

# TIR

## SMART ELECTRONICS

THE FOUNDATION  
OF SMART INDUSTRIES

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ABOUT BOI

## BOI NET APPLICATION

JANUARY - DECEMBER 2019



**TOTAL INVESTMENT**  
**1,624**  
 Projects  
**US \$24,312.03**  
 Million



**TOTAL FOREIGN INVESTMENT**  
**991**  
 Projects  
**US \$16,277.49**  
 Million

## FOREIGN INVESTMENT

BY TARGET SECTORS

	<b>ELECTRONICS</b> <b>140</b> Projects   <b>US \$2,522.06</b> Million		<b>AUTOMOTIVE</b> <b>101</b> Projects   <b>US \$2,255.79</b> Million
	<b>PETROCHEMICALS &amp; CHEMICALS</b> <b>60</b> Projects   <b>US \$602.57</b> Million		<b>TOURISM</b> <b>15</b> Projects   <b>US \$450.77</b> Million
	<b>AGRICULTURE &amp; FOOD PROCESSING</b> <b>71</b> Projects   <b>US \$375.31</b> Million		<b>DIGITAL</b> <b>134</b> Projects   <b>US \$266.37</b> Million
	<b>BIOTECHNOLOGY</b> <b>7</b> Projects   <b>US \$190.29</b> Million		<b>MEDICAL</b> <b>13</b> Projects   <b>US \$79.97</b> Million
	<b>AUTOMATION &amp; ROBOTICS</b> <b>7</b> Projects   <b>US \$26.98</b> Million		<b>AEROSPACE</b> <b>2</b> Projects   <b>US \$17.52</b> Million

## MAJOR FOREIGN INVESTMENTS

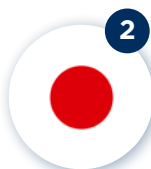
Unit: US\$ (US\$ = 31.1 THB as of 31 January 2020)

Note: Investment projects with foreign equity participation from more than one country are reported in the figures for both countries. Statistics on net applications are adjusted whenever applications are returned to applicants due to insufficient information.



1  
**PEOPLE'S REPUBLIC OF CHINA**

**203** Projects  
**US \$8,414.98**  
 Million



2  
**JAPAN**  
**227** Projects  
**US \$2,350.55**  
 Million



3  
**HONG KONG**  
**67** Projects  
**US \$1,167.65**  
 Million



4  
**SWITZERLAND**  
**21** Projects  
**US \$766.01**  
 Million



5  
**TAIWAN**  
**76** Projects  
**US \$645.88**  
 Million



6  
**SINGAPORE**  
**120** Projects  
**US \$394.63**  
 Million



7  
**USA**  
**34** Projects  
**US \$394.18**  
 Million



8  
**NETHERLANDS**  
**47** Projects  
**US \$335.31**  
 Million



9  
**AUSTRALIA**  
**14** Projects  
**US \$148.26**  
 Million



10  
**SOUTH KOREA**  
**33** Projects  
**US \$100.93**  
 Million

# SMART ELECTRONICS

## SMART INDUSTRIES

Lifestyle changes are driving new demands for a growing array of intelligent products. Decreasing birthrates and increased urbanization are contributing to an aging population, smaller working age population, smaller families, and solo living. People are more concerned by health and wellbeing. Modern consumers increasingly care about environmental impact of their product choices. At the same time importance of connectivity and mobility is growing. These global trends are driving demand for consumer electronics products such as health promoting electronic devices, care robots, mobile communication devices, and small-but-smart home appliances. These products are more energy efficient and environmentally friendly. Moreover, they are equipped with smart technologies that use computation and connectivity to access and share information in real time in almost any place.

The modern economy is driven by data, and that trend is being accelerated by the spread of IoT. This has spurred a rise in smart electronics, which can be defined as any intelligent device with integrated sensors that is connected to the internet. These devices, which can include the capabilities of sensing, actuation, and control, are used in everything from smart traffic management systems, to smart building solutions, energy automation systems, smart farming, healthcare service management, and many other systems.

