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THAILAND INVESTMENT REVIEW

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SMART ELECTRONICS A SMART INVESTMENT OPPORTUNITY

CONTENT



BOI Net Application

Cover Story

IoT: The Next Big thing
in Smart Electronics

Industry Focus

Smart Electronics:
A Smart Investment Opportunity

Short Article

BOI Measures
to Support Growth in Tourism
and Transport Sectors

02 Company Interview 08

Mitsubishi Electric Consumer Products
(Thailand): A Leading Global Producer of
Air-Conditioners and Smart Electronics

03 News Bites 09

05 BOI's Missions and Events 10

07 Thailand Economy At-A-Glance 11

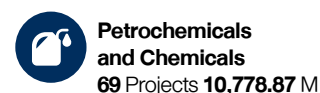
About BOI 12

BOI NET APPLICATION

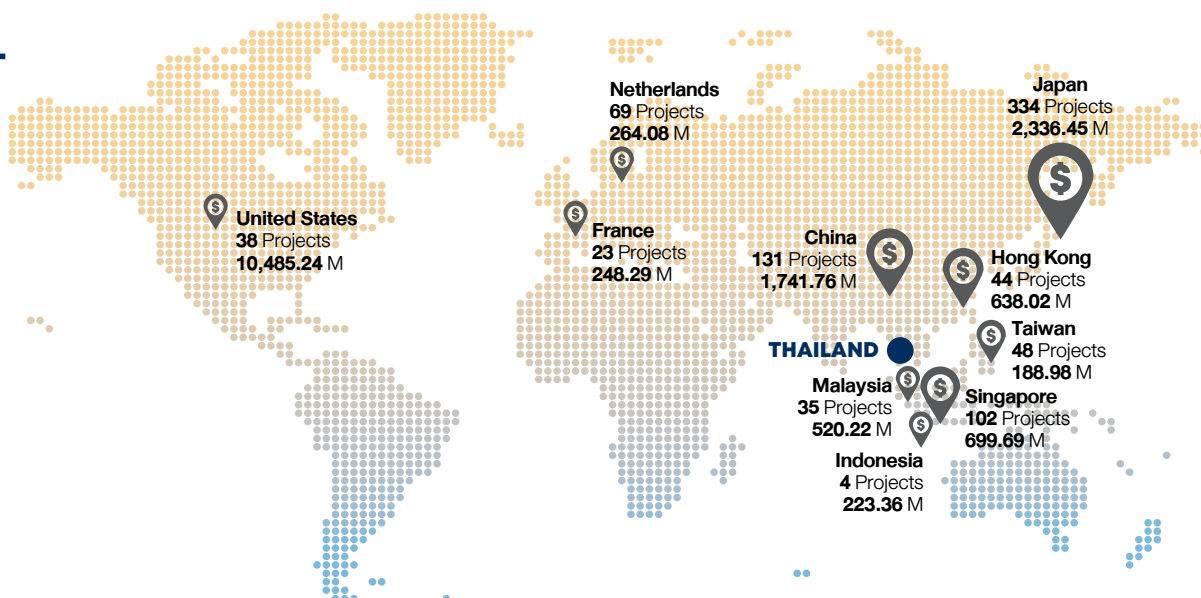
January - December 2018



FOREIGN INVESTMENT BY TARGET SECTORS



FOREIGN INVESTMENT BY MAJOR ECONOMIES



Unit: US\$ (US\$ = 31.85 THB as of 21 January 2019)

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. For more details, please see link http://www.boi.go.th/newboi/index.php?page=Report_investment



IOT: THE NEXT BIG THING IN SMART ELECTRONICS

More than just a network of connected devices, the Internet of Things (IoT) has become a game changer in 21st century industry. As the technology enables physical devices and everyday objects to communicate, interact and exchange data over the Internet, they can be monitored and controlled from anywhere and at any time. With this disruptive function, the IoT has forced both producers and consumers to question the traditional concepts of products, services, and even business models.

The disruption of the IoT

The increasing rate of smartphone subscriptions has provided the IoT with greater opportunities to connect users and devices via the internet. Facilitating remote operation and data collection, this way of interaction between users, smartphones, and devices has disrupted various industries in the past few years. An obvious example would be the way Uber converted old cars into connected vehicles that can be tracked, located, and hired by users.

