however, WEF also expects 97 million new jobs to be created. Prospective investors may also be interested in providing financial assistance to the different stakeholders across the M&E value chain, which includes industry players in Research & Development / Design & Development (R&D/D&D), raw material and parts manufacturing, machine building/system integration, sales and distribution, and services, among others. Primarily, investing in R&D activities and connecting the various entities involved, including universities, companies, centres of excellence, and other R&D institutes, can play a big role in spurring industrial innovation.

APPROVED INVESTMENTS IN THE MACHINERY AND EQUIPMENT (M&E) INDUSTRY IN 2021

Domestic vs Foreign Investments

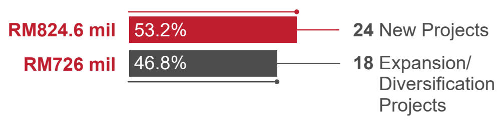
42 Projects Approved

Total **RM1.6** bil



Expansion/ Diversification vs New Projects

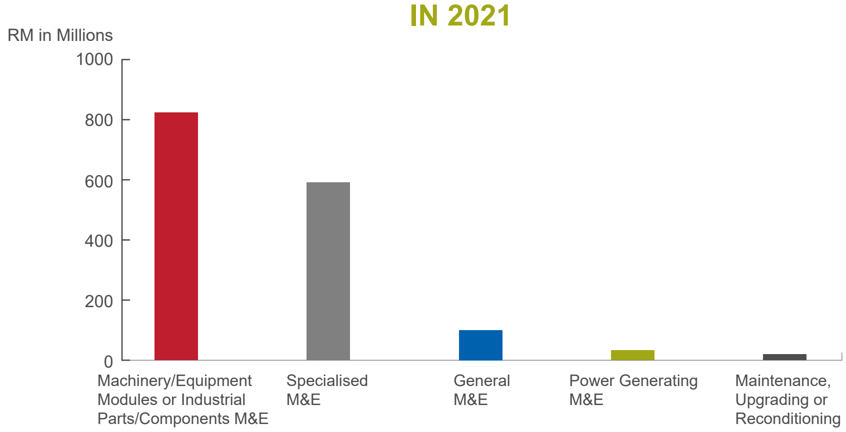
RM1.6 bil Total Investments



Employment Opportunities

2,268
Total Job Opportunities

INVESTMENTS IN PROJECTS APPROVED IN THE M&E INDUSTRY BY SUB-SECTOR IN 2021



Machinery/Equipment Modules or Industrial Parts/Components M&E

RM823.6 mil Total Investments

18 Projects Approved

Domestic Investments **7.1%** RM58.3 mil

Foreign Investments **92.9%** RM765.3 mil

RM603.3 mil 73.3% — **13** New Projects

RM220.3 mil 26.7% — **5** Expansion/ Diversification Projects

Specialised Machinery & Equipment for Specific Industries

RM591.7 mil Total Investments

16 Projects Approved

Domestic Investments **54.5%** RM322.4 mil

Foreign Investments **45.5%** RM269.3 mil

RM129.8 mil 21.9% — **6** New Projects

RM461.9 mil 78.1% — **10** Expansion/ Diversification Projects

General Industrial Machinery & Equipment, Components and Parts

RM100.2 mil Total Investments

5 Projects Approved

Domestic Investments **74.8%** RM74.9 mil

Foreign Investments **25.2%** RM25.3 mil

RM58.2 mil 58.1% — **3** New Projects

RM42 mil 41.9% — **2** Expansion/ Diversification Projects

Power Generating Machinery & Equipment

RM25 mil Total Investments

1 New Project Approved

Domestic Investments — RM25 mil

Maintenance, Upgrading or Reconditioning of M&E

RM10 mil Total Investments

2 Projects Approved

Foreign Investments — RM10 mil

RM8.2 mil 82% — **1** New Project

RM1.8 mil 18% — **1** Expansion/ Diversification Project

One of the projects approved in the M&E industry was an expansion project by a home-grown automation champion, with investments amounting to RM182.5 million, to manufacture automated production lines or equipment for solid-state battery products, as well as automated systems for manufacturing battery cells, modules, and packs for different battery technologies, i.e. lithium-ion, solid-state, and sodium-ion. This additional investment will focus on technology precision, accuracy, repeatability, high throughput, and quality inline inspection to improve traceability. The company's M&E are installed across the world, including PRC, Vietnam, Singapore, the United States of America, United Kingdom, Thailand, and certain European Union countries, which also includes Fortune 500 companies.

As the energy storage sector continues to boost the global market, this has required the company to build its third manufacturing facility in Batu Kawan, Penang to meet demand. This project fits perfectly with the global trends of Industry 4.0, and will make Malaysia part of the value chain to complement the revolution. The company also has a large technical talent pool with 85 R&D personnel that undertake D&D activity to ensure continual improvement in of their equipment's throughput. Currently, the company employs 800 personnel, and expects to increase that to 1,200 by mid-2022. About 65 per cent of its total workforce earns more than RM3,000 monthly.

Engineering Supporting Industry (ESI)

ESI's dynamism and resilience is a vital pillar supporting the growth of Malaysia's manufacturing and services sectors. This industry serves as a fundamental base for the growth of other industries in Malaysia.

Malaysia is recognised globally for its engineering capabilities, consistent quality and production, and reliability, particularly in machining and fabrication. ESI sub-sectors contribute significantly to the manufacturing and services sectors, and require constant technological changes and upgrading, as they are impacted by consumer demand, production costs and industry competition.

Malaysia's ESI companies continue to maintain their competitive advantage in the global supply and value chain, ahead of rising competition in neighbouring countries such as Vietnam, Indonesia, and Myanmar. The industry's existing supply chain has been fully established and is well-equipped with the necessary technical knowledge to comply with the quality requirements set by machine makers, having already received clients' recognition, and certifications across multiple fields such as NADCAP, AS9100, and ISO13485.

Over time, the Government has been encouraging ESI companies to position themselves as 'total solution' providers; offering total manufacturing solutions, as well as parts and components for high-technology industries such as front-end semiconductors, medical devices, aerospace, and solar/photovoltaic industries. This involves the provision of integrated services from product conception to serial production, and the management of all relevant processes, including procurement, logistics, packaging, R&D, testing, and certification. Outsourcing of materials/components/services to third parties, or investments via non-equity modes of international production, is currently rising among MNCs/LLCs in the industry.

ESI HIGHLIGHTS IN 2021

Domestic vs Foreign Investments

55 Projects Approved

Total **RM827.4** mil

Domestic Investments **71.1%** RM587.9 mil

Foreign Investments **28.9%** RM239.5 mil

Expansion/ Diversification vs New Projects

RM827.4 mil Total Investments

RM572 mil 69.1% — **31** New Projects

RM255.4 mil 30.9% — **24** Expansion/ Diversification Projects

Employment Opportunities

2,159
Total Job Opportunities

SUB-SECTORS

Machining

26 Projects Approved

Total **RM388.6** mil

Domestic Investments **56.5%** RM219.5 mil

Foreign Investments **43.5%** RM169.1 mil

RM262.4 mil 67.5% — **11** New Projects

RM126.2 mil 32.5% — **15** Expansion/ Diversification Projects

Casting

2 Projects Approved

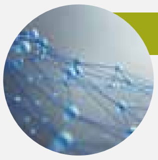
Total **RM44.8** mil

Domestic Investments **31.7%** RM14.2 mil

Foreign Investments **68.3%** RM30.6 mil

RM26.6 mil 59.4% — **1** New Project

RM18.2 mil 40.6% — **1** Expansion/ Diversification Project



Surface Engineering

4 Projects Approved

Total **RM71.1** mil

Over double 2020's investments of RM33.8 million

Domestic Investments **71.7%** RM51 mil

Foreign Investments **28.3%** RM20.1 mil

RM57.8 mil 81.3% — **3** New Projects

RM13.3 mil 18.7% — **1** Expansion/ Diversification Project

454% over 2020's figure of RM2.4 million

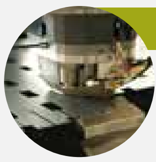
Heat Treatment

3 Projects Approved

Total **RM35.4** mil

Domestic Investments **44.4%** RM15.7 mil

Foreign Investments **55.6%** RM19.7 mil



Metal Stamping

3 Projects Approved

RM30.1 mil Total Investments

RM29.5 mil 98% — **2** New Projects

RM0.6 mil 2% — **1** Expansion/ Diversification Project

Jigs and Fixtures

9 Projects Approved

RM225 mil Total Investments

16.1 times the amount invested in 2020

RM131.4 mil 58.4% — **7** New Projects

RM93.6 mil 41.6% — **2** Expansion/ Diversification Projects

Moulds, tools and dies

7 Projects Approved

RM25.9 mil Total Investments

RM22.3 mil 86.1% — **3** New Projects

RM3.6 mil 13.9% — **4** Expansion/ Diversification Projects

Cutting tools

1 Project Approved

Domestic Investment of **RM6.5 mil**

A notable diversification project approved in 2021 is from Malaysian-owned Coraza Systems Malaysia Sdn. Bhd. (Coraza). Coraza is an engineering solutions provider offering one-stop services from early-stage engineering development to product delivery, with core competencies in sheet metal fabrication, precision machining, and electromechanical assembly. The manufacturing plant is equipped with state-of-the-art Computer Aided Manufacturing (CAM) systems, the latest of which is ESPRIT CAM, benefitting customers that require complex machining solutions for highly-demanding components in the aerospace and semiconductor industries.

Potential high-growth areas in the ESI industry include the production or procurement of higher-grade and exotic materials such as Hastalloy, Inconel, Super Duplex, and Titanium, as these are currently not available locally but are required by ESI companies. In order to reduce lead time and logistics costs, the focus is on providing easy access to these materials in the country. The presence of stockists for such materials is critical to sustain the growth of the industry, signifying that more opportunities are available within the industry.

Basic Metal Products

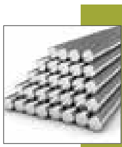
Malaysia's basic metal products industry is a crucial supplier of the precursor materials essential to various manufacturing segments such as engineering goods, construction material, defence, medical equipment, communication devices and scientific equipment. Metals are also critical in the circular economy paradigm, as they can be indefinitely recycled, reused and remanufactured.

While the ferrous metal products sub-sector in Malaysia is a mature one, there are opportunities to move up the value chain and fill in the ecosystem gaps in the areas of steel and alloy steel production. The Government has announced a revised policy for the ferrous metal products sub-sector to spur growth, particularly in flat steel products.

Ferroalloy production has also been highlighted due to its importance in supplying raw materials for steelmaking. Given Sarawak's competitive hydro-energy prices, ferroalloy projects have typically been located in the state but in 2021, two projects were approved in the east coast of Peninsular Malaysia with total investments of RM1.5 billion to cater to existing mills and reduce their dependency on imports. They will also support local economic growth and offer up to 950 high-skilled jobs to Malaysians.

BASIC METAL PRODUCTS

Ferrous Metal Products (Iron and Steel)



Long products are traditionally used in construction and civil engineering, consisting of:
- Billets
- Steel bars
- Steel wire rods

Flat products are mainly used in higher-value applications e.g. E&E, automotive, medical devices, and O&G, consisting of:
- Slabs
- Hot/cold rolled coils
- Galvanised steel
- Colour-coated steel

Non-Ferrous Metal Products

- Aluminium
- Tin
- Copper
- Zinc
- Lead

Investors have shown steady interest in the non-ferrous metal products sub-sector, especially in the production and processing of aluminium. Currently, the sole Malaysian company venturing into aluminium smelting is Sarawak-based Press Metal Berhad. The company estimates that aluminium demand will grow substantially, given the global growth of automated driving and electric vehicles that require high-strength, lightweight materials, aside technological innovations in this and other emerging areas. This has led the company to double its smelting capacity, opening various business opportunities to many downstream players to commercialise aluminium-related products for high-value-added applications such as E&E, energy storage, and aircraft-components.

Other growth opportunities include the market for magnesium. With its characteristics of being lightweight, high tensile and yield strengths, and good machinability, magnesium (and its alloys) could be used in the automotive and aerospace industries. Potential investors are encouraged to invest in the entire ecosystem, from the mining of dolomite (a raw source of magnesium) to the manufacturing of magnesium alloys, and the production of automotive and aerospace parts.

Non-ferrous metals such as aluminium, copper, silver, bauxite, and lead are also important in achieving low-carbon objectives. As the world shifts towards low-carbon technologies, the Government is focussing on promoting investments in non-ferrous metal products that are used in high-end industries and niche markets. One specific area is the recovery of non-ferrous metals from scrap as the main raw material. Aluminium- and copper-related products are the top choices of most manufacturers as both have high recovery rates. Prospective investors should consider projects that improve the management of domestic waste and scrap, including enhancing the sorting and segregation processes of the source waste.

The Government has also revised the policy regulating the recycling/recovery industry and importation of metal scrap. The focus is on the importance of local waste/scrap management, promoting the circular economy in line with the practices of the National Investment Aspirations (NIA) by MITI. This policy is also a proactive measure to ensure that Malaysia does not become a dumping ground for other countries.

APPROVED INVESTMENTS IN THE BASIC METAL PRODUCTS INDUSTRY IN 2021

Domestic vs Foreign Investments

22 Projects Approved

Total **RM19.4** bil

Increase of **RM5 billion** when compared to 2020

Domestic Investments
1%
RM0.2 bil

Foreign Investments
99%
RM19.2 bil

Expansion/ Diversification vs New Projects

RM19.4 bil Total Investments

RM9.1 bil 46.9% — **15** New Projects

RM10.3 bil 53.1% — **7** Expansion/ Diversification Projects

136.1 times the amount invested in 2020

Employment Opportunities

9,283
Total Job Opportunities

One notable approved investment in 2021 is a new project in the non-ferrous metal sub-sector by SK Nexilis Malaysia Sdn. Bhd. (SK Nexilis), with investments worth RM4.3 billion to produce electro-deposited copper foil used in lithium-ion batteries. A subsidiary of the Fortune 500 company SKC, SK Nexilis is the global leading manufacturer of copper foil for batteries, particularly thin-tech innovations in copper foil manufacturing. The company is known among the industry players for their reputable innovation of copper foil. This project will support the electric vehicle (EV) ecosystem and telecommunications industry. Located in Sabah, this project is expected to create 300 high-skilled employment opportunities for locals.

Fabricated Metal Products

The fabricated metal products industry in Malaysia is dominated by domestic SMEs undertaking basic metal fabrication processes in both the manufacturing and services sectors. It is a mature and well-established industry, often associated with the automotive and heavy equipment industries. Fabricated parts vary from small to large components. The sector is crucial in supporting the growth of various sectors such as E&E, automotive, M&E, and the building and civil construction sectors.

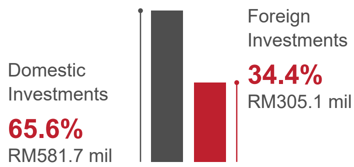
The industry offers opportunities particularly in the areas of customised and niche fabricated metal products. Other areas include talent upskilling as fabrication processes such as computerised machining and cutting, punching, blanking, notching, stamping, folding, and welding require in-depth technical knowledge.

APPROVED INVESTMENTS IN THE FABRICATED METAL PRODUCTS INDUSTRY IN 2021

Domestic vs Foreign Investments

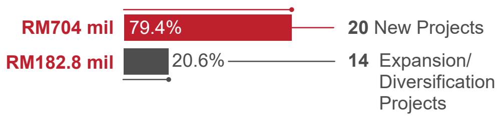
34 Projects Approved *

Total **RM886.8** mil



Expansion/ Diversification vs New Projects

RM886.8 mil Total Investments



Employment Opportunities

1,214 Total Job Opportunities

*Note: excluding projects under ESI and Oil & Gas Services and Equipment

Textile and Apparels

The textile and apparels industry has been one of Malaysia's major export contributors since the 1970s. The main export markets are the USA, the UK, Germany, and Japan.

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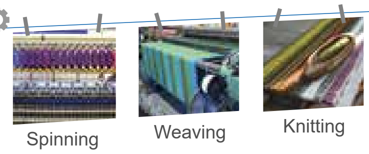
This industry continues to focus on high-quality investments, including those that are high-value-added and knowledge-intensive, featuring advanced technologies, R&D, and innovation.

Moving forward, this industry is exploring new growth areas; specifically, technical/functional textiles including medical and smart textiles that will meet the evolving needs of consumers and businesses long into the future.

TEXTILE AND APPARELS

Textiles
Upstream primary textiles and activities



Apparels
Clothing, footwear, leatherwear and jewellery

Clothing
Made-up garments, Personal Protective Equipment (PPE) and accessories (labels, buttons, zippers, packaging, etc.)

Footwear
Boots, shoes, sandals, slippers and clogs

Leather
Footwear, automobile seats, clothing, bags, book bindings, fashion accessories and furniture

Jewellery
Decorative items, costume jewellery such as brooches, rings, necklaces, earrings, pendants, bracelets and cufflinks

The industry has seen reduced exports continuing for the past five years due to deficiency in local raw materials such as fibre and yarns; however, there are signs of recovery that could spur growth over the next few years.

The industry recorded exports of RM22 billion in 2021 compared to RM21 billion in 2020. According to Grand View Research, the textile industry is set to grow at a CAGR of 4.4 per cent from 2021 to 2028, with revenues forecasted to reach US$1,412.5 billion in 2028.

There has been an increasing demand for smart textiles that use optical fibres, metals, and various conductive polymers to interact with the environment. This demand is expected to grow by 3.7 per cent over the projected period, owing to its high-performance properties and end-user applications. Increasing populations and urbanisation in emerging economies has also increased demand for clothing and apparel. The preference for sustainable products is likely to lead major textile companies to focus on investing in ESG-based manufacturing practices that target sustainable products.

According to Mordor Intelligence, natural fibres and non-woven fabrics are driving the growth of the global textile market. As natural fibre composites are lighter and stronger than conventional fibres, there are extensive applications in the automotive and other industries. Meanwhile, non-woven fabrics are used in hygiene products, such as diapers and sanitary napkins, and in road construction in the form of geotextiles.

MIDA has taken the lead to work with industry stakeholders throughout 2021 to brainstorm possible solutions and strategies that can help revitalise the textiles and apparels industry. In mid-July, MIDA held an industry engagement session with MITI and other stakeholders during the Fourth Council Meeting of the Federation of Malaysian Fashion Textiles and Apparels (FMFTA) which discussed issues surrounding the industry's operations during the lockdowns.

Among the focus area is fostering the circular economy in the textile and apparels industry. By designing longer-lasting clothes, recycling previously-used textiles, introducing bio-based materials, and introducing business models featuring repair and rental, the industry can significantly reduce its inputs and outputs. Technical capacity-building, skills training and investments in new technologies will also be key when it comes to scaling circular solutions.

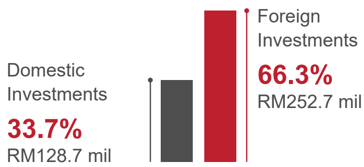
ESG principles related to the industry have not been neglected, with the five-day Batik Week in late October 2021 launched by MIDA in collaboration with the Malaysian Batik Association, Yayasan Budi Penyayang Malaysia, FMFTA, and Kraftangan Malaysia. The virtual programme aims to elevate Malaysian batik by embracing new technology and green business models, without changing the uniqueness and authenticity of the traditional techniques. The event explored pathways for local manufacturers, especially SMEs, to embrace technology for batik production. Batik Week also promoted the understanding and appreciation of batik as Malaysia's national heritage. The event successfully brought together prominent industry stakeholders including textile and apparel industry players, universities, and government agencies.

APPROVED INVESTMENTS IN THE TEXTILE AND APPARELS INDUSTRY IN 2021

Domestic vs Foreign Investments

19 Projects Approved

Total **RM381.4** mil



Employment Opportunities

566
Total Job Opportunities

A significant project approved was from a Danish-owned company, Fibertex Personal Care Sdn. Bhd., specialists in spunmelt nonwovens and printed nonwovens for the hygiene industry. This expansion project worth RM150 million offers an additional 36 jobs based in Sendayan Tech Valley, Negeri Sembilan.

Another project approved was an expansion project in Telok Panglima Garang, Selangor with investments of RM46.8 million from NAUE Asia Sdn. Bhd., a wholly-owned subsidiary of NAUE International GmbH, a German company. NAUE Asia is a specialist full-service geosynthetic manufacturer, equipped with Bentofix geosynthetic clay liner ("GCL") and multi-component GCL, Secutex, and Secutex Soft Rock needle-punched non-woven production lines.

Building Technology

Malaysia has a thriving construction and building technology ecosystem which has contributed to business and employment opportunities in various fields. Two key components of the building technology ecosystem are the non-metallic mineral and industrialised building system (IBS) industries.

Non-metallic Mineral Products

Malaysia has over 22 different types of minerals spanning metallic, non-metallic, and energy minerals. These are important economic sources that are scattered across the country, with much-unexplored potential and benefits for a wide range of industries such as construction, E&E, aerospace and medical devices. In April 2021, the Government launched the National Mineral Industry Transformation Plan 2021-2030 to achieve sustainable growth and drive the development of the mineral industry value chain holistically. Investors are encouraged to capitalise on these growing developments, particularly when it comes to the non-metallic minerals, to produce high-value-added end products for the local and export markets.

Globally, the non-metallic mineral products industry was estimated to have been worth US$274.7 billion in 2021, with a CAGR of 3.3 per cent expected between 2021 and 2024.

NON-METALLIC MINERAL PRODUCTS

Glass products

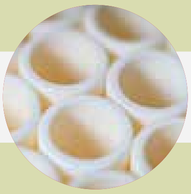
Solar glass, safety glass, borosilicate glass tubing, glass fibres

Cement and concrete products

Portland cement, hydraulic cement, blended cement

Ceramics and clay-based products

Walls, floor, roof tiles, fine and advanced ceramics (applications in E&E and aerospace)



Other products

High-purity alumina (HPA), quicklime, barite, marble, granite

In Malaysia, the industry saw investments worth RM422.9 million spread across 11 new (RM220 million) and six expansion/diversification (RM202.9 million) projects. At RM311.3 million, DDI formed the majority (73.6%) of total investments, with FDI bringing in the remaining RM111.6 million (26.4%). A total of 782 jobs were created as a result of these investments.

Both imports and exports of non-metallic mineral products increased in 2021 as compared to 2020, with Malaysia exporting RM2.3 billion more than 2020's exports of RM8.3 billion, while imports were worth RM7.4 billion, or RM800 million more than 2020. Most of the exports were mainly to Singapore, the USA, PRC, India, and Australia, while imports were from PRC, Japan, Taiwan, Vietnam, and Thailand.

One prominent project approved in the industry was an expansion project in Negeri Sembilan by Mediceram Sdn. Bhd. Through the adoption of Industry 4.0-related technologies, the company produces hi-tech ceramic hand formers used as moulds to produce rubber gloves for examination, surgical, household, and general industrial usage. This project involves investments worth RM95 million, providing over 100 employment opportunities.

A new project approved with investments worth over RM50 million was from Unibase Pre-Cast Sdn. Bhd, a subsidiary of Crescendo Corporation Berhad (CCB). The company's principal activity is the manufacturing of concrete products for the domestic and Singaporean markets.

Industrialised Building System (IBS)

According to KPMG's Global Construction Survey, 2021 saw a rebound in the construction industry worldwide, with two-thirds of project owners expecting to expand their capital programmes, and half of all respondents being optimistic about the market's future direction. Most contractors expect their revenue to grow over the next year, and nearly a third of them believe that growth will be at least 10 per cent.

The survey noted the industry's rebound was due to resilience, with half of the engineering and construction firms surveyed intending to invest significantly in technologies to enhance the delivery of capital programmes. Indeed, 87 per cent of all respondents recognised the need to plan for resilience in their projects.

Malaysia's construction industry charted a remarkable growth rate of 40.3 per cent in the second quarter of 2021 as construction and related supply chain activities resumed, after a lacklustre performance in the first quarter.

Prospective investors can still take advantage of the significant room for growth in the IBS industry as Malaysia still has a low implementation rate of IBS usage in construction. Involving the manufacturing of building components (usually off-site) in a controlled environment, which are then installed into construction works, IBS and many other modern construction techniques are only feasible with extensive automation, which local companies in Malaysia have yet to adopt at a significant rate. Hence, investments into the popularisation of automation in the construction industry, as well as the take-up of IBS, are highly welcomed.

MIDA's support for the IBS industry can be seen in its renewed collaboration with the Construction Industry Development Board, when the two signed a new Memorandum of Understanding (MoU) to jointly promote technology adoption and global best practices among Malaysian construction industry players in November 2021. The MoU aims to strengthen the Construction 4.0 Strategic Plan, in-line with *Wawasan Kemakmuran Bersama* (WKB) 2030 and the National Policy on Industry 4.0 (Industry4WRD).

Both parties are committed to enhancing the areas of policy development and advocacy; R&D, training, and promotion of IBS; Industrial Revolution 4.0 (IR4.0) and Construction Revolution 4.0 (CR4.0) technologies; green initiatives and building materials quality; as well as investment promotions in relevant sectors.

There were three IBS projects approved in 2021. One of them is a majority Malaysian-owned company, MGB Sany Sdn. Bhd., a comprehensive and fully-integrated construction and development company, producing IBS precast concrete products. The expansion project is located in Ijok, Selangor, and was approved with a total investment of RM23 million.

Another approved project was in Bukit Minyak, Pulau Pinang, by a wholly-owned Malaysian company, Chin Eng Precision Sdn. Bhd., producing IBS modular building structures, with an investment value of RM5.3 million.

AB5 Sdn. Bhd. is a manufacturer of IBS precast building components. The company's approved project located in Lahat, Perak, is for producing beams, slabs, and walls, with total investments valued at RM12.8 million.

Medical Devices

The global medical devices industry is expected to reach US$745 billion by 2030, representing a CAGR of 5 per cent driven by several worldwide health trends, including the prevalence of both infectious and chronic diseases, as well as accelerating technological innovation. Despite the drop in economic activity due to the pandemic, demand for ventilators and Personal Protective Equipment (PPEs) has soared. The demand for hospital supplies, in-vitro diagnostic devices, and respiratory care devices will also likely continue as measures are taken to mitigate the emergence and spread of similar infections.

Home-based treatments supported by remote healthcare professionals, and telemedicine have also risen in popularity as patients choose to limit their potential exposure to COVID-19, and seek alternative ways to gain access to medical and healthcare facilities. This has also increased the use of wearables enabling users to better track their healthcare indicators and needs. Investors are encouraged to seize opportunities from these growing trends.

Malaysia has the largest medical devices industry within the ASEAN region with an estimated market size of US$1.8 billion and is the preferred offshore manufacturing site for global medtech companies. Medical devices exported from Malaysia are monitored and regulated by the Medical Device Authority (MDA), a regulatory body created under the Ministry of Health. Most domestic medical device manufacturers comply with international standards such as ISO 13485, US FDA 21 CFR Part 820, and the CE Mark. Over 90 per cent of medical devices manufactured in the country are earmarked for the export market.

The country's well-established medical device supply chain is complemented by matured industries such as the semiconductor, E&E, precision engineering, and plastic products industries. This end-to-end ecosystem makes Malaysia a more attractive destination for global medical device manufacturers that are looking to produce high-value-added medical devices and supporting services.

High-tech medical device manufacturers are eligible to be considered for full income tax exemption on their statutory income for five years. Additionally, as part of PENJANA, Malaysia is offering a special Relocation Incentive until December 2022 for new medical device investments.

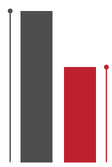
APPROVED INVESTMENTS IN THE MEDICAL DEVICES INDUSTRY IN 2021

Domestic vs Foreign Investments

38 Projects Approved

Total **RM7.7** bil

An increase of **RM1.6 billion** across 13 fewer projects as compared to 2020, signifying an increased CIPE and a shift towards higher-quality projects



Domestic Investments
61%
RM4.7 bil

Foreign Investments
39%
RM3 bil

Expansion/ Diversification vs New Projects

RM7.7 bil Total Investments

RM4.7 bil — **22** New Projects

RM3 bil — **16** Expansion/ Diversification Projects

Employment Opportunities

12,498 Total Job Opportunities

15 projects (39.5%) 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

Among the projects approved was a new investment by Menicon Malaysia Sdn. Bhd. (Menicon), the first and largest contact lens manufacturer in Japan. Menicon will manufacture contact and intraocular lenses in Malaysia, with an investment of RM650 million. An intraocular lens is implanted in the eyes as part of a treatment for cataracts or myopia, as well as correcting longer errors in near-sighted, far sighted and astigmatic eyes. This export-oriented project will create approximately 278 jobs for Malaysians, with 141 of the employees being in the managerial, technical, and supervisory categories. Malaysia was chosen as the company's first factory in Southeast Asia due to the country's good supporting infrastructure, skilled human resources, as well as the strong support from the Government.

Pharmaceuticals

The global pharmaceuticals industry revenue reached US$1.3 trillion in 2020 while the industry is expected to grow by a CAGR of 8 per cent to US$1.7 trillion in 2025. R&D remains a critical mainstay of the industry, with companies spending a minimum of 20 per cent of their sales revenue on R&D projects. Asia Pacific is the second-largest pharmaceuticals market in the world, accounting for 26 per cent of the global market.