The industrial sector is quickly adopting these technologies to become “smarter” and more efficient in managing resources, improving productivity and reducing costs. The electrical and electronics (E&E)



industry is the foundation for all smart industries.

## NATIONAL INDUSTRY AGENDA

Thailand’s E&E industry is already the world’s second largest air conditioner exporter,<sup>1</sup> as well as a major producer of refrigerators, cellphones, electronic integrated circuits (IC) and micro-assemblies, and hard disk drives. In 2019, Thailand’s forecasted E&E export value was US \$59.52 billion,<sup>1</sup> equaling 24 percent of Thailand’s total exports.<sup>2</sup> The E&E industry, and its supporting supply chain, employ more than 750,000 workers, making it one of the largest industrial employers in Thailand.

The government selected Smart Electronics to be one of the 12 targeted growth industries under the Thailand 4.0 economic model because it is a fundamental building

block that enables many other growth industries. Smart Electronics is indeed a “National Industry Agenda” as described by The Electrical and Electronics Institute (EEI). The institute, supervised by the Ministry of Industry (MOI), has proposed three key pillars of sustainable smart E&E development.<sup>5</sup> First a collaborative platform among designers, programmers and marketers must be created. Second, a data science center needs to be established to analyze and make use of industrial and behavioral data efficiently. Lastly, an industry’s innovation lab must be set up to research and test product standards as well as user design. In line with the EEI strategy, the MOI has formed measures to enhance the capacity of the E&E industry in four key areas; 1) capacity enhancement of potential and existing operators such as manufacturers of hard disk drives and electrical appliances, as well as promoting IC design, wafer fab and embedded software

<sup>1</sup> Office of Industrial Economics. (2020). Thailand Economic Outlook and Forecast 2019. Retrieved from <http://www.oie.go.th/2019annualreport>

<sup>2</sup> Ministry of Commerce. (2020). Thailand Trading Report 2020. Retrieved from <http://www.ops3.moc.go.th/tradereport>

businesses; 2) enhancing system developers, including establishing an IoT Platform, Center of Smart E&E, and standards of smart E&E products; 3) market stimulation by tax incentives and other support; and 4) disposal of electronic waste. Ultimately, the MOI aims to promote new growth industry subsectors that require advanced technologies and developer skills, such as smart home, smart appliances, wearable electronics, and electronics design.<sup>3</sup>

**STRONG E&E INDUSTRY**

Thailand is well positioned to be a prominent manufacturing base of smart E&E products. The Thai E&E industry is highly proficient in the production and development of sophisticated E&E products. Thai manufacturers, as well as MNC's such as Bosch, Siemens, Daikin, Samsung, Seagate, and Western Digital that have manufacturing operations in Thailand, are trusted by global partners because of their skill in precision manufacturing, as well as electronic manufacturing services such as IC design. Thailand has an extensive E&E supply chain, and companies are equipped with well trained technicians and engineers who are capable of harnessing the benefits of factory automation systems.

In the consumer electronics segment, major opportunities lie in the rise of IoT-embedded electrical appliances. Backed by strong supply chains and trends in digital services, the market value of Thai IoT is forecasted to leap from only US \$120 million in 2018



to US \$2.19 billion by 2030.<sup>4</sup> Cloud services and mobile devices are also substantial parts of the Smart Electronics trend.<sup>10</sup> Various government targeted growth industries, from next-generation automotive to the digital industry, are creating large market opportunities for providers of electronic industrial parts and systems with applications ranging from private smart factories to government smart city initiatives. In addition to the domestic consumer and industrial markets, Thailand has convenient links to ASEAN, China and Japan, providing easy access to a large regional demand.