While connectivity remains the elemental foundation on which the IoT is built, computational power and sensors

are also crucial supporting features that take this technology to a whole new level by enabling customization of the user's experience that is impossible with connectivity alone. As just one example, an IoT integrated air conditioner can now calculate a cooling schedule that optimizes energy efficiency while maintaining the desired temperature thanks to embedded sensors and remote control.

With industrial practices forever disrupted, businesses are now integrating this paradigm-shifting technology as a matter of survival. Ikea, for example, has repositioned itself as a smart home

company by introducing new product lines that embrace the IoT, including a set of smart blinds that can be opened and closed via wireless remote and voice command. Previously, Ikea also launched its smart LED bulbs in 2017 with distinct features offering remote controlling and brightness adjustment of up to 10 wireless LEDs. With the continued momentum of smart electronics, the company's aim is to reach "absolute convenience" by expanding the integration of their smart products with artificial intelligence devices, including the Apple Homekit, Alexa, and Google Assistant.

COVER STORY

The rise of the IoT

In response to the growing demands of the consumer market, the cost of IoT products tumbles as more developers enter the booming but increasingly competitive market. Gartner, a global research and advisory company, predicted that 1 million IoT devices will be installed hourly by 2021, while HP also forecast an 18% CAGR in machine-to-machine connections, reaching 27 billion by 2024. In Thailand, it was estimated that the country's IoT industry will reach a value of Baht 33 billion by 2020, with research showing that Thai enterprises lead the way across ASEAN in terms of developing and implementing IoT solutions.

Even though electronics and the smart home sectors have led the way in adopting the IoT, the technology is now expanding to create added value in the sharing economy. On the streets of Beijing, for example, people no longer have to worry about where to park their bike or whether the bike will be stolen. Companies like Ofo have adopted IoT technology to create a bike-sharing service that enables users to hire a registered bike near to their current location. The application incorporates an integrated sensor system and online payment that allow users to scan, unlock, and pay via the smartphones. This IoT integrated service has had an impact that goes beyond just convenience. The application can even calculate the calories each user has burned and the carbon emission that each user has helped to reduce by using the bikes.



The future development of IoT

With the imminent rise of IoT, the World Economic Forum published a report earlier this year named Realizing the Internet of Things: A Framework for Collective Action. The report identified five essential pillars that will shape the development of IoT:

1. Architecture and standards

The report suggested that scalable, future-proof and cost-effective architectural choices are important to the future of IoT, while it also indicated that reference architecture will help the IoT develop its standards and best practices.

2. Security and privacy

With issues and concern of cybersecurity being discussed widely in the past months, transparency and clarity in the data collecting policy of the IoT remain highly relevant to its adoption rate. These challenges regarding public opinion on IoT transparency have to be addressed and assurances provided for its long-term success.

3. Shared value creation

Budgetary and financial considerations remain the constraints holding back IoT investment in its early days. Overcoming these challenges requires leadership and vision from businesses and governments.

4. Organizational development

To enable full integration, the IoT requires a level of rethinking by businesses that will promote widespread adoption within their organizations. The report suggests that achieving this requires the compliance of three components: executive leadership, a realignment of incentives, and massive upskilling.

5. Ecosystem governance

To avoid issues among the key players, such as competing technology, competing vendors, or varying public opinion, the IoT ecosystem requires internal regulation and the collective attention of industry



members to create an effective self-governance mechanism.

Offering the potential to make people's daily lives safer, more efficient, and more convenient, the IoT is considered to be a game-changing opportunity with the power to have a significant impact on businesses and society as a whole. To ensure the sustainable growth of the IoT, concerns regarding security, trust, and transparency have to be addressed through constructive principles in order to eliminate unnecessary risks that may hinder the growth of the industry in the future.

In line with the Thailand 4.0 policy of upgrading the country's industry through innovation and digitization, the Thai government has implemented a number of measures to address these issues and facilitate the growth of the IoT industry. The Digital Agenda 2018 introduced by the Ministry of Digital Economy and Society is designed to promote a digital workforce and economy with a focus on smart cities and IoT development through five key areas: digital infrastructure, digital government, digital manpower, cyber security and digital tech developments.

The Ministry's Smart Cities Framework also aims to achieve 77 smart cities across Thailand by 2023. Defined as being fully working and sustainably operational urban environments that are managed through digital technologies, pilot smart cities are already being developed and tested in certain provinces.

