INspire is a quarterly newsletter produced by InvestPenang. This publication aims to give our stakeholders an update on the industry landscape and emerging opportunities in Penang, along with the State’s initiatives to support industries. For more information, visit investpenang.gov.my or contact us via email at enquiry@investpenang.gov.my or call us +604-646 8833.

About INspire

InvestPenang is the Penang State Government’s principal agency for promotion of investment. Its objectives are to develop and sustain Penang’s economy by enhancing and continuously injecting business activities in the State through foreign and local investments, including the spawning of viable new growth centres. To support the realization of its objectives, InvestPenang also runs initiatives like SMART Centre (to assist SMES), Penang CAT Centre (to assist talents) and @CAT Penang (to assist start-ups).

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ATTRACTION, DEVELOPMENT & RETENTION OF TALENTS

- Resource centre and point-of-contact for employers and talents
- Policy advocacy on addressing talent gap
- Secretariat for Penang Future Foundation (PFF)

TALENT ATTRACTION & RETENTION

- Awarding scholarships to outstanding and deserving students from the field of Science, Technology, Engineering, Mathematics, Accounting & Finance
- Upon graduation, recipients will become part of the diverse talent pipelines in Penang’s workforce

ASSISTING SME TO MOVE UP THE VALUE CHAIN

- Advisory for market intelligence and financial resources from state & national agencies
- Assist in creating new business opportunities and capacity building initiatives to develop SMES’ value proposition

START-UP DEVELOPMENT

- One-stop centre for tech entrepreneurial activities in Penang
- Launch pad of Penang’s tech-startup community & innovation labs
- Unique & flexible co-working space, tech events, accelerator & mentorship programme in George Town UNESCO World Heritage Site

FUNDING EARLY STAGE TECH START-UPS

- Assist high potential tech start-ups with innovative technology products & services to attain commercialization
- Enhance local tech start-up ecosystem, encapsulating ‘Powered in Penang’ capabilities

INspire - The Team

Writers: Yeoh Bit Kun / Lee Siu Ming
bitkun@investpenang.gov.my / siuming@investpenang.gov.my

Graphic Design & Layout: Hiou Yian Ling
yianling@investpenang.gov.my
In Malaysia, the Movement Control Order (MCO), which was enforced on 18 March 2020 and extended twice at the time of writing to 28 April 2020, has severely curtailed economic activities.

**Malaysian needs more than “stimulus packages”**

In response to the pandemic, the Federal and State Governments have announced economic packages, providing direct financial assistance to households and businesses to tide them over in the short term.

These economic packages are aimed at easing the immediate cash flow crunch faced by businesses during the MCO, and to provide wage support to safeguard jobs. However, these are short term measures.

**The longer-term challenge is to put the country back to work as soon as possible**

Getting the country back into productive mode is the key to financial and social sustainability in the longer term. Looking at the economy as a whole, demand disruptions are likely to persist and the ripple effect will be far, wide and deep.

To this end, public sector spending and the manufacturing sector will be the economic drivers to sustain us through the difficult time ahead.

While global exports will be dampened by weaker external demand, the economic implications are varied across countries. Those that react swiftly to Covid-19 situations and implement comprehensive EHS (Environment, Health and Safety) protocols to restart their manufacturing sectors quickly will be the ones that can contain the damage to their economies most effectively.

Such protocols are needed not only during the MCO but also after it is uplifted, in order to protect the health and safety of employees, the public as well as the environment, from hazards associated with the workplace.

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**By Dato’ Seri Lee Kah Choon**

Special Investment Advisor to the Chief Minister of Penang
Director of InvestPenang

**Mounting uncertainties**

2020 has all the makings of a challenging year. The Covid-19 outbreak has sent global industries and economies into a tailspin, posting significant threats to the healthcare system, severely disrupting the supply chain and dampening consumer spending. It has even overshadowed the unresolved US-China trade and technology war.
So, what’s next for Penang?

With half a century of industrialisation in its DNA, Penang has navigated numerous up and down cycles, and has emerged stronger from each. While the Covid-19 situation is unprecedented in its scale, Penang is versatile enough to navigate these uncertainties and seek out fresh opportunities.

Accounting for 30% of the nation’s exports, contributing 77% to the country’s trade surplus and being a regional manufacturing hub for medical devices as well as electrical and electronic (E&E) components and finished products, Penang holds a major role in driving Malaysia’s industry outlook. Through the following focused and distinct strategies, the State Government is striving to minimize the damage from the ongoing turmoil:

#1 – Helping investors catch up on the progress of their projects

2019 was a fantastic year for Penang in terms of attracting foreign direct investments, and many of these strategic investment projects are on hold, pending the MCO being uplifted so that physical implementation on the ground can proceed or resume.

The State Government will facilitate in every possible manner to help these investments catch up with their implementation timelines. Under the leadership of the Chief Minister, Penang Development Corporation and InvestPenang are in close contact with the investors in driving their plans and projects forward.

#2 – SMEs: Race to recovery

The survival of SMEs is crucial for employment and preserving the manufacturing supply chain. The Federal and State Governments have already introduced direct financial assistance to SMEs in the form of wage subsidies, deferment of loan repayments and the provision of interest-free loans.

These measures would temporarily relieve SME’s cash flow constraints. The conditional operation approval by the Ministry of International Trade and Industry (MITI) for qualified SMEs during the MCO period is expected to alleviate the financial distress of SMEs.

#3 – Preparing to help potential job seekers

The current macro environment encompasses too many uncertainties. While the current job market in Penang remains stable, we should prepare ourselves for the worst. The State Government, via the Penang Career Assistance and Talent Centre (CAT Centre), is ready to offer job-matching facilitation for those facing retrenchment due to shifting technology.

The new industries in Penang are doing well and are always hungry for talent. With the implementation of all the investments already in the pipeline, Penang is looking forward to the creation of at least 13,000 new job opportunities. The challenge for us is to match the right skills with these new employment opportunities. In the new norm after Covid-19, there is no lifelong employment, only lifelong employability.