Malaysia's pharmaceuticals industry has the capability to produce a wide range of products such as sterile preparations, injectables and infusions, capsules and tablets, and time-release and liquid medications. Made-in-Malaysia pharmaceuticals are accepted globally, as the industry complies with certifications and international standards such as the European Good Manufacturing Practice and ISO 17025, while the country is also a member of the Pharmaceutical Inspection Convention and Pharmaceutical Co-operation Scheme.

There are more than 269 manufacturers in Malaysia licensed by the Drug Control Authority (DCA), Malaysia's governing body for the registration, licensing, and monitoring of pharmaceutical, health, and personal care products under the Ministry of Health (MOH). Of this figure, 179 of the manufacturers (66.5%) are categorised as traditional medicine and health supplement producers, 78 (29%) as being pharmaceutical producers, and 12 (4.5%) are veterinary products producers. As at 31 December 2021, 1,505 new pharmaceutical products have been registered with the DCA, including traditional products (41.7%), prescription medication (12.2%), health supplements (29.4%), non-prescription/OTC (3.6%), new chemical entities (3.9%), veterinary medicine (4.9%), and biologics (4.2%).

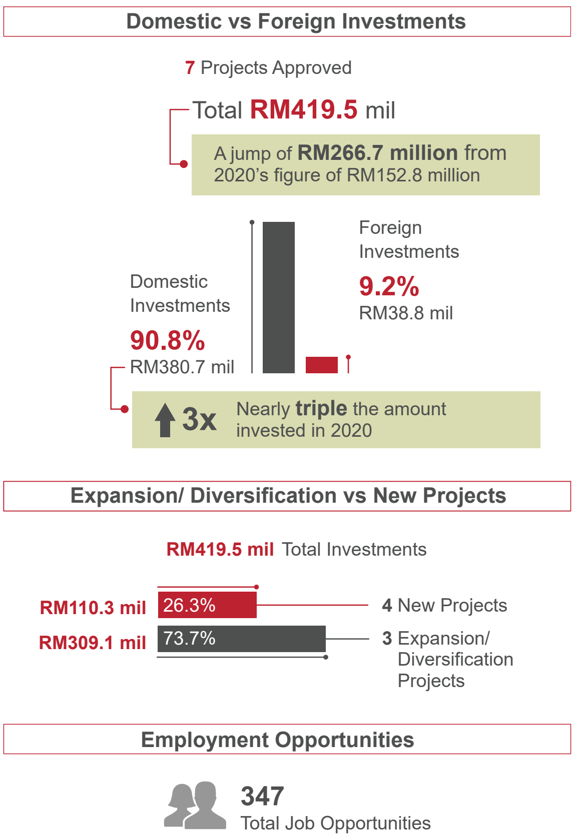
In recent years, the domestic pharmaceuticals industry has increasingly focused on COVID-19-related R&D activities, seizing opportunities by leveraging the worldwide scarcity in specific products related to the pandemic, while the industry's ecosystem remained resilient despite the movement restrictions and border closures. The Government recognises the pharmaceutical industry's great potential, and continues to encourage investments involving cutting-edge innovations and technologies to spur the local pharmaceutical ecosystem towards producing high-value-added products.

For instance, Budget 2022 has extended the preferential tax rate incentive, which provides investors with a tax rate ranging from zero to 10 per cent for a period of 10+10 years if they locally manufacture pharmaceutical products including vaccines. Both the PENJANA Relocation Incentive, which provides a special tax rate of zero per cent for investments of above RM300 million for new companies, and the Investment Tax Allowance of 100 per cent for existing companies, have also been extended to the end of 2022.

Given Malaysia's established pharmaceutical ecosystem, R&D capabilities, available incentives and abundance of natural raw materials, this industry has the right ingredients to grow beyond the production of generic drugs and fill-and-finish vaccines towards undertaking clinical trials and drug development. In fact, the newly launched Vaccine Development Roadmap envisions Malaysia as a vaccine manufacturer within the next decade by encouraging human vaccine development and production capabilities locally; positioning the country as the next powerhouse for vaccine production in Asia.

Among the projects approved was Pharmaniaga Lifescience Sdn. Bhd.'s investment of RM278.6 million to conduct vaccine manufacturing, including fill-and-finish activities for Sinovac Biotech Ltd.'s CoronaVac vaccine to fulfil the demand for COVID-19 vaccines, as well as bulk manufacturing for future vaccines. This project, which is a model example of Malaysia's ambition and aspiration to venture into the development and production of home-grown human vaccines, will create 99 new job opportunities, particularly within the science and technical fields.

APPROVED INVESTMENTS IN THE PHARMACEUTICALS INDUSTRY IN 2021



Another project approved was local pharmaceutical company Nashmir Capsule Sdn. Bhd.'s expansion project to manufacture empty hard gelatine capsule shells, meant for finished dosages, dietary supplements, and traditional Chinese medicines. The company is the only manufacturer of high-quality empty hard gelatine capsule shells in Malaysia, and its products have been certified as *halal* by the Islamic Development Department of Malaysia (JAKIM). The company's ability to penetrate the ASEAN and MENA (Middle East and North Africa) markets provides a testament of local manufacturers' capabilities to establish themselves on the international stage. This successful establishment further complements Malaysia's expanding pharmaceutical industry ecosystem, by filling in the gaps that are yet to be explored.

Biotechnology

The global biotechnology market was worth US$627.63 billion in 2020, and is projected to grow at a CAGR of 8.57 per cent until 2026 driven by new developments in drug discovery for various diseases. The R&D for COVID-19 vaccines and treatments has greatly stimulated growth in the biotech industry, with companies such as Pfizer Inc. and BioNTech SE, as well as AstraZeneca plc being the beneficiaries.

In Malaysia, the biotech industry has moved on from its traditional applications towards renewable, non-toxic, and cost-competitive products. Launched in 2005, the National Biotechnology Policy (NBP) outlined the development of three biotech economic sectors; namely, agriculture, healthcare, and industrial manufacturing, with a steadily growing biotech ecosystem comprising various innovation centres and academic research entities.

Investors can consider the various opportunities to develop biopharmaceutical and biomedical solutions that enhance the quality of healthcare provision for the domestic and global markets. An example of such a solution is the advent of personalised or precision medicines. Rather than having drugs and medicines created on a 'one-size-fits-all' basis, which has traditionally been the case, modern genomics makes it possible to tailor specific medications for individuals depending on the makeup of their DNA.

In 2021, one new biotechnology project was approved with an investment of RM11.2 million. Cell Tissue Technology Sdn. Bhd.'s investment involves the production of tissue-engineered human skin, meant for treating major skin loss and non-healing ulcers. This also includes the creation of 20 new employment opportunities, a majority of which is dedicated for managerial and professional roles. Through the commercialisation of its product, Cell Tissue Technology looks to address gaps in tissue engineering research, and provide more affordable medical technology solutions for the masses. As a first for Malaysia, the company's tissue engineering project represents an important step for the biotechnology industry and contributes in raising the quality of healthcare services in the country.

Agro-Food

There are opportunities for large-scale and high-impact agricultural projects to assist Malaysia to meet self-sufficiency for food production as well as reduce the country's dependency on imported food over time. Under the National Agrofood Policy 2021 – 2030, the focus is on the development and upscaling of key agricultural produce such as rice, dairy, livestock, fruits, and vegetables.

The Government, through the Ministry of Agriculture and Food Industries (MAFI), encourages the innovation and adoption of advanced technology in operations, leading to increased profitability as well as more efficient, sustainable, and resilient agricultural production processes.

By modernising the agro-food industry through the use of automation and technology-driven concepts such as 'smart farming' or 'precision agriculture', investors can help contribute to the sustainability of Malaysia's food ecosystem, in line with SDG 2 - Zero Hunger, which aims to end all forms of hunger and malnutrition by 2030, and make sure all people, especially children, would have sufficient nutritious food. The Government welcomes investments that involve promoting sustainable agriculture and helping to support small-scale farmers by ensuring their equal access to land, technology, and markets.

In 2021, MAFI approved tax incentives for six projects worth RM20.5 million, with 103 job opportunities resulting from these projects.

Food Processing

Opportunities in high-value food product manufacturing are rising in tandem with the increasing demand for sustainable products. A discernible trend in the country's increasingly diversified food processing industry is the demand for plant-based products from sources such as beans, nuts, oats, and coconuts. In 2021, MIDA approved five plant-based food projects worth RM309.6 million. This is estimated to grow at an annual rate of 10 per cent, with the market for these products developing rapidly since 2019.

Increasing the industry's productivity and achieving sustainable food production necessitates a revamp of current practices and processes to keep up with the latest trends. The Government aims to strengthen the role of industrial estates and food production areas by increasing their usage rates, narrowing the developmental gaps across regions and states, and between urban and rural areas.

Potential investors are encouraged to adopt Industry 4.0 technologies such as Big Data Analytics, IoT, and AI, as well as deepen the use of robotics and smart sensors in their production processes. This will help alter the industry landscape, creating more knowledge-intensive strategic talent development in line with the NIA goals to create high-value jobs for the nation.

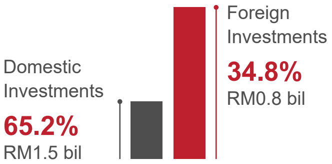
APPROVED INVESTMENTS IN THE FOOD PROCESSING INDUSTRY IN 2021

Food Processing & Beverage

Domestic vs Foreign Investments

77 Projects Approved

Total RM2.3 bil



The 56 new and 21 expansion/diversification projects will result in

5,139
Total Job Opportunities

Animal Feed Sub-Sector

Domestic vs Foreign Investments

Total RM3.1 bil

3 Projects Approved
- 1 Malaysian Owned
- 2 Foreign Owned

138
Total Job Opportunities

The approved projects involved the production of food ingredients, processed fruits and vegetables, sugar and chocolate confectioneries, processed meat products, beverages, cereals and flour-based products, dairy products, and other food products.

In addition, there was an increased emphasis in the animal feed segment of the global food industry. In 2021, there were three projects approved in this sub-sector, including a notable foreign aquaculture feed project worth RM3 billion from China and two animal feed projects worth RM28.2 million, one of which was from Singapore. A total of 138 employment opportunities resulted from these three projects.

Palm Oil-Based Food Products

Malaysia benefitted from the much higher CPO prices in 2021, with prices hitting a peak of RM5,341 per tonne in November, the highest in over nine years, due to a drop in production from labour shortages causing lower yields amid unflagging demand. Together with Indonesia, Malaysia produced 85 per cent of palm oil globally, and both countries have a 30 per cent share of global oils and fats production.

The prices of major commodities, including palm oil, have continued to rally as economic activities resume with the easing of COVID-19 restrictions in major consuming countries. With border restrictions also easing, the Malaysian Government has permitted approximately 32,000 foreign workers to enter the country in 2022 for work in oil palm plantations.

The local palm oil sector, which has been driven by the upstream segment in the past decades, is set to change its course through increased demand from the downstream segment in the coming years. The future of the palm oil industry in the country lies on downstream activities, thus reducing its dependency on the fluctuation of CPO prices and increased margins. MIDA is also championing this initiative to upgrade the downstream processes and technologies for high-value-added palm oil products, in order to contribute to a higher revenue share of the palm oil sector.

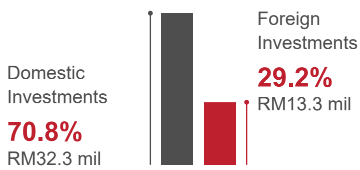
Given the positive demand outlook, and since over 35 million additional tonnes of palm oil can be produced annually without any expansion of plantation land, there is still significant room for growth. If the industry can improve its yield by 50 per cent like other oilseed crops, this would result in a large boost in revenue and enhance the industry's resilience, according to Malaysian Palm Oil Board (MPOB), a premier government agency under the Ministry of Plantation Industries and Commodities. As at December 2021, 451 miller companies were licenced by MPOB, with 49 companies having refineries in operation and Manufacturing Licences approved by MIDA.

APPROVED INVESTMENTS IN THE PALM OIL-BASED FOOD INDUSTRY IN 2021

Domestic vs Foreign Investments

2 Expansion Projects Approved

Total RM45.6 mil



Employment Opportunities

99
Total Job Opportunities

The approved projects involved the production of Refined, Bleached, and Deodorised Palm Oil (RBDPO) and palm fatty acid distillates

Palm Biomass

Malaysia's palm biomass industry has been steadily developing over the past few years due to increasing demand for bioenergy. From 2015 to 2020, Malaysia's palm biomass export value approximately tripled from RM77 million to RM222 million. The industry has lots of potential given the country's abundant resources, and investors are encouraged to seize these opportunities.

The Malaysian Palm Oil Board (MPOB) estimates that Malaysia has a total of 5.9 million hectares of oil palm plantations. In 2020, the country produced 96.6 million tonnes of palm biomass, mostly in the form of large palm leaves or pruned fronds and oil palm trunks (OPT) at the plantation site. In addition, the processing of fresh fruit bunches in palm oil mills generates biomass such as empty fruit bunches (EFB), palm kernel shells (PKS), palm kernel cake, and mesocarp-fibre.

Palm biomass can be used as a renewable energy resource both domestically and internationally. The National Energy Policy, as announced in 12MP, is a comprehensive energy policy aimed at making Malaysia carbon-neutral by 2050, with an intermediate goal to have renewable energy form 31 per cent of Malaysia's total energy generation capacity by the end of 2025. Currently, the country has the capability to produce more than 2400 MW of biomass and 410 MW of biogas which can produce 82.0MW and 113.4MW of electricity respectively, according to 2021 data from the Sustainable Energy Development Agency (SEDA).

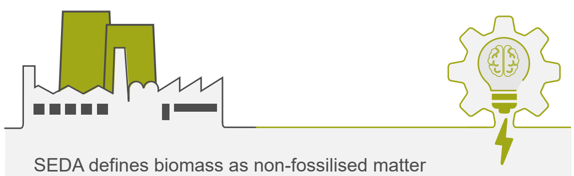
The global biomass pellet market has been growing as a result of government initiatives and stringent environmental regulations spurring the demand for renewable energy sources, especially as countries such as PRC, Japan, and ROK have pledged to achieve net-zero emissions within the next few decades in line with the SDGs. In Malaysia, biomass pellets can be obtained from EFB and PKS, as well as from other sources including woody plants, the timber industry, sawdust, sugarcane, and switchgrass.

MIDA has approved three projects to produce palm biomass-based products in 2021, with total investments worth RM152.5 million. Foreign investments dominated the industry, bringing in RM148.3 million (97.2%) and expected to provide a total of 164 employment opportunities. One of the projects approved was from a wholly-foreign-owned company to produce black pellets from EFB, with a proposed investment of RM123 million, which will provide 141 job opportunities.

> "The global biomass pellet market has been growing as a result of government initiatives and stringent environmental regulations spurring the demand for renewable energy sources, especially as countries such as PRC, Japan, and ROK have pledged to achieve net-zero emissions within the next few decades in line with the SDGs.

MIDA also approved four other biomass-related projects not involving palm biomass, with investments amounting to RM55.2 million. Domestic investments dominated the sub-sector, bringing in RM39.1 million (70.8%), while the rest came from FDI. These projects, which utilise biomass from wood waste and other agriculture waste, are expected to create a total of 126 new job opportunities.

DEFINITION OF BIOMASS



SEDA defines biomass as non-fossilised matter originating from indigenous plants, animals, and micro-organisms, including but not limited to

- Biodegradable products
- Organic material by-products and residues
- Agricultural, industrial, and municipal waste

Chemicals and Chemical Products

The chemicals and chemical products industry has remained vital to the resiliency of the manufacturing sector this year with its comprehensive value chain comprising agricultural chemicals, industrial gases, inorganic chemicals, paints, soaps, detergents, printing inks, as well as other chemical products and recycled plastic pellets.

In the third quarter of 2021, the industry, together with the petroleum products including petrochemicals, rubber products, and plastic products industries, contributed 12.6 per cent to the growth of the manufacturing sector despite the challenging operating landscape due to COVID-19 restrictions, and played a critical supporting role for other essential industries/services such as food, pharmaceuticals, medical devices, rubber products, and E&E.

APPROVED INVESTMENTS IN THE CHEMICALS AND CHEMICAL PRODUCTS INDUSTRY IN 2021

Domestic vs Foreign Investments

81 Projects Approved

Total **RM4.8** bil

Domestic Investments **29.2%** RM1.4 bil

Foreign Investments **70.8%** RM3.4 bil

Expansion/ Diversification vs New Projects

RM4.8 bil Total Investments

RM2.7 bil	56.1%	48 New Projects
RM2.1 bil	43.9%	33 Expansion/ Diversification Projects

Employment Opportunities

2,584 Total Job Opportunities

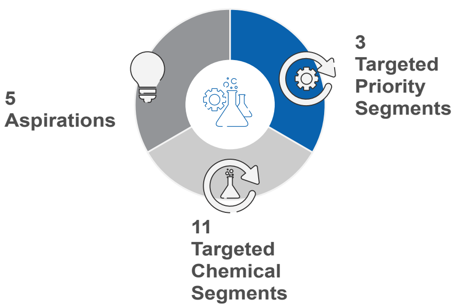
Imports and exports of chemicals and chemical products increased significantly in 2021, as compared to 2020, due to heightened demand as essential inputs in the plastic products and rubber products industries. The total exports of chemicals and chemical products in 2021 reached RM70.7 billion, representing a 39.3 per cent growth from the previous year. The year also recorded RM96.5 billion worth of chemicals and chemical products imports, an increase of 29.9 per cent over 2020's figures.

A notable new project approved in the industry is one from LG PETRONAS Chemicals Malaysia Sdn. Bhd. A joint venture between PETRONAS Chemicals Group Berhad (PCG) and LG Chemicals Ltd. (LG Chem), the company will produce nitrile butadiene latex (NBL) with an annual capacity of 200,000 tonnes. NBL is a core raw material for making nitrile gloves, which is widely used in industries such as healthcare, medical, and food, among others. Through continual R&D and investments, PCG and LG Chem will collaborate to offer multiple grades and innovative uses of NBL, as well as develop high-value-added products. The project is expected to create more than 100 new job opportunities.

Another notable project identified is the production of sodium silicate by SPCI OSC Silicate (M) Sdn. Bhd., a joint venture between SPCI – a leading chemical manufacturer, processor, and service provider in Malaysia and Singapore – and OSC, a Taiwanese company that is the leading producer of precipitated silica, sodium silicate, and factice in Asia Pacific. This new production facility in Kuantan, Pahang, will have an annual sodium silicate production capacity of up to 80,000 tonnes. With some flame-retardant characteristics, sodium silicate is the main raw material of precipitated silica, mainly used for green tires and low-rolling-resistance tires, which are specifically used in EVs. Sodium silicate also serves as a multipurpose material used in metal repair, as well as applications involving the cementing of heat- or fire-exposed items. It is also used as a raw material to produce specialty chemicals that preserve food, treat wood, and protect wood from insects. Furthermore, it is used to minimise porosity in concrete and permanently binds the silicates to the surface, making it more wearing and water-repellent.

Malaysia's first Chemical Industry Roadmap (CIR) 2030, which is the definitive guide for the chemicals industry over the 10 years to 2030, envisions a sustained contribution by the chemicals industry's supply and value to the nation's economic growth.

CHEMICAL INDUSTRY ROADMAP (CIR) 2030



Aspirations

- Increase the value-added from building blocks
- Enhance downstream integration
- Increase product competitiveness
- Improve sustainability
- introduction of new technology

Targeted Priority Segments

- Base chemicals and intermediates
- Plastics and polymers
- Specialty chemicals

Targeted Chemical Segments

- Fertilisers
- Oleochemicals
- C1 intermediates
- High-performance composites
- Synthetic rubber
- Plastics (commodity, engineering, high performance)
- Agrochemicals
- Care chemicals
- Nutrition chemicals
- Electronics chemicals
- Construction chemicals

Petroleum Products Including Petrochemicals

PETROLEUM PRODUCTS INCLUDING PETROCHEMICALS

Petroleum Products derived from crude oil include:

- Petrol
- Diesel
- Kerosene
- Naphtha condensate
- Liquefied petroleum gas (LPG)
- Liquefied natural gas (LNG)
- Lubricating oils

Petrochemicals are used in the production of:

- Plastics
- Synthetic fibres
- Synthetic detergents
- Synthetic rubber
- Solvents
- Paints
- Dyes
- Adhesives
- Agrochemicals
- Pharmaceuticals

The global petrochemicals market grew at a CAGR of 17.6 per cent from US$365 billion in 2020 to US$429.1 billion in 2021, and is expected to reach US$477.85 billion in 2025 at a CAGR of 3 per cent. Dominating the market, Asia Pacific accounted for over 45 per cent of the market's global revenues in 2020. Closer to home, Malaysia's petroleum products including petrochemicals industry is a pillar of the nation's GDP and economic growth.

The nation is not only a leader in the production of natural gas, petroleum products, and basic petrochemicals, but also focuses on speciality petrochemicals, creating a complete value chain of more advanced finished products. PETRONAS, the national oil and gas company, spearheads the petrochemical industry in Malaysia, and has successfully attracted other large petrochemical companies such as Idemitsu, Lotte Chemicals, and BASF to set up production facilities in the country. With readily-available feedstock and a plethora of anchor companies, Malaysia has achieved a compelling position in the region.

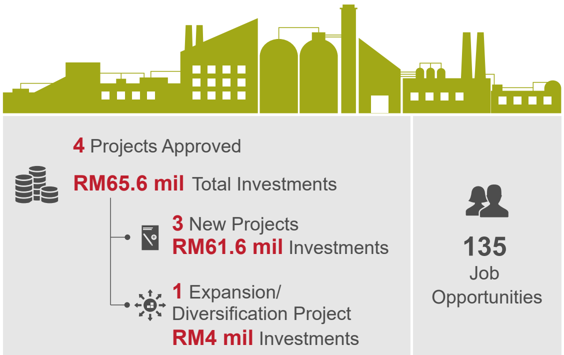
There are four petrochemicals complexes in Malaysia, with the latest one, known as Refinery and Petrochemical Integrated Development (RAPID), scheduled to commence operations by 2022. These petrochemicals complexes feature shared state-of-the-art supporting services such as connected waste material handling, smart warehousing, advanced metering infrastructure for utilities, and an R&D centre. It is economically attractive for big companies to set up their facilities within these facilities to undertake more complex speciality petrochemicals, turning Malaysia into a petrochemical hub in ASEAN.

Prospective investors are therefore invited to take advantage of RAPID and invest in the speciality petrochemicals segment, which has been gaining traction in growing industries such as textiles, aerospace, medical devices and automotive. Investors can also consider adopting Industry 4.0-related technologies, paving the way to further develop the speciality petrochemicals portfolio, especially those serving niche markets and industries.

The recently-developed Chemical Industry Roadmap 2021-2030 (CIR) outlines plans in tandem with other key national roadmaps and blueprints such as the New Industrial Master Plan (New IMP), Shared Prosperity Vision (SPV) 2030 and 12MP for the country's petroleum products and petrochemicals industry to become a global hub.

The industry contributed RM95.7 billion to Malaysia's total exports of RM1.2 trillion in 2021. This represents an increase of 4.6 per cent as compared to 2020. Meanwhile, a total of RM89.6 billion worth of petroleum products were imported.

APPROVED INVESTMENTS IN THE PETROLEUM PRODUCTS INCLUDING PETROCHEMICALS INDUSTRY IN 2021



A notable new project approved in 2021 was undertaken by Zhonghe Industries Sdn. Bhd. ("ZISB"). The company has secured a patented technology to process and refine waste oil into marketable and usable base oil. ZISB plans to develop a base oil manufacturing plant with lubricants production capabilities so that the products meet the regulatory requirements for industrial usages. In addition, ZISB has taken the initiative to work closely with research institutes to produce more accepted standard materials to sustain its continuous business development in this industry. This project will involve a total investment of RM50 million and is expected to provide more than 70 job opportunities.

Another approved investment was an expansion project for the recovery of oil from plastic waste through pyrolysis. Established in 2002, Heng Hiap Industries Sdn. Bhd. (HHI) is a fully-integrated plastic recycling company, relying on its 18 intellectual property patents and trademark to enter 37 international markets. HHI manufactures and customises superior recycled plastic resins for use in a variety of finished products. The horizontal integration of its supply chain provides the company full control over the quality of its materials throughout the production process. More than 70 per cent of the recovered oil is exported to 35 countries worldwide for use by chemical industry players in their production process to make new certified circular polymers. In particular, this project involves HHI collaborating with a global chemical industry leader to create the first certified circular polymers produced through the advanced recycling of plastic scrap. Located in Pasir Gudang, Johor, the project involves a total investment of RM4 million.

Plastic Products

Plastic products cover a wide gamut, from common household products and packaging materials to high-end products in the E&E, telecommunications, automotive, medical devices and healthcare sectors. In particular, COVID-19 has seen a massive surge of plastic products in the form of personal protective equipment (PPE) such as gowns, aprons, and face masks, which were all in high demand from the healthcare sector.

As an essential industry, the related companies and manufacturers continued to operate throughout the MCO period in 2021. Demonstrating its resilience during this period, the industry is expected to expand at a CAGR of 3.4 per cent from 2021 to 2028.

The plastic products industry performed very well in 2021 (Jan-August), with a total trade volume of RM19.2 billion compared with 2020's (Jan-August) figure of RM15.8 billion. Malaysia's total exports of plastic products was worth RM10.3 billion (Jan-August 2021).

Malaysian plastic packaging manufacturers are internationally competitive and able to meet the demands of the food industry worldwide. The next move is to further develop their competitive edge in the area of high-potential, high-end plastics, where there is ample room for growth. Aside this, there is a need to accelerate the adoption of automation and other digital technologies associated with Industry 4.0.

To boost the plastic industry's resilience, MIDA conducts various initiatives together with the Malaysian Plastics Manufacturers Association (MPMA) and other stakeholders. Among them was a series of webinars explaining the Government's incentives and efforts to promote the adoption of Industry4WRD and automation, particularly for SMEs. MIDA also worked closely with MPMA during MCO 3.0 to ensure SOP compliance in this industry, particularly with regards to vaccination of the workforce.

"Malaysian plastic packaging manufacturers are internationally competitive and able to meet the demands of the food industry worldwide. The next move is to further develop their competitive edge in the area of high-potential, high-end plastics, where there is ample room for growth. Aside this, there is a need to accelerate the adoption of automation and other digital technologies associated with Industry 4.0.

Underscoring the industry's commitment towards the circular economy and sustainability is Malaysia's Roadmap towards Zero Single Use Plastics 2018-2030.

MALAYSIA'S ROADMAP TOWARDS ZERO SINGLE USE PLASTICS 2018-2030

Strategies include:

- Improved plastic recovery management
- Increasing the availability of reliable market data
- Financing opportunities for plastic circularity
- Enhancing policy support
- Increasing corporate action
- Strengthening public awareness and willingness to pay for sustainability

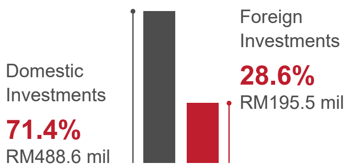
Sustainable waste management is prioritised, in line with the SDGs and ESG guidelines. Notably, the recycling of plastic waste is a promoted activity under the Promotion of Investments Act 1986 and is eligible for tax incentives under MIDA's purview. Investors are encouraged to branch out into the areas of bioplastics as well as biodegradable plastics, both of which are part of the nation's shift towards the circular economy and sustainability.

APPROVED INVESTMENTS IN THE PLASTIC PRODUCTS INDUSTRY IN 2021

Domestic vs Foreign Investments

42 Projects Approved

Total **RM684.1** mil



Employment Opportunities

1,902 Total Job Opportunities

Among the landmark projects approved in 2021 was one worth RM40.5 million undertaken by NAFAS Plastic Industries Sdn. Bhd. to produce polypropylene woven bags and jumbo bags. As one of the subsidiaries of Pertubuhan Peladang Kebangsaan (NAFAS), the company is able to produce up to seven million pieces of plastic packaging every year, with its main customer being Malaysian NPK Fertilizer Sdn. Bhd. (MNFSB). The company's initiatives complement the fertiliser value chain, as MNFSB is a joint venture between NAFAS, Pertubuhan Peladang Negeri, Pertubuhan Peladang Kawasan, Ahli-Ahli Peladang, and Petronas Chemicals Fertilizer Kedah Sdn. Bhd.

Rubber Products

Malaysia is the seventh-largest producer of natural rubber in the world, with the country's rubber products being exported to more than 200 countries across the globe. Malaysia is also the world's leading supplier of latex products such as examination gloves and surgical gloves, supplying more than half of the global demand.

To date, rubber products have been critical in the production of material for sealing and

packaging devices, medical supplies, tyres and other automotive parts, and construction. Future-generation rubber products will most likely feature high-performance elastomers used in moulded flexible parts such as adhesives, and for scientific applications.