**BOI INCENTIVES FOR SMART E&E**

Committed to facilitating investors business success, the BOI constantly works with ministries and industry experts to enhance policies and incentives. Investment in the



manufacturing of E&E products, parts or equipment used for E&E products, including material for microelectronics, may be granted corporate income tax exemption up to eight years. The more advanced embedded software developer and electronics design business, including microelectronics design and embedded system design, could also receive the generous eight-year holiday on corporate income tax with 8-year CIT exemption (No CIT exemption ceiling)

Opportunities for investors in the smart electronics industry go far beyond the E&E sector. The smart technologies will also transform other growth industries, including the digital, robotics, aviation, automotive, agriculture, food, and healthcare industries. With supportive incentives from the BOI, along with the existing expertise of the domestic E&E supply chain, Thailand is an excellent choice for investors in this industry segment.



<sup>3</sup> Ministry of Digital Economy and Society. (2019). Thailand Technology Foresight 2035. Retrieved from <https://www.depa.or.th/database>  
<sup>4</sup> Ministry of Industry. (2020). Smart Electronics in First S-Curve. Retrieved from <http://www.industry.go.th/database>

# INTERNET OF THINGS IN THE THAI MARKET

## PROLIFERATION OF IOT

After years of anticipation, the era of the Internet of Things (IoT) has arrived. Real products and services are accessible to not only the industrial sector, but also to end consumers. Products such as smart fridges, smart watches, health trackers, smart bike locks, and even a smart yoga mat, have become common in just a few years. IoT devices, defined as anything that has a sensor-attached and the ability to connect and transmit data over the Internet, are game changers because of their ability to capture data which can be processed into valuable information for businesses and consumers. The applications that are enabled by the technology are virtually limitless.

## THE GLOBAL MARKET

The number of IoT devices worldwide is skyrocketing. It is estimated that there will be more than 75 billion IoT devices installed by 2025, five times as many as in 2015. This growth has created opportunities for businesses large and small to build innovative IoT products. McKinsey & Company reported that the percentage of businesses using IoT grew from 13 percent to 25 percent during the period from 2014 to 2019. The industrial



applications of IoT technologies are diverse, including industry, agriculture, retail, and medical services. Research indicates that public utilities, for example smart meters, are the segment with the highest installed base, accounting for one quarter of the total endpoints. Building automation is predicted to enjoy the highest growth rate in 2020, followed by the automotive and healthcare segments. IoT spending is forecast to increase from US \$726 billion in 2019 to US \$1.1 trillion in 2023.

The benefits of IoT can be illustrated by considering case studies of early adopters, such as the case of Schneider Electric's smart factory in France, which was highlighted by The World Economic Forum as one of the smartest factories in the world. By integrating IoT technologies into the facility, and creating a machine and

system interconnectivity platform with data analytics systems, the factory achieved a seven percent improvement in productivity and up to thirty percent energy savings. In another example, Michelin, a world-renowned tire manufacturer, applied IoT to address a different business concern, asset tracking and monitoring. The tire giant developed a real time tracking and analytics solution for its sea freight. During the pilot period the company reported that the accuracy rate of shipment ETA's improved by 40 percent, there was a 10 percent reduction of inventory in transit, and "out of stock" occurrences were reduced by 75 percent. In both cases, the connected IoT technology devices captured and communicated information which was integrated with other data, analyzed, often in real time, and transformed into valuable business insights by sophisticated





analytics tools. Applications of IoT will continue to expand and become more varied and more customized to different business requirements. This trend will be made possible by a range of IoT devices that bring higher computing power, more affordable price points, smaller size, and enhanced computing and sensor technologies, as well as the faster and more reliable 5G next generation connectivity.

**IOT OPPORTUNITIES IN THAILAND**

IoT represents a powerful disruptive force because it is not merely a single technology, it is a foundation for capturing and analyzing data which will fuel future innovations and economic growth. In fact, several of the government’s Thailand 4.0 initiatives, such as Smart City and Industry 4.0, are focused on boosting adoption of IoT. The government also established the Digital Economy Promotion Agency (DEPA) under the Ministry of Digital Economy and Society (MDES), which collaborates with the private sector and numerous partner organizations, including agencies under the Ministry of Industry, to establish an IoT Institute and Thailand Digital Valley in the digital industry promotion zone (EECd), located in the Eastern Economic Corridor area.