#4 – Strategies for industry development

To strengthen Penang’s manufacturing sector and to protect employment, the State has worked towards establishing a diversified base of industries over the years.

The Covid-19 pandemic created a new normal as to how people live and work. Key changes include a surge in the adoption of e-commerce and broader acceptance of the work-from-home model by employers.

The State understands the importance of digital infrastructure to support this new norm, and the establishment of Digital Penang to enhance the State’s digital infrastructure will further strengthen Penang as the destination of choice for the digital economy.

#4.1 – Continue to entrench Penang’s position in the medical device industry

Leveraging on the strength of the E&E industry, Penang has focused on developing the non-glove medical device ecosystem over the past 10 years. The State has gained increasing traction from leading global medical device players, and we expect the trend to continue. The medical device segment provides consistent and non-cyclical growth, and the current pandemic is expected to expedite the industry’s development.
#4.2 – E&E product portfolio diversification

In the meantime, Penang’s broader E&E product portfolios have evolved from being consumer electronics-centric to include products with more industrial applications, such as components, modules and systems for telecommunication.

#4.3 – Seizing opportunities arising from the paradigm shift in the global supply chain

Since the beginning of the US-China trade war, corporates around the world have re-strategized their manufacturing footprints, recognizing the risks associated with a single location production site. The Covid-19 pandemic has further strengthened the importance of diversification. Hence, a structural change in the global supply chain is underway. The Penang State Government will continue to work on attracting strategic companies that are looking to diversify their footprints in Southeast Asia.

#4.4 – To further strengthen Penang’s position as a GBS hub

The State Government will continue to promote the Global Business Services (GBS) industry and add more GBS Grade-A office space to cater to the industry’s expansion.

Penang is currently home to more than 60 GBS companies, which have created and maintained more than 12,000 high-paying positions. Services covered by these GBS companies run the gamut from finance to supply chain management, as well as from trading and analytics to research and development (R&D), logistics and other activities.

With established capabilities in both manufacturing and GBS, Penang is able to offer competitive advantages to MNCs in many aspects, including lower overall costs and higher efficiency in their operations.

#4.5 – Continuous push up the value chain

Penang’s industries have seen vertical diversification over time, and efforts to ensure this trend continues are ongoing. More companies have opted to expand their higher value R&D and knowledge-based activities here as part of their regional rationalisation initiatives. Malaysia’s Budget 2020 strategically provides tax incentives for the targeted high-value sectors and upstream activities. The Penang State Government will continue working closely with investors and provide feedback from industries to the Federal Government to attract strategic industries to Malaysia and Penang.

“Sustainability is always the top priority of the Penang State Government”

Extraordinary times call for extraordinary solutions, innovation and self-adjustment. Amid the prevailing headwinds, we must be ready to adapt and embrace the new living, working and learning models.

The state government is committed to ensuring that Penang remains a conducive, desirable and sustainable destination for “work, live, play and invest”.
2019 was an action-packed year for Penang as approved manufacturing investments hit a record high, with strong inflows of both new and re-investments into the State. Despite the challenging global economic backdrop and growing trade tensions between the worlds’ two biggest economic superpowers, Penang recorded RM16.9 billion in total approved manufacturing investments in 2019, up 192% year-on-year and more than double its 10-year average of RM8.0 billion (2010-2019).

According to MIDA, Penang successfully garnered 166 manufacturing projects in 2019, which is estimated to create 18,886 new job opportunities in Penang.

E&E, medical devices and equipment manufacturing are the key pillars of industry in Penang

The electrical and electronics (E&E), medical devices and equipment manufacturing industries collectively made up about 87% of Penang’s total approved manufacturing investments in 2019. This reflects Penang’s continued strength as a high-technology manufacturing hub in the region. In fact, the rising investment value per new job created suggests that Penang is on the right track in attracting higher quality investments. In addition, avionics, halal and food manufacturing are among the other promoted industries in Penang.

Malaysia’s top FDI recipient

In 2019, foreign direct investments (FDI) into the State accounted for 89% of the total investment inflows, while the remaining 11% were domestic direct investments (DDI). Penang commanded 20% of Malaysia’s total manufacturing investments, and its RM15 billion FDI inflow entrenched the State as the country’s top FDI destination, accounting for 28% of the country’s total FDI.

The companies from United States and United Kingdom were Penang’s top sources of FDI inflows, with notable investments coming from Intel Technology, Jabil Circuit, Lam Research, Micron Technology, Smith+Nephew, among others. In addition to the direct economic impact of the investments, the sustainable, long-term spill-over impact will emerge once more supply chain localisation opportunities are realised, which typically take root 1-3 years after the initial investments materialise and the companies ramp up production.
Positioned as a preferred location for GBS

In the digital economy and services industry, the State continues to position itself as a preferred location for Global Business Services (GBS). Currently, Penang is home to more than 60 GBS companies. In 2019, Siemens Digital Industries Software launched its first and only South East Asian Technical Competency Hub in Penang, while Zebra Technologies, Left Pocket Creatives and Monitor ERP Systems are some of the companies that have announced expansion plans in Penang.

Penang chosen to host WCIT 2020

Penang’s significance in the ICT landscape is also being acknowledged and recognised by leading international organisations. One such instance is the State’s appointment to host the World Congress on Information Technology (WCIT) from 14-16 September 2020. Known as the Olympics of the world’s information technology industry, WCIT 2020 Malaysia establishes Penang as the gateway to Southeast Asia for the world. 4,000 visionaries, captains of industry, government leaders and academics from 100 countries are expected to attend this 3-day event.

About WCIT 2020

WCIT2020 is the 24th edition of the World Congress on Information Technology and to host in Malaysia, the gateway to Southeast Asia, from 14-16 September 2020, with 4,000 visionaries, captains of industry, government leaders and academics from 100 countries.

Emphasis on both re-investments and new investments

Re-investments contributed about 56% to Penang’s total approved manufacturing investments in 2019, signifying existing investors’ satisfaction and strong confidence in the State’s governance and business outlook, opting to further expand their presence here.