According to the International Rubber Study Group (IRSG), the pandemic has driven up the world production of rubber for the first nine months of 2021 by 8.9 per cent to 21.6 million tonnes, from the 19.8 million tonnes in the corresponding period of 2020. Global imports of rubber for the first nine months of 2021 increased by 14.9 per cent to 17.6 million tonnes year-on-year, as compared to 15.4 million tonnes in 2020. In addition, global exports for the first nine months of 2021 increased by 12.6 per cent to 16.8 million tonnes from 14.9 million tonnes, reflecting significant growth since the pandemic. In Malaysia, the rubber products industry contributed RM64.6 billion to Malaysia's total exports of RM1.24 trillion in 2021. This is an increase of 45.8 per cent year-on-year, mainly because of a surge in demand for rubber gloves worldwide due to the COVID-19 pandemic.

The future of Malaysia's rubber products industry lies in strengthening its capabilities in high-potential segments such as E&E. For instance, isoprene (a derivative of rubber) can be combined with zinc silver oxide ink to create stretchable batteries, which have been gaining traction. MIDA invites investments and collaborations with industry stakeholders, government agencies, and research institutions to charter a clear direction and to identify strategies in the area of manufacturing advanced rubber products.

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Investments are further welcomed into the production of green rubber, in line with the 12MP's advancing sustainability theme. Other growth areas include creating expertise in rubber technologies, advanced materials, moulds, and dies, and nanotechnologies to meet market and R&D demands.

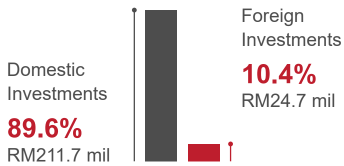
Prospective investors are also invited to leverage several incentives such as the Industry4WRD Intervention Fund, Industry4WRD DISF and Automation Capital Allowance (Automation CA) to embark on automation and digital transformation by commercialising new products and undertaking upskilling initiatives. Notably, there were two rubber products companies approved for Automation CA in 2021.

APPROVED INVESTMENTS IN THE RUBBER PRODUCTS INDUSTRY IN 2021

Domestic vs Foreign Investments

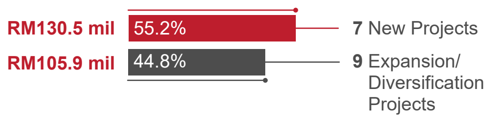
16 Projects Approved

Total **RM236.4** mil



Expansion/ Diversification vs New Projects

RM236.4 mil Total Investments



Employment Opportunities

565
Total Job Opportunities

A new project approved in 2021 was undertaken by Hibon Corporation Sdn. Bhd., a subsidiary of the Kossan Group specialising in manufacturing high-performance automotive products. The company will invest a total of RM30.4 million to produce a variety of rubber products, including engineered rubber parts, rubber grommets, general rubber products, and steel products. Its main customers are Proton, Perodua, and other vehicle brands assembled in Malaysia. It is expected to provide 64 new job opportunities.

> In 2021, Malaysia's 19 oleochemical plants produced 2.7 million tonnes of basic and specialty oleochemicals. The industry's market size is expected to grow at a compound annual growth rate (CAGR) of 5.8 per cent from 2020 to 2027.

Oleochemicals

Since the 1980s, Malaysia has been one of the world's largest oleochemicals producers, especially basic oleochemicals such as fatty acids, fatty alcohol, methyl ester and glycerine, supported by being the second-largest palm oil producer in the world providing the feedstock for the industry's use.

In 2021, Malaysia's 19 oleochemical plants produced 2.7 million tonnes of basic and specialty oleochemicals.

The industry's market size is expected to grow at a compound annual growth rate (CAGR) of 5.8 per cent from 2020 to 2027. This is in part due to the growing demand for products using natural or plant-based inputs, as well as cosmetics, pharmaceuticals and biochemicals; personal hygiene practices to mitigate COVID-19 risks has also led to the need for disinfectants and sanitisers made using basic oleochemicals such as natural alcohol and glycerine; and the increasing popularity of washing and cleaning products, dietary supplements, and specialty soaps produced from specialty oleochemicals such as plasticisers and polyacrylate resins.

In 2021, the total export value of the Malaysian oleochemicals sector was RM26.8 billion, a 94.2 per cent increase from 2020's RM13.8 billion. The industry recorded total imports valued at RM7.8 billion in 2021. The top two export destinations were PRC with total exports of RM5.4 billion, followed by the Netherlands with RM3.5 billion worth of exports.

KL-Kepong Oleomas Sdn. Bhd. has obtained the Manufacturing Licence for an expansion project with an additional capital investment of RM587 million. This expansion will create 120 new job opportunities. The expansion will further strengthen the company's position and improve its operations as one of the major natural fatty alcohol producers. This project is a true testament to the company's commitment to growing its production capacities. The company continues

to undertake research and development activities to further strengthen its manufacturing capabilities. In the long run, this initiative will assist in boosting the competitiveness of the oleochemical industry.

MIDA, which periodically undertakes strategic engagements with various industry groups, conducted a dialogue session with the Malaysian Oleochemical Manufacturers Group (MOMG) to update industry players on the latest government facilitations, while MOMG members shared the issues faced by them and their views on sustainable growth.

> "As with other industries, the oleochemicals industry is aligned with the sustainability themes prescribed by the 12MP, in line with the SDGs and ESG guidelines. As such, investments into the usage of palm-based and other green chemicals as intermediates for polymer production as alternatives to petroleum-based chemicals are highly-sought-after.

The industry is primarily driven by large domestic corporations that are constantly seeking to maintain and increase their competitiveness globally, given the challenges posed by emerging countries such as Indonesia, India, and the Philippines. These players are looking to capitalise on their strength in basic oleochemicals production to further develop downstream specialty oleochemicals. Through R&D activities for emerging applications and end-use markets, they can produce speciality oleochemicals that have broad applications, excellent product performance, and add value, as well as ensure that their products are safe for human use, environmentally compatible, and biodegradable.

Further technology development within the segment will help carve out lucrative niches within the specialty oleochemicals segment. Investors can consider funding the development of new innovations and technologies that can help increase their productivity, as well as improve their internal processes and operations.

Another growth segment in the oleochemicals industry is in the production of biodiesel, a biofuel that is a direct substitute to diesel derived from petroleum. Biodiesel in general refers to fatty acids methyl ester (FAME), an oleochemical derivative produced through transesterification and esterification with methanol. In particular, investors can look into second-generation biodiesel, which comes from used cooking oil, palm oil mill effluent, and other biomass products. These biofuel processes can be produced sustainably by using biomass with new technologies such as hydrogenated vegetable oil, which does not compete with the use of palm oil in food. The acceptance of second-generation biodiesel by the market can positively influence consumer perception with regards to the high quality of biofuels produced locally.

As with other industries, the oleochemicals industry is aligned with the sustainability themes prescribed by the 12MP, in line with the SDGs and ESG guidelines. As such, investments into the usage of palm-based and other green chemicals as intermediates for polymer production as alternatives to petroleum-based chemicals are highly-sought-after. Alongside biofuel production, this will help bring down greenhouse gas (GHG) emissions, which the Government aspires to reduce by 45 per cent per unit GDP by 2030.

WOOD AND WOOD PRODUCTS & FURNITURE AND FIXTURES

Wood and Wood Products & Furniture and Fixtures

Malaysia's timber industry is the third most important commodity sub-sector after oil palm and rubber. The National Agricommodity Policy ensures the sustainability of this crucial source, along with its enhanced midstream and downstream economic processes.

In addition, Malaysia as a leading global furniture manufacturer, is in a strong position to meet the demands from the infrastructure and hospitality sectors, as well as the e-commerce players. According to Expert Market Research, the global furniture market is expected to grow at a CAGR of 5.2 per cent from 2021 to 2026, with wooden furniture dominating the type of furniture preference in the market. This benefits Malaysia, as the country is a major producer of tropical wood and wood products, as well as being positioned among the top 10 world exporters of plywood, sawn timber and furniture. In 2021, Malaysia's export of wood and wood products amounted to RM20.3 billion. Of this, 13.7 per cent is from plywood while 46.9 per cent came from wooden furniture.

The Centre for Industrial Studies (CSIL) reported that the global demand for furniture grew well above pre-pandemic levels and is expected to further increase in 2022 and 2023. The property sector also sees the shift towards smaller homes and apartments, which heightened the demand for multipurpose or multifunctional furniture that incorporates extra storage space. In addition, even before the current work-from-home set off, there had been an increased market for office furniture in the home setting. Investors are encouraged to capitalise on these trendy markets while engaging in R&D and optimising production processes.

> Malaysia as a leading global furniture manufacturer, is in a strong position to meet the demands from the infrastructure and hospitality sectors, as well as the e-commerce players.

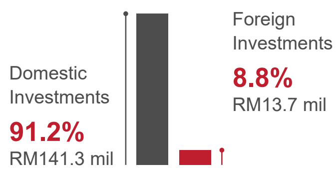
It is an imminent necessity for industry players in Malaysia to adopt higher automation, in light of the limitation of foreign labour to only 20 per cent of the total workforce in the manufacturing sectors. Facilitation through either Automation Capital Allowance, Industry4WRD Intervention Fund, or PENJANA Smart Automation Grant in 2021 has provided support to eligible players to start implementing technologies associated with Industry 4.0 in their manufacturing operations.

APPROVED INVESTMENTS IN THE WOOD AND WOOD PRODUCTS INDUSTRY (EXCLUDING BIOMASS AND FURNITURE) IN 2021

Domestic vs Foreign Investments

14 Projects Approved

Total **RM155** mil



Expansion/ Diversification vs New Projects

RM155 mil Total Investments

Employment Opportunities

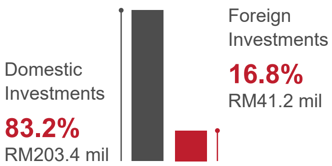
660 Total Job Opportunities

APPROVED INVESTMENTS IN THE FURNITURE AND FIXTURES INDUSTRY IN 2021

Domestic vs Foreign Investments

30 Projects Approved

Total **RM244.6** mil



Expansion/ Diversification vs New Projects

RM244.6 mil Total Investments

Employment Opportunities

1,033 Total Job Opportunities

Paper, Printing and Publishing

The world produces over 400 million tonnes of paper and cardboard annually, with packaging paper and board being the most produced type of paper. This signifies the importance of paper even in the era of digital transformation. The resurgence in paper supply and demand has in large part been due to the rise of e-Commerce.

Malaysia has been producing paper for over half a century. Industry players heavily rely on recovered paper as the raw material to produce paper products, predominantly packaging paper products such as kraft paper, testliner, corrugated medium paper, and paperboard. As such, paper can be considered a renewable resource that contributes to the circular economy in Malaysia.

Therefore, there remain significant opportunities in the use of other fibre sources to produce paper, such as bamboo, kenaf, and empty fruit bunches (EFB) from oil palm trees. EFB in particular is widely available nationwide, but only one company is currently producing paper from EFB.

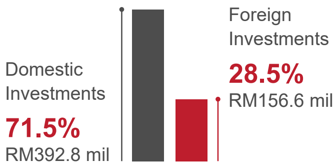
Malaysia's share of the global paper production rate is at 1.9 million tonnes annually. This is set to skyrocket to 10 million tonnes per year, once 10 PRC companies complete the setting up of their paper mills in the country, with an estimated investment totalling RM17.3 billion and creating over 9,000 employment opportunities.

APPROVED INVESTMENTS IN THE PAPER, PRINTING AND PUBLISHING INDUSTRY IN 2021

Domestic vs Foreign Investments

34 Projects Approved

Total **RM549.4** mil



Expansion/ Diversification vs New Projects

RM549.4 mil Total Investments

Employment Opportunities

1,413 Total Job Opportunities

Paper and Paper Products Sub-sector

28 Projects Approved

Total **RM403.4** mil

Printing and Publishing Sub-sector

6 Projects Approved

Total **RM146** mil

Accelerating the Vaccination Rate with PIKAS

The widespread vaccination of economic frontliners is essential to achieve the targeted goal of attaining herd immunity and mitigating the effects of COVID-19 on businesses and society. Together with the private sector, MITI launched the Public-Private Partnership COVID-19 Industry Immunisation Programme (PIKAS) as part of the National COVID-19 Immunisation Programme (PICK). PIKAS seeks to accelerate the vaccination rate of the manufacturing sector workforce in Malaysia through the cooperation of various stakeholders; including the Government, industry players, chambers of commerce, business associations, and other non-profit organisations.

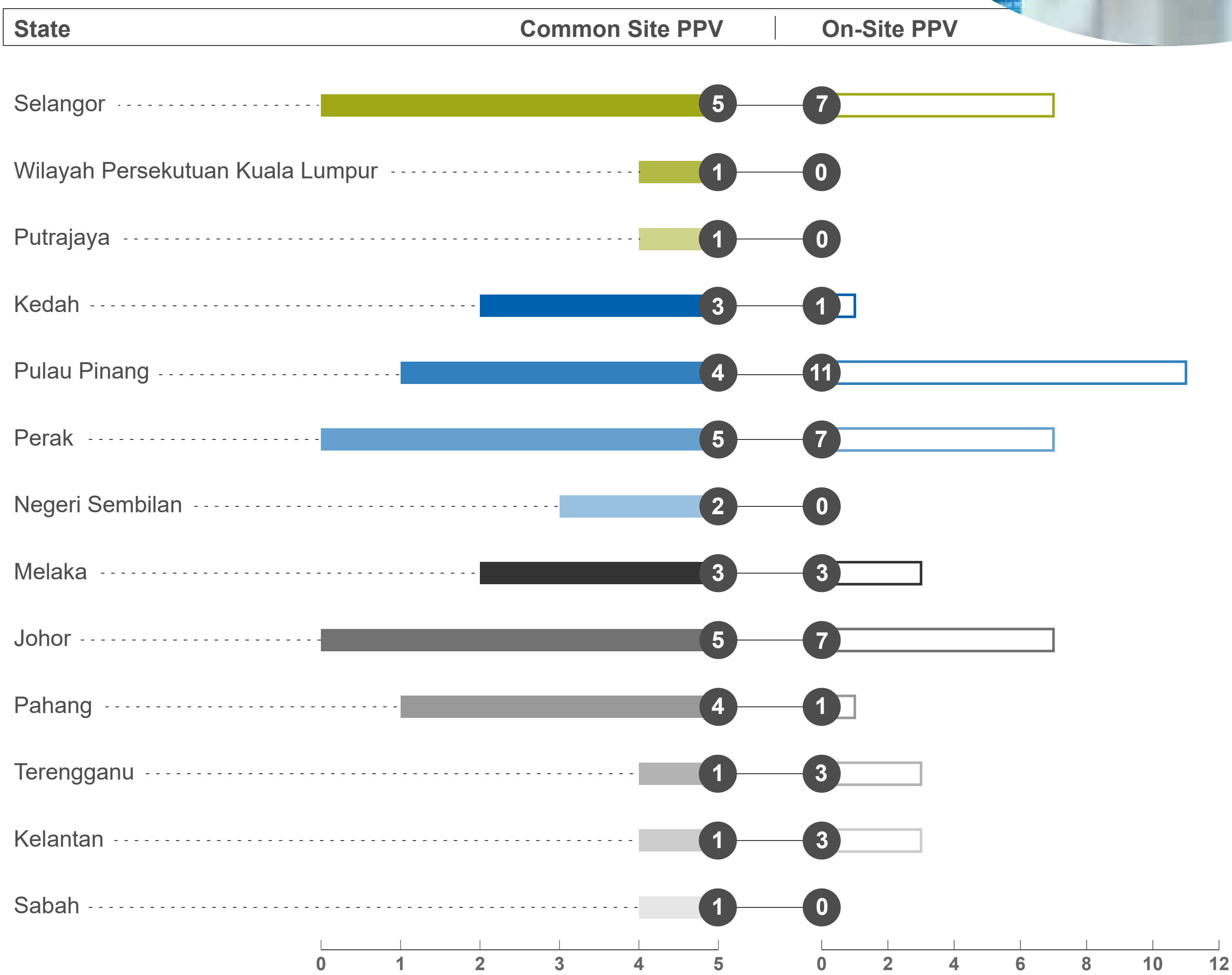
The PIKAS model splits the vaccination costs between the Government through MITI, which pays for the vaccines themselves, and the manufacturers, which pay for the costs of ProtectHealth (PH) administering the vaccine along with venue preparations and/or arrangements. Through PIKAS, manufacturing companies can have their employees vaccinated at various Vaccination Administration Centres (PPVs). This includes Common PPVs such as convention centres, exhibition centres and hotels; and On-Site PPVs, which are the companies' own factory premises.

Companies that choose the Common PPVs pay RM15 per dose for the cost of vaccine administration. This includes services rendered by medical practitioners, nurses, and logistic arrangements. They are also required to pay an additional RM30 per dose to the PPV's management for the venue, medical waste disposal, ambulance services, security, and other related services. Companies using On-Site PPVs pay the RM15 per dose and bear all costs associated with venue preparation.

Through PIKAS, the vaccination rate for the 2.2 million workers in the manufacturing sector was increased. Priority was given to the workforce in critical manufacturing industries such as E&E; food processing; basic metal products including the ferrous sub-sector; medical devices particularly PPE; O&G; and rubber products, especially medical gloves. As the Government had to prioritise vaccine distribution to PICK, walk-ins were allowed at PICK PPVs under Operation Surge Capacity, resulting in a revised PIKAS target of 1,000,000 manufacturing sector workers to be vaccinated.

Since its introduction on 16 June 2021, a total of 79 PIKAS PPVs have commenced operations, with 36 Common Site PPVs and 43 On-Site PPVs at manufacturing plants. The number of PPVs by state are as listed on the next page:

> "PIKAS seeks to accelerate the vaccination rate of the manufacturing sector workforce in Malaysia through the cooperation of various stakeholders; including the Government, industry players, chambers of commerce, business associations, and other non-profit organisations.



As of 31st October 2021, a total of 1,126,171 workers have registered under MySejahtera for vaccination. Of these, a total of 1,005,128 workers have received at least one vaccination, while a total of 963,312 have been fully vaccinated. Throughout Malaysia, 98 per cent of registered manufacturing workers have received COVID-19 vaccines. This includes workers who have been vaccinated through other vaccination initiatives such as PICK and walk-ins.

Strengthening Malaysia's Talent Readiness

Malaysia continues to be positioned as an investor-friendly location for long term growth of both foreign and domestic businesses with a focus on talent readiness to complement the increasingly high-tech innovative investments that are being received by the country. This is in line with National Investment Aspirations (NIA) where one of five core overarching goals is to create high-value jobs.

Given the challenges posed by the COVID-19 pandemic, many companies are redefining and restructuring their workforce to adapt to disruptions thrown up by the changing landscapes within their industries. Companies today require even more support to reskill and upskill their workforce, and to upgrade their talent readiness quotient. Cognizant of these needs, MIDA remains committed to assist investors in sourcing for skilled local human capital and contribute in facilitating the nation's reskilling and upskilling efforts.

Among initiatives include facilitating one-on-one engagements between companies and the relevant academic and training institutions. Example of companies facilitated are AT&S Austria Technologie & Systemtechnik (Malaysia), Risen Solar, Omron Malaysia, Electrofast Manufacturing, Tube Pac, PCC Oxyalkylates Malaysia, Kooka Paper Manufacturing, Panasonic Malaysia, Mighty Bakery and Airfoil Services. Notably, Lam Research International successfully hired 185 locals for their projects in Malaysia through this engagement.

MIDA has also assisted companies in their virtual recruitment drive by collaborating with PERKESO to organise an online career fair and a series of career talk programmes conducted at the national and state levels. The signature career talk programme themed, 'Listen and Act: Paving Your Way To Industry' provides a platform for job seekers, not only to have the opportunity of attending a virtual interview, but to also gain an insightful snapshot of industry knowledge from the companies directly. On the national level, seven companies namely Nestle, Lam Research, PKT Logistics, CJ Century, Resmed, Dominant Opto and Omron participated in the programme. It was well attended by a total of 502 job seekers. On the state level, companies such as Dunham-Bush Industries Sdn Bhd conducted an online interview to source for talents particularly in Selangor. To amplify the effort, MIDA has also conducted an online career fair in July 2021 with the participation of 16 companies, whereby 1,428 job seekers attended the online interview session.

Under the same umbrella of the career talk series themed 'Listen and Act: Paving Your Way to Industry', MIDA also organised a Special Edition of its signature programme, 'INTERNSHIP Career Talk' on 21 September 2021. It featured Top Glove Corporation which offered 2,000 internship opportunities and provided an in-depth look into the company's operations, manufacturing practices and corporate culture.

To ensure a pipeline of talent with the skills that are relevant to the industry, MIDA recognises that graduates need to be equipped with the latest technical know-how and expertise. This has led to a collaboration initiative known as the Manufacturing and Services Internship Programme (Manufactship) which involves several customised modules of industrial training, namely the Structured Internship Programme (SIP), Work Based Learning (WBL) and 2U2i offered by Ministry of Higher Education (MOHE). As at November 2021, 11 companies from various industries have registered for the programme. Through one-to-one engagements with MIDA, several companies have hired interns with an intention to absorb them once the training completed. For instance, Lam Research International, Best Eternity Recycle Technology and GS Paperboard & Packaging have placed 20, 30 and 54 students in their operations respectively.

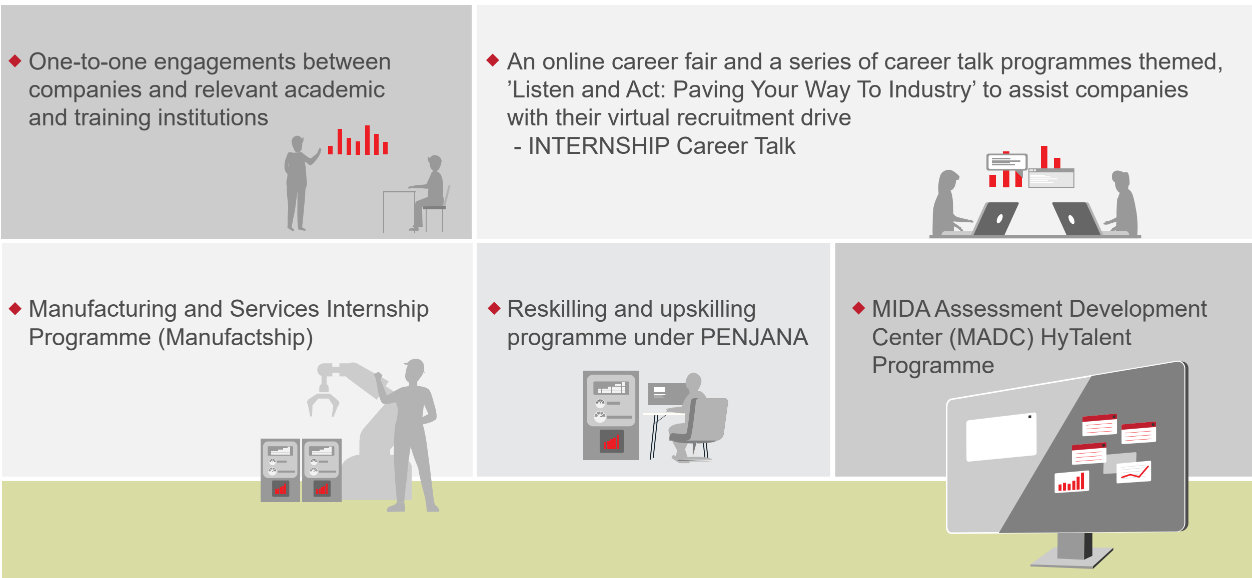
Given MIDA's role in facilitating foreign direct investments, Malaysian students studying abroad can also benefit from MIDA's internship initiatives. When SK Nexillis – a global E&E company from the Republic of Korea (ROK) announced their first overseas investment in Sabah, MIDA jumped into action to assist the company with their talent needs. MIDA Seoul together with the Public Service Department (JPA) of Seoul and SK Nexilis launched the SK Nexilis Global Internship Programme in

a sharing session with Malaysian students in ROK. As part of the Government's reskilling and upskilling initiative under the National Economic Recovery Plan (PENJANA), MIDA has collaborated with three training centres to reduce the skills gap and address unemployment among Malaysians, particularly unemployed graduates and retrenched workers. The programme, which started in October 2021 and is expected to wrap up by end-2022, has benefitted 285 trainees who completed their training last year. Modules offered are Industry 4.0 and technology driven content encompassing topics such as Artificial Intelligence (AI), data automation, drone piloting, advanced CNC technologies, aerospace, marine and solar.

MIDA has also partnered with local universities namely Universiti Kebangsaan Malaysia (UKM), Universiti Teknologi Malaysia (UTM) and Universiti Putra Malaysia (UPM) to implement the MIDA Assessment Development Center (MADC) HyTalent Programme to provide intensive leadership and technical training in the field of Internet of Things (IoT) and Industrial Internet of Things (IIOT). It comprises a five-month live-in pilot programme combined with a six-month internship duration to develop fresh graduates in a structured leadership and technical training to meet the needs of Malaysia's industries.

Along with maintaining a conducive investment ecosystem, MIDA is amplifying its efforts to realise Malaysia's aspirations of generating high-value employment opportunities for quality investment projects. MIDA continues to facilitate companies from the manufacturing and selected services sectors to develop and future proof talent with a broad range of skill sets including Fourth Industrial Revolution (4IR)-related expertise that are important for them to keep pace with the rapid changes in technological advancement and meet industry demands.

TALENT FACILITATION FOR INVESTORS



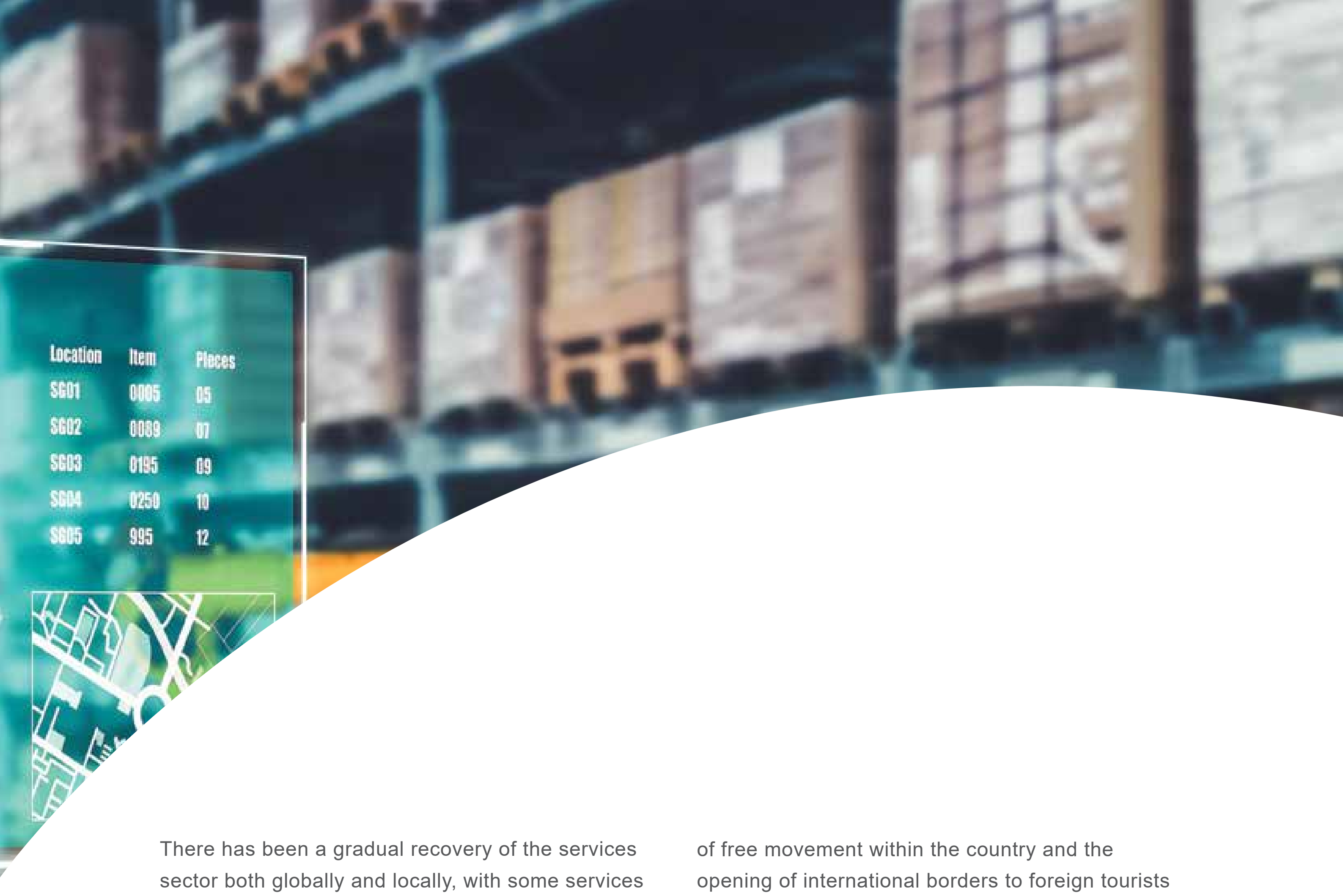
3.0 Performance of the Services Sector

"Globalisation of the services sector in recent decades supported by the so-called third unbundling offers new opportunities for international division of labor with major implications for labor markets. Intensification of digitalisation since the COVID-19 pandemic began has accelerated this phenomenon. Digital technology has also allowed access to a new range of products and services."