The IoT market in Thailand is forecast to grow, driven mostly by consumer-related IoT, rising to US \$2.19 billion

by 2030. From a baseline of US \$120 million in 2018, that represents a CAGR of more than 27 percent. This rapid growth, the highest among all Smart Electronics segments, makes the IoT market a huge opportunity. A recent Asia IoT Business Platform survey ranked Thailand highest among ASEAN countries in corporate IoT implementation.

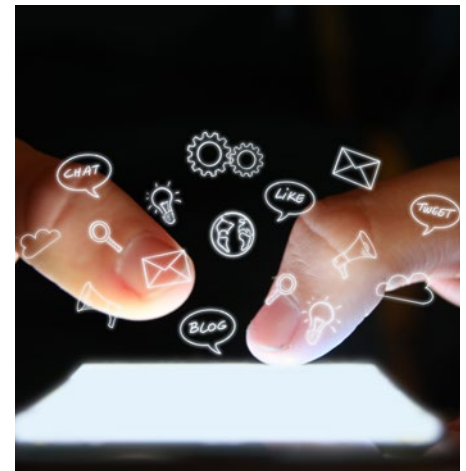
The arrival of 5G, set to be ready by 2020, is expected to further accelerate the adoption of IoT, and Thai network operators are prepared for the forecasted IoT boom. CAT Telecom is developing a LoRaWAN network to serve the Smart City project in Phuket while AIS and True have rolled out multiple IoT solutions for consumers and businesses.

**USE CASES**

The current majority of IoT adoption in Thailand has been in manufacturing, logistics and transportation, however, applications are being developed across many industries. For example, PTT, the Thai oil and gas company, has a gas pipeline maintenance system, called the Integrated Pipeline Maintenance and Monitoring System (iPMMS), that uses IoT devices to reduce cost and increase safety. In real estate, developers are planning smart buildings that incorporate IoT, including projects such as the flagship business district, One Bangkok. The entire district will be managed by

a centralized system with 250,000 IoT sensors installed. Another application is from the insurance sector, Thaivivat Insurance has a system that uses IoT to track motor vehicle usage and offers vehicle owners the option of on demand insurance coverage. This “Pay As You Drive” plan can reduce premiums by up to 40 percent.

IoT plays a significant role in the digital and economic transformation of the government’s Thailand 4.0 vision. The BOI offers a range of investment incentives to support and promote investment in IoT and related digital technologies, including eligibility to receive up to eight years of corporate tax exemption and non-tax privileges. The EECd digital industry promotion zone, offering investors from targeted industries additional compelling tax incentives, is set to become the technology supercluster that drives Thailand’s growth in this important industry segment.



# WELCOME TO THE EEC: ASIA'S PRIME GATEWAY



## THE PRIME GATEWAY TO ASIA

Since 2016, the Eastern Economic Corridor (EEC), Thailand's flagship economic zone, has attracted investment applications totaling more than US \$39 billion. In 2018, applications for investments exceeded US \$22 billion, a year-on-year increase of 117 percent. In 2019, 59 percent of all investment applications received by the BOI were from projects in the EEC.

Thailand's gateway to Asia ranges across three eastern provinces, Chachoengsao, Chonburi and Rayong. The EEC Development Plan is designed to help transform Thailand into a value-based economy supported by innovation, technology and creativity, with extensive and efficient links to ASEAN and the world.

## INVESTMENT PROMOTION ZONES

The EEC project includes a US \$32.93 billion infrastructure upgrade plan, including the Eastern Airport City "Aerotropolis" (EECa), Digital Park Thailand (EECd), High Speed Rail Ribbon Sprawl (EECh) linking 3 main airports, the Eastern

Economic Corridor of Innovation (EECi), and the Medical Hub (EECmd), as well as expansions of the Map Ta Phut and Laem Chabang Seaports.

