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MALAYSIAN PRIME MINISTER ENGAGES CHINESE BUSINESS LEADERS IN BEIJING

Witnesses Signing of 14 Agreements Worth RM144 Billion

Following the invitation by China's President Xi Jinping during his visit to Malaysia last year, Prime Minister Dato' Sri Najib led a delegation to Beijing to further enhance mutual trust and cooperation between the two countries as well as to deepen diplomatic relations between both sides. The visit made historic achievements with the signing of 14 agreements worth RM144 billion in various areas such as trade and investment, development of technology parks and supply of goods and services. This reflects that Malaysia has the right policies and conditions in place to attract foreign businesses.

"We share China's view that the best way to face the global economic headwinds is to increase cooperation, and create mutually beneficial and sustainable growth through trade and investments. As China made itself increasingly more trade and investment friendly, be it through its 'Go Abroad' strategy, 'One Belt One Road' (OBOR) initiative or regional agreements such as the ASEAN-China Free Trade Agreement, Malaysia has certainly benefited from China's prominence on the world stage,"

said the Prime Minister during his interaction with the Chinese business leaders at the Business Roundtable session with China's captains of industry organised by the Malaysian Investment Development Authority (MIDA) on 1 November 2016.



In conjunction with the roundtable meeting, the Malaysia-China Business Forum was also held at the China World Hotel, Beijing. The forum featured a presentation by Dato' Sri Mustapa, the Minister of International Trade and Industry (MITI), on the recent economic developments and business opportunities in Malaysia. There was also a panel discussion which involved several public and private institutions from both China and Malaysia. The session was moderated by Mr David Liao, President & CEO of HSBC Bank (China) Company Limited. The event ended with a luncheon and an address by the Prime Minister.

HIGHLIGHTS

The Malaysian delegation received many good feedback and insights during the session. These include compliments on the Malaysian government's initiative to double the internet speed as announced in Budget 2017 and future plans for expansion projects in infrastructure, finance and real estate. Many investors expressed their satisfaction with Malaysia's business environment and the ease of doing business in the country, particularly with the presence of more Chinese banks such as Bank of China and ICBC.

According to China's national statistics, China's investments in Malaysia stood at USD2.2 billion as at the end of 2015, and this figure is expected to increase in the coming years. Trade with China accounted for 15.8% (USD59.1 billion) of Malaysia's total trade in 2015. China was Malaysia's largest source of imports at USD33.1 billion, an increase of 12.0%, and second largest export destination with exports valued at USD25.9 billion, an increase of 10.0% from 2014.

INDUSTRY

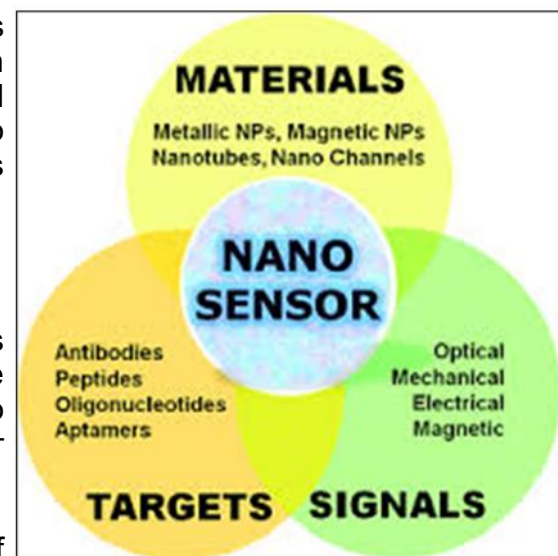
NANOSENSORS AND OPPORTUNITIES IN THE SEMICONDUCTOR SECTOR IN MALAYSIA

What started as devices to detect changes in quantities, sensors have evolved and become so crucial in many industries with industry players competing towards producing miniaturised gadgets with more sophisticated applications. Hence it is no surprise that nanosensors are the next big thing in the electronics components industry.