Asian Economic Integration Report 2022, Asian Development Bank (ADB)

Of Vigour and Vigilance

Investments in the services sector continue to elevate the economic development of Malaysia, showcasing an encouraging performance in withstanding the impact of the pandemic and its restrictions. The Government remains vigilant to the changes in the dynamic business landscape and continues to review and reform services sector policies to strengthen productivity, innovation and create quality job opportunities.



There has been a gradual recovery of the services sector both globally and locally, with some services sub-sectors performing better than others. Due to the pandemic, services that require minimal contact will be the least affected. According to the World Trade Organization (WTO), the global services trade volume is recovering, but the growth may be at a slower pace than pre-pandemic levels due to its reliance on in-person interactions.

The global services market is expected to grow from US$10.8 trillion in 2020 to US$11.8 trillion in 2021 at a compound annual growth rate (CAGR) of 8.9 per cent. The growth is attributed to companies reorganising their processes and recovering from the COVID-19 impact that presented many operational challenges. The market is expected to reach US$15.7 trillion in 2025 at a CAGR of 7 per cent.

In Malaysia's case, the Ministry of Finance's (MOF) Economic Outlook Report 2022 forecasts that the services sector will rebound by 7 per cent in 2022. The report notes that this recovery will be dependent upon economic activities going back to normal in 2021, which will see all sectors across the board record positive growth. The resumption of free movement within the country and the opening of international borders to foreign tourists later in 2022 will be a further boon to the recovery of the services sector. The implementation of eight stimulus and assistance packages totalling RM530 billion since 2020 and 2021 Budget measures to mitigate the impact on households and businesses also contributed to the growth.

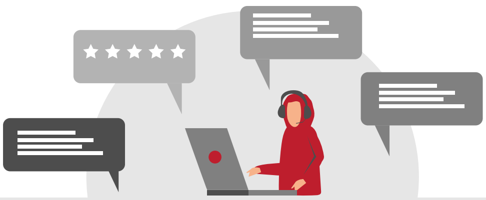
According to Bank Negara Malaysia (BNM), the Malaysian economy registered a positive growth of 3.6 per cent in the fourth quarter of 2021 (3Q 2021: -4.5%), bringing the full year growth to 3.1 per cent. On the supply side, all economic sectors recorded improvements in growth, led by the services and manufacturing sectors. The services sector which was the main contributor to Malaysia's economy, grew by 3.2 per cent in the fourth quarter of 2021 as compared to the preceding quarter due to higher consumer spending amid easing of containment measures.

> “In Malaysia's case, the Ministry of Finance' s (MOF) Economic Outlook Report 2022 forecasts that the services sector will rebound by 7 per cent in 2022.

With the relaxation of the movement control order (MCO), more services sub-sectors have revived and the total investments approved in the services sector in 2021 recorded a positive growth of 34.4 per cent of the approvals recorded in 2020 (RM70.0 billion). A total of RM94.1 billion worth of investments were approved for this sector with 3,803 projects that are expected to create 29,909 job opportunities for the country.

Malaysia seeks to revitalise its investment strategy to further attract high-quality projects in the country. The Cabinet on 21 April 2021 approved a new investment agenda, building upon the National Investment Aspirations (NIAs) and Malaysia's unique value proposition to investors. NIA will focus on coherence and cohesiveness across all national policy documents and initiatives related to investment, including the New Industrial Masterplan (New IMP) and the 12th Malaysia Plan.

HIGHLIGHTS OF THE SERVICES SECTOR IN 2021

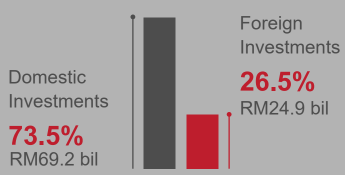


Total for services: **RM94.1 billion**
(positive growth of **34.4%** from RM70 billion in 2020)

3,803 Approved Projects

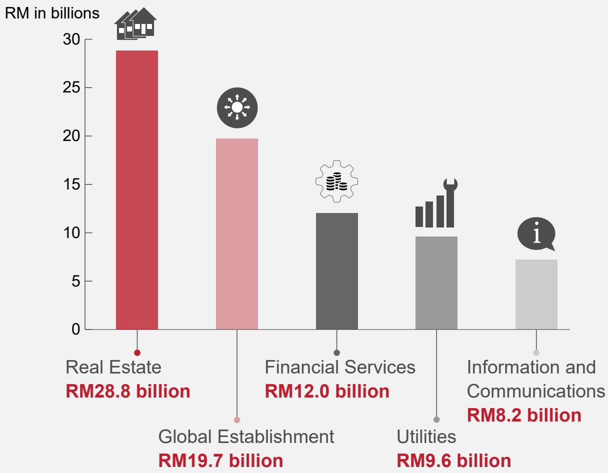
29,909
Total Job Opportunities

Total **RM94.1** bil



Domestic investments were concentrated in real estate, financial services, utilities, information and communications, and support services sub-sectors.

The top five contributors of approved investments in the services sector in 2021



Collectively, these sub-sectors represent **83.2%** of approved investments in the services sector during the period

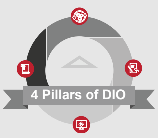
Majority of the main services sub-sectors recorded growth in investments approvals, with most of them in global establishment, financial services, transport services and health services.

Foreign direct investments have also registered an increase, more than threefold, from **RM6.6 billion in 2020 to RM24.9 billion in 2021**. This positive development marks a growing interest and confidence of foreign investors in making Malaysia their strategic investment destination for high-value services

MAJOR INITIATIVES UNDERTAKEN BY MIDA TO BOLSTER THE SERVICES SECTOR THROUGHOUT 2021

1 Digital Investment Office (DIO)

- Fully-digital collaborative platform between MIDA and Malaysia Digital Economy Corporation (MDEC)
- To create awareness on digital investments
- To strengthen the coordination among all Investment Promotion Agencies (IPAs) in promoting and attracting new investments
- End-to-end facilitation is offered to enable timely implementation of digital investment projects
- Four pillars of the collaborative platform
  - Coordination
  - Evaluation
  - Facilitation
  - Policy Advocacy



- In line with the MYDIGITAL initiative in attracting investments worth RM70 billion in the digital sector by 2025

Establishment Date - 22 April 2021

2 Policy on New R&D Definition under Finance Act 2018

- In collaboration with MITI, MOF and IRB
- Further amendments to the PIA 1986 were made via the 2022 Finance Bill on 8 November 2021
- Definition of R&D and contract R&D Company
- Monitoring requirement for the R&D status every five years

Effective Date: 1 January 2022

3 Formulation of the Twelfth Malaysia Plan (12MP)

- Total of eight (8) strategic and high impact industries are identified to regenerate economic growth, namely electrical and electronics, global services, aerospace, creative, tourism, halal, smart farming and biomass
- Key cross-cutting game changers that are related to services:
  - Catalysing strategic and high impact industries to boost economic growth of global services and tourism sectors
  - Revitalising the healthcare system in ensuring a healthy and productive nation
  - Embracing the circular economy by integration of SDGs and ESG to foster a green economy
  - Enhancing digital connectivity for inclusive development of a digital economy and infrastructure as well the policies governing the sectors
  - Aligning research and development (R&D) towards commercialisation, wealth generation and economic growth in order to strengthen the R&D, commercialisation and innovation ecosystem
  - Transforming the logistics ecosystem for greater efficiency to ultimately become a regional transportation and logistics hub by 2025
- Others - Incentive Coordination and Collaboration Office (ICCO) as the coordinator to oversee all incentives provided by various ministries and agencies across economic sectors

Duration - 2021-2025

RMK12

4 Extension of Tax Incentive for Shipbuilding and Ship Repairing (SBSR) and Principal Hub (PH)

- Extension is to enable continuous investment for the sub-sectors and generate significant spill overs for the country
- Extended under Budget 2021 to boost investments in the SBSR and PH

Duration - Effective until 31 Dec 2022

5 Relocation Incentive for Services

- Special Tax Incentive under PENJANA is extended under Budget 2022 till end 2022 to cover selected services sectors with significant spillover effects by granting a 0% to 10% special tax rate for 10 years
- Eligibility criteria of industry applies
- Non-resident individuals holding the key post in these companies could also consider a special income tax exemption at the rate of 15% for 5 years

Duration - Effective until 31 Dec 2022

6 Introduction of the Global Trading Centre (GTC) - Making Malaysia a Regional Distribution/Procurement Hub

- The incentive for GTC was incepted to encourage MNCs and local companies to venture into procurement, distribution and trade activities to further support their global supply chains

Duration - Effective until 31 Dec 2022

7 Expansion of Scope for Green Technology Tax Incentives

The scope of these incentives were expanded to include Rainwater Harvesting System (RHS) projects as follows:

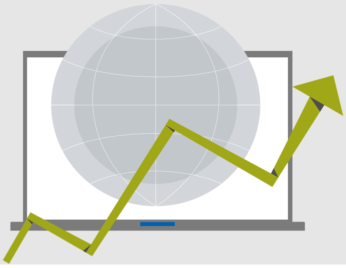
- Investment Tax Allowance of 100% for qualifying capital expenditure for green technology activities/ purchase of green assets for a period of 3 years. This allowance can be deducted up to 70% of the statutory income

Duration - Effective from 1 January 2022 to 31 December 2023

8 Digital Ecosystem Acceleration (DESAC) Scheme

- Introduced in Budget 2022 to support the comprehensive development of the national digital ecosystem
- The incentive offers an income tax rate of 0% to 10% for up to 10 years for new digital technology providers and an income tax rate of 10% for up to 10 years for existing digital technology providers undertaking diversification of new services/ new segments
- Investment tax allowance of 100% on capital expenditure for qualifying activities for up to 10 years is offered to digital infrastructure providers, whereby allowance can be offset over statutory income

Duration - Effective from 30 October 2021 to 31 December 2025.



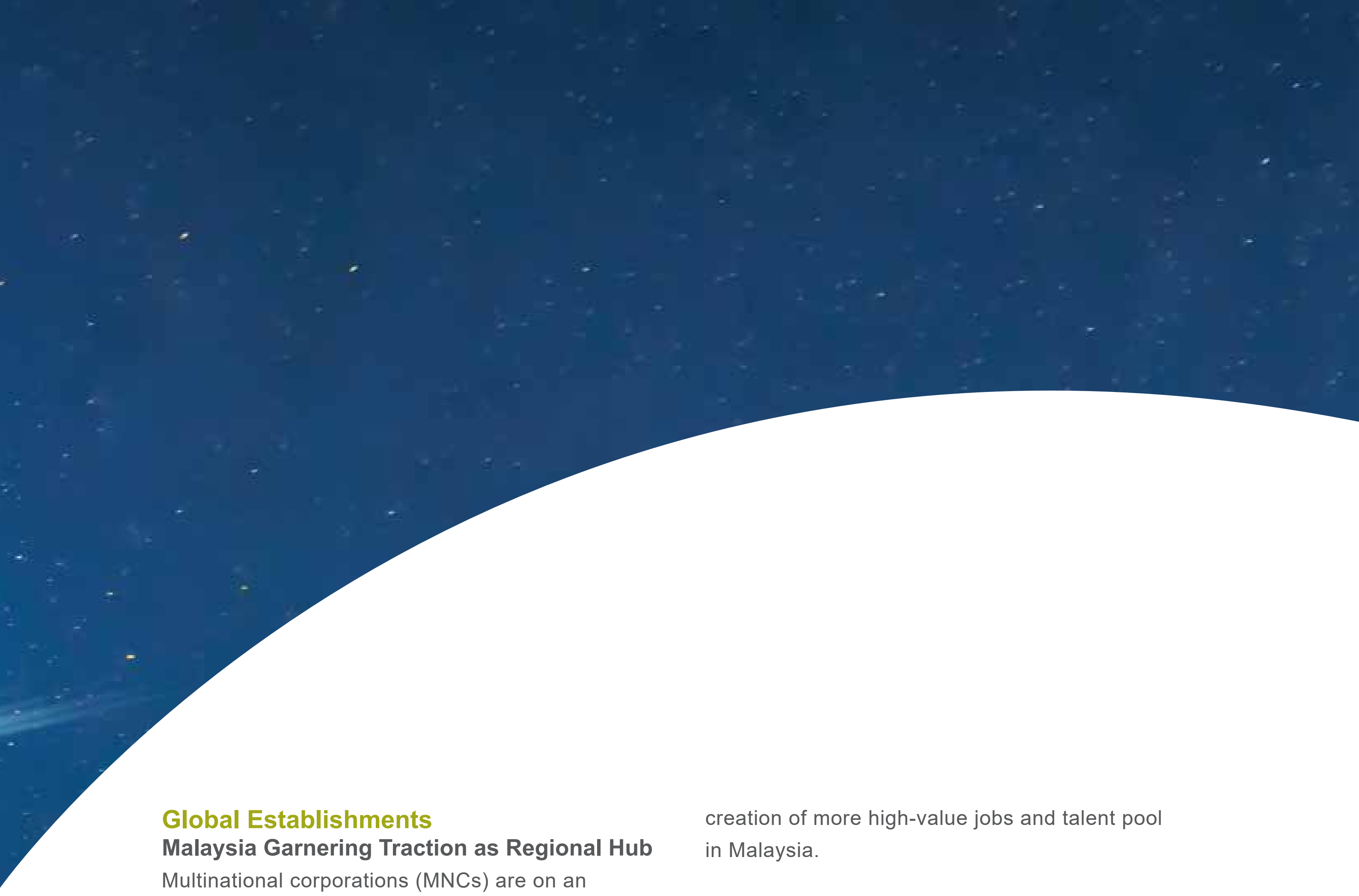
9 Formulation of New Industrial Master Plan (NIMP)

- Replaces the Third Industrial Master Plan (IMP 3), ended in 2020
- Not only focused on manufacturing but also emphasised on the services sector

Duration - 2021 - 2030

Zooming In On Services

With the easing of movement restrictions and reopening of more sub-sectors, Malaysia's diversified services sector continues to adapt to the resurging economic activity and responded favourably. This is driven by support and measures under initiatives such as the National Recovery Plan (NRP), Twelfth Malaysia Plan (12MP), New Industrial Master Plan (NIMP), Digital Ecosystem Acceleration (DESAC) Scheme, and other policy reviews.



Global Establishments

Malaysia Garnering Traction as Regional Hub

Multinational corporations (MNCs) are on an accelerated search for the most ideal location to house their central operating hubs to better serve and manage their supply chain function.

New hub structures of today are gradually morphing towards a regionally integrated model where the need for transparency is glaringly evident for companies to have greater visibility over their entire supply chains. To develop an agile yet resilient structure, MNCs need to establish control towers to centrally manage their supply chain networks better with increased efficiency.

In tandem with the current global trends, the Government announced the enhanced Principal Hub Incentive Scheme under Budget 2021. With the first version coined way back in 2015, the revised scheme now branded as PH3.0, will see a relaxation of conditions which will potentially appeal to more companies to leverage Malaysia as a base to render high value–added services to support their network in the region.

This revision is timely as Malaysia continues to innovate its investment policies and strategies to put her at par with other competing countries in the region and potentially look to further accelerate the creation of more high-value jobs and talent pool in Malaysia.

As a further incentive to position Malaysia as a regional hub, the Government also announced in Budget 2021, the Global Trading Centre (GTC) scheme as part of its strategy to further attract MNCs and local companies to establish their Global/ Regional Distribution Hubs in Malaysia. The GTC scheme is an enhanced, comprehensive scheme which provides a tax incentive and facilitation to ease import and export activities and aims to support companies in key manufacturing and services sectors venturing into procurement, distribution and trade activities to further strengthen their global supply chain.

This is aligned under the Twelfth Malaysia Plan (12MP) to accentuate the nation’s aspiration in becoming a knowledge-based economy by enticing more companies to provide higher value-add services and converge here, making Malaysia their Global Services Hub.

> “To develop an agile yet resilient structure, MNCs need to establish control towers to centrally manage their supply chain networks better with increased efficiency.

Principal Hub Projects

Since 2015, MIDA has approved a total of 43 Principal Hub projects– bringing in the commitments of companies to incur business spending of RM67.3 billion, utilise local ancillary services worth RM9 billion and create 6,806 jobs in sectors such as medical devices, electrical and electronics (E&E), oil & gas, chemicals and machinery and equipment.

As at December 2020, 21 Principal Hub companies have begun their operations with a total of 2,890 high-value jobs created, half of which are earmarked exclusively for Malaysians. These hubs have also incurred business spending of RM11.2 billion along with the utilisation of local ancillary services amounting to RM1.5 billion. Many of these companies have exceeded their commitments under the Principal Hub incentive in the first year of operations alone.

PERFORMANCE OF THE PRINCIPAL HUB PROJECTS IN 2021

Boston Scientific International Sdn. Bhd.

As a global medical technology leader for more than 40 years, Boston Scientific advances science for life by providing a broad range of high-performance solutions that address unmet patient needs and reduce the cost of health care.

Boston Scientific is setting up an Asia Pacific Supply Chain Hub in Penang, housing a Regional Distribution Center (RDC), Supply Chain Center of Excellence (CoE) and Trading Hub.

The RDC will be one of three centres globally and the company's first in Asia. The upcoming facility will enable new capabilities in Malaysia to serve highly regulated medical device markets in Asia Pacific. The CoE will provide professional expertise and management support to Boston Scientific entities across Asia Pacific as well as global manufacturing sites. The Trading Hub will develop competencies to source and incorporate third party manufacturers into a vertically integrated global supply chain for medical devices.

The Asia Pacific Supply Chain Hub is an extension to the Boston Scientific manufacturing plant located at Batu Kawan, Penang. This latest investment continues to build on the company's capabilities to serve global and regional healthcare markets and deliver life-changing technologies to patients around the world.

Huawei Technologies (Malaysia) Sdn. Bhd.

Huawei is among the major tech companies which has invested and made significant contributions to Malaysia's growth of the ICT industry in Malaysia over the past 20 years.

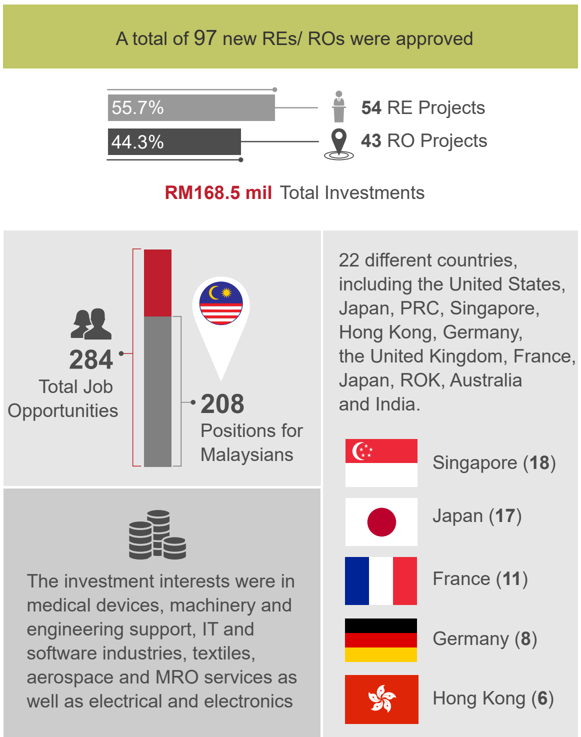
Having initially established its operations in Malaysia in 2001 to provide leading ICT solutions and technical support services, today Huawei has since expanded its investments in the country through the establishment of its Global Operational Headquarters (GOHQ) that leads the strategic direction of the Group's business in the Asia Pacific region and beyond.

Huawei further expanded its GOHQ's functions with additional business activities including the establishment of the Cloud Business Unit to undertake the Digital Infrastructure Hub initiative, Digital Talent Hub initiative and Digital Ecosystem Hub initiative. This project will also involve the evolution of the GOHQ as a Regional 5G Capability Centre preparing for the deployment of 5G in Malaysia which is expected to be ready by 2022.

Representative Offices/Regional Offices (REs/ROs)

Foreign companies can set up Representative Offices/Regional Offices (REs/ROs) in Malaysia as a forward base to coordinate and support their operations in the Asia Pacific region. These offices are used to gather information and evaluate feasibility for their parent companies to make long-term investment commitment decisions.

REs/ROs HIGHLIGHTS IN 2021

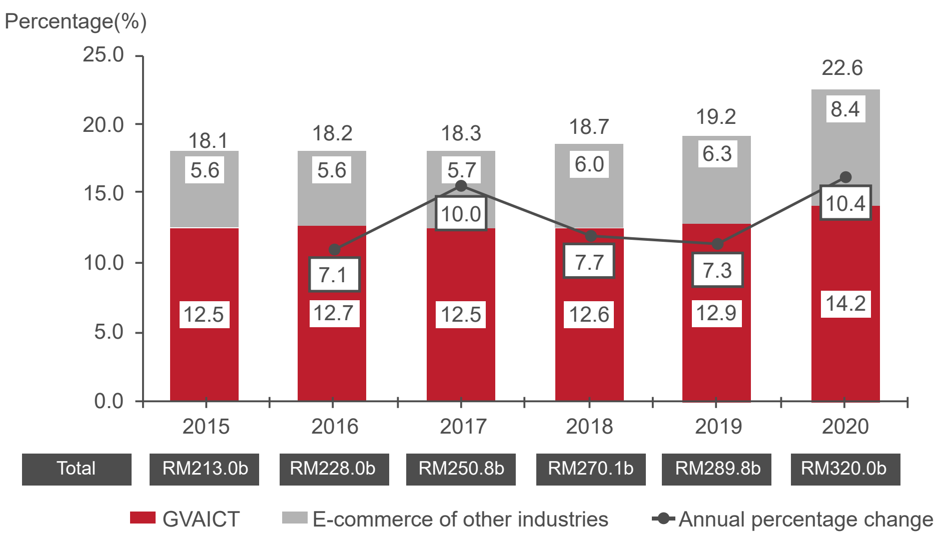


Digital Services

Malaysia has vast opportunities in the digital space. The growing role of digital technology is observed as a potential accelerator to the economic growth led by innovation. It is able to provide new breadth and increase the value proposition in positioning the country as a strategic investment destination in the region, as well as a hub for the new digital technology sector. As Malaysia aspires to become a high-tech innovation nation, a regional market producer for digital products and digital solutions providers, and for the Government to be fully data driven by 2030, it is necessary to provide a sustainable pipeline of digital products and services through the upskilling of talent with automation tools and advanced Fourth Industrial Revolution (IR4.0) technology.

The robust digital ecosystem with a wide range of information and communications technology (ICT) services position the country as a strategic hub for digital services. Establishing itself as one of the more resilient sectors, the ICT industry expanded its contribution to the economy at a rate of 10.4 per cent in 2020 compared to 7.3 per cent in 2019 with a value of RM320 billion, according to the Department of Statistics Malaysia (DOSM). This positive growth is in line with the Government's main focus on empowering the digital economy and strengthening the country's economic growth under the 12th Malaysia Plan (12MP) 2021-2025 to restore growth beyond the COVID-19 pandemic. Furthermore, the ICT industry contributed 22.6 per cent to the GDP, comprising Gross Value Added of ICT (GVAICT) at 14.2 per cent while e-commerce

ICT CONTRIBUTION TO ECONOMY



Source: Department of Statistics Malaysia (DOSM), 15 October 2021 of other industries is 8.4 per cent. To support a digitally-led economic recovery, the Government has mooted several policies and strategies which put ICT at the forefront of investment. In achieving the aspirations of MyDIGITAL, the Malaysia Digital Economy Blueprint (2021 – 2030) was launched on 19 February 2021 with MIDA as one of the key enablers of this roadmap. The blueprint projects RM70 billion of investments which are expected to contribute 22.6 per cent of digital economy to the country's GDP, and aim to create 500,000 high-tech job opportunities by 2025.

Under Budget 2022, the Digital Ecosystem Acceleration (DESAC) scheme was also introduced to strengthen the digital ecosystem in the country. The scheme adopts a-whole-of-nation approach which resonates with Malaysia's tech strategies by encouraging investments from MNCs, SMEs, MTCs as well as startups. This will elevate local digital companies' capabilities to become a global leader in the digital space ranging from a digital tech provider, digital infrastructure provider and producer of technologies.

DESAC encourages investments by Digital Technology Providers (DTPs), involved in providing digital services based on IR4.0 and digitalisation technology related to manufacturing and manufacturing-related services, as well as Digital Infrastructure Providers (DIPs) that provides infrastructure such as data centres and submarine cables.

> "Malaysia is becoming a regional hub for many businesses, and this is driving more organisations to invest in cloud systems, which are, in turn, driving the need for more local data centres.

These DESAC incentives aim to make Malaysia more attractive for long term quality digital investments and elevate local digital companies' capabilities to become global leaders in the digital space. DESAC also aims at developing and upgrading digital infrastructure which is fundamental in advancing the digital economy. The scheme will be effective for applications received by MIDA from 30 October 2021 until 31 December 2025. According to the GlobalData Market Opportunity Forecasts 2020 report, the manufacturing sector continues to be the highest contributor to total ICT spending in the country.

Malaysia is becoming a regional hub for many businesses, and this is driving more organisations to invest in cloud systems, which are, in turn, driving the need for more local data centres. Regal Orion, a Japanese-owned data centre will be operating its green mega data centre facilities in Enstek Tech Park, Negeri Sembilan, a highly developed digital infrastructure area with international connectivity. With a total investment of RM1.3 billion, the facility branded as SHINSEI MALAYSIA 1 (SM1) is expected to commence its operation as a Tier IV green data centre with a total of 120,000 square feet of net hosting space. It will be operated as a 'wholesale' data centre serving several anchor tenants from Japan. SM1 will also be equipped with a cutting-edge green infrastructure that emphasises business and environmental sustainability, powered by Submersify™ fluid submersion technology.

Research and Development (R&D)

Collaborations between the Government and private sector, the streamlining of R&D facilitation, and commercialisation of R&D are all focal points for Malaysia as it charts its way to become a knowledge-driven nation with socio-economic transformation and inclusive growth. The target is to rapidly increase the gross domestic expenditure on R&D (GERD) to 3 per cent by 2025 and ultimately to 3.5 per cent by 2030.

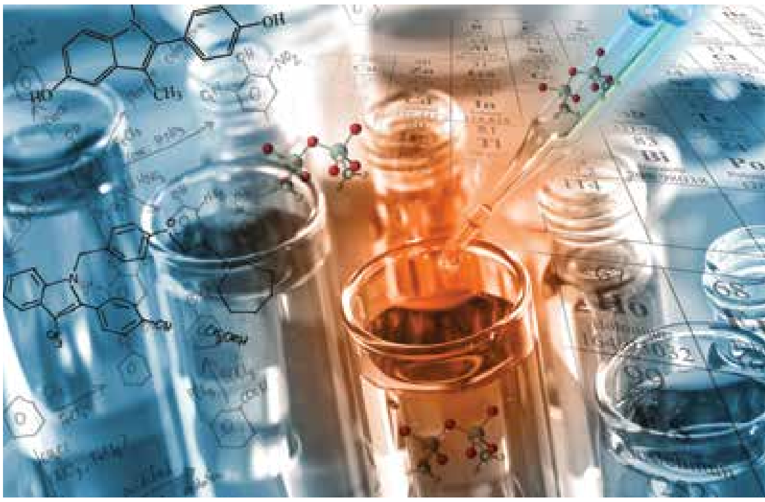
The strategies and action plan to achieve this goal are laid out under the National Policy on Science, Technology and Innovation (NPSTI) 2021-2030, launched in December 2020 to consolidate all of Malaysia's STI activities and programmes. Among initiatives under NPSTI is the restructuring of technology development and R&D grants under the Ministry of Science, Technology and Innovation (MOSTI) to promote the involvement of SMEs and MNCs in the private sector. A notable evaluation criterion for these grants includes collaborations between the public universities and research institutes with the private sector. Additional efforts to streamline R&D facilitation include the creation of the Technical Commercialisation Accelerator (TCA) and strengthening of the National Innovation Sandbox (NTIS).

Echoing this agenda, MIDA continues to play a vital role in enhancing the overall R&D ecosystem. In 2021, a new intellectual property (IP) development incentive was introduced to incentivise companies undertaking R&D activities and those that have filed for patents, utility innovations and copyrighted software based on their R&D output. The incentive provides full income tax exemption on royalty or licensing fees for the qualifying IP assets for 10 years. MIDA also tenaciously promotes collaborations between The Collaborative Research in Engineering, Science and Technology Centre (CREST) and the E&E industry for market-driven R&D and commercialisation, talent development and industry network engagement. (More updates on MIDA's efforts are found on page 100-101, Box Article: Pushing the R&D Envelope)

The outlook for R&D in 2022 is optimistic as the commercialisation of R&D is a key target area through the recently launched National Investment Aspirations (NIA) policy. Arising from this is a Special Tax Incentive for Selected Services, announced in Budget 2021, which covers new investments into R&D and Design and Development (D&D), and is available from 2021-2022.