In the 21st century, it is no longer enough to be connected. The growth of the IoT means that every connection is an opportunity to create a smarter world. ■

SMART ELECTRONICS: A SMART INVESTMENT OPPORTUNITY

On the back of seemingly relentless technological advancements, the electronics and IT industries have been experiencing a steady growth in global production over the past few years. According to the Japan Electronics and Information Technology Industries Association (JEITA), it is estimated that the industry expanded by 4% in 2018 to reach a value of USD 2,836.6 billion.

In line with the global growth in the electronics and IT industries, Asia remains a strong base for electrical and electronics (E&E) production, with China being the largest E&E producer globally. Asia is also the largest market for E&E, accounting for around 55% of all sales according to the Electrical and Electronics Manufacturing Global Market Report 2018 by Reportlinker.

Strong production and export base

With the largest E&E manufacturing base in the ASEAN region, Thailand was ranked as the world's 13th largest exporter in 2017, according to the Bank of Thailand. The country was also reported to be among the world's top 10 exporters for 6 electrical appliances, including air conditioners (2nd), washing machines (2nd), microwave ovens (3rd), compressors (6th), refrigerators (7th), and rice cooker (8th). Apart from home appliances, Thailand is also one of the world's largest manufacturers of hard disk drives (HDDs). In 2019, the HDD segment is expected to reach an approximate export value of USD 12.6-13.1 billion.

Another major product of Thailand's electronics industry is integrated circuits (ICs). The country is home to many global IC producers operating with advanced assembling technology. According to

the Observatory of Economic Complexity, with an export value worth USD 12 billion, ICs accounted for 5.6% of Thailand's total export value in 2017 with the main export markets being China, Hong Kong, and Singapore.

Thailand's competitive advantage

As reported by the Office of Industrial Economics, nearly three quarters of the total output of Thailand's appliances is for the export market. Against this backdrop, Thailand's Free Trade agreements (FTAs) remain highly relevant to the competitiveness of the industry. The 12 Free Trade Agreements (FTAs) implemented by Thailand enable businesses in the country to earn the rewards of almost tariff-free trade with 17 different nations through both bilateral and multilateral agreements. Through these FTAs, almost all E&E parts can be imported tariff-free into FTA partner countries.

Apart from the FTAs, Thailand also offers a workforce that is not only cost competitive but also trained in the relevant skills. More than 700,000 workers are employed in the country's E&E industry, including over 40,000 graduates with diploma certificates or higher qualifications in engineering, manufacturing, and construction as of 2017. To ensure Thailand's education

system continues to produce career-ready graduates, the Thai government has launched, among others, the "Work-Integrated Learning Program" (WiL) with the aim of supplying an additional 50,000 skilled workers to the industrial sector over the next five years.

Bright investment opportunities

Smart electronic devices are increasingly serving a variety of functions in modern homes and buildings, including security, energy efficiency, appliances, and entertainment. Through the Internet of things (IoT), devices and home appliances are equipped with software, sensors, actuators, and connectivity, allowing these devices to connect, interact, and exchange data. For example, a refrigerator with built-in sensors can alert inhabitants when the milk is about to run out. According to data and analytics firm, Global Data, the global IoT market is projected to reach USD 318 billion by 2023 at a compound annual growth rate (CAGR) of 20%, reflecting growing demand and higher adoption rates among consumers worldwide.

While Thailand's robust electronics industry enables it to keep pace with the latest developments in smart electronics and IoT technology, the country's strong digital infrastructure opens up a ready-made market. With an estimated 41 million people (around 60% of the population) connected to the internet, Thailand's high Internet penetration provides huge potential and a solid foundation for electronic products with IoT technology.

INDUSTRY FOCUS



In addition, the Thai automotive industry represents another promising industry contributing to the demand for electronics as the new generation of cars are increasingly equipped with electronics such as smart sensors, car navigation systems, and airbags. In fact, cars remain the product with the highest density of electronic components among all consumer machines. With that in mind, Thailand's massive automotive production provides a huge market opportunity as the country produced 1.94 million units in 2017, while it was reported by the Asia Times that over 112 million sensors were used in the automotive industry in Thailand in the same year.