The EEC megaprojects are already underway. In the EECa zone, the upgrade of U-Tapao International Airport, as well as the surrounding commercial areas and MRO facilities, are scheduled to be complete by 2023. In the Digital Park, major construction is underway, including the Intelligent Operation Center (IOC), due to be completed in July 2020, and the IoT Institute, expected to be completed by 2021. The contract for the 3 Airport High Speed Rail Link Project was signed in October 2019, construction sites are now being prepared, and rail operation is expected to start by 2023. EECi, the promotion zone for the R&D and innovation ecosystem for the automation, robotics, agri-food and biotechnology industries, started construction in February 2019. Currently 72 percent of the project's "Phase 1" space has been leased or is under negotiation with tenants and it is expected to start operation by mid-2021. The Medical Hub, the latest

investment promotion zone which was announced in February 2019, is located at the Thammasat University Campus in Pattaya. This future hub of innovative health care includes a new Thammasat University hospital as well as a Senior Complex to support the aging society in Thailand.

The EEC promotional zones qualify for tax and non-tax investment incentives for specific industries, including exemption from corporate income tax (CIT) for up to 13 years with 8-year CIT exemption (No CIT exemption ceiling)

## E&E IN EEC

The electrical and electronics (E&E) industry is a major investor in the EEC, along with the automotive and petrochemical industries. Thailand is a major producer of E&E goods and services and has a well-integrated supply chain. Smart electronics are expanding the reach of the E&E industry by delivering components for the Next Generation Automotive industry, Smart Homes, and Smart Cities.

The EEC is home to many multinational corporations in the E&E industry, including Emerson, Samsung, Sharp, Sony, and Sumitomo. In 2018, Hitachi opened the Lumada Center Southeast Asia in Chonburi. The Hitachi center was one of the first movers in the market to offer industrial IoT solutions.

## PROSPEROUS FUTURE

The EEC offers a promising opportunity for E&E investors looking for long-term yields. Companies wishing to reach the ASEAN marketplace, with a population of more than 650 million people, should consider investing in the EEC because of the industry ecosystem, upgraded infrastructure, generous tax and non-tax incentives, and strong connectivity to regional and global markets.

# SEAGATE CONTINUES FOSTERING INNOVATION IN THAILAND

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## MR. JEFF NYGAARD

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SEAGATE'S EXECUTIVE  
VICE PRESIDENT OF  
OPERATIONS, PRODUCTS,  
AND TECHNOLOGY

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Seagate Technologies, a global leader in data management, has provided the data solutions behind the technologies, from personal computers to the cloud to autonomous vehicles, and smart cities that have revolutionized the lives of individuals across the world. Thailand has played an important role in the company's overall success, as Seagate has been active in the country for 37 years. During that time, the company has expanded its presence and taken on a leading role as a steward for the development of innovation and technology in the country.

In 1983, Seagate's first facilities in Thailand opened their doors. At the time, the country offered both a low-cost workforce as well as a strategic location in the heart of Southeast Asia, a region in the midst of a rapid ascent that continues to this day. In addition, the Thai Government's commitment to creating an enabling environment for businesses swayed Seagate's decision-makers to invest in Thailand. From the Government's perspective, Seagate's presence was not only good for economic development, but also for sparking a more innovative mindset in Thailand.

The environment that Seagate entered in 1983 has changed considerably over the years. What began as labor-intensive manufacturing has evolved into automation-driven manufacturing. While the Thai workforce is more expensive today, it has also become more skilled, enabling Seagate to find local talent to fill the higher value positions it needs.

"Today, we are here because of the workforce," said Mr. Jeff Nygaard (Seagate's Executive Vice President of Operations, Products, and Technology). "The workforce is quite experienced, from the operator, technician, to professional, and throughout the management levels."