Furthermore, Malaysia's commitment to reinvigorate R&D is also reflected in the Twelfth Malaysia Plan (2021-2025) with the creation of a Research Management Unit under the Economic Planning Unit of the Prime Minister's Department to coordinate R&D activities and funding mechanisms across various R&D centres and related organisations. The aim is to spur innovation and encourage experimental research with better potential commercial value. The Government seeks to ensure that huge public investments into R&D and science will translate to better long-term returns for the economy.

The Government has also allocated RM423 million for disbursement through MOSTI and the Ministry of Higher Education (MOHE) to strengthen R&D activities, under Budget 2022. This allocation is projected expected to further bolster the local innovation ecosystem and encourage partnerships with the industry.

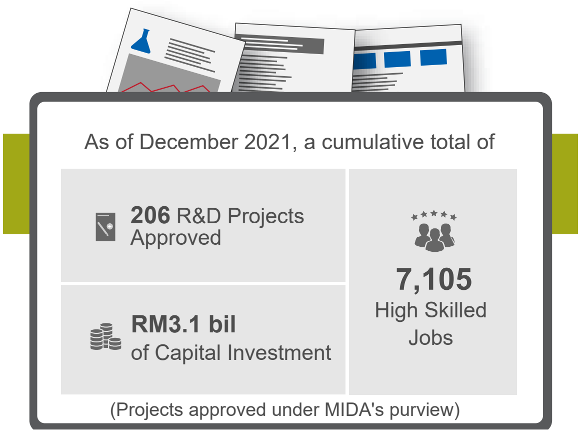


Performance of the R&D Sector

The interest of the private sector to explore R&D related activities was sustained in 2021. A total of 20 R&D projects were approved with an investment value of RM40.6 million. Out of this total, seven projects were approved under MIDA, with investments worth RM25.3 million, creating 156 new job opportunities.

There was a notable R&D project by a major company from India with investments of more than RM11 million to establish an R&D centre in Malaysia. This is expected to create about 70 high quality employment opportunities. The venture marks the company's first halal skin research and innovation centre, which will also be one of the largest and most advanced halal skincare lab in the world. The facility will conduct R&D on personal care and household products and devices as well as healthcare and nutricosmetics products, supplements and devices.

HIGHLIGHTS OF THE R&D SECTOR (1995-2021)



APPROVED INVESTMENTS IN THE R&D SECTOR (1995-2021)

Type	No	Employment	Domestic Investments (RM million)	Foreign Investments (RM million)	Total Investments (RM million)
			1995-2021		
Contract R&D	83	1,547	399.4	207.3	606.8
R&D Company	30	631	87.6	110.0	197.6
In-house R&D	47	2,165	544.4	845.9	1,390.3
R&D Status	29	1,384	158.3	152.5	310.8
Others	17	1,378	213.6	423.7	637.3
Grand Total	**206**	**7,105**	**1,403.4**	**1,739.4**	**3,142.8**

Notes:
i. Projects Approved under MIDA's Purview
ii. Due to rounding, figures presented in this table may not add up precisely to the totals provided

APPROVED INVESTMENTS IN THE R&D SECTOR IN 2021

1 In-house R&D Company

3 in Contract R&D

3 being given R&D status

RM25.3 mil Total Investments

Domestic Investments
49.4%
RM12.5 mil

Foreign Investments
50.6%
RM12.8 mil

156
High-Tech Jobs

Note: Projects approved under MIDA's purview

Green Technology

Advancing Green Growth

Despite lockdown measures and reduced economic activity, global greenhouse gas concentrations continued to rise. The United Nations Framework Convention on Climate Change (UNFCCC) Annual Report 2020 concluded the period of 2016 and 2020 as being the hottest decade on record, threatening lives and livelihoods worldwide. Although Malaysia contributes less than 0.7 per cent of the global greenhouse gas emissions, the Government has pledged to do its part to right the climate balance by reducing greenhouse gas emissions to 45 per cent of GDP by 2030 in line with the Paris Agreement.

The Twelfth Malaysia Plan 2021-2025 (12MP) has made green growth a priority, specifically focusing on green technology and energy sustainability as the main factors to advance Malaysia's green economy. Given the overlap of sections and ministries involved, the Government is using a whole-of-nation approach which includes embracing the circular economy, encouraging shared public-private responsibility and investments, as well as organising green financing facilities in moving towards a low carbon nation. Optimistically, Malaysia has committed to the target of becoming a net-zero emission nation by 2050 with a renewable energy target of 31 per cent.

12MP ACTION ITEMS FOR ENVIRONMENTAL SUSTAINABILITY

Environmental Sustainability

1. Climate change mitigation and adaptation
2. Carbon tax
3. Sustainable consumption and production
4. Disaster risk management
5. Disaster risk insurance scheme
6. Green technology
7. Green technology indicators
8. Biodiversity conservation
9. Renewable energy
10. Energy efficiency
11. Integrated water resource management
12. Marine litter
13. Valueing ecosystem services
14. Waste as commodity

(list not exhaustive)

Opportunities in Green Technology

The current green technology incentives have been well received since they were first introduced in Budget 2014. The extended Green Investment Tax Allowance (GITA) and Green Income Tax Exemption (GITE) till December 2023 have continued to receive encouraging responses from the industrial and commercial sectors through various projects. Companies are encouraged to invest in green technology areas such as renewable energy (RE) sources such as solar, biomass, biogas, mini-hydro, and other green technology activities such as energy efficiency (EE), green building, green data centre and integrated waste management.

In the pipeline are plans for the Government to launch the MySDG Trust Fund, a Sustainable Sukuk, in collaboration with the United Nations to meet any financing gaps. Among the latest initiatives to assist SMEs include the Low Carbon Transition Facility, introduced under Budget 2022, with a fund value of RM1 billion, based on a matching fund arrangement with participating financial institutions. In 2022, the Government will also issue Sustainability Sukuk up to RM10 billion to be channelled to eligible environmental-friendly projects.

APPROVED INVESTMENTS IN GREEN TECHNOLOGY IN 2021

Sector	Sub-Sector	Number	Total Employment	Domestic Investments (RM million)	Foreign Investments (RM million)	Total Investments (RM million)
Green Services	Energy Generation	6	51	20.9	0	20.9
	Green Building	1	5	1.0	0	1.0
	Total	**7**	**56**	**21.9**	**0**	**21.9**
Green Projects	Energy Conservation	35	166	398.1	7.8	405.9
	Energy Generation	842	458	2,290.4	710.1	3,000.5
	Green Building	4	4	74.3	12.4	86.7
	Waste Management	1	150	172.9	0	172.9
	Total	**882**	**778**	**2,935.7**	**730.3**	**3,666.0**
	Grand Total	**889**	**834**	**2,957.6**	**730.3**	**3,687.9**

Renewable Energy (RE) on the Rise

The World Energy Outlook 2021 reports that investments in renewable energy continued to increase despite disruptions due to the pandemic. Wind and solar PV increased at their fastest rate in two decades and the demand for electric vehicles has set new sales records. It is estimated that the annual global market for wind turbines, solar panels, lithium-ion batteries, electrolysers and fuel cells will grow tenfold to US$1.2 trillion by 2050.

With these promising trends in RE, the Government is gradually liberalising the power market under the Malaysia Electricity Supply Industry (MESI) 2.0 to stimulate investment opportunities. The target is for renewables to achieve 31 per cent of Malaysia's total installed capacity by 2025 and 40 per cent by 2035.

Currently in Malaysia, hydropower technologies dominate this sector at 86 per cent of renewable capacity. Meanwhile, large scale solar (LSS) projects present a highly attractive investment opportunity. In 2021, the LSSPV Bidding Cycle 3 saw 99 per cent of bids quoting below the baseline tariff price. Smaller-scale solar photovoltaic (PV) consumer installation is another area of growth, driven by reduced costs of production and the Net Energy Metering (NEM) Scheme which provides a pathway for excess energy to be sold back into the grid. Biomass and biogas are increasingly appealing RE sources. Leveraging the nation's

APPROVED RENEWABLE ENERGY PROJECTS BY SUB-SECTORS IN 2021

Type of Renewable Energy (RE)	Projects Approved	Investments (RM million)	Employment
Solar	826	2,765.5	323
Biogas	14	196.3	108
Biomass	2	38.8	27
Total	**842**	**3,000.6**	**458**

palm oil industry as a fuel source, the RE potential is more than 1,000MW and 500MW respectively.

Of the solar projects approved in 2021, a total of 818 are self-consumption solar projects with investments of RM643 million and eight LSS projects by LSS3 Pekan Sdn. Bhd., Kerian Solar Sdn. Bhd., Solarpack Suria Sungai Petani Sdn. Bhd., Viva Solar Sdn. Bhd., Cove Suria Sdn. Bhd., Cypark Estuary Solar Sdn. Bhd., Classic Solar Farm Sdn. Bhd., and TC Sunergy Sdn. Bhd. with total investments of RM2,122.5 million.

Other RE projects approved include 14 biogas projects with total investments of RM196.3 million, and two biomass projects worth RM38.8 million. A total of 458 employment opportunities were created from all these RE projects. MIDA has also approved one waste to energy project i.e. Berjaya Alam Murni Sdn. Bhd. which is located in Selangor with green investment amounting to RM172.9 million. A total of four green building projects have been approved in 2021 with total investment of RM86.7 million i.e. Petronas Management Training Sdn. Bhd., Impian Bebas Sdn. Bhd., Ajinomoto (Malaysia) Berhad, and Brickfields Asia College Sdn. Bhd.

For green services projects, seven projects were approved with total investments of RM21.9 million. These projects will create 56 high-quality job opportunities to undertake green services for solar PV system integrators and green building.

Oil and Gas Services and Equipment

The oil & gas (O&G) sector faced headwinds in 2021 due to prolonged low oil prices and sluggish global demand. The current trend of energy transition into renewable and low carbon energy also adds to the uncertainty of the upstream oil & gas market. Many oil majors including Petronas have cut their capital expenditures in the upstream sector and focused more on specialty chemicals, renewable energy (RE) and hydrogen.

In light of these developments, the O&G services and equipment (OGSE) sub-sector, which covers the upstream (oil and gas field services) and midstream (transportation and storage) segments, as well as maintenance of machinery and equipment will be affected due to its heavy reliance on Malaysia's upstream market. The midstream market, in particular, is expected to grow in the next five years given the increasing demand for oil storage and increased intra-Asia trade. LNG terminals capacity is also anticipated to rise as sales volumes increase due to low crude oil prices – a spillover effect which would present investment opportunities in transportation and storage services.

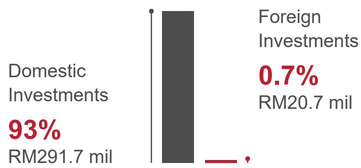
On a strategic level, the National OGSE Industry Blueprint 2021–2030, which was launched in April 2021 outlines plans to advance and accelerate technology development among local OGSE companies to help them adapt to the rapidly evolving requirements of the energy services market such as development in the energy transition front. With these competencies, OGSE players would be able to take on opportunities beyond the O&G field, and into adjacent industries, on top of offering services to the global market.

APPROVED INVESTMENTS IN OIL AND GAS SERVICES AND EQUIPMENT IN 2021

Domestic vs Foreign Investments

9 Projects Approved

Total **RM312.4** mil



9 Projects Approved

- **6** projects for oil and gas machinery & equipment worth **RM117 million**
- **2** were for oil & gas services and petroleum products (including petrochemicals)
- **1** project for fabricated metal products

Employment Opportunities

264
Total Job Opportunities

Recovery on the Horizon

Malaysia's O&G sector can expect to see brighter days following higher world economic growth rates in 2022. According to the OPEC's December 2021 oil market report, the world oil demand is projected to hit 99.13 million barrels per day (bpd) in 2022, exceeding pre-pandemic levels. As oil prices continue to pick up, activities for the OGSE industry will follow suit. The resilience of O&G sector highlights that it will remain an essential part of the energy mix in the coming years, despite an accelerated shift towards renewables.

Many opportunities exist for OGSE sector investors stemming from the development of 13 new offshore exploration blocks within proven hydrocarbon basins in Malaysia provide bountiful opportunities. To this end, the Malaysia Petroleum Management (MPM) has launched the Malaysia Bid Round (MBR) 2021, a platform for interested investors to submit their tenders. These 13 blocks cover nine shallow-water and four deep-water acreages, with Discovered Resource Opportunities (DRO) included in some of these exploration blocks.

The energy transition trend also paves the way for the industry to move into a more green, innovative and sustainable business model. Investors with innovative services and products may be eligible for incentives and grants under various schemes offered by relevant agencies such as MIDA, SME Corp and Malaysia Petroleum Resources Corporation (MPRC). These incentives are aligned to the Government's aim to intensify local OGSE development for global competitiveness and further enhance Malaysia's position as one of the leading OGSE gateways in the region.

In 2021, a noteworthy OGSE project was from Premier Hytemp Sdn. Bhd, a global market leader in the manufacture and supply of engineered metal solutions, offering a complete and global supply chain capability from original steel and alloy supply to the manufacture of complex components. Exclusively serving the oil and gas sector, the group supplies to customers across the globe from its operating bases in the UK, Singapore and Malaysia.

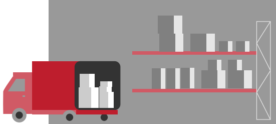
Logistics

The global contract logistics market regained its momentum in 2021 according to Transport Intelligence (ti-insight), with a forecast growth of 6.5 per cent, which is 2.9 per cent higher than pre-pandemic levels in 2019. This recovery is attributed to the progressive removal of restrictions to spur economic activities as well as pent up demand driving an increase of fulfilment services. It is anticipated that the shift in consumer behaviour will accelerate the growth of e-commerce and online shopping, leaving a lasting impact on the global logistics sector.

The Malaysian logistics industry is a beneficiary of both the e-commerce boom and the gradual recovery of the global supply chain. This is reflected by the country's external trade rebounding in the second-half of 2020, which drove demand for logistics services to its pre-pandemic levels. Locally, domestic investors continue to show growing interest in storage expansion, cold chain facilities, last-mile delivery services as well as freight and supply chain technologies for efficient integration between shippers and third-party logistics (3PLs) companies.

Being among the fastest-growing in Southeast Asia, Malaysia's e-commerce segment is an extremely attractive market to capitalise. It has an estimated

APPROVED INVESTMENTS IN LOGISTICS IN 2021



Integrated Logistics Services (ILS)

ILS comprises activities provided by logistics companies along the logistics supply chain such as freight forwarding, warehousing, transportation and other related value-added services i.e. distribution, product assembly/ installation, consolidation, procurement, quality control, and supply chain management

20 ILS Projects Approved

Total **RM1.7 bil** Investment Value

- **RM1,720.7 mil** Domestic Investments
- **RM6.2 mil** Foreign Investments

2,111 Job Opportunities

International Integrated Logistics Services (IILS)

IILS is a status 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

22 IILS Projects Approved

Total **RM252.8 mil** Investment Value

440 Job Opportunities

Cold Chain Facility/ Services

Cold chain facilities and services for perishable agricultural products i.e. fruits, vegetables, flowers, ferns, meat, and aquatic products

1 Cold Chain Project Approved

Total **RM226.8** mil Investment Value

14 Job Opportunities

growth of 10.6 per cent in 2021, according to GlobalData's E-commerce Analytics, and is expected to reach RM51.6 billion in trade volume by 2024 – increasing at a compound annual growth rate (CAGR) of 14.3 per cent between 2020 and 2024.

A notable project approved in 2021 was from ILM Logistics (M) Sdn. Bhd. with investments of RM226.8 million in cold chain. The company aims to significantly change the cold chain provision outlook through innovation and automation.

Regional e-Fulfillment Hub

The Government has made headway in levelling the playing field for local SMEs to compete against large export-oriented firms and developed nations with initiatives such as the National e-Commerce Strategic Roadmap (NESR) 2.0, MyDIGITAL and the Malaysia Digital Economy Blueprint. One key strategy is to establish Malaysia as a regional and global e-fulfilment and transhipment hub to facilitate cross-border e-trade in the region while driving the exports of Malaysian SMEs via e-commerce.

The Government has also set out strategies to transform the logistics ecosystem for greater efficiency in the 12MP which will enhance the prospects for the logistics industry for the next five years. Adoption of automation and digitalisation are both crucial enablers for industry players to compete in the increasingly sophisticated environment of e-fulfilment. An area of opportunity is the expansion of storage space and innovative services activities.

There are also huge demands for warehouse and distribution centres with efficiency-enhanced technologies, such as blockchain and the Internet of Things (IoT). Incentives and grants are available through various schemes under MIDA and other relevant agencies to spur the growth of this sector towards becoming the Regional E-Commerce Logistics Hub.

Healthcare

Malaysia's public healthcare facilities and medical workers were stretched to their limits at the height of the pandemic in 2021 and fought tirelessly to face down COVID-19. With an aggressive vaccine roll-out and strict monitoring of SOP's, the nation is on its road to recovery. In Budget 2022, the Government has prioritised public healthcare to aid this recovery by allocating the Ministry of Health (MoH) RM32.4 billion, the second-highest allocation, with 13.5 per cent earmarked for development expenditure while 54 per cent is for emoluments.

Meanwhile, international border closures have affected Malaysia's thriving health tourism sector, recording about 270,000 healthcare traveller arrivals in 2021, compared to 1.3 million arrivals in 2019. Addressing this is the Malaysia Healthcare Travel Industry Blueprint 2021-2025 that will be rolled out in two phases, namely the Recovery Phase (2021-2022) which will focus on promoting quality offerings and enhancing patient experience through digitalisation efforts, and the Rebuild Phase (2023-2025) to foster collaborations to promote niche offerings such as Fertility and Cardiology Hubs, the Centre of Excellence for Oncology and the Flagship Medical Tourism Hospital Programme. The Malaysian Healthcare Travel Council (MHTC) has been given a budget of RM20 million in 2022 to promote the country's medical tourism sector internationally and is targeting a revenue of RM800 million in 2022.

APPROVED INVESTMENTS IN HEALTHCARE IN 2021

RM741 mil Total Investments

- **5** Projects Approved
- **869** Total Job Opportunities

Notable quality projects approved in 2021

- Sunway Medical Centre, Seberang Jaya (RM462.8 million)
- HSC Medical Centre Kuala Lumpur (RM62.8 million)

The Government continues its commitment to attract investments in private healthcare by extending incentives for private hospitals and ambulatory care centres (ACC) until 31 December 2022. The Domestic Investment Strategic Fund (DISF) under the Pelan Jana Semula Ekonomi Negara (PENJANA) has also been enhanced to benefit the services sector.

The private healthcare sector is poised for growth as the pandemic has revealed new areas of opportunities for healthcare services to be resilient and sufficiently prepared, such as meeting the scarcity of hospital beds. Three new hospitals are slated to open within the next three years, namely the KPJ Healthcare Bhd's Kinrara Health Centre targeting completion in 2Q21, Damansara II Specialist Hospital (1Q22), and Sunway Healthcare Group's Seberang Jaya Medical Centre (2022).

New opportunities for healthcare services include the adoption of new technology and digitalisation, which will reduce costs and procedures, thereby strengthening the healthcare ecosystem. The Twelfth Malaysia Plan (12MP) has outlined various strategies to leverage advanced technology and digitalised healthcare services. The two-year extension of tax incentives will be a boon for investments in the industry.

Another potentially promising investment prospect is senior assisted living care. Research by DataBridge Research reveals that 605 million or 11 per cent of the entire global population are above 65 years old. In Malaysia, the Economic Planning Unit (EPU) in partnership with the MHTC is exploring the International Retirement Living programme- designed to attract healthy and active foreign retirees to enjoy the country's warm weather and well-equipped facilities. Another noteworthy factor for investors to consider is that the nation ranks as the top Asian country for retirement in US-based International Living's Annual Global Retirement Index from 2015 - 2021. This index considers multiple factors, including the availability of high-quality, affordable, and accessible healthcare.

Meanwhile, telemedicine private healthcare providers in Malaysia have found new growth opportunities. For instance, the Sunway Medical Centre Velocity (SMCV) and Parkway Pantai of IHH Berhad Group have set up teleconsultation services to allow patients to receive health advice from specialists or medical

officers from the comfort of their homes.
MIDA continues to support and encourage investments in private healthcare facilities and undertake policy advocacy with relevant stakeholders including MHTC, Ministry of Health (MoH), Ministry of Finance (MoF) and Malaysian Productivity Corporation (MPC), while supporting various healthcare investment promotion initiatives.

Education

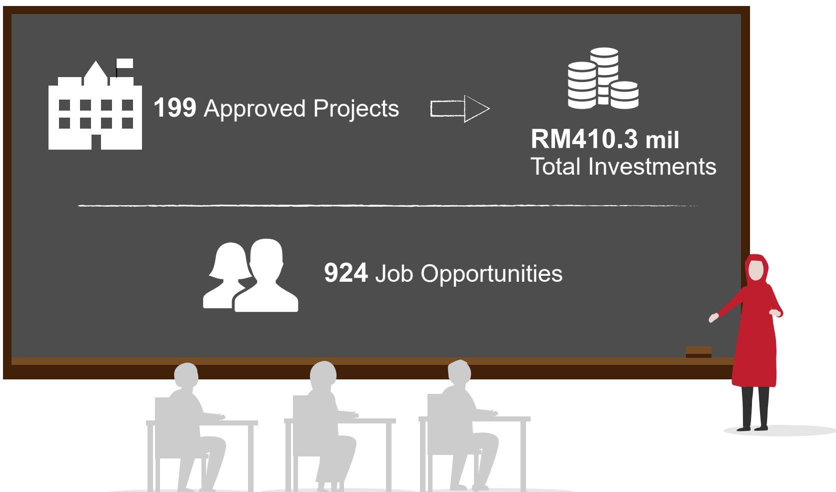
Human capital is a key driver of economic growth and socioeconomic development. Efforts to accelerate manpower development through higher education was derailed by the pandemic but resumed its recovery trajectory in some areas. According to the Department of Statistics Malaysia (DOSM), about 32 per cent of the Malaysian labour force possess tertiary qualifications. This achievement is more than a threefold increase since 1990. The number of university graduates in Malaysia increased by 4.4 per cent in 2020 from 5.13 million graduates in 2019. This is in line with the growth of Malaysia's Private Higher Education Institutions (PHEIs) in recent decades, supplying a constant stream of human capital for the country as well as the wider ASEAN region.

The enhancement of the education standard remains a priority for Malaysia. This includes improving technical and vocational education and training (TVET), strengthening lifelong learning (LLL) and increasing the efficiency of the labour market to meet industry demands, especially since the Fourth Industrial Revolution (4IR) brings diverse new technologies that impact education and training. Confronting this reality, the Twelfth Malaysia Plan (12MP) focuses on realigning the labour market for inclusive and sustainable growth, increasing job opportunities for Malaysians as well as developing future-ready talent.

The country's ongoing efforts were recognised in the QS World University Rankings for Asia 2022 where University Malaya (UM) along with 24 other Malaysian tertiary institutions showed improvements. UM went up one spot to rank eighth in Asia and privately owned UCSI University breached the top 100, climbing 28 levels to the 77th position.

"The country's ongoing efforts were recognised in the QS World University Rankings for Asia 2022 where University Malaya (UM) along with 24 other Malaysian tertiary institutions showed improvements.

APPROVED INVESTMENTS IN EDUCATION IN 2021



Nonetheless, disruptions in the higher education sector continued through 2021 with the closure of institutions and international borders for almost a year, necessitating a more sophisticated delivery of online and distance learning. Cognisant of this, the Education Ministry was allocated the lion's share of Budget 2022 to aid the recovery of this sector with an allocation of RM52.6 billion. The Higher Education Ministry was granted RM14.5 billion to improve the online learning system, enhance digital access and flexible learning options, while TVET received RM6.6 billion to upgrade their upskilling and re-skilling programmes, with an emphasis on getting industry accreditation.

To help close the gaps between the needs of the industry and the supply of young local talents, one of MIDA's latest initiatives, the Artificial Intelligence for Universities (AI4U) Programme was organised in collaboration with Intel Malaysia and the Malaysia Productivity Corporation (MPC). (Other initiatives by MIDA can be found on page 68-69, Box Article: Strengthening Malaysia's Talent Readiness)

PHEIs including TVET institutions may apply for the Domestic Investment Strategic Fund (DISF) and the Smart Automation Grant (SAG) under PENJANA to support the adoption of technology and innovation. The funds will cater to expenditures incurred in training Malaysians, R&D activities, automation, modernisation and upgrading of facilities, obtaining international standards/ certification, and licensing or purchasing new/high technology. In 2021, MIDA approved a SAG for a private college engaged in the adoption of smart digital technology. The college made an additional investment of RM1.9 million for the introduction of advanced digital ultrasound machines for students of Medical Imaging and Advanced Diploma in Medical Ultrasonography for their practical learning. Learning and teaching methods that combine sophisticated digital media and simulation are well aligned with the National 4IR Policy.

Investment opportunities abound in niche TVET areas such as aerospace, aeronautics, digital electronics, creative industries and hospitality. MIDA welcomes both local and foreign companies to venture into new growth areas of high value-added, knowledge-based technology towards creating a conducive and engaging lifelong learning environment in Malaysia.

Hospitality - Hotel & Tourism

Domestic tourism stayed in the spotlight in 2021, starting with a partial reopening of the Langkawi domestic travel bubble on September 16, 2021. This has been an encouraging first step to the

recovery of the tourism industry, with a total of 38,748 domestic tourist arrivals and RM15.97 million in tourism receipts recorded. The Ministry of Tourism, Arts and Culture (MOTAC) expects domestic tourism to bounce back following the uplifting of movement restrictions and reopening of state borders, with a targeted growth of 3.8 per cent, although there was an estimated loss of income of RM135 billion and RM165 billion for 2020 and 2021 respectively. This is bolstered by Malaysia's successful vaccination campaign, where the country is poised to enter the endemic phase with 97.6 per cent of its adult population fully vaccinated as of 31 December 2021.

APPROVED INVESTMENTS IN HOSPITALITY IN 2021

In spite of the challenges faced, for the period of **January to December 2021, a total of 29 projects** were approved with total investment amounting to **RM3.4 billion** with **2,949 new job opportunities.**

RM3.4 bil
Total Investments

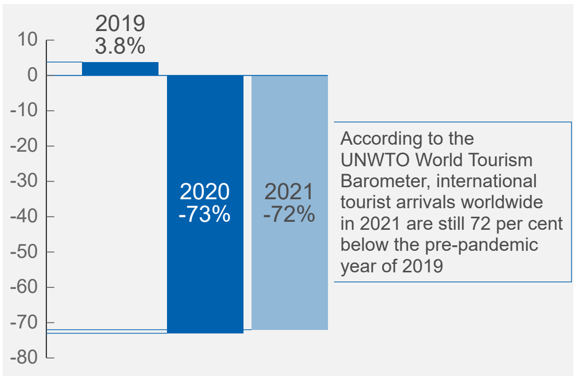
2,949
Job Opportunities

To re-invigorate the tourism industry, the Government has outlined several strategies in the Twelfth Malaysia Plan (12MP). Among them are restoring tourist confidence to travel safely in a post-pandemic world and providing better quality products and services such as ecotourism and community-based cultural immersion activities which distinctly portray the Malaysian experience. Safety and hygiene will be the focus in all branding and promotional efforts.

In support of the adversely affected tourism and hospitality industry players, Budget 2022 announced seven key initiatives involving a total of RM1.6 billion, which included a wage subsidy programme that will benefit more than 26,000 employers and 330,000 employees. Financing programmes for the tourism sector under the PENJANA Tourism Financing facility and matching grants for budget hotel repairs are also part of the plan to revive and sustain the tourism industry.

The Government has also launched a ten year transformation plan for the tourism industry, called the National Tourism Policy (NTP) 2020 – 2030. The NTP was formulated to position Malaysia as among the top ten tourist destinations in both arrivals and receipts. One of the key strategies to remain competitive far into the future is to embrace Smart Tourism. One of the notable hotel projects approved was the San Francisco-based Kimpton Hotels & Restaurants at The Exchange (TRX) with a total investment of approximately RM700 million. The proposed 4-5 star hotel project will provide 471 hotel rooms that will be managed by the Intercontinental Hotels Group (Asia Pacific) Pte. Ltd. This project marks the first Kimpton venture in Malaysia and is expected to open in 2024.

UNWTO WORLD TOURISM BAROMETER 2021



Source: World Tourism Organization (UNWTO)

"In support of the adversely affected tourism and hospitality industry players, Budget 2022 announced seven key initiatives involving a total of RM1.6 billion, which included a wage subsidy programme that will benefit more than 26,000 employers and 330,000 employees.

Other Services

Real Estate

The real estate sub-sector covers housing and service apartment projects under the purview of the Ministry of Housing and Local Government. In 2021, this sub-sector continues to remain viable despite current headwinds, sustaining its position as the largest contributor to the services sector at 30.6 per cent.