The BOI's incentives

Under section 5 of the general list of activities eligible for promotion, the Thailand Board of Investment (BOI) offers various incentives aimed at activities in the E&E industry. For example, activities involving the integration of high technology-such as the manufacturing of advanced technology electrical products with the ability to connect to the Internet of Things or with circuits or operation control systems, processing systems, embedded systems or embedded software-will be granted an 8-year corporate income tax (CIT) exemption provided that the product has its own design process. For the manufacturing of products without their own design

process, such activity will receive a 5-year CIT exemption.

Apart from the incentives for activities involving the integration of high technology, the manufacture of electrical parts and/or equipment used for industry will receive a 5-year CIT exemption under the condition that the activity has its own product design, with a 3-year CIT exemption available if the activity does not have its own product

design. Activities involving electronics design, including microelectronics design and embedded system design, may also receive an 8-year CIT exemption with no cap. Manufacturing telecommunication products is also eligible for at least a 5-year CIT exemption, while the manufacture of emission, transmission and reception devices used in fiber-optic and wireless communication systems is eligible for a higher-tier incentive with an 8-year CIT exemption. The incentives under section 5 also include the manufacturing of embedded software which qualifies for an 8-year CIT exemption with no cap, while digital services such as Software platforms, digital architecture design services, or even Fintech will also receive a 5-year CIT exemption. Meanwhile, the BOI also offers non-tax incentives including the permission to own land, to acquire relevant visas/work permits for foreign staff, and to take out or remit money abroad in a foreign currency. ■

Activities		Incentives
5.1	Manufacture of electrical products	
5.1.1	Manufacture of advanced technology electrical products	
5.1.1.1	With own-design process of the product	A 2
5.1.1.2	Without own-design process of the product	A 3
5.2	Manufacture of parts and/or equipment used for electrical products	
5.2.1	Manufacture of electrical parts and/or equipments used for industry: Power Inverter, Distribution Transformer, Main Circuit Breaker	
5.2.1.1	With own-design process of the product	A 3
5.2.1.2	Without own-design process of the product	A 4
5.3	Manufacture of electronic products	
5.3.2	Manufacture of telecommunication products	
5.3.2.1	Manufacture of emission, transmission and reception devices used in fiber-optic and wireless communication systems	A 2
5.3.2.2	Manufacture of other telecommunication products	A 3
5.6	Electronics design	
5.6.1	Microelectronics design	A 1
5.6.2	Embedded system design	A 1
5.7	Software	
5.7.1	Embedded software	A 1

A 1 = 8 years (No Cap), A 2 = 8 years, A 3 = 5 years, A 4 = 3 years

BOI MEASURES TO SUPPORT GROWTH IN TOURISM AND TRANSPORT SECTORS

A previous edition of the Thailand Investment Review started the year by summarizing Thailand's economic success in 2018. This article follows up on that summary by examining the contributions from particular sectors and the role of the Thailand Board of Investment (BOI) in not only continuing to support growth in those sectors but also promoting economic activities in less commercially concentrated parts of the country.

Recently released by the Office of the National Economic and Social Development Council (NESDC), Thailand's Gross Domestic Product (GDP) experienced an estimated 4.2% growth over the year, with the number for the final quarter put at 3.7%. These figures were mainly attributed to growth in non-agricultural sectors, with tourist-related industries expanding at particularly high rates. Included under the wider tourism sector are the transport industry, which experienced a 6.1% expansion, as well as the hotel and restaurant sector, which recorded 5.3% growth. On a more specific level, transportation expanded by 4.9% in the 4th quarter of 2018.

Another tourism-related industry with a gradual growth is hospitality. Thailand has experienced a rebound in the number of foreign tourists visiting the country, with the 38 million tourists reported in 2018 representing a 4.3% growth from the previous year. According to the Ministry of Tourism and Sports, East-Asian countries remain the main source market, accounting for around

68% of all tourists, while European visitors ranked second with more than 17% of the market. In line with the upward trend in foreign tourists, the NESDC has also forecasted that Thailand will remain a prominent destination for international visitors, while it is estimated that the tourism industry will generate more than 2.24 trillion baht in 2019.