What are Nanosensors?

Nanosensors are sensory points that are able to detect changes in microscopic environment and convey the information to the macroscopic world. As the name suggests, nanosensors are too small to be visible with the naked eye hence it requires a higher level of technology to design and develop them.

Technology-wise, nanosensors are based on the conductivity of nanowires. Conductivity is the degree to which a specified material conducts electricity when a voltage is applied across it. Therefore, nanosensors will be manufactured by bonding nanowires made from semiconducting materials with other conducting materials. The amount of changes in conductivity will determine the type of particles present. This can then be manipulated into information for various usages.



NPs : Nano Particles

Global Market and Megatrends

The Internet of Things is expected to reach 30 billion connected devices by 2020, and nanosensors will play a big role in achieving this. Nanosensors will likely be found working in almost everything including cars, pets, the human body, buildings and medical devices. It is also estimated that the value of investment for nanosensors will be USD1.5 billion by 2021.



- Nanosensors in > 30 billion devices by 2020.

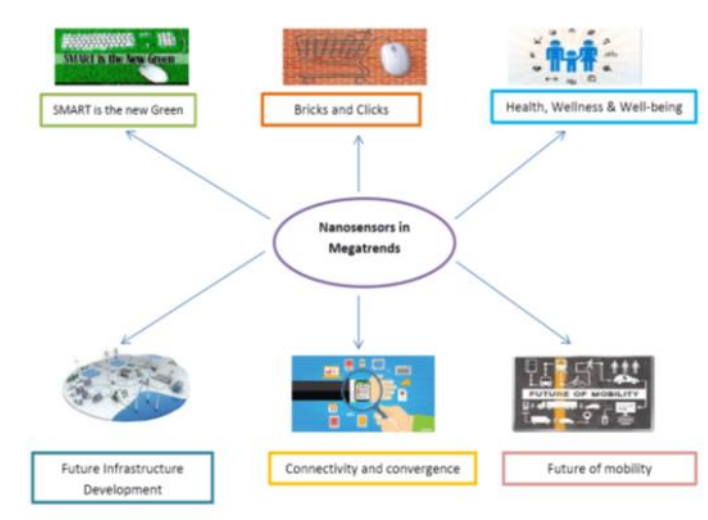


- Investment worth: USD1.5 billion by 2021.

Source : www.businessinsider.com & www.weforum.org



Among the big names in nanosensors manufacturing are OMRON Corporation, Oxonica, Lockheed Martin Corporation, Texas Instruments Inc, Analog devices Inc, Samsung Electronics Co. Ltd., and Honeywell International, Inc. These players will look into expanding their presence through new innovations for various applications.

From a macro-perspective, nanosensors will be dominating the Megatrends (defined as transformative, global forces that will shape the future world with their far reaching impact in various areas) as these components play a vital role in many crucial areas of life.



Applications of Nanosensors

Due to its size, nanosensors can be applied in many areas. The automotive industry may use nanosensors to improve fuel consumption while aerospace industry players use them to constantly monitor the changes in aircraft parts for maintenance purposes. Nanosensors are also used in medical equipment for various medical diagnostics. This makes early detection of certain diseases possible. Meanwhile in the field of defence and security, nanosensors can be embedded in equipment to detect radiation from bio-chemical weapons.

 <p><u>AUTOMOTIVE</u></p> <ul style="list-style-type: none"> - Improve the fuel consumption. - Ergonomics of car seats. 	 <p><u>AVIATION</u></p> <ul style="list-style-type: none"> - Monitor changes and performance of aircraft parts for maintenance purposes. - Ergonomics of aeroplane seats.
 <p><u>MEDICAL</u></p> <ul style="list-style-type: none"> - Used in medical diagnostics to detect the presence bacteria or inflammatory cells. - Early detection of diseases. 	 <p><u>HOMELAND SECURITY/DEFENSE</u></p> <ul style="list-style-type: none"> - Detect radiation from bio-chemical weapons. - Detect dangerous substance in water.