Several initiatives were outlined by the Government to support the sub-sector including the Home Ownership Campaign (HOC) and PENJANA's real property gains tax (RPGT) exemption. Additionally, Bank Negara Malaysia's (BNM) record-low overnight policy rate of 1.75 per cent made homeownership attractive, bolstering the property market to move a considerable amount of built inventory in the post-lock down phase.

In 2021, a total of 1,044 projects, fully driven by domestic players were approved with total investments of RM28.8 billion. The performance moderated by 7.8 per cent from RM31.3 billion reported in the corresponding period of 2020.

REAL ESTATE SUB-SECTOR IN 2021

1,044 Projects Approved

RM28.8 bil Total Investments

The performance moderated by **7.8 per cent** from RM31.3 billion reported in the corresponding period of 2020

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.

According to Moody's Investors Service, the Malaysian banking system is well capitalised and liquid enough to withstand the distress of the movement-controlled lockdowns due to supportive policies that extended repayment assistance and loan moratoriums. Malaysian banks have remained profitable with some having performed better in 2021 compared to 2020.

Approved investments in 2021 recorded more than 300 per cent growth at RM12 billion with a total of 53 projects vis-à-vis RM2.5 billion recorded in 2020. The sub-sector emerged as the third-largest contributor (12.8%) to the services sector. Domestic investment contributed RM11.3 billion (94.3%) while foreign investments totalled RM683.7 million (5.7%). Most of the approvals or 95.5 per cent were concentrated in the banking segment, particularly onshore conventional and Islamic banking activities, potentially creating 969 jobs opportunities.

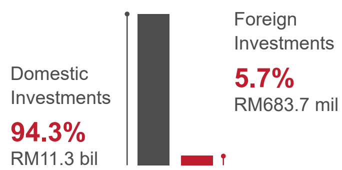
FINANCIAL SERVICES SUB-SECTOR IN 2021

Domestic vs Foreign Investments

53 Projects Approved

RM12 bil Total Investments

More than **300%** growth



The sub-sector emerged as the third-largest contributor **(12.8%)** to the services sector

Most of the approvals or **95.5%** were concentrated in the banking segment, particularly onshore conventional and Islamic banking activities

Employment Opportunities

969 Total Job Opportunities

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 (TNB), Sarawak Energy and Sabah Electricity Sdn. Bhd. (SESB). Water utilities services include those provided by Suruhanjaya Perkhidmatan Air Negara (SPAN) and Pengurusan Aset Air Berhad (PAAB).

In 2021, the sub-sector registered a total of RM9.6 billion approved investments – all of which were from domestic sources. The majority or 95.2 per cent of these projects were in the generation, transmission and distribution of electricity while 4.8 per cent were from the development of the water services industry. Although the approvals slowed by 10.7 per cent, the utilities sub-sector was the fourth highest contributor to the approved investments in the services sector during the period, after real estate, global establishment and financial services sub-sectors.

UTILITIES SUB-SECTOR IN 2021

RM9.6 bil Total Investments

95.2% of these projects were in the generation, transmission and distribution of electricity while **4.8%** were from the development of the water services industry

The utilities sub-sector was the fourth highest contributor to the approved investments in the services sector

The utilities sub-sector is expected to expand by **6.7%** in 2022 following higher electricity usage by industrial and commercial segments

The utilities sub-sector is expected to expand by 6.7 per cent in 2022 following higher electricity usage by industrial and commercial segments.

Information and Communications

The information and communications sub-sector cover activities related to telecommunications, Multimedia Super Corridor (MSC) status, computer software, broadcasting, ICT services and creative content.

For the telecommunications sub-sector, based on the investment approval data provided by the Malaysian Communications and Multimedia Commission (MCMC) (which covers only the first nine months of 2021), a total of RM4.8 billion investments were approved, compared to the RM8.2 billion registered in 2020. Investments remained wholly driven by domestic sources.

Meanwhile for the computer software, a total of RM8.5 million investments were recorded in 2021, a decline of 61 per cent compared with 2020. Out of the total, 88.1 per cent or RM7.5 million were from foreign sources and the balance of RM1 million was from domestic sources.

INFORMATION AND COMMUNICATIONS SUB-SECTOR IN 2021

RM8.2 bil Total Investments

450 Projects Approved

2,026 Total Job Opportunities

The information and communications sub-sector comprises investment approvals in the telecommunications sub-sector, MSC status projects, computer software and ICT services.

MIDA works with the Malaysia Digital Economy Corporation (MDEC) to drive Malaysia's digital transformation through facilities such as the Multimedia Super Corridor (MSC) Status. MSC Status companies contribute to digital adoption, digital entrepreneurship and innovation aspirations of the country. The Government has been very consistent and strategic in its effort to embrace rapid digitalisation, which is envisioned to transform the country into a digitally-enabled and technology-driven high-income nation, as well as becoming a regional leader in the digital economy. To streamline these efforts, the Digital Investment Office (DIO) – a fully digital collaborative platform between MIDA and MDEC, was established on 22 April 2021. This is in line with the MyDIGITAL initiative in attracting RM70 billion worth of investments in digitalisation by 2025.

"The Government has been very consistent and strategic in its effort to embrace rapid digitalisation, which is envisioned to transform the country into a digitally-enabled and technology-driven high-income nation, as well as becoming a regional leader in the digital economy.

Total approved investments for MSC status in 2021 is RM2.2 billion with 76.5 per cent of the investment amounting RM1.6 billion were from domestic investments. The total of 27 MSC status projects are expected to generate 1,921 job opportunities for Malaysians.

The information and communications sub-sector is poised to grow in the next few years with digital transformation initiatives such as the National Digital Infrastructure Plan or Pelan Jalinan Digital Negara (JENDELA) to improve 4G mobile broadband coverage and the quality of these services. In 2021, JENDELA has achieved a 94 per cent 4G coverage in populated areas compared to 91.8 per cent in the previous year. The country's average mobile broadband speed has improved, reaching 29.14Mbps, compared with 25Mbps previously. Additionally, the rollout of the 5G network will encourage more local companies to adopt IT and automation towards achieving sustainable growth.

Note :
Starting from 2021, a new category namely the information and communications sub-sector, has been created as a result of combining the telecommunications sub-sector and MSC status projects. This is in line with the Malaysia Standard Industrial Classification (MSIC) 2008 which was developed by DOSM.

Distributive Trade

Distributive trade constitutes wholesale and retail trade; hypermarkets and supermarkets, department stores and direct selling, and franchising – all of which are regulated under the Ministry of Domestic Trade and Consumer Affair (MDTCA) and other distributive trade projects approved under the Petroleum Development Act 1974.

The approved investments in 2021 declined by 2.7 per cent from RM3.7 billion to RM3.6 billion. The majority or 78.8 per cent of these were from foreign sources – concentrated in the wholesale and retail trade. The total 908 approved projects will generate 14,392 job opportunities, making it the largest employer within the services sector.

DISTRIBUTIVE TRADE SUB-SECTOR IN 2021

908 Projects Approved

RM3.6 bil Total Investments

78.8% of these were from foreign sources – concentrated in the wholesale and retail trade

Employment Opportunities

14,392 Total Job Opportunities

The largest employer within the services sector

Among government initiatives to support this sector is the allocation of RM31 billion through Budget 2022 for subsidies, assistance and incentives to rally

this sector to recover. The continuation of several programmes, such as the 'Buy Malaysian Products' and 'Malaysian Sales' campaigns, the franchise and direct selling industry agenda is expected to boost the distribution trade industry. Moreover, the push for wider usage of e-commerce and digitalisation through the Distributive Trade Master Plan (2021-2025) is expected to provide clear directions and lead to anticipated growth of 8.7 per cent in 2022.

Transport

Maritime transport, aviation (including airport infrastructure and maintenance, repair and refurbishment - MRO) and highway construction and maintenance jointly make up the transport sub-sector.

A total of 24 projects, all from domestic sources, were approved in 2021 with investments worth RM1.6 billion, an increase of 143.5 per cent compared with RM654.2 million worth of investments in the same period of 2020. The majority of these approvals were in airport infrastructure and seaports.

The recovery in this sector was very profound with a slew of investments being approved once the movement restrictions uplifted. Under the 12MP, the Government is committed to providing integrated, affordable, seamless mobility, with a target to be in the top 10 rankings of the World Container Port's Report and top 30 ranks in the World Bank Logistics Performance Index by 2025.

TRANSPORT SUB-SECTOR IN 2021

24 Projects Approved

RM1.6 bil Total Investments

An increase of **143.5%** compared with RM654.2 million worth of investments in the same period of 2020

The majority of these approvals were in airport infrastructure and seaports

The Digital Investment Office (DIO): A New Approach To Attract Digital Investments Into Malaysia

The growing role of digital technology has shown the potential to significantly transform the economic landscape around the world. Malaysia has been very consistent and strategic in its effort to embrace rapid digitalisation, which is envisioned to transform the country into a digitally-enabled and technology-driven high-income nation, as well as becoming a regional leader in the digital economy. To streamline these efforts, the Digital Investment Office (DIO) was established on 22 April 2021, endorsed by the National Council of Digital Economy and Fourth Industrial Revolution (MED4IR). It is in line with the evolution of the global investment landscape towards digitalisation and Industry 4.0, creating unique and interesting value propositions for digital projects.

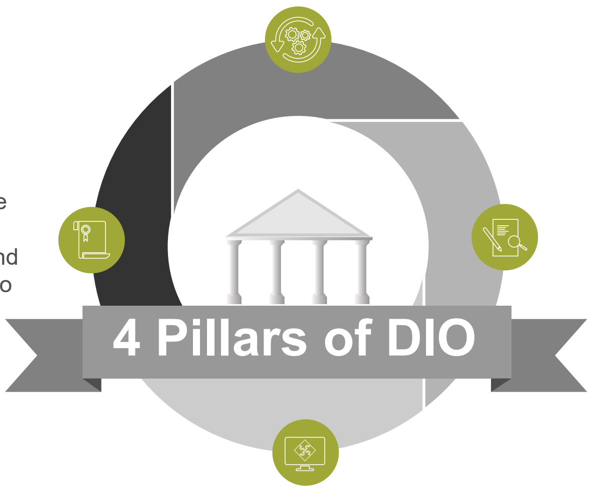
This initiative will further solidify Malaysia's aim to reinvigorate the national agenda to enhance competitiveness as formulated in the National Investment Aspirations (NIA), which focus on coherence and cohesiveness across all national policy initiatives relating to investment. DIO also serves as a single cohesive platform entrusted to streamline and coordinate all foreign and domestic digital investments in the country, while providing end-to-end facilitation to investors in the digital space. The DIO will also put forward future-ready policies and guides on talent requirements and digital infrastructure networks, as well as address operational issues faced by businesses during the current pandemic and beyond. This essentially provides structured governance on investment promotion and facilitation, which supports promotional activities and processes that enable and strengthen the digital ecosystem.

The office is committed to play its role in meeting the targets under the MyDIGITAL initiative; namely to attract digital investments worth RM70 billion while increasing the digital economy's share of Malaysia's GDP to 22.6 per cent by 2025.

By unifying various investment strategies among the respective stakeholders, DIO offers a unique value proposition for all upcoming digital investments. The collaborative effort will cater to the rapidly-growing digital industries' needs, further enhancing Malaysia's capabilities and the nation's competitiveness as an ideal business location for companies operating in the digital ecosystem.

Coordination
Coordinates and streamlines digital investments with all IPAs in the country and suggests the best value proposition to investors

Policy Advocacy
Suggests appropriate policy advocacy to relevant ministries and agencies in relation to the development of digital investments



Evaluation
Joint evaluation by MIDA-MDEC or evaluation by respective economic corridors on digital investment applications

Facilitation
Provides end-to-end facilitation to investors for their digital project implementation

How to reach Digital Investment Office (DIO)

The DIO is reachable via the 'Malaysia, Heart of Digital ASEAN' (MHODA) portal, which can be assessed through www.heartofdigitalasean.my as well as MIDA's official website. Through this platform, investors can submit their investment interest through a single-entry point, easing entry and facilitation, and enabling quality digital investment opportunities in line with the goals of MyDIGITAL and DIO's role to strengthen Malaysia's capabilities and competitiveness as an ideal location for digital companies to do business.

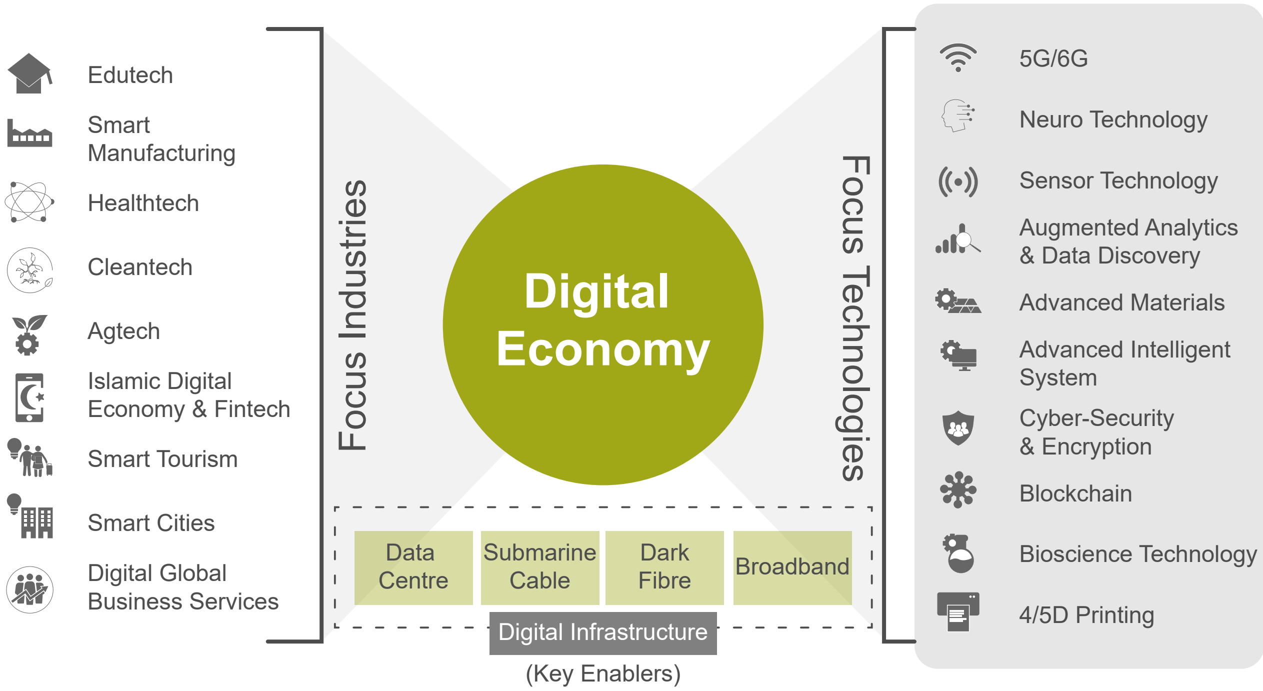
Providing a cohesive and supportive ecosystem in an efficient operating environment is imperative to entice quality investments into Malaysia. Moving forward, DIO will continue to play its profound role to strengthen Malaysia's capabilities and the nation's competitiveness as an ideal business terrace for companies in the digital space.

Features of the MHODA portal:-

- User-friendly interface with dedicated section on FAQs
- News and insights on Malaysia's digital initiatives
- Ease of investment proposals submission and inquiries

Moving forward, Malaysia will reinvent itself in Strategic Digital Tech Industries

As digital is a fast evolution segment, we also welcome new breeds of technology that can enhance Malaysia's capability as a digital nation



Source: MySTIE 10-10 Framework

Pushing the R&D Envelope

Malaysia is focused on facilitating industries to pursue Research and Development (R&D) activities to accelerate the nation's technological aspirations of adopting the Fourth Industrial Revolution (IR4.0). The Government provides facilitation and support through various platforms for all stages of R&D from idea creation to commercialisation. Under Budget 2021, the Government further expanded the tax incentive for companies that commercialises the R&D findings of public research institutions and, public and private higher learning institutions. The eligible R&D scope now includes both resource-based and non-resource-based undertakings.

In line with the country's goals, MIDA has been increasing its efforts through initiatives such as seminars and business outreach programmes as well as providing and managing incentives. In April 2021, MIDA hosted the Research and Development for Business (RD4B) Programme to promote the importance of R&D activities among industry players with the participation of 1,392 companies.

The RD4B was organised to highlight the government departments and agencies that promote R&D in Malaysia, including MIDA, the Ministry of International Trade and Industry (MITI), Ministry of Science, Technology, and Innovation (MOSTI), Ministry of Higher Education (MOHE), Inland Revenue Board (IRB), Collaborative Research in Engineering, Science and Technology Centre (CREST) and Cyberview Sdn. Bhd. The objective was to provide useful information for companies to consider investing in R&D or expanding their businesses in the R&D segment. This includes participants from the USA, Australia, Russia, Singapore, Hong Kong, Switzerland, Taiwan, Belarus, Pakistan, Canada, the Netherlands, the United Kingdom, Sweden, Argentina and Germany.

MIDA's most recent initiative is the launch of the i-R&D portal, a gateway to connect all stakeholders, i.e. government agencies, academia and companies in the R&D ecosystem, creating a centralised R&D support centre to ensure that R&D initiatives in the country are being realised effectively.

VARIOUS SUPPORT AND FACILITIES AVAILABLE:

Facilities for companies undertaking R&D activities

Domestic Investment Strategic Fund (DISF)

Objective: To encourage local industry players to enhance their technical capabilities and obtain international certifications in strategic industries

Features:
- A matching grant with a 50:50 ratio, on a reimbursable basis for eligible expenditures
- Eligibility: All companies with Malaysian equity ownership of at least 60%

R&D Incentive and Status

Objectives:
To support the growth of R&D activities and the ecosystem of R&D service providers in Malaysia

Features:
- Tax incentive for new R&D companies, contract R&D companies and in-house R&D projects
- Clients of the companies granted with the R&D status can enjoy double deduction on approved R&D expenditure

Towards bolstering the Industry 4.0 journey for SMEs, MIDA has also jointly organised the Artificial Intelligence for SMEs (AI4S) Programme with Intel Malaysia and Malaysia Productivity Corporation (MPC) in 2021, where around 100 selected SMEs have each received an Intel Artificial Intelligence Starter Kit developed by Axiomtek and attended training sessions to jump-start the implementation of AI in their respective business operations.

Facilities for companies moving towards Industry 4.0

Facility	Features
Automation Capital Allowance (Automation CA) **Objective**: To encourage quick adoption of automation in labour-intensive industries	**Features**: • Labour-intensive category-Automation CA is 200 per cent on the first RM4 million expenditure incurred for plant and machinery within 8 years of assessment from 2015 to 2023 • Other industries-Automation CA is 200 per cent on the first RM2 million spent on automation machinery within the same time frame
Smart Automation Grant (SAG) **Objectives:** To encourage Small and Medium Enterprises (SMEs) and Mid-Tier Companies (MTCs) to automate and digitalise operations, production and trade channels	**Features**: • 1:1 matching basis on eligible expenditures, up to a maximum grant of RM1,000,000 per company
Industry 4WRD Intervention Fund **Objective**: Promote the adoption of Industry 4.0, particularly among the local small and medium enterprises	**Features**: • A maximum grant of RM500,000 offered as a matching grant • 70 per cent is subsidised by the Government • 30 per cent by the company on a repayable basis for the eligible expenditures
Industry 4WRD Domestic Investment Strategic Fund (DISF) **Objective**: To accelerate the shift of Malaysian-owned companies in targeted industries to adopt Industry 4.0 practices and upgrade the company's technological capabilities	**Features**: • A matching grant with a 60:40 ratio to compensate expenses related to industrial automation for Malaysian companies participating in the Industry4WRD Readiness Assessment programme

4.0 Performance of the Primary Sector

"The fluctuations in commodity prices (in 2021) highlight some of the challenges in transitioning to a zero-carbon economy. Cities have a key role to play, given they account for around two-thirds of energy demand and greenhouse gas emissions."

The World Bank, Commodity Markets Outlook, October 2021

Booming Primary

The mass vaccination campaigns in 2021 has helped the global economy grow as pandemic restrictions eased, spurring recovery in the agriculture, mining and commodities segments. This is also reflected in Malaysia as the primary sector had a good run last year with a significant increase in approved investment in all three sub-sectors.

The global economy began recovering from the pandemic in the second-half of 2020, with the metals and mining commodity prices returning to pre-pandemic levels. Demand for most metals was driven upwards by the release of post-pandemic repressed consumer spending, government stimulus efforts and an accelerating global energy transition away from carbon-based fuels. It is expected that metal prices may decrease in 2022 after supply disruptions are resolved and global growth softens.

Similarly, the global crude oil prices climbed to their highest in seven years at above US$80 a barrel in October 2021 in anticipation of a vaccination-driven economic revival. A stable economic recovery is expected following these positive trends, particularly in the oil and gas (O&G) sector. For Malaysia, the increased demand and high price of O&G are set to compel PETRONAS to ramp up capital expenditure; sending a cascading positive effect along the supply chain.

Crude Palm Oil (CPO) prices also rallied high in the first-half of 2021 due to the recovery of the global edible oil demand as eateries and the hospitality industry reopen. This is expected to remain at high levels in 2022. This bodes well for the primary sector, which comprises three main sub-sectors, namely agriculture, mining and plantation and commodities.

PRIMARY HIGHLIGHTS IN 2021

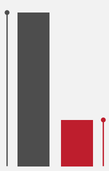
59 Projects Approved

RM17.3 bil Total Investments

An increment of **183.6%** from RM6.1 billion in the previous year

Domestic vs Foreign Investments

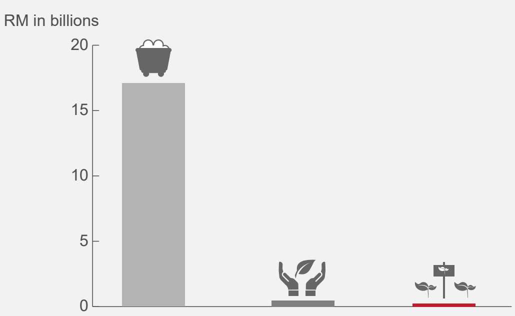
Domestic Investments
76.3%
RM13.2 bil



Foreign Investments
23.7%
RM4.1 bil

528
Total Job Opportunities

RM17.3 bil Total Investments



RM17.1 bil Mining

RM211.4 mil Plantation and Commodities

RM20.5 mil Agriculture

Agriculture

During the pandemic, the agriculture sector remained open to ensure that food supply was not interrupted. However, the movement control order (MCO) hampered a smooth flow as manpower and food supply logistics was affected. Crops, livestock, agriculture and deep-sea fishing make up the agricultural sub-sector in Malaysia.

The Ministry of Agriculture and Food Industry (MAFI) was allocated RM4.82 billion in Budget 2022 to drive modernisation efforts in the agricultural sector to improve the agro-food chain, generate higher income and attract more young agro-preneurs. A further RM120 million was allocated for food security projects in various states, including development of the aquaculture industry and shellfish farms in Johor.

In 2021, six projects were approved with total investments of RM20.5 million, an increase of 754.2 per cent from RM2.4 million approved in 2020. Domestic investments amounted to RM20.4 million (99.5%) while foreign investments totalled RM0.1 million (0.5%). This sub-sector is expected to create a total of 103 potential jobs for Malaysia.

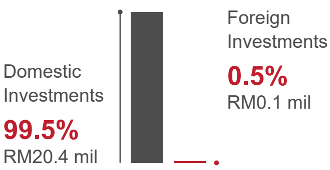
AGRICULTURE IN 2021

Domestic vs Foreign Investments

6 Projects Approved

Total **RM20.5** mil

An increase of **754.2%** from RM2.4 million approved in 2020



Employment Opportunities

103 Total Job Opportunities

Mining

Malaysia aspires to become an important hub for the development of the mineral industry as it has an estimated value of RM4.11 trillion in mineral resources, comprising metallic minerals worth RM1.03 trillion, non-metallic minerals (RM2.96 trillion) and energy minerals (RM0.12 trillion) that have the potential to be produced optimally. The National Mineral Industry Transformation Plan 2021-2030 (TIM 2021-2030) aims to streamline the management of the mineral industry to achieve sustainable growth and develop a new source of national wealth.
In keeping with SDG goals the Government has allocated RM87.2 million under the 12th Malaysia Plan to carry out works to mitigate potential environmental damage in the mineral industry.
Investments in the mining sub-sector comprise oil and gas exploration and quarrying other minerals.

In 2021, a total of 19 projects were approved with investments of RM17,096.3 million, which contributed 98.7 per cent of total investments in the primary sector. Of these, 16 projects in oil and gas have contributed RM17,089.3 million worth of investments and another three projects in minerals with RM7 million worth of investments. Foreign investments amounted to RM4,075.3 million (23.8%) while domestic investments totalled RM13,021 million (76.2%). These projects are expected to create 37 jobs.

MINING IN 2021

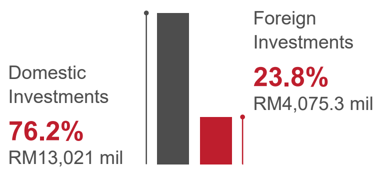
Domestic vs Foreign Investments

19 Projects Approved

Total **RM17,096.3** mil

which contributed **98.7%** of total investments in the primary sector

16 projects in oil and gas have contributed **RM17,089.3 million** worth of investments and another 3 projects in minerals with **RM7 million** worth of investments



Employment Opportunities

37 Total Job Opportunities

Plantation and Commodities

The plantation and commodities sub-sector, comprising oil palm, rubber, forest plantation, kenaf and pepper, has contributed significantly to the country's economic development for the past 50 years. Palm oil remains one of Malaysia's important commodity crops and the country's main agricultural export. In 2021, the GDP contribution from palm oil in Malaysia was 2.5 per cent.

To boost the plantation and commodities sub-sector, the Government has allocated RM2.5 billion in Budget 2022 with the following measures:

- RM2.5 billion for rehabilitation packages and settlers' development with RM1.3 billion of the amount given to FELDA
- RM495 million provided to the Federal Land Consolidation and Rehabilitation Authority (FELCRA) participants
- RM699 million for smallholder development in the rubber industry under the Rubber Industry Smallholders Development Authority (RISDA)
- Consolidate rubber smallholders, entrepreneurs and small cooperatives to increase their capabilities under the National Rubber Industry Transformation Programme
- A matching grant for introducing and expanding the use of a newly developed latex stimulant, RRIM Hydrobest to rubber smallholders
- RM190 million to continue with the Monsoon Season Assistance
- RM5 million to provide takaful protection to all Area Farmers Organisations (PPK) members nationwide under the Farmers Smart Card Takaful Protection Scheme
- RM35 million to implement the Oil Palm Smallholders Replanting Stimulation Scheme
- RM20 million in the effort to combat anti-palm oil campaigns at the international level

In 2021, investments valued at RM211.4 million were approved in the 34 projects under the plantation and commodities sub-sector, an increment of 683 per cent from investments of RM27 million in 2020. All investments under the plantation and commodities sub-sector were domestic investments. These projects are expected to generate 388 jobs. The majority of the projects are in oil palm contributing RM163.7 million in investments.

PLANTATION AND COMMODITIES IN 2021

Domestic vs Foreign Investments

34 Projects Approved

Total **RM211.4** mil

- An increment of **683%** from RM27 million investment in 2020
- All investments under the plantation and commodities sub-sector were **domestic investments**

The majority of the projects are in oil palm contributing **RM163.7 million** in investments

Employment Opportunities

388 Total Job Opportunities

Relaxation of Incentive Conditions for the Manufacturing and Services Projects

Investments have a paramount role in Malaysia's emergence as a dynamic industrialising nation. The substantial flow has positively impacted the economy from various angles such as the creation of high-income jobs; transfer of knowledge, skills and technology to Malaysians; along with the development of a local supply chain that leads to the rise of local enterprises. Its importance is well entrenched in the five-year Malaysia Plans and the Industrial Master Plans throughout the years.

As the principal investment promotion agency under the Ministry of International Trade and Industry (MITI), MIDA has put in place comprehensive and competitive facilitation and investment incentives to attract more high-quality investments – both foreign direct investment (FDI) and domestic direct investment (DDI) into the country. Companies enjoying the incentives are required to abide by certain stipulated conditions. These conditions are to ensure that the approved investments will bring significant benefits to the local economy.

In March 2020, MIDA conducted a survey on the "Impact of COVID-19 on the Malaysian Economy and the Mitigation Measures" among manufacturers. The survey revealed that the value of production loss was estimated at RM64.6 billion and the loss from the value of exports was estimated at RM51.2 billion in the first two months of 2020. This was the period when companies were unable to operate due to the Movement Control Order (MCO) restrictions. Additionally, the services sector was also affected, particularly the tourism sub-sector with an estimated loss of RM3.3 billion in revenue by June 2020.