Being a business-friendly state that emphasises sustainability, the Penang State Government strongly believes that fostering long-term relationships with industries is crucial in the economic development of the state. The existing companies’ technical capabilities and capacity expansion in Penang translate into upskilling, better job prospects and prosperity for local residents.

The State’s ability to attract new investors is made possible by its resilient ecosystem and comprehensive supply chain, in which every stakeholder in the industry plays a role.

CONVERSATIONS TO CONNECT

Billions of online connections between people, businesses, information, data, infrastructure, devices and even processes are changing everything, driving more innovation and disruption than was ever possible. Is your business accelerating and evolving at the same speed? Are you shifting your strategies and measuring the impact of the competition well? This changing landscape is a world of opportunities – make the digital economy relevant to you.

Learn more about WCIT2020 at wcit2020.org

Rt. Hon. Mr Chow Kon Yeow leading a delegation to Armenia in 6-9 Oct for the handing over of WCIT hosting duties to Penang in 2020
Efforts in enhancing Penang’s position as a “Destination of Choice for Investments”

One of InvestPenang’s key objectives is to promote Penang as the location of choice for technology, industry and business, and toward this end, international investment promotion missions are one of the agency’s key initiatives. These missions are part of the State’s pro-active approach in engaging MNCs to foster stronger relationships between the State government and global industry leaders, with a view to create an awareness of the opportunities and incentives available to corporates in Penang, and to help the State understand the goals and needs of investors, and lend assistance toward achieving these, where practicable. In 2019, InvestPenang officials visited existing, prospective and potential investors in the United States, Europe and East Asia.

InvestPenang also endeavours to build ties with foreign government agencies and councils, and in May 2019, the agency signed a Memorandum of Understanding (MoU) with the China Chamber of International Commerce (CCOIC). CCOIC is China’s national foreign trade and investment promotion agency, and the MoU is aimed at promoting bilateral investments and to bridge local SMEs with Chinese companies for new business opportunities. Both parties are committed to establish regular communication and data interconnection mechanisms for information exchange.

On the home front, the Penang State Government conducts activities throughout the year to facilitate and aid the development and growth of industries.

Among the events organised by InvestPenang in collaboration with industry partners in 2019 were: 1) the 5th Penang Global Business Services Conference 2019, 2) SMART Capability Building Workshop “SMEs in the UK – Brexit: Opportunities or Challenges?”, 3) ‘MDV Fund Talks – Project/Contract Financing Programmes for SMES’, 4) International Electronics Elite Forum and Run (IEEFR) 2019, 5) Penang Deputy Chief Minister’s Business Appreciation and Networking Dinner.

Formation of the Penang Strategic Investment Advisory Council

Having an ear to the ground to obtain feedback from industry players is vital in enhancing Penang as a preferred location for strategic investments, and to enable the state to form business-friendly and constructive industrial policies. Toward this end, in April 2019, the State government announced the establishment of the Penang Strategic Investment Advisory Council (PSIAC), a joint effort between the state government and the private sector. The council is composed of private sector leaders with vast experience who are also respected thought leaders in their respective industries, State officials, and members of State agencies. It is the intention of the State to assemble a council comprising members from diverse backgrounds and competencies to obtain comprehensive input from a broad range of industries.

With record investments in 2019, focus now shifts to realising investments

2019’s robust investment performance depicts a busy year for Penang, but the exciting journey for these investments has just started. While the progress of some of these investments has been affected by the Covid-19 pandemic and the enforcement of the Movement Control Order (MCO), the State Government will redouble its efforts to facilitate in every possible manner to help investors catch up with their implementation timelines and realise the impact of new high-quality jobs on the ground.

The State Government is cognisant that the vibrant industry in Penang did not emerge overnight. Instead it has been a steady progression, involving the development of a comprehensive supporting ecosystem. Two of the key competitive edges Penang has in attracting investments are its robust supporting industries and strong talent pool. Through InvestPenang and other relevant agencies, the State government will continue to work closely with all stakeholders, from MNCs to local SMEs, as well as academic institutions, to achieve its goals.
Penang and Malaysia's External Trade Performance (2019)

<table>
<thead>
<tr>
<th></th>
<th>Penang</th>
<th>Other States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export (RM bil)</td>
<td>105</td>
<td>32</td>
</tr>
<tr>
<td>Import (RM bil)</td>
<td>289</td>
<td>697</td>
</tr>
</tbody>
</table>

Source: Department of Statistics Malaysia

Penang and Malaysia’s Approved Investments in Selected Industries (2019)

- **Electronics & Electrical Products**: 15.8 RM bil
- **Scientific & Measuring Equipment**: 2.1 RM bil

Penang contributed 39% and 54% of Malaysia’s E&E and scientific and measuring equipment investments respectively.

Source: MIDA and InvestPenang data

Penang: Approved Manufacturing Investments by Industry (2019)

- **Electronics & Electrical Products**: 58.7%
- **Machinery & Equipment**: 14.6%
- **Non-Metallic Mineral Products**: 2.6%
- **Chemical & Chemical Products**: 2.1%
- **Fabricated Metal Products**: 5.2%
- **Others**: 2.1%

Source: MIDA and InvestPenang data

Penang: Approved Manufacturing Investments by Status (2019)

- **Reinvestment**: 56%
- **New**: 44%

Of the total RM16.9 billion in approved investments, 56% were for re-investments and 44% for new investments.

Source: MIDA and InvestPenang data
FedEx announces reinvestment of RM17.6 million in Penang facilities

Global logistics services provider FedEx launched its upgraded integrated facilities at the Penang International Airport. This RM17.6 million investment is the first of its kind in Malaysia to screen all packages via X-ray, regardless of size.

Abbott Penang shares that they will continue to grow

Abbott announced that it will continue to grow and expand its operations in Penang.

The US-headquartered medical device company currently employs some 1,020 employees in Penang, and its plant here is the only manufacturing site for pacing devices in Asia.

Aemulus announces RM35 million expansion

Aemulus, a homegrown automated test equipment company, announced a RM35m expansion plan to grow its R&D activities and business infrastructure.