Nanosensors in Malaysia

Malaysia has had more than 40 years of experience in the manufacturing sector and for the past 20 years, the manufacturing sector has embarked on robotic assembly lines, precision engineering and computer controlled processes. With the country's strong manufacturing base and comprehensive ecosystems that have been built over the years, Malaysia is well positioned for future development in new and emerging technologies.

Malaysia is currently adopting the ecosystem approach in developing the industry. Foreign direct investments must be supported by strong local companies that offer services beyond maintenance and logistics. In the technology sector, local companies can play a vital role in offering Design and Development (D&D) and Research and Development (R&D) services.

INDUSTRY

The first step of producing nanosensors involves integrated circuit (IC) designing activity. Although the development of nanosensors is globally a billion dollar industry, IC design is also a huge industry on its own.

In 2015, Malaysia attracted USD400.8 million worth of investment in semiconductor industry. While Malaysia's semiconductor industry is quite established, there is still much room for development opportunities especially at the up-stream level. The D&D and R&D services in semiconductor are areas where local companies with sufficient technological know-how can move into. A few local IC design companies such as Symmid Corporation and Malaysia Microelectronic Solutions have already marked their presence in this area despite it being largely dominated by multi-national companies.

Recognising the importance of sustainable growth, the Malaysian Government has been strongly encouraging more local players to increase their competitiveness by undertaking more D&D and R&D activities. Many agencies in Malaysia offer assistance for these type of activities. Existing local companies can explore the possibility of grants for the purpose of equipment purchase and commercialisation under the Domestic Investment Strategic Fund (DISF). Another form of assistance is through the corporate tax exemption i.e. Pioneer Status and Investment Tax Allowance. These are under the purview of MIDA.

Another example is MIMOS, a government agency which centralises its activities to develop the national E&E and ICT industry. MIMOS Nano Semiconductor Technology Centre (NSTC) provides R&D shared facilities and services as part of the Malaysian Economic Transformation Programme under the Electrical and Electronics National Key Economic Area.

MIMOS offers a chain of services through technology collaborations with fabless design houses, end product customers and technology partners. Among the services offered are Failure Analysis/Material Analysis, Reliability Testing, Wafer & IC Testing, IC Design, Wafer Fabrication & Wafer Prototyping, Rapid Product Prototyping, Nano & MEMS Fabrication & Synthesis, Nanocharacterisation (under the NANOVerify programme) and Hands-On Skills Development Programme.

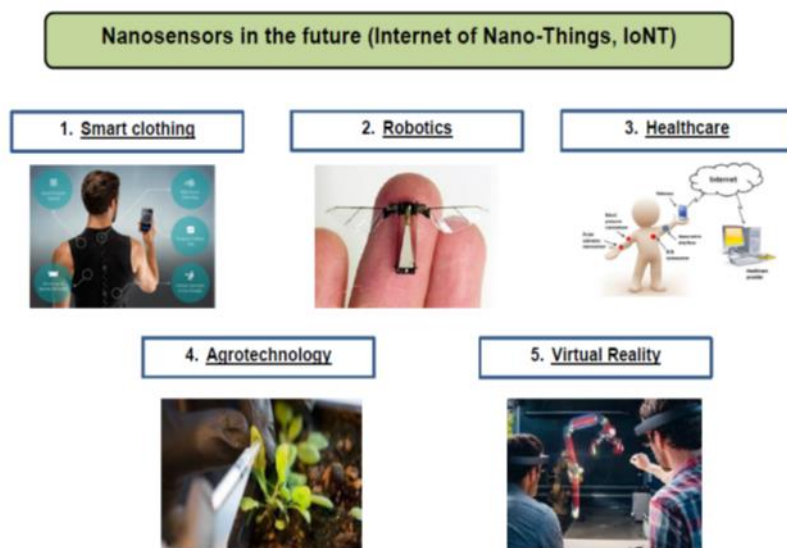
NSTC's new focus areas for 2016-2020 include nanosensors design, nano-graphene electronics & sensor tools, and advanced packaging. With several successful projects under their belt, MIMOS welcomes more R&D collaborations especially with Malaysian companies.