This trend further persevered in 2021 as COVID-19 infection rates continued to spike in February which led to the Government executing MCO 3.0. While this had more lenient restrictions, it still resulted in the economy suffering a loss of RM200 million daily, albeit comparably lower than the first two MCOs.

Being a responsive Government, MIDA together with MITI, the Ministry of Finance and the Inland Revenue Board of Malaysia are working together to facilitate companies that are directly impacted by the pandemic. Companies in the manufacturing and services sector with approved incentives under MIDA were given a certain relaxation on conditions as part of the proactive measures undertaken by the Government to continue Malaysia's economic revitalisation efforts by facilitating investments and restoring investors' confidence.

Nonetheless, the approved companies are required to comply with specific conditions and implement their approved projects within a specific period, as stipulated in the Approval Letters issued by MIDA. With the implementation of this relaxation mechanism, a company may be considered for certain relaxations on achieving the approved thresholds or meeting the implementation timeline of their approved projects, subject to compliance of identified criteria set by the Government. This is effective from 2020 to 2021.

Companies are encouraged to leverage these facilities to ensure minimal disruptions to their daily operations and the long term sustainability of their business. Moving forward, MIDA will continue to engage the industry players to gain better insights on their challenges towards rendering better services in facilitating business and economic recovery processes.

"Being a responsive Government, MIDA together with MITI, the Ministry of Finance and the Inland Revenue Board of Malaysia are working together to facilitate companies that are directly impacted by the pandemic.

InvestMalaysia Portal Goes Live

The InvestMalaysia Portal, launched in March 2021, is a single gateway portal for investors to submit and manage applications online. The portal optimises processes through automation and is a core element of MIDA's ongoing digital transformation initiative, which includes seamless data capturing and analysis.

Investors can now expect a more efficient evaluation of their applications with an automated approval process and better facilitation of information sharing at a single-entry point. Investors may also access live investment updates, real-time visibility of investment projects and reports, and undertake more informed decision-making. This centralised data warehouse is anticipated to allow investors to make faster and more accurate analyses through automated dashboards. Additionally, it would also improve MIDA's response rate to each investment enquiry in a prompt and professional manner; while providing accurate and up-to-date information on investments, and assisting investors in the implementation of their projects.

The portal transforms MIDA's core business functions with improved efficiency and productivity through an integrated technology system stepping up the application and approval process and allowing companies to speed-up project implementation. All modules offered for online application submissions may be accessed at https://investmalaysia.mida.gov.my.

These include applications for manufacturing licence (e-ML), exemption letter from ML, incentive (e-Incentive), expatriate posts and Representative Offices/Regional Offices (REs/ROs) status, Import Duty/Sales Tax Exemption (JPC), MIDA Confirmation Letter [Surat Pengesahan MIDA (SPM)], grants and Domestic Sales incentives. Instructions on how to register and navigate the portal through a PDF document, a video guide and a webinar are also available.

To ensure the portal performs at optimum and to make improvements, a dedicated Customer Service Unit (CSU) comprising a verification team to receive clients' applications and a specialised team with investment-related experience have been formed to answer enquiries related to applications, the facilitation process and project implementations.

The InvestMalaysia portal is among MIDA's many initiatives to re-engineer its business processes to raise the efficiency of various functions of the organisations and adapt to the agile ways of working by providing more online services for a broad spectrum of investors. As Malaysia's leading investment agency, MIDA continues to make every effort to shorten the processing time for applications by embracing digital solutions with the aim of meeting the opportunities and challenges of today's investment landscapes while supporting investors' needs.

5.0 Staying on the Recovery Path

"Countries face a historic opportunity to establish a better way forward. Despite the damage wrought by the pandemic, the exceptional crisis response offers a unique opportunity for a “reset” that addresses past policy deficiencies and chronic investment gaps. By investing now to build a green, resilient and inclusive economy, countries can turn the challenges of COVID-19 and climate change into opportunities for a more prosperous and stable future. Private sector dynamism and innovative financing will need to power the recovery and to create economic growth and employment through investment and innovation."

World Economic Forum, 18 January 2022

Resilience-Focused Optimism

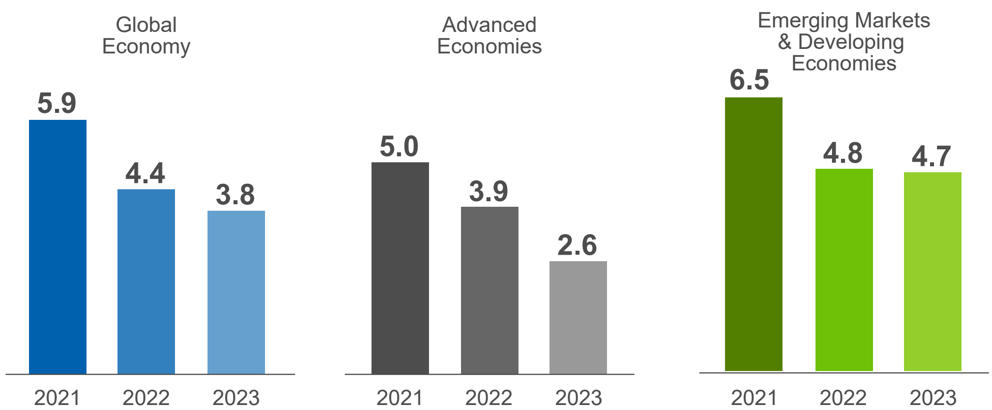
“The National Investment Aspirations (NIA) would be central to revitalise Malaysia’s investment climate, attract high-quality investments into the country and create high-income jobs, particularly post-COVID. Moving forward, Malaysia must adopt a comprehensive approach to reinvigorating the investment ecosystem and respond adequately to emerging megatrends, as well as the evolving needs of our investors.”

YB Dato' Seri Mohamed Azmin Ali, Senior Minister and Minister of International Trade and Industry (MITI)

Economies across the globe continued on a path to recovery as countries and businesses made efforts to rise above the pandemic. According to the World Bank, a notable deceleration in major economies such as the USA and PRC is expected to cause supply chain bottlenecks due to the global role these countries have in spreading the economic effects of the pandemic. With COVID-19 fault lines opening up, medium to long-lasting economic scarring is reflected in rising health concerns, global inflation, supply chain disruptions and pricing pressures. These uncertainties have also affected world governments in manoeuvring policy choices which impact foreign direct investment prospects. While vaccination remains one of the crucial keys to ensure economic resiliency, the unequal access to vaccines, fresh threats from COVID-19 variants and stresses of climate change have led to an uneven global economic recovery.

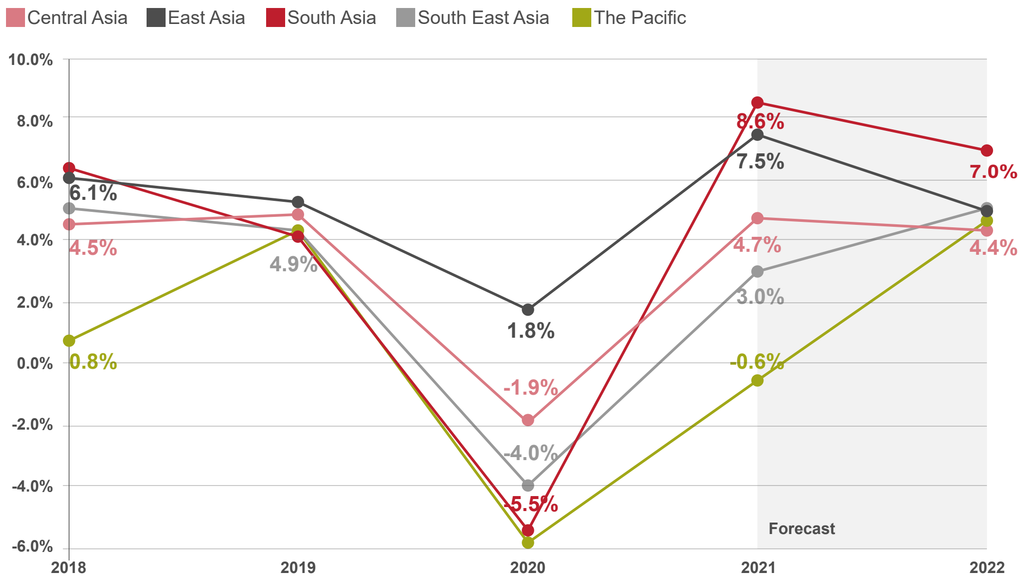
The World Economic Outlook by the International Monetary Fund (IMF) projects the global economy to moderate from 5.9 per cent in 2021 to 4.4 per cent in 2022, given the stubbornly resurgent pandemic and renewed economic disruptions. UNCTAD projects global growth to be at 3.6 per cent in 2022, with global income reaching 3.7 per cent lower than pre-pandemic levels. While rebound growth rates of 2021 are unlikely to be repeated, UNCTAD expects growth momentum to be driven by international project finance in infrastructure sectors.

GROWTH PROJECTIONS



Source: International Monetary Fund, World Economic Outlook Update, January 2022

GDP GROWTH FORECASTS BY SUBREGION

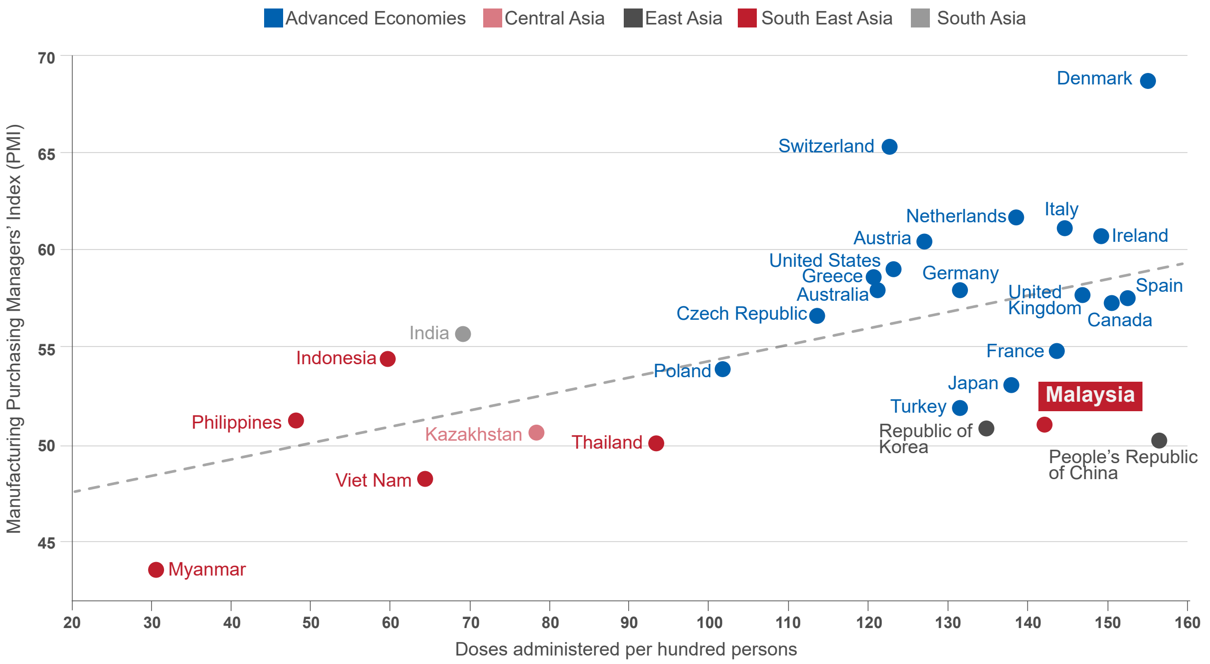


Source: Asian Development Bank. Asian Development Outlook Supplement, December 2021

The World Bank also anticipates a slower global growth at 4.1 per cent in 2022 and 3.2 per cent in 2023. This will weigh on demand in emerging market and developing economies (EMDEs); anticipating a deceleration to 5.1 per cent in 2022 and elevated levels of global inflation. Growth in the East Asia and Pacific region is only expected to increase slightly to 5.2 per cent in 2023. Nonetheless, economic growth in Malaysia is forecast to rebound to 5.8 per cent in 2022 as domestic demand improves amid high vaccination rates.

Meanwhile, the Asian Development Bank (ADB) projects a 5.1 per cent growth in 2022 from 3 per cent in 2022 for the Southeast Asia region and expects recovery at different paces due to the varying levels of vaccination achieved by each country. Malaysia is among countries in Southeast Asia with a commendable vaccination rate, with almost the entire adult population vaccinated by the end of 2021 while nearly 90 per cent of adolescents aged 12 to 17 have also been vaccinated according to the Ministry of Health (MOH). In the region, Singapore, Cambodia and Brunei also have high vaccination rates.

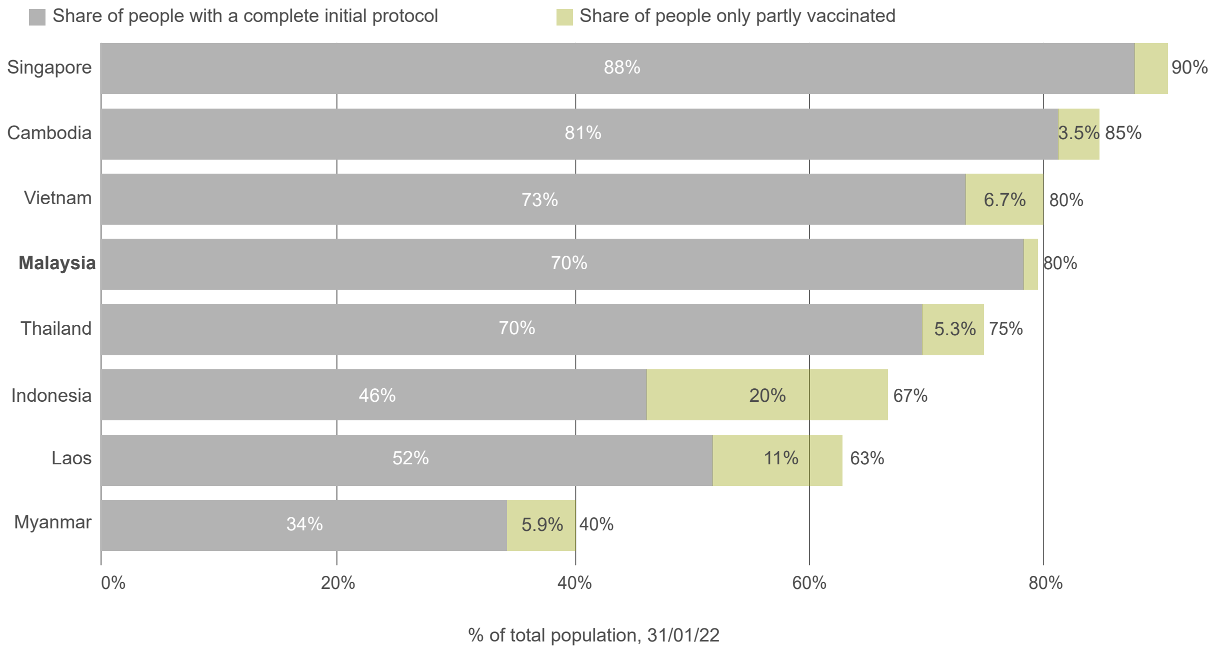
VACCINATION RATE VS ECONOMIC ACTIVITY



Source: CEIC Data Company (accessed 2 December 2021), Our World in Data (accessed 2 December 2021)

Note: The manufacturing PMI and doses administered per hundred persons are the average for September to November 2021

ASEAN COVID-19 VACCINATION RATES



Source: Our World in Data

Recovery from the effects of the pandemic on the health and economy of the world will take time, with some countries being more resilient than others. Malaysia in particular is estimated by the ADB to achieve a growth rate of 5.9 per cent in 2022 versus the estimate of 3.8 per cent in 2021. The IMF and the World Bank have similar growth projections for Malaysia in 2022, at 6 per cent and 5.8 per cent respectively while the Malaysian Government has estimated GDP to grow between 5.5 per cent and 6.5 per cent.

As an open economy, Malaysia benefits from the growth of its major trading partners and the strengthening of global external demand (Export of goods account for 60% of Malaysia's GDP and export-oriented sectors account for 70% of manufacturing employment). According to the ADB, regional trade in the developing Asia region has picked up, with the region's exports having outpaced the global recovery in trade. Bank Negara Malaysia's (BNM) Fourth Quarter 2021 review highlighted that the country's gross exports grew at a faster pace of 29 per cent, reflecting strong external demand and a broad-based expansion across products. In January 2021, Malaysia's trade performance recorded an expansion of 34.9 per cent to RM205.5 billion compared to the same period in 2020, while the current account balance recorded a surplus of RM15.2 billion in the fourth quarter of 2021 according to BNM.

Malaysia's economic outlook in 2022 will hinge upon the continued positive performance of its key export industries, which is influenced by global market conditions. The supply chain challenges in the global semiconductor industry which began in 2020, for instance, will continue to impact the performance of Malaysia's electrical and electronics (E&E) industry in 2022.

The severity and duration of the global chip shortage in 2022 is expected to be less pronounced compared to 2021 because of the increased capacity and supply chain improvements made by chipmakers, distributors, and end customers. Global semiconductor players which have invested to increase their capacity in 2021 will, however, require time to ramp up their production that will be operational earliest in 2023. Nonetheless, according to the World Semiconductor Trade Statistics, the global semiconductor market is projected to grow 10.1 per cent to US$606 billion (RM2.53 trillion) in 2022.

The reconfiguration of global supply chains to enhance resilience will benefit Malaysia's exporters. The year 2021 saw Malaysia successfully attracting strategic investments of major foreign players in the E&E industry. The implementation of these projects will increase opportunities for Malaysia's local players to provide their products and services to support the global MNCs, boost their capabilities in moving up the value chain of technology transfer and fortify their role in research, development and innovation. Apart from this, the projected higher oil price also bodes well for Malaysia's economic growth, with international experts estimating the oil price to increase to US$100 (RM419) per barrel. Malaysia is a net exporter of oil and gas and the industry contributes 6.2 per cent to the country's GDP. According to the Socio-Economic Research Centre (SERC), the current spike in oil price will not only increase Malaysia's revenue (generating an additional RM350 million in export value with every US$1 increase in oil price) but also strengthen the Malaysian Ringgit.

The advancement of digital technology will also shape Malaysia's industrial development. Several key trends have emerged in the global economic landscape, including the:

- Emergence of data as the future commodity
- Transformation of the 'Everything-as-a-Service' (XaaS) economy
- Transformation of conventional supply chains into digitalised supply chain operations

The trend of digitalisation provides the opportunity for Malaysia to develop new sources of economic growth by converging its traditional sectors (such as machinery and equipment, medical devices, automotive and ICT) with the digital economy. These new growth areas include digital healthcare, automated machinery and robotics, and 'mobility-as-a-service' technology solutions such as autonomous delivery vehicles and multi-modal transportation solutions.

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The year ahead will also be marked by various efforts to support both the foreign and domestic business community, manage climate-related risks including developing infrastructure strategies, and facilitate a more diversified economic structure to forge a resilient and green Malaysia.

Among the reforms undertaken to address the economic scarring and ongoing challenges are:

National Recovery Plan

To protect public health and sustain the economy, the Government unveiled the National Recovery Plan (NRP) in June 2021 as an exit strategy from the pandemic. The NRP involved four phases mapping out the reopening of economic and social activities, capacity at which companies could operate and the easing of domestic travel restrictions. The implementation of the phases was based on three indicators, namely the infection rate in the community, the capacity of the public healthcare system and the vaccination rate.

The NRP prioritised the achievement of herd immunity to ensure the resumption of economic activities and the lifting of travel restrictions. The Ministry of International Trade and Industry (MITI) launched the Program Imunisasi Industri COVID-19 Kerjasama Awam -Swasta (PIKAS), a public-private partnership effort under the National COVID-19 Immunisation Program (PICK) to accelerate the vaccination rate of workers in the manufacturing sector. (More information on PIKAS can be found on pg 66-67)

Pro-Business Policies

BNM liberalised foreign exchange policy rules to facilitate international trade and enhance the country's attractiveness as a global manufacturing hub for foreign investors.

Under the new policy, resident exporters are no longer required to convert a portion of their export proceeds into the local currency. They are now allowed to use foreign currency when trading with other residents involved in the global supply chain. This facilitates a natural hedge for the resident exporters and their business partners along the supply chain to reduce foreign exchange risk and improve trade efficiency, especially in export-oriented industries

National Investment Aspirations (NIA)

The NIA is an overarching framework, forming the basis for Malaysia's investment policies and initiatives to support the country's investment landscape. The Government's value propositions such as fiscal and non–fiscal incentives, talent development initiatives, licensing and regulatory framework improvement and business facilitation will be directed towards attracting investments in diversified, complex and higher value-added sectors and activities. The NIA was also developed in response to the global economic agenda, emerging megatrends and business needs of investors. (More information on NIA can be found on pg 22-23)

National Budget 2022

BUDGET 2022

With the re-opening of the economy, the Government intends to accelerate the country's economic recovery through its Budget 2022. Given the need to ensure a durable recovery, a record–high budget of RM332.1 billion was approved for 2022, including RM75.6 billion in development expenditure. Under Budget 2022, there are targeted support and opportunities for businesses to transition into a recovering economy ripe for growth, focused on productivity measures, improving digital and technological infrastructures as well as facilitating the transitioning of industrial sectors toward automation.

Key highlights of Budget 2022 include:

- RM80 million which is provided through MITI to **train 20,000 employees** who support high–value industry clusters such as maintenance, repair and operation (MRO) in Subang, Selangor; electrical and electronics in Kulim, Kedah; and chemicals in Gambang, Pahang;
- RM50 million is provided through state skills development centres such as in Sarawak, Johor and Penang to increase the **Technical and Vocational Education and Training (TVET)** skill levels of 5,000 workers in oil and gas welding, industrial automation and mechatronics;
- Additional RM100 million under the **Smart Automation Grant (SAG)** to support 100 more manufacturing and service companies in automating their business processes; and
- RM45 million for **technological transformation incentive** in line with Industrial Revolution 4.0 or Industry4WRD show continuous support from the Government to businesses especially Small and Medium Enterprises (SMEs) and Mid-Tier Companies (MTCs).
- The **Digital Ecosystem Acceleration Scheme (DESAC)** offers income tax rate of 0% to 10% for up to 10 years to Digital Technology Providers and Investment Tax Allowance (ITA) of 100% on capital expenditure for qualifying activities for up to 10 years to Digital Infrastructure Providers.
- The scope on the existing tax incentive for green technology has been expanded to include **Rainwater Harvesting System (RHS) projects**

Malaysia Digital Blueprint (MyDIGITAL)

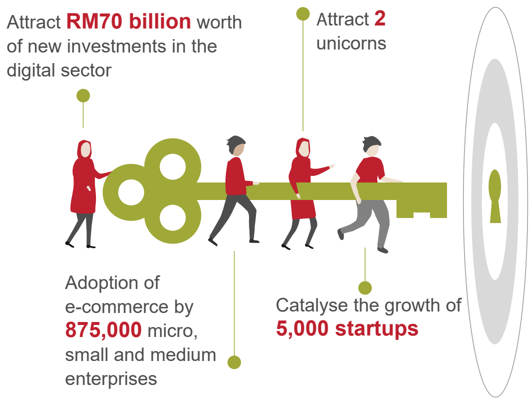
Adopting digital technology is key not just for economic recovery but also to accelerate the journey to become a high-income nation. The World Bank's World Development Report 2021 titled 'Data for Better Lives' explores the tremendous potential of the data revolution. When data is used more effectively, it has the potential to transform the world – raising productivity and efficiency levels and ultimately improving lives. The report highlights that greater focus should be placed on developing an integrated national data system that is built on a whole-of-government, multistakeholder approach to data governance. Hard and soft infrastructure is important to enable the equitable and trustworthy production, processing, flow, and use of data.

MyDIGITAL was introduced to strengthen the foundation and development of the country's digital infrastructure. It sets the tone for the next frontier of Malaysia's digital endeavours, complementing the vision outlined in the 12MP. Among the national initiatives include:

- RM21 billion will be invested through the National Digital Network (JENDELA) over the next five years
- RM1.65 billion will be invested by telecommunications companies to strengthen connectivity to the international submarine cable network until 2023
- RM15 billion will be invested to roll out 5G nationwide over a period of 10 years
- Between RM12-15 billion will be invested by cloud service provider (CSP) companies over the next five years
- The development of digital infrastructures, such as data centres are central to enabling 5G applications
- Promoting the digital tech sector such as data centres, cybersecurity, artificial intelligence (AI), creative and digital content like gaming and animation, as well as system integrators and solution providers to fortify Malaysia as the technology launchpad in the region

The development of digital infrastructure and roll-out of 5G networks will accelerate the development of advanced technologies such as artificial intelligence (AI), the internet of things (IoT), big data analytics and blockchain, and transform the way Malaysia's society operates.

Key targets identified under MyDIGITAL include:



To realise these targets, MIDA is working closely with the Malaysia Digital Economy Corporation (MDEC) through the Digital Investment Office (DIO), a fully digital collaborative platform. (More information on DIO can be found on pg 98-99)

Green Growth and Circular Economy

Advancing a green growth agenda is essential in achieving economic empowerment, environmental sustainability and social inclusion. The Government's green growth initiatives in line with the Sustainable Development Goals (SDG) 2030 is focused under the 12MP and Budget 2022. Over the next five years, there will be a nationwide shift towards a circular economy; a holistic approach whereby economic growth and benefit is decoupled from the consumption of finite resources and the production of waste.

Among the initiatives to be undertaken by the Government to drive the circular economy under the 12MP are:

- Leveraging on GITA and GITE incentives to encourage investment in green technology by companies;
- Facilitating Research, Development, Commercialisation & Innovation (R&D&C&I) to produce high value-added products that reduce waste and adopt best practices;
- Incentivising local waste recycling activities via the Pioneer Status (PS) or Investment Tax Allowance (ITA). Eligible activities include the recycling of agricultural waste or agricultural by-products, toxic or non–toxic waste, chemical and reclaimed rubber; and the production of reconstituted wood-based panels or products;
- Encouraging companies, especially Micro, Small, Medium Enterprises (MSMEs) to adopt circular economy practices in their value chain covering design, production, logistics, consumption and waste management.

Other green initiatives under Budget 2022 include the following:

- The Bursa to launch a Voluntary Carbon Market, a voluntary platform for carbon credit trading between green asset owners and others in the move towards low-carbon practices. This is in line with the Cabinet's approval to develop a Domestic Emissions Trading Scheme (DETS). It would serve as a catalyst for carbon trading in Malaysia and encourage domestic investors to reduce greenhouse emissions in their business activities, and develop products and services which meet international environmental standards.
- A boost to the local electric vehicle (EV) industry by providing full exemption from import duty, excise duty and sales tax for electric vehicles.
- Individuals are given income tax exemption of up to RM2,500 on the cost of purchase, installation, rent, hire purchase as well as subscription fees for EV charging facilities. These benefits are aimed at shifting customer preferences towards more energy-efficient vehicles, which help to reduce air pollution.
- Reinforces the need for Malaysian companies and the local supply chain to adopt environmental, social and governance (ESG) frameworks premised on higher value creation.
- An allocation of RM1 billion Low Carbon Transition Facility to BNM to help SMEs adopt sustainable practices and lower their carbon footprint. This fund is provided on a matching arrangement with participating financial institutions.

Twelfth Malaysia Plan (12MP)

The 12MP provides the direction for the nation's developmental goals and priorities in the next five years (2021-2025)

- Three key themes: resetting the economy, strengthening security, wellbeing and inclusivity and advancing sustainability
- Four catalytic enablers: developing future talent, accelerating technology adoption and innovation, enhancing connectivity and transport infrastructure and strengthening the public service
- Eight high–impact sectors: E&E, global services, aerospace, creative, tourism, halal, smart farming and biomass

These sectors have been selected due to their catalytic potential and will be developed by leveraging advanced technology adoption and the global trend of digitalisation, as well as Malaysia's niche capabilities

Review of Tax Incentives Framework

In November 2021, a total of 136 countries, including Malaysia, agreed upon a deal to ensure that companies pay a global minimum tax rate of 15%. This landmark agreement is the result of the initiative by the Organisation for Economic Cooperation and Development (OECD) to address the challenges of taxation arising from the rapid rise of technology businesses and increased level of tax avoidance of these companies by shifting income derived from intangible sources such as drug patents, software and royalties to low-tax countries to avoid paying higher taxes in their home countries.

The proposed global minimum tax rate, which will go into effect in 2023, is expected to change the way governments attract FDI into their countries. Like many countries, Malaysia uses various tax incentives to attract investment but has in recent years shifted its focus towards adopting the ecosystem approach to attract investment – targeting niche products, technology and services filling the gaps within the country's key industries and strengthening attributes such as talent, infrastructure and capacity of domestic companies to strengthen the overall investment ecosystem.

The Malaysian Government has also embarked on a comprehensive review of its existing tax incentive framework to improve its competitiveness, transparency and ability to attract impactful and sustainable investment. The review focuses on streamlining tax incentives, improving the application process and enhancing the post-approval monitoring mechanism to ensure the compliance of investors towards tax incentive conditions. The global minimum tax rate proposal will undoubtedly influence the ongoing effort of the Malaysian Government in reviewing its tax structure and refining its investment promotion strategies.