To ensure the growth in the tourism and transport sector continues, the BOI has launched two new measures aimed at developing the country's rail industry and further enhancing its tourist destinations. Expecting to stimulate investment in rail development and related activities, the BOI offers an initial 100% exemption for the first 5-8 years of projects in rail system development and related activities provided the application is made by 30 December 2021. On top of that, a 50% corporate income tax (CIT) reduction for an additional 3-5 years will also be granted after the expiry of the initial exemption. Rail system development and related activities implemented in Khon Kaen Province

and Nakhon Ratchasima Province will receive an additional 5-year CIT exemption, while activities implemented outside Bangkok, Khon Kaen Province, and Nakhon Ratchasima Province will receive an additional 3-year CIT exemption added on to the granted period. These special packages are expected to support the national infrastructure plan to expand the national rail network by more than 6,000 kilometers nationwide as well as to help kick-start the establishment of a rail production hub in the northeastern region.

For the tourism industry, more activities are being added to the existing promotion list to attract extra investment in tourism infrastructure-related activities as well as to support the creation of new tourist attractions, particularly in second-tier provinces. Two newly-created categories have been added to those eligible for the BOI's incentives, namely (1) cruise terminals and (2) large-scale tourist attractions with high standards. In addition, the BOI has also expanded the scope of existing conditions to cover all types of museums with the aim of enhancing the inclusivity and variety of Thailand's tourist attractions, particularly those in secondary provinces.

The BOI firmly believes that the new measures put in place will help encourage the development of infrastructure to support Thailand's tourism industry and its infrastructure in the longer run. ■



mitsubishi electric consumer products (thailand): a leading global producer of air-conditioners and smart electronics

Mitsubishi Electric Consumer Products' international operations

With production plants in six countries across Europe, Asia and North America, Mitsubishi Electric Consumer Products (MCP) is well known for creating a variety of high performance and reliable household products, with a particular focus on air-conditioning units. At present, Thailand acts as the main production center, primarily due to the country's reputation for offering high-quality human resources, a well-established infrastructure, global supply chain links, and attractive government policies. With a public commitment to sustainable business practices, including via the implementation of the United Nations' Sustainable Development Goals (SDGs), MCP prides itself on product offerings that are safe, reliable, and environmentally friendly.

First established in Thailand on 27 November 1989, MCP has developed an enviable reputation both at home and abroad for its consistently strong financial performance. For example, in the 2018 fiscal year (ending on 31 March 2019), company sales are expected to reach 14 billion baht, an increase of approximately 4% from the previous year. This aligns with Thailand's overall GDP increase of 4.2% over the same period. In the fiscal year 2019, sales are projected to increase by a further 10% to 15.5 billion Baht.

“As part of our corporate pledge of ‘creating a better tomorrow’, at Mitsubishi Electric Consumer Products (Thailand), we are committed to fostering high-quality technological innovations that will benefit consumers around the world”

Mr. Norikazu Ishikawa,
President – Mitsubishi Electric
Consumer Products (Thailand) Co., Ltd.



A period of expansion

Since commencing operations in Thailand 30 years ago, MCP has become a household name in air conditioner and smart electronic manufacturing. With rapid growth rates in these two sectors across the globe, warehouse expansions within Thailand are currently underway to meet the increased demand. As MCP's 178,400 m² original site edged towards its maximum capacity, an additional 244,000 m² site was opened on 1 December 2015. To ensure maximum efficiency, the original site will now focus on the production of room air conditioners, while the newer site will primarily deliver commercial package air conditioning units. If demand continues to grow as expected, an additional factory is tentatively slated for construction in 2025.

As MCP's products have continued to advance, there has been a noticeable spike in demand from across the region and further afield. To capitalize on this interest, MCP has continued to invest in ongoing technological improvements, ensuring that it is able to provide superior air conditioning and smart electronic product offerings. For example, artificial intelligence and Wi-Fi integration are now considered standard in both the European and North American markets, and will soon be available for customers in Thailand.

Mr. Norikazu Ishikawa, President of Mitsubishi Electric Consumer Products (Thailand), notes that “with international growth continuing to boom, we are

re-doubling our efforts to ensure that we can provide world-class products at a competitive price.” It is expected that air-conditioning exports from Thailand will soon reach 140 countries, a true testament to the conducive operating environment provided by the Thai government for companies like MCP.

What support has Mitsubishi Electric Consumer Products received from the BOI?