With this investment, the company expects to increase its workforce headcount to 500 people, from 140 currently.

Official opening of SAM Engineering (M) Bhd’s new RM140 million manufacturing plant

SAM Engineering (SAM), a subsidiary of Singapore Aerospace Manufacturing Pte Ltd, officiated its new 145,000 sq. ft. plant in Bukit Minyak. This is SAM’s 6th plant in Malaysia. The new facility produces major nacelle structures for aircraft and will employ 200 highly-skilled workers when fully ramped up.

Monitor ERP System opens new ASEAN HQ

Monitor ERP System, a Swedish software company that offers enterprise resource planning (ERP) systems, opened its new ASEAN headquarters in Straits Quay, Penang. The office is the company’s biggest outside of Sweden.

Exabytes inks partnership with Alibaba.com

Exabytes Network, a home-grown web hosting and cloud service provider, was appointed by Alibaba.com as an authorized Global Gold Supplier Membership Channel Partner. This partnership serves the needs of local SMEs and businesses in accelerating cross-border e-commerce

Note: *The list of companies mentioned is not exhaustive
Appreciation dinner with industry partners

The Office of the Deputy Chief Minister 1 and InvestPenang hosted an appreciation dinner with the State’s industry partners on 11 Dec.

130 industry leaders attended the dinner, which included speeches on investment updates, the Penang Future Foundation scholarship, World Congress of IT 2020 and Penang Smart City.

5th Penang Global Business Services (GBS) Conference

Approximately 300 industry participants attended the 5th Penang GBS Conference. Themed ‘Leading Business Direction in the Digital Era’, the conference aimed to create awareness of and encourage GBS companies to embark on digital transformation initiatives.

Smith+Nephew announces the establishment of a new manufacturing facility in Penang

UK-based global medical equipment manufacturer, Smith+Nephew (S+N), will build a new manufacturing facility in Batu Kawan Industrial Park.

This will be S+N’s first manufacturing facility in Southeast Asia, and is expected to create up to 800 jobs over the next five years. First shipment from the plant is expected in the fourth quarter of 2021.

National Instruments announces expansion in Penang

US-headquartered National Instruments (NI) produces automated test equipment. The MNC announced a RM170 million expansion of its facility in Penang, which will be located next to its existing plant.

The new expansion will open up 250 new positions. NI Penang is one of the three largest NI facilities in the world.

Opening ceremony of Zebra Technologies’ expansion

Zebra Technologies, a US company and global leader in enterprise asset intelligence, celebrated the expansion of its Penang facility, from 36,000 sq. ft. to 58,000 sq. ft..

The company’s workforce grew from 100 people in 2014 to 500 employees in 2019.

Grand opening of Japan Lifeline’s new facility in Penang

Japan Lifeline, a leading manufacturer of medical devices, celebrated the grand opening of its new facility at North Penang Science Park. This is the company’s first facility outside of Japan, and it will produce medical devices for cardiac rhythm management, electrophysiology or ablation and cardiovascular surgery.

Official opening of SIBS’ first plant in Penang

SIBS is a Swedish company that produces IBS residential apartment modules, serving the European market.

At the opening ceremony of its first plant in Penang, SIBS announced its next phase of expansion, which will have 4 times the capacity of its existing plant, and will create more than 600 jobs. Post expansion, SIBS could produce 7,000 units of IBS apartments annually in Penang.

Official opening of Bruker’s new plant

Bruker, a US-headquartered MNC and a world leader in high-performance scientific instruments, established its first Asia-based manufacturing facility in Penang.

The new 25,000-sq. ft. plant caters to “design, assembly, test and ship” activities to serve Bruker’s global customer base.

VAT Group celebrates the opening of its Phase 2 manufacturing facility at Batu Kawan Industrial Park

Switzerland-headquartered VAT Group, a leading player in vacuum valves that serve the semiconductor, display and solar panel manufacturing industry, celebrated the grand opening of Phase 2 of its manufacturing facility at Batu Kawan Industrial Park.

Official opening of Kemikon’s new plant in Prai

Swiss contract manufacturer Kemikon opened its new plant in Prai Industrial Park, Penang. The plant occupies approximately 80,000 sq. ft. and has 130 employees currently.

Kemikon specialises in building metal structures, parts and modules for semiconductor equipment manufacturers.

Hotayi Electronic expects investments in its Batu Kawan facility to reach RM1 billion

Hotayi, an electronics manufacturing services company, held a grand opening of its new facilities in Batu Kawan. Having invested RM600m in Phase 1, Hotayi expects to embark on Phase 2 of its expansion plans in the next 1-2 years, which could bring total investments in Batu Kawan to RM1 billion.

Hotayi has been operating at Bukit Tengah Industrial Park, Bukit Mertajam, since 1992.

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Kemikon specialises in building metal structures, parts and modules for semiconductor equipment manufacturers.
Nasdaq-listed Fortune 500 company, Lam Research, is establishing a new, advanced technology production facility in Batu Kawan, Penang. Chief Minister of Penang, Rt. Hon. Chow Kon Yeow, together with representatives from Lam Research, Mr. Kevin Jennings, Senior Vice President, Global Operations, and Mr. Mike Snell, Vice President, Manufacturing, announced the company’s plans at a joint video press conference on 5 February 2020.

The upcoming plant will complement Lam Research’s existing production sites in the United States, Austria and South Korea, and will be a significant boost to Penang’s electronics and electrical (E&E) ecosystem, elevating the State’s position as a powerhouse in the global semiconductor industry.

**Lam Research’s investment to have a far-reaching impact on Penang’s E&E ecosystem**

Lam Research is an innovative global wafer fabrication equipment (WFE) player, with a revenue of US$9.5 billion in 2019. It will be the first global WFE leader to establish a manufacturing facility in Malaysia, which will complement Penang’s position as an established regional hub in the back-end high technology machinery and equipment (M&E) as well as semiconductor assembly and testing segments.