Because of the quality of the workforce, Seagate has moved more value-added components of its operations to Thailand. In fact, the company's global financial services unit is now based in Bangkok. The company has also transitioned

some product development activities to Thailand. Transitioning such value-added services to a new location takes time, and Mr. Nygaard credits the consistency of the Thai Government's vision and support for allowing Seagate to cultivate a world-class working environment.

The broader development of the business environment has also served to facilitate the expansion of Seagate's operations in Thailand. The combination of Government policy, the economic rise of Asia, and an improved Thai workforce created a flourishing ecosystem, not only multi-national corporations, but domestic firms as well. As such, Seagate has built a robust supply chain, encompassing approximately 750 local suppliers in Thailand.

"The fact that we have the talent and supply chain in Thailand has



been a huge enabler to help us get to where we are today,” said Mr.Nygaard.

Seagate management views its investment in Thailand on a long-term time horizon. This is evident through both its expansion into value-added services as well as its commitment to workforce development. To support the next generation of workers, Seagate takes an active role in improving the quality of education nationwide. Specifically, the company has partnered with a range of government agencies and universities to improve science, [technology, engineering, and mathematics] (STEM) learning from the grade-school through university levels. The company aims to inspire youth to pursue high-value STEM careers and enhance technical education so that graduates are prepared to succeed in emerging fields, such as automation, data analytics, and mechatronics.

Over the past ten years, Seagate has also made substantial investments in research and development (R&D) initiatives in Thailand. The company currently supports 17 active projects with strategic partners, including the National Science and Technology Development Agency (NSTDA), King Mongkut’s Institute of Technology Ladkrabang, and Suranaree University of Technology. These R&D initiatives demonstrate Seagate’s commitment to Thailand’s domestic innovation space.



Since 2003, Seagate has collaborated closely with local universities in R&D activities, the company has launched engineering hubs with Khon Kaen University (KKU), Suranaree University of Technology (SUT), and King Mongkut Institute of Technology Ladkrabang (KMITL). Subsequently, many graduates from these universities have been employed by Seagate.

Moreover, Seagate has also been a constant supporter of The AMCHAM Thailand Foundation (ATF). The ATF has funded the University education of almost 3000 deserving Thai students. The ATF organizes camps for new and graduating students of the program every year to prepare them for life after university. Seagate funds scholarship for deserving ATF students and during the orientation camp, students visit Seagate’s facilities to get hands-on corporate world experience. The company also works hand in hand with the International Labour Organization (ILO) to further supports female retention and career advancement in the company by up skilling and broadening critical soft skills of female employees working in STEM-related frontline positions.

More broadly, innovation is at the heart of Seagate’s vision. Just as it has done throughout its history, the firm is hard at work developing the next generation of data solutions needed to enable emerging technologies to reach their potential and empower human flourishing worldwide.

From cloud-based solutions to store the exponential rise of Big Data to local storage needed to provide the real-time data necessary for autonomous vehicles to run safely, Seagate is at the forefront of technological progress and helping Thailand shape its 4.0 industries.

As the company forges ahead, it has made strategic investments in both its own operations as well as the future workforce of Thailand. As a result, Thailand will continue to play a prominent role in Seagate’s operations, helping the company harness the power of data to propel the next technological revolution.

***“The fact that we have the talent and supply chain in Thailand has been a huge enabler to help us get to where we are today,”***



### THAILAND'S INVESTMENT ECOSYSTEM UPDATE 16 JANUARY 2020

Mr. Kobsak Pootrakool, Deputy Secretary General to the Prime Minister for Political Affairs, along with Ms. Duangjai Asawachintachit, Secretary General of the Board of Investment, and Ms. Pimchanok Vonkorpon, Director General of the Office of Trade Policy and Strategy Office, Ministry of Commerce, met the international press to discuss "Thailand's Investment Ecosystem Update." The briefing was held at the Foreign Correspondents Club of Thailand (FCCT) at Maneeya Center Building on Ploenchit Road in Bangkok.