Thailand continues to maintain a conducive operating environment for the electronic and electronic appliance industries. For over two decades, MCP has benefitted from an assortment of tax and non-tax incentives from the BOI. More recently, the company’s project on manufacture of advanced technology electrical products has been granted support under ‘Section 5: Electronics and Electrical Appliances Industry’. Provided with the

BOI Incentive in the category of A3, the company will be exempt from corporate income tax obligations for 5 years (from February 2021 to February 2027). Other benefits include the exemption of import duties on machinery and on raw materials used in production for export, and a suite of non-tax incentives such as permission to own land and to bring into the Kingdom skilled workers and experts to work in investment promoted activities.

What does the future look like for Thailand’s electronic industry and Mitsubishi Electric Consumer Products?

Despite a significant rise in international exports, air conditioning and smart home appliance sales within Thailand are yet to reach their full potential. With GDP per capita rising from USD 680 in 1980

to USD 7,462 in 2018, overall rates of air conditioning ownership are still at about 30%. However, with wages and GDP expected to continue their forward trajectory, it is anticipated that ownership rates may skyrocket as high as 80% in the medium to long term.

As of 2018, Thailand’s electronic industry constituted approximately a quarter of national exports. Combined with a 4.0% economic growth projection in 2019, the electronic and smart appliances industry in Thailand is expected to remain strong in the short to medium term. As a company with a dedication towards meeting shifting consumer priorities and fluctuating market demands, it is anticipated that Mitsubishi Electric Consumer Products will continue to hold a strong market position both domestically and internationally for many years to come. ■

NEWS BITES

Prospect of Thailand’s smart home market: Thai Samsung Electronics Co., Ltd. got the first quarter of 2019 underway with the Samsung Consumer Electronic Conference. Under the concept of “Connected Living”, the conference showcased the new technology and innovative electronic products designed for the Smart Home. During the conference, Mr. Chalermpong Darongsuwan, Vice President of Thai Samsung Electronics, presented the market trend of consumer electronics in Thailand. Currently, Thailand’s home electronics appliance market is valued at 73 billion baht. The premium electronics market is forecasted to grow by 20% within this year due to higher customer demand for innovative products. He also referred to the data from a report by PricewaterhouseCoopers which shows that the Smart Home market value is projected to hike from 645 million baht in 2016 to 2.5 billion baht in 2020 at a remarkable average annual growth of 40%.

Electrical and electronics industry to thrive in 2019: On 7 February 2019, Mr. Somboon Hortrakul, Director of the Electrical and Electronics Institute (EEI), stated in a briefing that the thriving Thai electrical and electronics industry is undergoing a period of continued expansion as can be seen from the growth in most major shipment destinations. For exports, the country’s electrical and electronics shipment value in 2018 stood at USD 62.1 billion, a 2.16% increase from 2017. Based on the 2018 data, Southeast Asia was the top export destination, accounting for 18.5% of the total value (+5.38% from the previous year), followed by the United States at 17.9% (-2.30%), Europe at 14.5% (+8.64%), Japan at 11.5% (+12.2%) and China at 9.03% (-0.49%). In 2019, Thai export shipments were projected to grow by 3.26% to USD 64.1 billion. At home, the manufacturing production in the electrical and electronics industry was forecasted to rise in value by 2.97% in 2019. In particular, the electrical appliances will increase by 3.38% while electronics will increase by 2.56%.

BOI'S MISSIONS AND EVENTS



On 7 February 2019, the Thailand Board of Investment, led by its Secretary General, Ms. Duangjai Asawachintachit, held a consultative meeting with the Joint Foreign Chambers of Commerce in Thailand (JFCCT), led by JFCCT Chairman, Mr. Stanley Kang. More than 100 representatives from foreign chambers of commerce and other relevant agencies joined the event at Centara Grand at Central Plaza Ladprao, Bangkok. In the meeting, the BOI shared the latest updates on Thailand's investment measures and policy, while the relevant parties took the opportunity to discuss ways of promoting Thailand as a more favorable investment destination for investors.

On 11 February 2019, Ms. Duangjai Asawachintachit, Secretary General of the Thailand Board of Investment, gave a speech in a seminar entitled "EEC and Thailand's Law Reform Opportunity for New Investment" at the Thailand Institute of Justice (TIJ).



The speech was on the topic of Thailand's policy direction in promoting investment, especially in the special economic zones, as well as new investment promotion measures and special measures being introduced to stimulate investment during the Thailand Investment Year. The seminar's participants comprised approximately 100 Japanese investors in Thailand.