The State is already home to a host of renown global manufacturing equipment players, such as Keysight Technologies, National Instruments, Bruker Corporation, Agilent, VAT Engineering and Advanced Energy. Together with home grown equipment companies such as Vitrox, Pentamaster, SRM Integration, MI Technovation, Greatech Technology, UWC, Esoft and MMS Ventures, these companies have played critical roles in the development of Malaysia’s M&E industry, particularly in the E&E subsegment.
Lam Research’s entry is expected to complement the local E&E industry and have far-reaching effects on the local economy in terms of supply chain localisation opportunities, uplifting the skillset of the local technical workforce, as well as having significant economic spillover and multiplier effects. Given that Lam Research’s technology spans numerous high-tech disciplines (such as chemistry, physics, surface science, materials science, engineering, software, robotics and control systems), its presence in Penang will invariably attract relevant vendors to the State, further enhancing the already-comprehensive and robust E&E ecosystem in Penang.

**Global fab equipment investments projected at an all-time high in 2021**

SEMI, the global industry association that represents the electronics manufacturing and design supply chain, reported global semiconductor equipment sales dropped 7% year-on-year to US$59.8 billion in 2019, before staging a mild recovery in 2020, and growing further to reach an all-time high of US$67 billion in 2021.

In particular, industry sales growth is expected to be driven by the WFE segment (which comprises wafer processing, fab facility and mask/reticle equipment), which is estimated to account for 87% of total global semiconductor equipment sales in 2019. The dominance of the WFE segment is expected to continue, given the expected 3% year-on-year growth to US$58 billion in investments in fab equipment globally in 2020 and a sharp uptick drives record investments in 2021, as projected by SEMI in its World Fab Forecast Report (published in March 2020).

**Penang: A major contributor to Malaysia’s trade surplus**

In the context of the domestic economy, Penang continues to be a key pillar to Malaysia’s external trade, given its position as the country’s leading E&E hub, and the significance of the E&E industry to the country’s manufacturing sector and trade surplus. Penang recorded a trade surplus of RM105 billion in 2019, which is equivalent to 77% of Malaysia’s total trade surplus for the period. The State’s contribution to the country’s E&E sector (which is largely exported by air) is also evidenced by Penang airport’s position as Malaysia’s largest air cargo gateway, accounting for RM229 billion or 75% of the country’s exports by air in 2019.

In terms of investments, the State attracted RM35 billion in approved manufacturing investments in the E&E and M&E industries between 2014 and 2019, representing 38% of Malaysia’s total approved investments in these two subsectors.

Looking ahead, InvestPenang expects the E&E sector to continue to be the backbone of Penang’s industry, alongside the M&E and medical devices sectors. These are among the key industries in which the State has an established competitive advantage and InvestPenang will focus on attracting foreign and domestic investments into the State in these sectors.
Smith+Nephew
Reinforcing Penang’s Leading Position in the Medical Technology Industry

6 out of the top 30 global medical device companies have a manufacturing presence in Penang

Penang’s medical technology industry continues to draw investments from leading global players, with the latest coming from Smith+Nephew (S+N). The FTSE100 constituent’s strategic investment in the State was announced at a press conference on 19 November 2019, with the Chief Minister of Penang, Rt. Hon. Mr Chow Kon Yeow and representatives from S+N, Mr. Ross Macken, Vice President, Manufacturing Network Strategy, and Mr. Mark Arthun, Manufacturing Site Leader, Malaysia, in attendance. On 28 February 2020, S+N held a ground-breaking ceremony that was officiated by Rt. Hon. Mr Chow Kon Yeow, Mr. Mark Gladwell, President of Global Operations of S+N and Dato’ Azman Mahmud, Chief Executive Officer of Malaysian Investment Development Authority (MIDA).

With S+N’s investment, Penang is proud to house manufacturing facilities for six out of the world’s top 30 medical device companies (by 2018 revenue).

Penang picked for its balance of manufacturing expertise, established infrastructure, FDI track record and proximity to high growth markets

With global revenues of US$5.1 billion and R&D expenses of US$292 million in 2019, S+N is among the 30 biggest medical device companies in the world (by revenue). It is a leading global medical technology company, specializing in the Orthopaedics, Sports Medicine, Ear, Nose & Throat and Advanced Wound Management sub-segments. Supported by some 17,500+ employees worldwide, S+N has a presence in more than 100 countries around the world.

The facility in Batu Kawan Industrial Park will be S+N’s first manufacturing facility in Southeast Asia, complementing its existing global manufacturing operations that span nine countries, including the US, UK, Switzerland, Germany, India and China. S+N’s Penang facility will focus on Orthopaedic products, and will initially take up 250,000 sq. ft., with potential for future expansion. Construction is expected to be completed by the third quarter of 2021, with its first shipment expected by the fourth quarter. This investment is expected to create 800 high value jobs in the State over the next five years.

In explaining the company’s decision to locate its plant in the State, Mr. Gladwell said, “Penang provides a great balance of manufacturing expertise, a stable economy, established infrastructure, a long history of foreign direct investments and an established supply chain. Investing in Malaysia gives us a new presence close to our highest growth markets and enables Smith+Nephew to be part of a growing medical device centre of excellence.”

Global medical device industry to see resilient growth, with Asia being a fast-growing market

According to Deloitte’s 2019 Global Health Care Outlook, healthcare spending worldwide amounted to $7.7 trillion, equivalent to 10.4% of global GDP in 2017. This is forecast to grow at an annual rate of 5.4% in 2018-2022.
Driven by innovation and cutting-edge technologies, increased lifestyle-related ailments and economic developments that unlock the huge potential in emerging markets, the medical device segment is a critical and fast-growing segment within the healthcare industry.

KPMG forecasts global medical device sales will grow from US$371 billion in 2015 to US$617 billion in 2025, and will reach $795 billion by 2030. McKinsey estimates that by 2023, the APAC Medtech market will become the second largest in the world, ahead of the European Union. This has prompted industry leaders to establish manufacturing facilities in Asia to meet the rapidly-growing demand, with Malaysia being one of the preferred locations.