Local players are encouraged to further add value to the existing supply chain by taking advantage of all the facilities provided by the government and upgrade their services, capabilities and production quality to meet the requirements of high value-added and advanced technology industries in becoming future global champions.

Way Forward

Technological advancement are made possible by the collaboration of many parties. Collaborations bring industry giants, startups, R&D labs and others to the same table with different roles to play. New discoveries in R&D labs will be tailored to industrial use or industry players will determine the research areas which R&D labs need to work on. This cycle of "demand and supply" will create an ecosystem that can be benefited by players involved.

It will introduce new business opportunities and create jobs such as scientists, R&D engineers, IC designers, tool makers and machine fabricators. Not only will it spur the manufacturing sector, it will also bring the knowledge-based economy to greater heights.



UNIVERSITY-INDUSTRY RESEARCH COLLABORATIONS CRUCIAL TO SUSTAIN COMPETITIVENESS

History has shown that basic research plays a critical role in the development of science and technology. Increasingly, advances in technology hinge on research not just within universities where basic science and technical training is explored but also through collaborations with companies which are steeped in industrial and applied research.

University-Industry research collaborations are significant to foster a continuous economic development of a nation, especially since this is a key factor in translating research value into commercialisation. MIDA as the government's principal agency for the promotion of the manufacturing and services sectors in Malaysia is determined to bridge this gap to ensure a more dynamic collaboration.

Out of the 14 R&D Status Companies approved by MIDA as to date, five are linked to universities in Malaysia. These approvals enable their clients to enjoy double-deduction on R&D expenditure as stipulated under Section 34B of the Income Tax Act 1967. It is a tax efficient way to invest in R&D whereby industry partners can access university expertise while enabling the academia to produce more research with higher commercial potential.

The five universities are Management and Science University (MSU), University Tenaga Nasional (UNITEN), University of Nottingham Malaysia Campus (UNMC), University Malaysia Perlis (UniMAP) and Monash University Malaysia.

MSU Research and Innovation, a subsidiary of Management and Science University (MSU) is the pioneer recipient for the 'R&D Company' status by MIDA. MSU Research was awarded R&D Status Company in 2008 due to its breakthrough R&D project in traditional medicinal products. The R&D project involves a mixture of gamat (*stichopus chlorotus*) cream product with the Malaysian 'tualang honey', producing a traditional medicine product. Findings have shown that this medicinal gel or cream is effective in treating external wounds whereby time for healing was shortened.

The company has invested over RM88,000 in the R&D project and will continuously review and improve the products' quality. In addition, MSU Research will intensify its efforts in creating other traditional health products with potential for commercialisation.

UNITEN R&D was established in 2009 under University Tenaga Nasional (UNITEN) by Tenaga Nasional Berhad (TNB), Malaysia's main energy provider. UNITEN R&D focuses in research and development for power engineering, green technology, communication service convergence & knowledge and power computing. They have three Centres of Excellence and more than 30 Research Centres led by lecturers who are experts in the particular research areas. Over RM1.2 million has been invested to ensure the R&D projects meet the demand of the industry.

Notably, UNITEN's memorandum of understanding with O.Y.L. Research & Development Centre is an example of industry-academia collaboration. This is in line with the Government's efforts to foster research partnership and cooperation to address the skills mismatch between new graduates and industry expectations.

Nottingham MyResearch is incorporated as the subsidiary company of Nottingham Myriad (Malaysia Research Innovation and Development) Solution which falls under the University of Nottingham Malaysia Campus (UNMC). Nottingham MyResearch was granted the R&D Company Status by MIDA in 2013 to undertake R&D activities in engineering and social sciences.