Moving forward, MIDA will further improve sustainable investment factors and enablers such as ecosystem and domestic supply chains, future talent development, industry-academia collaboration in R&D&C and innovation, government delivery and efficiency, infrastructure (IT, connectivity) and digitalisation technology landscape (Industry 4.0) to ensure Malaysia remains competitive as a preferred investment destination in the region.

This includes upgrading existing industrial estates to facilitate investment activities. Malaysia has the competitive advantage of specialised industrial estates which cater to the needs of specific industries and activities such as small-scale industries, Halal industry, furniture park, biotechnology park, technology-intensive industries and R&D activities. The upgrading of these industrial estates is aimed, among others, at incorporating the adoption of Industry 4.0 elements (such as cloud computing, remote monitoring and predictive maintenance) and establishing eco-industrial park programmes. MIDA supports this initiative by engaging with investors and identifying the areas of improvement required in the industrial estates. The availability of world-class industrial estates helps to support and promote investment as well as generate productivity and foster environmental protection.

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Recognising the prospects of domestic businesses in driving economic growth, MIDA supports local companies in expanding their market outreach and adopting best practices by becoming critical parts of the global supply chain. MIDA will continue to spur local sourcing activities by connecting MNCs and LLCs to local mid-tier companies (MTCs) and small, medium enterprises (SMEs) through supply chain conferences and networking events and undertaking vendor development programmes (VDPs) to upgrade the capabilities of local vendors.

MIDA is aware of the importance of talent as an enabler to attract investment. In addition to the continuous reskilling and upskilling programmes undertaken, MIDA will also support initiatives which focus on preparing the workforce for future industries, amid the emergence of disruptive technologies.

For example, in 2022, MIDA will collaborate with the Ministry of Higher Education (MOHE) and E&E industry players to streamline and improve the curriculum of higher learning institutions. Through this initiative, industrial training will also be provided to develop critical skills in areas such as industrial design, data analytics, creative engineering and systems integration. This will reduce the gaps between the industry demand and talent created.

With the cautiously optimistic economic outlook for 2022, MIDA continues to be vigilant in monitoring the dynamic changing landscape and work towards maintaining a resilient business environment that attracts quality investment, integrates local companies into global supply chains and creates high-value jobs and opportunities for Malaysians.

Appendix 1: Approved Manufacturing Projects, 2021 and 2020

	2021			2020		
	NEW	EXPANSION/ DIVERSIFICATION	TOTAL	NEW	EXPANSION/ DIVERSIFICATION	TOTAL
Number	386	316	702	548	502	1,050
Potential Employment	42,204	32,371	74,575	56,048	24,187	80,235
Total Investment (RM Million)*	153,381.7	41,706.2	195,087.9	61,061.2	30,201.9	91,263.1
Domestic (RM Million)	8,725.1	6,764.2	15,489.3	24,308.4	10,374.8	34,683.1
Foreign (RM Million)	144,656.6	34,942.0	**179,598.6**	36,752.8	19,827.1	**56,579.9**

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

Appendix 2: New Manufacturing Projects Approved by Size of Total Investment, 2021 and 2020

SIZE OF TOTAL INVESTMENT	2021					2020				
	NO.	EMPLOYMENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*	NO.	EMPLOYMENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*
Less Than RM 2.5 million	7	75	6.2	0.4	**6.6**	12	211	19.5	2.2	**21.7**
RM 2.5 million - < RM 5.0 million	22	357	86.2	0.4	**86.6**	30	529	10.9	9.3	**118.0**
RM 5.0 million - < RM 10.0 million	90	2,755	604.4	84.6	**689.1**	109	3,444	648.8	150.3	**799.1**
RM10.0 million - < RM 50.0 million	213	12,281	3,437.9	909.7	**4,347.7**	308	19,890	4,751.8	1,728.4	**6,480.2**
RM50.0 million - < RM100.0 million	16	1,770	564.6	566.7	**1,131.3**	40	6,261	1,436.4	1,421.1	**2,857.5**
RM100.0 million - < RM500.0 million	25	5,501	2,483.2	1,990.2	**4,473.4**	32	8,234	2,295.5	3,775.9	**6,071.4**
RM500.0 million - < RM 1.0 billion	1	1,884	0.0	663.1	**663.1**	8	6,773	3,392.2	2,018.5	**541.1**
RM 1.0 billion And Above	12	17,581	1,542.5	140,441.5	**141,984.0**	9	10,706	11,655.5	27,647.1	**39,302.6**
TOTAL	**386**	**42,204**	**8,725.1**	**144,656.6**	**153,381.7**	**548**	**56,048**	**24,308.4**	**36,752.8**	**61,061.2**

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, 2021 and 2020

INDUSTRY**	2021					2020				
	NO.	EMPLOYMENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*	NO.	EMPLOYMENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*
Electrical & Electronics	94	28,362	1,711.2	146,265.8	**147,977.0**	148	19,541	2,087.6	13,550.8	**15,638.4**
Basic Metal Products	22	9,283	264.7	19,173.3	**19,438.0**	13	4,572	331.1	14,053.7	**14,384.8**
Chemicals & Chemical Products	89	3,048	2,276.5	3,483.4	**5,759.9**	74	3,562	1,636.5	4,633.8	**6,270.3**
Rubber Products	40	12,229	4,865.8	891.1	**5,756.9**	42	11,498	3,889.8	405.8	**4,295.6**
Food Manufacturing	77	5,354	1,574.3	3,814.7	**5,389.0**	103	4,891	2,327.8	967.0	**3,294.9**
Transport Equipment	44	2,318	992.1	1,191.2	**2,183.3**	91	5,245	2,155.8	1,721.4	**3,877.2**
Scientific & Measuring Equipment	13	807	85.7	2,031.1	**2,116.8**	30	1,343	347.7	1,898.8	**2,246.5**
Fabricated Metal Products	90	3,392	1,176.9	544.7	**1,721.6**	101	4,241	1,882.2	788.9	**2,671.1**
Machinery & Equipment	48	2,501	576.9	1,090.6	**1,667.6**	93	4,569	2,321.6	4,764.1	**7,085.7**
Plastic Products	45	2,006	488.6	288.5	**777.1**	64	2,639	867.9	274.7	**1,142.6**
Paper,Printing & Publishing	34	1,413	392.8	156.6	**549.4**	70	6,038	918.9	6,918.7	**7,837.6**
Non-Metallic Mineral Products	17	782	311.3	111.6	**422.9**	50	2,774	583.6	1,670.3	**2,253.9**
Wood & Wood Products	20	950	180.4	178.2	**358.5**	29	2,092	267.3	491.7	**759.0**
Textiles & Textile Products	15	304	54.7	241.0	**295.7**	53	2,486	979.5	129.2	**1,108.7**
Furniture & Fixtures	30	1,033	203.4	41.2	**244.6**	47	2,679	365.5	353.7	**719.2**
Petroleum Products (Inc. Petrochemicals)	5	147	186.3	38.8	**225.1**	11	765	12,551.1	2,942.6	**15,493.7**
Leather & Leather Products	1	75	31.8	0.0	**31.8**	2	40	8.9	30.2	**39.1**
Beverages & Tobacco	6	38	28.6	0.1	**28.7**	17	792	1,027.5	944.0	**1,971.6**
Miscellaneous	12	533	87.3	56.8	**144.1**	12	468	132.8	40.4	**173.2**
TOTAL	**702**	**74,575**	**15,489.3**	**179,598.6**	**195,087.9**	**1,050**	**80,235**	**34,683.1**	**56,579.9**	**91,263.1**

Note : * Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided
** Reporting of data is guided by the Malaysia Standard Industrial Classification 2008 (MSIC 2008)

Appendix 4: Approved Manufacturing Projects with Investments of RM100 million and above, 2021

INDUSTRY**	NEW					EXP./DIV.					TOTAL				
	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*
Electrical & Electronics	6	13,842	0.0	126,547.8	**126,547.8**	16	9,624	555.6	19,148.7	**19,704.3**	22	23,466	555.6	145,696.5	**146,252.0**
Basic Metal Products	3	4,142	5.3	8,785.0	**8,790.3**	4	4,398	0.0	10,230.8	**10,230.8**	7	8,540	5.3	19,015.8	**19,021.1**
Rubber Products	8	3,830	2,120.8	281.7	**2,402.5**	5	6,673	2,275.6	482.5	**2,758.1**	13	10,503	4,396.4	764.1	**5,160.6**
Chemicals & Chemical Products	5	324	658.5	1,309.3	**1,967.8**	5	227	891.9	1,593.7	**2,485.6**	10	551	1,550.4	2,903.0	**4,453.4**
Food Manufacturing	6	1,439	536.2	3,455.5	**3,991.8**	2	980	105.5	250.0	**355.5**	8	2,419	641.7	3,705.5	**4,347.3**
Scientific & Measuring Equipment	1	278	0.0	1,947.0	**1,947.0**	-	-	-	-	**-**	1	278	0.0	1,947.0	**1,947.0**
Transport Equipment	2	395	282.2	0.0	**282.2**	2	528	250.0	1,001.5	**1,251.5**	4	923	532.2	1,001.5	**1,533.7**
Machinery & Equipment	2	248	0.0	418.8	**418.8**	2	104	0.0	344.3	**344.3**	4	352	0.0	763.1	**763.1**
Fabricated Metal Products	3	315	263.1	226.8	**489.9**	-	-	-	-	**-**	3	315	263.1	226.8	**489.9**
Petroleum Products (Inc. Petrochemicals)	1	12	159.5	0.0	**159.5**	-	-	-	-	**-**	1	12	159.5	0.0	**159.5**
Textiles & Textile Products	-	-	-	-	**-**	1	36	0.0	150.0	**150.0**	1	36	0.0	150.0	**150.0**
Wood & Wood Products	1	141	0.0	123.0	**123.0**	-	-	-	-	**-**	1	141	0.0	123.0	**123.0**
TOTAL	**38**	**24,966**	**4,025.6**	**143,094.8**	**147,120.5**	**37**	**22,570**	**4,078.6**	**33,201.5**	**37,280.1**	**75**	**47,536**	**8,104.2**	**176,296.4**	**184,400.6**

Note : * Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided
** Reporting of data is guided by the Malaysia Standard Industrial Classification 2008 (MSIC 2008)

Appendix 5: Approved New and Expansion/Diversification Manufacturing Projects by Industry, 2021 and 2020

INDUSTRY**	2021						2020					
	NEW		EXP./DIV.		TOTAL		NEW		EXP./DIV.		TOTAL	
	NO.	TOTAL INVESTMENT (RM MILLION)*	NO.	TOTAL INVESTMENT (RM MILLION)*	NO.	TOTAL INVESTMENT (RM MILLION)*	NO.	TOTAL INVESTMENT (RM MILLION)*	NO.	TOTAL INVESTMENT (RM MILLION)*	NO.	TOTAL INVESTMENT (RM MILLION)*
Electrical & Electronics	26	126,978.8	68	20,998.2	94	**147,977.0**	53	5,439.1	95	10,199.3	148	**15,638.4**
Basic Metal Products	15	9,145.6	7	10,292.4	22	**19,438.0**	8	14,309.2	5	75.7	13	**14,384.8**
Chemicals & Chemical Products	53	2,796.9	36	2,963.0	89	**5,759.9**	41	4,962.1	33	1,308.2	74	**6,270.3**
Rubber Products	22	2,765.0	18	2,991.9	40	**5,756.9**	31	3,874.5	11	421.2	42	**4,295.6**
Food Manufacturing	61	4,818.9	16	570.0	77	**5,389.0**	61	1,088.0	42	2,206.9	103	**3,294.9**
Transport Equipment	21	678.8	23	1,504.5	44	**2,183.3**	44	1,776.8	47	2,100.4	91	**3,877.2**
Scientific & Measuring Equipment	6	2,015.5	7	101.3	13	**2,116.8**	5	1,956.2	25	290.2	30	**2,246.5**
Fabricated Metal Products	52	1,283.4	38	438.2	90	**1,721.6**	63	2,132.1	38	539.0	101	**2,671.1**
Machinery & Equipment	27	912.0	21	755.6	48	**1,667.6**	51	3,091.2	42	3,994.5	93	**7,085.7**
Plastic Products	24	441.9	21	335.2	45	**777.1**	35	588.1	29	554.5	64	**1,142.6**
Paper,Printing & Publishing	21	373.5	13	175.9	34	**549.4**	38	6,041.3	32	1,796.3	70	**7,837.6**
Non-Metallic Mineral Products	11	220.1	6	202.9	17	**422.9**	35	1,780.7	15	473.2	50	**2,253.9**
Wood & Wood Products	18	347.5	2	11.0	20	**358.5**	21	663.1	8	96.0	29	**759.0**
Textiles & Textile Products	4	39.1	11	256.6	15	**295.7**	12	320.2	41	788.5	53	**1,108.7**
Furniture & Fixtures	14	183.9	16	60.7	30	**244.6**	30	636.1	17	83.1	47	**719.2**
Petroleum Products (Inc. Petrochemicals)	4	221.1	1	4.0	5	**225.1**	8	12,134.3	3	3,359.4	11	**15,493.7**
Leather & Leather Products	1	31.8	-	-	1	**31.8**	1	35.1	1	4.0	2	**39.1**
Beverages & Tobacco	1	13.8	5	15.0	6	**28.7**	8	191.4	9	1,780.2	17	**1,971.6**
Miscellaneous	5	114.3	7	29.8	12	**144.1**	3	41.7	9	131.5	12	**173.2**
TOTAL	**386**	**153,381.7**	**316**	**41,706.2**	**702**	**195,087.9**	**548**	**61,061.2**	**502**	**30,201.9**	**1,050**	**91,263.1**

Note : * Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided
** Reporting of data is guided by the Malaysia Standard Industrial Classification 2008 (MSIC 2008)

Appendix 6: Approved Manufacturing Projects with Malaysian Majority Ownership by Industry, 2021 and 2020

INDUSTRY**	2021						2020					
	NEW		EXP./DIV.		TOTAL		NEW		EXP./DIV.		TOTAL	
	NO.	TOTAL INVESTMENT (RM MILLION)*	NO.	TOTAL INVESTMENT (RM MILLION)*	NO.	TOTAL INVESTMENT (RM MILLION)*	NO.	TOTAL INVESTMENT (RM MILLION)*	NO.	TOTAL INVESTMENT (RM MILLION)*	NO.	TOTAL INVESTMENT (RM MILLION)*
Rubber Products	20	2,737.3	12	2,475.3	32	**5,212.6**	26	3,797.1	8	313.8	34	**4,110.9**
Chemicals & Chemical Products	41	741.2	20	1,131.4	61	**1,872.6**	28	582.0	21	1,158.4	49	**1,740.3**
Electrical & Electronics	17	332.3	38	1,396.3	55	**1,728.6**	28	997.9	23	1,017.3	51	**2,015.2**
Food Manufacturing	55	1,306.6	13	288.4	68	**1,595.0**	51	862.1	33	1,226.8	84	**2,088.9**
Fabricated Metal Products	43	860.7	28	284.2	71	**1,144.9**	48	1,520.6	26	415.4	74	**1,936.0**
Transport Equipment	17	574.7	18	419.5	35	**994.2**	38	1,474.5	32	631.7	70	**2,106.2**
Machinery & Equipment	15	225.5	15	363.1	30	**588.6**	42	639.9	33	1,729.6	75	**2,369.4**
Plastic Products	21	330.3	13	141.9	34	**472.3**	31	486.3	23	423.3	54	**909.7**
Paper,Printing & Publishing	19	288.0	11	94.2	30	**382.2**	29	442.8	23	490.3	52	**933.0**
Non-Metallic Mineral Products	10	182.7	5	179.6	15	**362.2**	20	443.6	8	134.2	28	**577.8**
Basic Metal Products	10	242.7	2	3.4	12	**246.1**	6	258.2	4	75.6	10	**333.8**
Furniture & Fixtures	12	147.2	14	56.2	26	**203.5**	20	286.7	15	67.5	35	**354.2**
Petroleum Products (Inc. Petrochemicals)	3	171.1	1	4.0	4	**175.1**	5	11,935.3	-	-	5	**11,935.3**
Wood & Wood Products	14	163.2	2	11.0	16	**174.2**	14	249.9	7	35.6	21	**285.5**
Scientific & Measuring Equipment	4	56.2	2	29.9	6	**86.1**	4	121.7	20	233.5	24	**355.2**
Textiles & Textile Products	4	39.1	5	24.8	9	**63.9**	9	229.1	34	767.0	43	**996.2**
Leather & Leather Products	1	31.8	-	-	1	**31.8**	-	-	1	4.0	1	**4.0**
Beverages & Tobacco	1	13.8	4	14.8	5	**28.6**	6	122.9	7	451.3	13	**574.2**
Miscellaneous	4	58.1	5	29.2	9	**87.3**	2	21.5	5	106.3	7	**127.8**
TOTAL	**311**	**8,502.2**	**208**	**6,947.6**	**519**	**15,449.7**	**407**	**24,472.1**	**323**	**9,281.5**	**730**	**33,753.7**

Note : * Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided
** Reporting of data is guided by the Malaysia Standard Industrial Classification 2008 (MSIC 2008)

Appendix 7: Approved Projects in the Engineering Supporting Industries by Sub-Sectors, 2021

SUB-SECTOR	NEW					EXP/DIV					TOTAL				
	NO.	EMPLOY-MENT	DOMESTIC INVEST-MENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVEST-MENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVEST-MENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*
Machining	11	659	134.2	128.2	**262.4**	15	350	85.4	40.9	**126.2**	26	1,009	219.5	169.1	**388.6**
Jigs & Fixtures	7	422	131.4	0.0	**131.4**	2	105	93.6	0.0	**93.6**	9	527	225.0	0.0	**225.0**
Surface Engineering	3	130	51.0	6.8	**57.8**	1	38	0.0	13.3	**13.3**	4	168	51.0	20.1	**71.0**
Casting	1	31	0.0	26.7	**26.7**	1	22	14.3	3.9	**18.2**	2	53	14.3	30.6	**44.8**
Heat Treatment	3	118	15.7	19.7	**35.4**	-	-	-	-	**-**	3	118	15.7	19.7	**35.4**
Stamping	2	165	29.5	0.0	**29.5**	1	0	0.6	0.0	**0.6**	3	165	30.1	0.0	**30.1**
Moulds, Tools & Dies	3	100	22.3	0.0	**22.3**	4	0	3.6	0.0	**3.6**	7	100	25.9	0.0	**25.9**
Cutting Ware	1	19	6.5	0.0	**6.5**	-	-	-	-	**-**	1	19	6.5	0.0	**6.5**
TOTAL	**31**	**1,644**	**390.5**	**181.5**	**572.0**	**24**	**515**	**197.3**	**58.1**	**255.4**	**55**	**2,159**	**587.9**	**239.5**	**827.4**

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, 2021

SUB-SECTOR	NEW					EXP/DIV					TOTAL				
	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*
Machinery/Equipment Modules or Industrial Parts/Components	13	761	51.8	551.5	**603.4**	5	146	6.5	213.8	**220.3**	18	907	58.3	765.3	**823.7**
Machinery Specialised For Specific Industries	6	253	38.7	91.1	**129.8**	10	482	283.7	178.1	**461.9**	16	735	322.4	269.2	**591.7**
General Industrial Machinery, Equipment & Parts	3	288	32.9	25.3	**58.2**	2	200	42.0	-	**42.0**	5	488	74.9	25.3	**100.2**
Power Generating Machinery & Equipment	1	96	25.0	0.0	**25.0**	-	-	-	-	**-**	1	96	25.0	0.0	**25.0**
Maintenance, Upgrading or Reconditioning of M&E	1	26	0.0	8.2	**8.2**	1	16	0.0	1.9	**1.9**	2	42	0.0	10.0	**10.0**
TOTAL	**24**	**1,424**	**148.5**	**676.1**	**824.6**	**18**	**844**	**332.3**	**393.8**	**726.0**	**42**	**2,268**	**480.7**	**1,069.9**	**1,550.6**

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

Appendix 9: Approved Projects in the Electronics & Electrical Industry by Sub-Sectors, 2021

SUB-SECTOR	NEW					EXP/DIV					TOTAL				
	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*	NO.	EMPLOY-MENT	DOMESTIC INVESTMENT (RM MILLION)	FOREIGN INVESTMENT (RM MILLION)	TOTAL INVESTMENT (RM MILLION)*
Electronics Components	8	8,518	76.3	82,057.5	**82,133.8**	23	3,953	511.2	10,256.9	**10,768.0**	31	12,471	587.4	92,314.4	**92,901.8**
Electrical Components	8	3,886	165.6	42,248.7	**42,414.3**	11	5,079	381.5	4,577.1	**4,958.6**	19	8,965	547.2	46,825.7	**47,372.9**
Consumer Electronics	-	-	-	-	**-**	12	2,984	149.5	4,017.5	**4,167.0**	12	2,984	149.5	4,017.5	**4,167.0**
Industrial Electrical	3	276	18.3	1,610.5	**1,628.8**	7	125	37.6	20.8	**58.4**	10	401	55.8	1,631.3	**1,687.2**
Electrical Appliances	5	2,150	30.7	738.6	**769.3**	3	376	59.6	464.1	**523.7**	8	2,526	90.3	1,202.7	**1,292.9**
Industrial Electronics	2	115	32.7	0.0	**32.7**	12	900	248.3	274.2	**522.5**	14	1,015	281.1	274.2	**555.3**
TOTAL	**26**	**14,945**	**323.6**	**126,655.3**	**126,978.8**	**68**	**13,417**	**1,387.6**	**19,610.6**	**20,998.2**	**94**	**28,362**	**1,711.2**	**146,265.8**	**147,977.0**

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 Country, 2021 and 2020

COUNTRY ***	2021			2020		
	NO.	EMPLOYMENT	FOREIGN INVESTMENT (RM MILLION)*	NO.	EMPLOYMENT	FOREIGN INVESTMENT (RM MILLION)*
The Netherlands	14	4,092	74,909.3	14	4,995	6,536.9
Singapore	73	10,903	46,567.0	120	9,080	8,832.6
Austria	3	7,086	18,920.4	-	-	-
The People's Republic of China	43	13,898	16,604.2	71	10,376	17,752.4
Japan	25	3,318	7,536.5	59	2,508	1,650.6
Korea,Rep.	7	1,210	7,334.1	8	686	1,379.3
British Virgin Islands	3	267	3,322.2	12	2,460	5,494.8
The USA	21	1,690	1,146.1	28	3,136	3,664.1
Germany	13	554	820.8	8	171	1,183.5
Taipei	15	1,571	648.5	20	1,831	760.8
Luxembourg	1	500	250.0	-	-	-
Switzerland	4	146	225.0	9	727	2,762.4
Hong Kong SAR, China	8	774	194.3	27	4,093	2,932.0
Denmark	2	37	150.1	-	-	-
United Kingdom	13	1,297	142.2	6	313	52.9
Australia	9	317	117.6	6	312	94.6
Canada	3	184	65.5	1	46	3.9
India	6	208	52.1	3	55	0.6
Finland	1	0	21.3	-	-	-
Indonesia	2	329	14.1	2	70	56.2
New Zealand	1	81	11.6	-	-	-
Thailand	2	63	11.4	6	290	1,858.6
Macau SAR, China	1	26	7.3	-	-	-
Ireland	1	54	6.4	-	-	-
Bermuda	2	28	4.9	1	0	0.9
Pakistan	2	22	2.7	-	-	-
France	1	11	2.2	4	111	75.5
Brunei	2	63	0.0	-	-	-
Belgium	-	-	-	1	32	35.0
Italy	-	-	-	2	83	38.0
Philippines	-	-	-	2	73	64.1
Sri Lanka	-	-	-	1	7	3.1
Sweden	-	-	-	1	17	4.7
Egypt	-	-	-	1	57	6.8
Saudi Arabia	-	-	-	1	60	7.7
Syria	-	-	-	1	57	6.8
Turkey	-	-	-	1	25	1.1
United Arab Emirates	-	-	-	1	32	9.8
Belize	-	-	-	1	69	14.1
Nepal	-	-	-	1	0	0.0
Samoa	-	-	-	2	281	60.3
Swaziland	-	-	-	1	300	135.3
British Indian Ocean Terr.	-	-	-	1	85	47.3
Cayman Islands	-	-	-	5	1,038	920.5
Others	14	909	511.0	46	1,048	132.6
Total	**	**	**179,598.6**	**	**	**56,579.9**

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
*** Reporting of foreign investment is based on immediate investing country

Appendix 11: Approved Manufacturing Projects by State, 2021 and 2020

STATE	2021						2020					
	NEW		EXP./DIV.		TOTAL		NEW		EXP./DIV.		TOTAL	
	NO.	TOTAL INVESTMENT (RM MILLION)*	NO.	TOTAL INVESTMENT (RM MILLION)*	NO.	TOTAL INVESTMENT (RM MILLION)*	NO.	TOTAL INVESTMENT (RM MILLION)*	NO.	TOTAL INVESTMENT (RM MILLION)*	NO.	TOTAL INVESTMENT (RM MILLION)*
Pulau Pinang	57	73,356.6	54	2,867.1	111	**76,223.7**	70	8,604.0	96	5,509.0	166	**14,113.0**
Kedah	26	57,130.6	22	9,088.7	48	**66,219.3**	31	3,089.3	45	975.9	76	**4,065.2**
Pahang	7	2,020.5	7	8,469.9	14	**10,490.4**	16	3,088.0	14	1,696.5	30	**4,784.5**
Selangor	152	2,992.2	95	4,518.8	247	**7,511.0**	200	10,323.0	124	8,102.2	324	**18,425.2**
Johor	59	3,239.9	75	3,713.4	134	**6,953.2**	124	3,898.2	108	2,886.1	232	**6,784.3**
Perak	25	4,968.4	18	1,112.9	43	**6,081.3**	30	1,914.5	30	1,412.7	60	**3,327.1**
Sarawak	2	49.4	4	5,618.5	6	**5,667.9**	15	15,611.7	9	118.8	24	**15,730.5**
Sabah	11	4,848.0	3	13.4	14	**4,861.4**	8	11,727.9	7	225.8	15	**11,953.7**
Melaka	10	511.3	8	3,410.7	18	**3,922.0**	10	518.3	31	1,437.8	41	**1,956.1**
Terengganu	7	3,365.0	5	466.4	12	**3,831.4**	5	56.2	4	1,855.2	9	**1,911.4**
Negeri Sembilan	15	605.0	15	2,296.1	30	**2,901.2**	24	1,407.0	24	4,771.5	48	**6,178.6**
W.P. Kuala Lumpur	10	166.5	7	111.8	17	**278.4**	9	115.8	8	1,190.7	17	**1,306.5**
Kelantan	3	90.7	-	-	3	**90.7**	1	37.1	1	6.7	2	**43.9**
W.P. Labuan	1	25.1	3	18.5	4	**43.6**	2	70.2	-	-	2	**70.2**
Perlis	1	12.3	-	-	1	**12.3**	3	599.9	1	13.0	4	**612.9**
TOTAL	**386**	**153,381.7**	**316**	**41,706.2**	**702**	**195,087.9**	**548**	**61,061.2**	**502**	**30,201.9**	**1,050**	**91,263.1**

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

Appendix 12: Approved Investments in the Services Sector, 2021 and 2020

SERVICES SECTOR	NUMBER		POTENTIAL EMPLOYMENT		TOTAL INVESTMENT (RM MILLION)*	
	2021	2020	2021	2020	2021	2020
Real Estate	1,044	1,045	NA	NA	28,811.7	31,250.0
Global Establishments	102	141	3,838	704	19,658.5	595.2
Financial Services	53	28	969	221	12,029.7	2,500.9
Utilities	27	0	NA	NA	9,611.5	10,762.3
Information and Communications	450	615	2,026	4,074	8,179.2	12,202.1
Support Services	954	753	3,555	6,281	5,964.1	5,180.6
Distributive Trade	908	613	14,392	18,186	3,598.9	3,736.6
Hotel and Tourism	29	38	2,949	2,088	3,449.2	2,833.7
Transport Services	24	9	189	0	1,593.3	654.2
Health Services	5	1	869	73	741.0	8.8
Education Services	199	435	924	1,887	410.3	218.7
Other Services	8	7	198	214	76.2	98.4
TOTAL	**3,803**	**3,685**	**29,909**	**33,728**	**94,123.8**	**70,041.7**

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

Appendix 13: Approved Investments in the Primary Sector, 2021 and 2020

PRIMARY SECTOR	NUMBER		POTENTIAL EMPLOYMENT		TOTAL INVESTMENT (RM MILLION)*	
	2021	2020	2021	2020	2021	2020
Mining	19	11	37	24	17,096.3	6,061.9
Plantation and Commodities	34	11	388	804	211.4	27.0
Agriculture	6	1	103	3	20.5	2.4
TOTAL	**59**	**23**	**528**	**831**	**17,328.3**	**6,091.4**

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

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