Investment momentum in the medical devices industry to continue in Malaysia

Malaysia’s exports of medical devices grew at a 5-year CAGR of 14% to reach an all-time high of RM22.9 billion in 2018. The sector generated a trade surplus of RM17.5 billion, with the top three export markets being the US, Germany and Japan, according to data from the Malaysia External Trade Development Corporation (MATRADE) and Department of Statistics Malaysia. Between 2016 and 2019, MIDA approved investments worth RM11 billion in the country’s medical devices industry.

A survey conducted by the Association of Malaysian Medical Industries (AMMI) also re-affirms the positive outlook for the sector, with AMMI members reporting an outstanding value-added ratio of 49% in Malaysia’s medical device industry. The survey respondents plan to invest a total of RM765 million in plant expansion, new product development and R&D in 2020.

Penang: A clear leader in the non-glove medical device industry

Penang is a clear leader for non-glove medical device manufacturing, particularly for implants and surgical instruments, therapeutic products, diagnostic equipment and non-latex disposables. Thanks to 50 years of industrial experience and a robust supply chain, Penang’s supporting infrastructure – which includes an educated workforce as well as complementary industries such as sterilization services and packaging – is capable of meeting the stringent demands of the highly-regulated medical technology industry. The well-connected industry ecosystem is one of the State’s key competitive advantages in attracting high quality medical technology investments.

There are currently 56 medical technology device companies in Penang, including world-renown names such as B. Braun, Abbott Laboratories, Boston Scientific, Canon Medical Systems, Haemonetics, Integer Holdings, Tecomet, Japan Lifeline, Pentax Medical and Ambu. With the addition of S+N, Penang is poised to further entrench itself as a hub for the medical technology industry. The flourishing industry will, in turn, drive the creation of high quality, high technology jobs locally, that make a difference in the lives of people worldwide.

KPMG’s Medical Devices 2030 report
1

AMMI’s Medical Device Industry Status and Outlook Report 2019/2020
2

S+N’s official website
3

1 KPMG’s Medical Devices 2030 report
2 AMMI’s Medical Device Industry Status and Outlook Report 2019/2020
3 S+N’s official website
GBS – Complementing the Manufacturing Industry

Penang continues to build its position as a preferred location for Global Business Services (GBS) operations of companies from around the world. GBS operations have created more than 12,000 high income jobs in Penang, and the State is the second highest recipient of GBS/Shared Service Operations (SSO) investments in the country, outranked only by the Klang Valley.

There are more than 60 companies with GBS operations in Penang that serve their company’s global or Asia Pacific operations. Essentially, about one third of these are “captive players” – i.e. companies that have an existing manufacturing presence in the State, such as B. Braun, Cypress, Intel, Jabil, Motorola, Osram and Seagate. For these companies, the establishment of GBS services in Penang is a natural extension that usually complements or is synergistic to their existing manufacturing operations. In addition to these companies, Penang has also successfully attracted other MNCs that don’t have a physical manufacturing presence in the State, to establish their shared services operations here. These include companies such as Celestica, First Solar, Swarovski, Teleperformance and UST Global, among others.

Evolution and Trends in GBS

The GBS industry evolved from Shared Service Centres (SSCs), which were generally associated with the provision of back-office solutions with the objective of achieving cost savings. Over time, the concept of SSCs progressed towards global shared service centres, and most recently, evolved into GBS, which are deemed as business units in their own right. Instead of operating numerous SSCs and managing outsourced vendors independently, GBS provides integration of governance, locations and business practices to all shared services and outsourcing activities across the enterprise.

The existing range of GBS operations in Penang is diverse, ranging from research and development to IT, and from finance and human resources to supply chain management. The vibrant GBS industry in Penang demonstrates the State’s versatile talent pool in terms of both technical knowledge and language proficiencies.

Looking ahead, data and analytics, design thinking, robotics and cognitive processing technologies are the key elements that will shape organisations’ GBS activities in the future, and upskilling of the workforce to embrace new technologies is essential to ensure the availability of a suitably skilled workforce to meet the industry’s requirements.

The Evolution of the GBS Industry in Penang
Formation of GBS Focus Group Penang

To further enhance the GBS ecosystem, GBS Focus Group Penang was established in May 2019, led by InvestPenang. GBS Focus Group Penang provides a platform for various stakeholders to share information, ideas and concerns related to the industry. This, in turn, creates an effective, multi-faceted channel that provides feedback on government policies, drives curriculum alignment between industry and academia, shares studies and reports for benchmarking and best practices, and presents the prospects and possibilities of careers within the GBS industry.

The Penang GBS Focus Group initiative - by the industry, for the industry - is led by a committee comprising members from key stakeholders, namely Malaysia Digital Economy Corporation (MDEC), OM and InvestPenang, as well as industry players such as Cypress Semiconductor, HP, Intel Corporation, Jabil Inc., JED Centre, Motorola Solutions, Osram GSS, UST Global, Plexus and Xtrategize.

5th Penang GBS Conference attracted 300 participants

Recognising the importance of the GBS industry to the State, InvestPenang organises a GBS conference as one of its flagship events. The 5th Penang GBS Conference, which was held at Hotel Equatorial Penang on 22 August 2019, attracted 300 participants. The conference was officiated by YAB Tuan Chow Kon Yeow, the Chief Minister of Penang, and featured speakers from B. Braun, Cypress Semiconductor, Deloitte Consulting, Ernst and Young, Intel Corporation, Jabil Inc., Kimberly Clark, Motorola Solutions, PERSOLKELLY Consulting, UST Global and many others.

New GBS facility in Penang to serve growing demand

Penang’s already-thriving GBS industry is expected to experience continued growth, particularly with companies expanding their knowledge-driven GBS activities. The State government is in the midst of developing a new GBS facility, namely GBS One Mahsuri. Slated for completion in the first half of 2020, the new facility will provide 80,000 sq. ft. of Grade A office space that is designed and designated to house MNCs’ GBS operations.