The initial R&D projects which had been undertaken includes cellulosic fibre for fibre cement board manufacturing, pipeline failure prediction using artificial intelligence and ultrasonic transducer networks, herbal plant research and employee engagement survey. These projects have made positive impact in various industries in Malaysia especially in the palm oil plantation and herbal medicine segments.

SERVICES

Technopreneur at UniMAP (TUSB), incorporated in January 2012, was approved with the R&D Status Company in 2016 to undertake the R&D activities mainly on science and technology, agriculture, chemical, medical and electrical & electronics. TUSB is wholly owned by UniMAP Holdings, a subsidiary of University Malaysia Perlis (UniMAP). The establishment of TUSB is among the proactive approaches undertaken by UniMAP Holdings to increase UniMAP's commitment towards the national R&D agenda.

Notable R&D activities include developing new materials for railway sleepers; developing new methods to galvanise iron; developing composite lead free solder materials; research in non-invasive salivary glucose detection kit for diabetes mellitus; research on 'Harum Manis' mango production; developing biosensor kits for early detection of cervical cancer; developing an Affordable Automated Recirculating Aquaculture System (AARAS) and developing e.coli DNA test kit. One of the main missions of TUSB is to cultivate a research culture among lecturers and students of UniMAP.

Established in August 2015, **Monash Malaysia R&D (MMRD)**, a wholly owned subsidiary of Monash University Malaysia was awarded the R&D Status Company in September 2016. MMRD has invested RM3.1 million to undertake various R&D activities. Their research priorities include tropical medicine & biology, advanced engineering, developing the halal ecosystem, social and economic transformation such as estimating the economic burden of seasonal influenza. MMRD is also involved in the South East Asia Community Observatory and Brain Research Institute at Monash Sunway.

MMRD seeks to promote more R&D collaboration between Monash University and the industries to create a strong public private partnership. This is also to ensure that R&D offered by the university meets the requirements of the industries.

R&D is important to Malaysia's well-being and future sustainability. It creates value and enables the country to exploit new industries and economic opportunities. MIDA will continue to encourage and nurture partnerships among the relevant stakeholders towards advancing Malaysia's industries ahead of its competitors. It is anticipated that the collaborative efforts between the industry players and local universities will strengthen the capabilities of local universities in meeting the real demands of industry.

EVENTS

KAJD Signed RM30 Billion Agreement with Powerchina International for Investment, Development and Construction of Melaka Gateway

"This agreement is another reflection of the confidence by investors in the strong fundamentals of Malaysia's diversified economy. It is my hope that it will further encourage more investors to look at Melaka as their profitable investment destination," said YB Dato' Sri Mustapa Mohamed, Minister of MITI at the Memorandum of Agreement (MOA) Signing Ceremony between KAJ Development Sdn Bhd (KAJD) and Powerchina International Group Limited (Powerchina International) held on 1 September 2016.

Under the MOA, KAJD will partner with Powerchina International for the development and construction of three (3) islands which have been earmarked for various tourism, commercial, property and maritime development. The total investments are expected to be worth RM30.0 billion, within a span of 2 years from the date of the MOA. While for the fourth island at Melaka Gateway, which has been designated as a container and bulk terminal, shipbuilding & ship repair service yards, a maritime industrial park, will be developed by KAJD together with Guangdong, China and Chief Minister Incorporated (CMI). Upon completion in 2025, this mega project will draw approximately 2.5 million visitors per annum and create 40,000 – 45,000 job opportunities.



Signing for KAJ Development Sdn Bhd were YBhg Dato' Sri Yahya bin Hamzah, Chairman and YBhg Datuk Michelle Ong, Chief Executive Officer, while Powerchina International was represented by Mr. Ji Xiaoyong, President, Asia Pacific, together with Mr. Ye Haoliang, Vice President, Asia Pacific. Also present were Dato' Sri Liow Tiong Lai, Minister of Transport, Malaysia; Datuk Seri Ir. Haji Idris bin Haji Haron, Chief Minister of Melaka; and Dato' Azman Mahmud, CEO of Malaysian Investment Development Authority (MIDA).