### JAPAN - THAILAND ENVIRONMENTAL WEEK

**16 JANUARY 2020** Mr. Chokedee Kaewsang, BOI Deputy Secretary General, presented about investment promotion policies for businesses focused on environmental topics in the seminar "Japan - Thailand Environmental Week" at The Berkeley Hotel Pratunam in Bangkok. The event was jointly organized by Thailand's Ministry of Natural Resources and Environment, Japan's Ministry of the Environment, Japan International Cooperation Agency (JICA) and the Japan Environmental Management Association for Industry (JEMAI).



### BOI PRESENTS INVESTMENT PROMOTIONS TO KOREAN EXECUTIVES

**22 JANUARY 2020** Mr. Narit Therdsteeerasukdi, BOI Deputy Secretary General, delivered opening remarks and presented new investment promotion measures at the BOI's seminar "All Korean Executives Need to Know about Doing Business in Thailand" at Cape Dara Resort Pattaya in Chonburi Province. Mr. Kim Hyuntae, Director General of KOTRA Bangkok, and Mr. Kim Do-Soon, President of the Korean-Thai Chamber of Commerce, also addressed the attendees. Event speakers include representatives from the Eastern Economic Corridor (EEC) Office, the Customs Department, the Immigration Bureau and the Department of Employment. The seminar brought together 160 Korean business operators in the eastern region and members of the Korean-Thai Chamber of Commerce.



### MOU ON COOPERATIVE AND WORK INTEGRATED EDUCATION

**30 JANUARY 2020** Ms. Duangjai Asawachintachit, BOI Secretary General, and Mr. Seksan Ruangwohan, Deputy Secretary General, attended the academic conference to promote Cooperative and Work Integrated Education (CWIE) and signed an MOU for cooperation on CWIE with the Ministry of Higher Education, Science, Research and Innovation, government agencies, educational institutes and private companies. The conference took place at Rama Gardens Hotel in Bangkok, and was attended by over 500 senior executives from the public and private sectors.



### BOI BRIEFS JAPANESE BANKS

**22 JANUARY 2020** Mr. Chokedee Kaewsang, BOI Deputy Secretary General, welcomed the delegation of representative offices of Japanese banks in Thailand to the meeting to share information about the BOI's investment promotion policies, measures and incentives. The event, organized by Shoko Chukin Bangkok Representative Office, was held at the BOI's One Start One Stop Investment Center (OSOS), Chamchuri Square Building in Bangkok



### JAPAN-THAI BUSINESS MATCHING

**28 JANUARY 2020** Mr. Seksan Ruangwohan, Deputy Secretary General of the BOI, presided over the opening ceremony of the "Japan-Thai Business Matching 2020," a business matching event that promotes domestic sourcing of components and parts by facilitating trade connections between companies from Japan and Thailand. The event, organized by the BOI's Industrial Linkage Development Division, Japan Finance Corporation (JFC) and the Japanese Chamber of Commerce (JCC), was held at the Bangkok International Trade & Exhibition Centre (BITEC). The event attracted more than 400 buyer firms and exhibitors, resulted in 1,250 business matches

## KEY ECONOMIC FIGURES



GDP  
(2018)

**US \$543.7**  
BILLION



GDP PER  
CAPITA  
(2018)