Beyond this, the State government is mindful that the realisation of Penang’s digitalization agenda is contingent on having robust infrastructure that will support a comprehensive digital ecosystem. This is needed for the State to be competitive in attracting more investments in knowledge-driven GBS activities. A sound digital ecosystem could enable industries to undertake a paradigm shift via the adoption of disruptive technologies such as big data analytics and Internet-of-Things in their operations, which in turn will boost corporations’ productivity, cost savings and customer service experience. Towards this end, the State government is currently working on a Digital Transformation Master Plan to achieve these goals.
Penang Future Foundation: Shaping the State’s Talent Pipeline

Penang Future Foundation (PFF) turned 5 in 2019, marking its fifth anniversary of providing financial support to outstanding Malaysian students to pursue tertiary education opportunities locally. The foundation was established by the Penang State Government to help deserving Malaysians achieve their fullest potential, while concurrently building a robust talent pool that would support the growth and development of Penang’s industries.

5 Years of Talent Development

The availability of a stable and skilled workforce is a key criterion in attracting capital investments. Investors are attracted to locations that have a suitably skilled talent pool, and PFF’s scholarship awards and workforce development initiatives are part of the State Government’s efforts to foster a sustainable and conducive ecosystem that will attract high-quality, strategic investments, in line with the State’s industrial development goals.

In addition to providing financial aid to students, PFF engages with industries to understand forward-looking trends and human capital requirements. It facilitates dialogue between industry and academia to develop a pipeline of suitable graduates that can fulfil the needs of local industries. And, through internships, the annual PFF bootcamp programme and sharing sessions, PFF also gives scholars the opportunity to connect with corporates and industries to gain a better understanding of industry-specific career opportunities, requirements and prospects.

Over 500 Scholarships Awarded; Impact to Industry Already Materialising

As a scholarship programme that caters to the needs of industries in Penang, PFF only finances courses that are fully-accredited by the Malaysian Qualifications Agency in the fields of Science (excluding Medicine), Technology, Engineering, Mathematics, Accountancy and Finance.

Note: Since PFF’s inception
Source: PFF

77% of PFF scholars obtained CGPA scores of 3.67-4.00 in their Pre-University studies

PFF Selection Committee and Co-Interviewers
The programme is already making an impact to society and industry: Since its inception, PFF has disbursed scholarships to more than 500 scholars, with 112 outstanding students receiving scholarships last year. The Foundation is pleased to note that PFF programme has already produced more than 170 high-calibre graduates who have completed their respective fields of study, and successfully secured employment at companies of their choice in Penang.

**Continued Commitment towards State and Nation Building**

Penang’s strong talent pool has long been a key driver in the State’s success in attracting strategic investments, especially in selected niche industries, and the State Government recognises its role in ensuring that local talent is identified, nurtured and developed to its fullest potential.

Through PFF, the State is committed to the continued development of a robust and skilled workforce to support the growth of strategic industries, create more high value jobs and further reduce the proportion of unskilled labour in Penang’s workforce, which in turn, will enhance the resilience of the State’s workforce and local economy.

**Looking Forward for Public-Private Partnerships in Sustaining PFF**

PFF was launched with a seed fund of RM40 million in 2015, and to-date, has awarded RM29 million worth of scholarships. The State Government is working on plans to replenish the fund to ensure continuity in helping deserving young Malaysians access tertiary education qualifications, as well as to groom talent and leaders for the betterment of the State’s industries, economy and people. Toward this end, the State Government would like to call upon corporates to contribute to this State-building initiative, by contacting PFF secretariat at +604 646 8833 or dropping an email to info@penangfuturefoundation.my.

Learn more about PFF at penangfuturefoundation.my
Penang Future Foundation (PFF) held its PFF Bootcamp 2019 on 23 and 24 August 2019 at the Olive Tree Hotel, Penang. PFF Bootcamp is an annual program that has been held every year since 2016. It is organised by PFF for its scholars to meet and engage industry leaders to better understand current workforce requirements and outlook, industry trends and career prospects, with the ultimate aim of better preparing scholars for the workforce. Towards this end, the forum includes self-improvement talks and activities for scholars’ personal growth and development, and provides an opportunity for current scholars and programme alumni to connect and strengthen their network of contacts.

Highlights of the 2019 forum included site visits to Intel Malaysia and Vitrox Technology, an “Emotional Intelligence” training session conducted by Leaderonomics, as well as a talk by CEO of Aemulus Corporation, Mr. Ng Sang Beng, entitled “F for Fundamentals, Not for Fun”. The talk stressed the importance of building a solid foundation of technical and interpersonal skills, and how these would serve the scholars well in becoming industry-ready candidates as they prepare to join the workforce.

The ‘Realisation of Penang 2030’ Challenge

The 2019 Bootcamp also featured the ‘Realisation of Penang 2030’ Challenge. Working in four groups, the current batch of PFF’s scholars were challenged to design a public awareness campaign that would promote the Penang 2030 vision as a family-focused, green and smart state that inspires the nation. The assignment was aimed at enabling scholars to showcase their creativity, critical thinking, collaboration and presentation skills.

The Chief Minister of Penang, YAB Tuan Chow Kon Yeow, concluded PFF Bootcamp 2019 with a networking luncheon. In his closing remarks, he noted the State government’s appreciation for the efforts and contributions of the PFF Selection Committee members, co-interviewers and industry leaders in making the PFF a success.
On 23 March 2020, five days into the implementation of the Movement Control Order (MCO), InvestPenang initiated a donation drive, SOS to Frontliners, rallying Penang’s industry players for contributions of Personal Protective Equipment (PPE) and medical equipment to aid Covid-19 frontliners and those in need at the Penang General Hospital and local councils (MBPP and MPSP).

To date, over 30 corporates have donated critical items, including masks, gloves, face shields, isolation and medical gowns, thermometers, patient monitors, blood pressure monitoring devices, ultrasound equipment, reverse osmosis blood dialysis machines, laptops, printers and even urgently needed notice boards. Cumulatively, the value of these in-kind contributions has amounted to over RM1.5 million.