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Malaysia Remains Competitive, Companies Continue to Invest, Says MITI Minister

“Despite the closures of some manufacturing companies in Penang, the State continues to attract investments. Penang was among the top five recipients of approved investments in the manufacturing sector for 2015 with a total of RM6.72 billion approved investments from 107 manufacturing projects. While for the first quarter of this year, the state attracted additional investments of RM1.34 billion in 27 manufacturing projects,” shared YB Dato' Sri Mustapa Mohamed at a media conference in Equatorial Hotel, Penang held in conjunction with his working visit to the state.

He further added, “Investors particularly those who are already here continue to invest, expand and diversify their projects in the country. For example, RC Precision Engineering, a homegrown Malaysian company involved in contract manufacturing of OEM equipment, is expected to further invest RM8.5 million this year that will bring along an additional 80 jobs for Malaysians.



While another local champion which specialises in Wafer Level Chip Scale Package i.e. Mi Equipment, has further plans to invest RM65 million for its expansion that will create more than 100 job opportunities for Malaysians”.

Earlier, the Minister visited SAM Precision, an arm of SAM Engineering & Equipment (SAM Malaysia) which is a subsidiary of Singapore Aerospace Manufacturing (SAM) Pte Ltd. With the positive outlook of the aerospace industry, capability of Malaysia’s local supporting companies as well as the availability of talent pool for precision machining, SAM Malaysia will be spending more than RM100 million over the next two years for expansion. This includes the diversification project of SAM Precision to manufacture thrust reverser machined parts for the aerospace industry, the first of its kind in Malaysia.

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Malaysian Manufacturers to Enhance Operational Efficiency, Adopt Appropriate Technologies and Explore New Markets

“Despite the overall growth, the industry is under constant pressure to improve its performance, particularly in adopting better technology and processes such as automation to reduce labour intensive activities. To stay ahead, Malaysian manufacturers not only need to enhance their operational efficiency but also adopt appropriate technologies and explore new markets,” said Datuk N. Rajendran, Deputy CEO of MIDA at the Seminar on Government Policies, Facilitations & Assistance for the Plastics and Mould & Die Industries.



According to Datuk Rajendran, Malaysian companies can only be competitive by producing high value added products and integrated services. They should focus on developing specialisation niches, strengthen innovation and deliver new or enhanced products or processes into global markets towards enhancing economic growth. In doing so, local players were urged to take advantage of all the facilities provided by the government and upgrade their services, capabilities and production quality to meet the requirements of high value-added and advanced technology industries in becoming future global champions.

The Seminar, held at MIDA HQ on 26 September 2016, was a collaborative effort between MIDA, Malaysian Plastic Manufacturers Association (MPMA) and Malaysia Mould and Die Association (MMADA). The event was part of MIDA’s on-going engagement with the business community to maintain a high performing manufacturing industry.

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Malaysia's Business Landscape Continues to Thrive

The Ministry of International Trade and Industry and its agencies are ramping up efforts to engage with companies on the ground to gain insights on their operational issues amid the challenging economic climate. “We seek to better facilitate these companies in weathering the storm,” said Dato' Sri Mustapa Mohamed at a media conference held in conjunction with the *Turun Padang* Programme to the state of Selangor on 6 October 2016.

Earlier in the day, the Minister met with the management of Port Klang Free Zone (PKFZ) and Syarikat Logistik Petikemas, and visited Century Total Logistics. Both Syarikat Logistik Petikemas and Century Total Logistics are embarking on expansion and diversification of their current operations. The Minister then held a Dialogue Session with companies that are operating in Selangor. Among them are Nippon Electric Glass (NEG), Nitto Denko, Pharmaniaga, Shin-Etsu and Panasonic Manufacturing Malaysia.