**US \$7,856**

### GDP GROWTH



### INVESTMENT GROWTH



### EXPORT VALUE GROWTH



UNEMPLOYMENT  
2018\*

**1.1%**



HEADLINE  
INFLATION  
2019\*

**1%**

Source: NESDB  
\*Forecast under Source: NESDB, add Bank of Thailand

## MARKET PROFILE 2019



POPULATION  
**69.6**  
Million

MINIMUM WAGE  
PER DAY  
THB **331**

\$ APPROXIMATE  
**US \$10.64**

Source: United Nations and Ministry of Labor

## CLMVT ECONOMY AT-A-GLANCE



Source: IMF, International Trade Statistics, UNCTAD, World Bank Data 2018

### POPULATION

**242**  
Million

### GDP GROWTH

**8.2%**

### FDI

**52**  
US \$ Billion

### IMPORT FROM THE WORLD

**12.7%**  
(540 bil. US \$)

### EXPORT FROM THE WORLD

**9.9%**  
(535 bil. US \$)

## INTERNATIONAL COMPETITIVENESS

Source: WEF, IMD and World Bank

THAILAND IS THE EASIEST CLMVT COUNTRY TO DO BUSINESS.



LEAST TIME  
TO SET UP BUSINESS

**4.5** DAYS



HIGHEST RATING:  
WORLD BANK EASE OF  
DOING BUSINESS 2019

**27<sup>TH</sup>**



FEWEST  
PROCEDURES **5** STEPS



HIGHEST SCORE:  
WORLD ECONOMIC  
FORUM COMPETITIVENESS  
INDEX

**38<sup>TH</sup>**

## EXPORT FIGURES



EXPORT VALUE  
JANUARY-DECEMBER 2019

**244,956.87**

US \$  
MILLION

### TOP 10 INDUSTRIES



Motorcars and Parts  
\$27,168.52  
Share 11.1%



Computers and Parts  
\$18,153.94  
Share 7.4%



Precious Stones  
and Jewellery  
\$15,634.00  
Share 6.4%



Rubber Products  
\$11,182.06  
Share 4.6%



Plastic Beads  
\$9,140.26  
Share 3.7%



Chemical Products  
\$7,566.76  
Share 3.1%



Electronic  
Integrated Circuits  
\$7,560.27  
Share 3.1%



Refined Fuels  
\$7,315.16  
Share 3%



Machinery  
and Parts  
\$7,277.70  
Share 3%



Other Industrial  
Products  
\$6,269.28  
Share 0%

### TOP 10 MARKETS



USA  
\$31,224.27  
Share 12.7%



China  
\$29,012.02  
Share 11.8%



Japan  
\$24,464.24  
Share 10%



Vietnam  
\$12,065.19  
Share 4.9%



Hong Kong  
\$11,666.35  
Share 4.8%



Malaysia  
\$10,420.05  
Share 4.3%



Australia  
\$10,194.43  
Share 4.2%



Indonesia  
\$9,059.55  
Share 3.7%



Singapore  
\$8,807.49  
Share 3.6%



India  
\$7,319.37  
Share 3%

Source: Ministry of Commerce

## EXCHANGE RATES

(Data as of 31 January 2020)

\$	£	€	¥	¥
THB	THB	THB	THB	THB
<b>31.1</b>	<b>41.2</b>	<b>34.7</b>	<b>28.9</b>	<b>4.5</b>

Source: Bank of Thailand  
Note: Baht/ 1 Unit of Foreign  
Currency - Average Selling Rates.  
JPY currency is for 100 Yen

## TAX RATES

Source: The Revenue Department

CORPORATE INCOME TAX:	PERSONAL INCOME TAX	VAT	WITHOLDING TAX
<b>20%</b>	<b>35%</b>	<b>7%</b>	<b>1 - 10%</b>

# BOI OVERSEAS OFFICES



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## ABOUT BOI

The Office of the Board of Investment (BOI) is the principle government agency that operates under the Prime Minister's Office for the purpose of encouraging investment in Thailand. We at the BOI serve as the professional contact points for investors, providing them with useful investment information and services. We offer business support and investment incentive to foreign investors in Thailand, including tax and non-tax incentives. A few non-tax incentives include granting land ownership to foreigners and facilitating visas and work permits. Besides serving the needs of overseas investors, we also offer consultation services to Thai investors who are interested in investment opportunities abroad.

### GUANGZHOU

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