The programme is proof that our frontliners and Covid-19 patients are not alone in their fight against the pandemic as we have and continue to see unwavering support from Penang’s industry players, with more aid expected in the coming weeks.

Rt. Hon. Mr Chow Kon Yeow, Chief Minister of Penang said, “The generosity and support from the industry for this initiative has been overwhelming, and epitomises the true meaning of Good Corporate Citizenship and the Power of Unity. The aid from some of these corporates has gone beyond mere donations, as they also contributed their time and resources in sourcing for appropriate suppliers and ensuring quick delivery to the frontliners.”

The industry players have been stepping up and helping in every possible manner. Many assisted with sourcing of short-supply PPEs via their procurement counterparts in China, and also purchased equipment urgently needed for Covid-19 and isolation wards. A sewing factory volunteered to sew disposable hoods and isolation gowns that are in critically short supply.

Chow added, “I would like to express our deepest appreciation to all corporates and individuals who have supported this initiative, as well as our gratitude to all the frontliners who have shown courage and perseverance, working tirelessly to ensure the safety of our citizens and homeland; we will continue to provide support to them in their selfless efforts.”

“And a big thank you to InvestPenang for initiating this project.” Chow said.

“Together, we will overcome this unprecedented situation. With our resourcefulness, generosity and collaborative spirit, Penang will navigate these uncertainties and seek out fresh opportunities for growth and development.” he concluded.

Six industry players, namely, Inari Amertron, Intel, Jabil, Keysight, Micron and Motorola, along with Dato’ Loo Lee Lian, CEO of InvestPenang, paid a visit to Penang General Hospital on 17 April 2020.
Western Digital contributed 10 units of laptops, 5,000 pieces of PPE and 10,000 pieces of face shield suits to Penang General Hospital. It also donated PPE to Seberang Jaya Hospital and face shields to the Advanced Medical and Dental Institute, USM.

Analog Devices contributed a reverse osmosis blood dialysis machine to Penang General Hospital.

Intel donated 4 units of patient monitors, 2 units of ventilators, 140 units of stethoscopes, 20 units of Covidien Kangaroo Epumps, 1,000 pieces of N95 masks and 7,000 pieces of nitrile gloves to Penang General Hospital. It also donated face masks to offices of Customs Department.

Greatech contributed an ultrasound machine to Penang General Hospital.

Analogue Devices contributed a reverse osmosis blood dialysis machine to Penang General Hospital.

Inari Amertron contributed 5,000 pieces of jumpsuits, 50,000 pieces of 3-ply surgical masks and 6,000 pieces of nitrile gloves to the frontliners.

Micron contributed 5 units of patient monitors to Penang General Hospital.

Hotayi Electronics donated 5 units of blood monitoring devices and nitrile gloves to Penang General Hospital.

Shan Poornam Metals collectively contributed 250,000 pieces of 3-ply face masks and 800 pieces of PPE to Penang General Hospital, MBPP, MBSP and other frontliners.

Jabil contributed N95 masks, surgical face masks and 3D face shields to Penang General Hospital.
SOS to Frontliners

(1) The reported in-kind contributions only reflect donations via InvestPenang’s donative drive. Many companies are also involved in separate contribution efforts to Covid-19 frontliners and patients.

(2) The list of contributing companies mentioned is not exhaustive.

<table>
<thead>
<tr>
<th>Company</th>
<th>Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exabytes</td>
<td>contributed 2,000 pieces of N95 masks to Penang General Hospital.</td>
</tr>
<tr>
<td>Globetronics Technology</td>
<td>contributed 50,000 pieces of 3-ply surgical masks to Penang General Hospital and other frontliners.</td>
</tr>
<tr>
<td>Osram</td>
<td>contributed 888 jumpsuits to the Penang General Hospital.</td>
</tr>
<tr>
<td>Vitrox</td>
<td>donated 1,000 pieces of isolation gowns to Tzu Chi Malaysia, which distributed the supplies to the General Hospitals of Penang, Kelantan, Sungai Buloh and Johor.</td>
</tr>
<tr>
<td>Jinko Solar</td>
<td>contributed 20,000 pieces of face masks to MBSP.</td>
</tr>
<tr>
<td>Elsoft</td>
<td>contributed 60 units of temperature scanners to MBPP &amp; MBSP.</td>
</tr>
<tr>
<td>National Instruments</td>
<td>contributed 5 units of laptops, 20,000 pieces of nitrile gloves, 7 whiteboards and temperature scanners to the Penang General Hospital.</td>
</tr>
<tr>
<td>Aemulus</td>
<td>contributed 10,000 pieces of 3-ply face masks to Penang General Hospital, MBPP &amp; MBSP.</td>
</tr>
<tr>
<td>Texchem</td>
<td>donated 1,000 pieces of “Tex-Shield” face shields to Penang General Hospital.</td>
</tr>
<tr>
<td>Motorola Solutions</td>
<td>donated 1,000 pieces of isolation gowns to Penang General Hospital.</td>
</tr>
<tr>
<td>Dapper Jeans</td>
<td>sewed disposable hoods and medical gown for Penang General Hospital.</td>
</tr>
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Elsoft contributed 60 units of temperature scanners to MBPP & MBSP.

National Instruments contributed 5 units of laptops, 20,000 pieces of nitrile gloves, 7 whiteboards and temperature scanners to the Penang General Hospital.

Aemulus contributed 10,000 pieces of 3-ply face masks to Penang General Hospital, MBPP & MBSP.

Texchem donated 1,000 pieces of “Tex-Shield” face shields to Penang General Hospital.

Motorola Solutions donated 1,000 pieces of isolation gowns to Penang General Hospital.

Dapper Jeans sewed disposable hoods and medical gown for Penang General Hospital.

Thank you to all the frontliners who have and are continuing to serve the nation 😊
INVEST-IN-PENANG BERHAD
PSDC BUILDING, 1, JALAN SULTAN AZLAN SHAH,
11900 BAYAN LEPAS, PENANG.
TEL: 04-646 8833
EMAIL: ENQUIRIES@INVESTPENANG.GOV.MY