“Through the face-to-face engagement today, I am delighted to share that the companies that we met have expressed their commitment to expand and diversify their operations in the near future. This is welcome news in the context of foreign direct investments, and in creating additional employment opportunities,” said Dato' Sri Mustapa.

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Connecting to the Global Biomass Ecosystem through International Biomass Conference Malaysia

“Biomass is one of the priority areas for development that could serve as a high value economic driver for Malaysia's economy in the near future. In recent years, the importance of the biomass industry across sectors within various types of applications and outputs has been growing.

We should continue to focus and build on our niche areas and competencies in this industry while not forgetting the importance of collaborating with various stakeholders to ensure its sustainability,” said YB Dato' Sri Mustapa Mohamed, Minister of International Trade and Industry (MITI) at the official launching of the International Biomass Conference Malaysia 2016 (IBCM2016) on 11 October 2016.

The Minister urged local stakeholders to maximise the value of Malaysia's biomass resources to grow the manufacturing and services sectors and optimise the highest aggregated value these industries can bring to the country. “We are also aware that such opportunities are not limited to Malaysia. To continue to develop this industry requires extensive collaboration and co-development efforts by the different foreign governments and business community. Malaysia can be your destination to forge these partnerships and alliances as well as become a platform for many businesses to expand in the region,” added YB Dato Sri Mustapa.



The full day conference, a collaborative effort among MIDA, MATRADE and Agensi Inovasi Malaysia (AIM) was attended by more than 900 key local and international players from the global biomass value chain. Other than the MITI Minister, the event was also graced by YB Datuk Sri Mah Siew Keong, Minister of Plantation Industries and Commodities and YB Datuk Hajah Nancy Shukri, Minister at the Prime Minister's Department.

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Roche Expands Footprint in Malaysia through its Global Shared Service Centre for Asia Pacific in Sunway

Roche, the world's largest biotech company, opened its Global Shared Service Centre for the Asia Pacific region in Malaysia on 26 October 2016. It is one of its six centres in the world, the others being in Budapest, Warsaw, Sao Paulo, Indianapolis and San Francisco. Malaysia is the first ASEAN country to be selected by Roche to provide finance, procurement and IT services to 15 Roche affiliates across the Asia Pacific region.



EVENTS

In launching the centre, YB Dato' Seri Ong Ka Chuan, Second MITI Minister said, "We are pleased to welcome the opening of Roche's Global Shared Service Centre for the Asia Pacific region, an expansion of its current business portfolio in sales and distribution of pharmaceutical and diagnostic products and services in the country.

Roche's investment demonstrates the company's continued confidence in Malaysia and is yet another testament to Malaysia's continued attraction as a preferred investment destination."

Martin Kikstein, General Manager of Roche Services (ASIA PACIFIC) Sdn. Bhd. explained, "Malaysia was chosen as the hub to create a Global Shared Service Centre for Asia Pacific region as it is strategically located in the heart of Southeast Asia, has strong foreign direct investment policies, a dynamic business environment and a friendly competitive market. "Furthermore, Malaysia has great infrastructure and a skilled workforce with broad language capabilities."

Also present at the ceremony were the Sunway Group's Chairman and Founder, Tan Sri Dr. Jeffrey Cheah, the Swiss Ambassador to Malaysia, Michael Winzap and Chief Executive Officer of the Malaysian Investment Development Authority (MIDA), Dato' Azman Mahmud.

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ABOUT MIDA

The Malaysian Investment Development Authority (MIDA) is the Government's principal promotion agency under the Ministry of International Trade and Industry (MITI) to oversee and drive investments into the manufacturing and services sectors in Malaysia. Starting operations in 1967, MIDA is the first point of contact for investors that want to take advantage of Malaysia's vibrant economy, world-class infrastructure and business-friendly environment to set up their profit centre in Asia. For more information, visit www.mida.gov.my or e-mail us at investmalaysia@mida.gov.my.



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