On 24 January 2019, Mr. Chokedee Kaewsang, Deputy Secretary General of the Thailand Board of Investment, welcomed Mr. Yang Wei-qun, Deputy Director General of the Department of Asian Affairs, Ministry of Commerce of the People's Republic of China, and a delegation of 6 officials from the Ministry who had come to discuss approaches to promoting Chinese investment in Thailand. The meeting also included a discussion on the linkage between various industries under the Thailand 4.0 and Made in China 2025 plans in accordance with the Belt and Road Initiative of China, which will promote Thailand as a production base in the ASEAN region.



On 9 February 2019, Ms. Bonggot Anuroj, Deputy Secretary General of the Thailand Board of Investment, joined a seminar on "Investment and Trade Opportunities between Thailand and North East India". Held at Centara Grand at Central World, Bangkok, the seminar was organized by the Embassy of India in Bangkok on the occasion of a group of entrepreneurs from North East India traveling to Thailand in order to study opportunities for business cooperation between companies from the two countries.



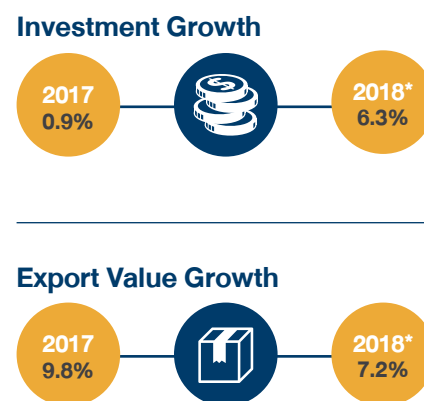
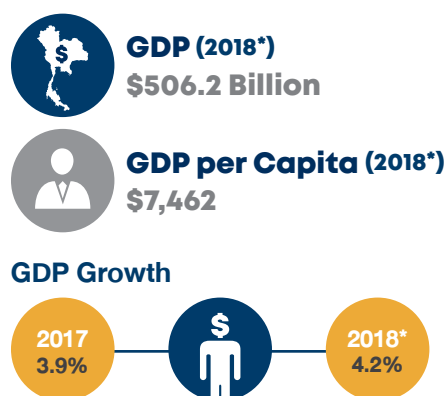
On 31 January 2019, Mr. Narit Therdsteerasukdi, Deputy Secretary General of the Thailand Board of Investment, participated in a High Level Panel Discussion as part of the 2nd official meeting of the France-Thailand Business Forum at the Plaza Athénée Hotel, Bangkok. The primary aim of the forum was to promote collaboration between the two countries in terms of trade and investment, especially in the Eastern Economic Corridor (EEC). The forum brought together representatives from the Ministry of Energy, the Ministry of Commerce, the Ministry of Foreign Affairs and the National Innovation Agency as well as 60 French investors in the fields of transport infrastructure, smart city development, energy, bio-economy, agriculture, food and tourism.



During 6-8 February 2019, Ms. Ratchanee Wattanawisitporn, Director of the BOI Frankfurt Office, along with other BOI representatives, organized an investment promotion activity at the Integrated System Europe (ISE) 2019 event, which took place in Amsterdam, the Netherlands. The ISE is one of Europe's largest exhibitions on digital technology and digital products. In the event, the BOI representatives met with many companies in the digital, electronics and energy industries, several of whom expressed an interest in investment opportunities in Thailand.

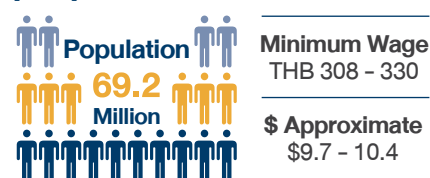
THAILAND ECONOMY-AT-A-GLANCE

Key Economic Figures



Note: *Estimated value | Source: NESDC

Market Profile (2018)



International Competitiveness



Export Figures

(January - December 2018)

Export value (USD million)

Jan - Dec 2017 : 236,694.18

Jan - Dec 2018 : 252,486.40

Year-on-year Growth : 6.7%

Top 10 Export Markets

Rank	Value (USD Million)	YoY Growth	Share
China	30,175	2.3%	12.0%
US	28,016	5.4%	11.1%
Japan	24,942	13.0%	9.9%
Vietnam	12,958	11.8%	5.1%
Hong Kong	12,524	1.8%	5.0%
Malaysia	11,627	12.4%	4.6%
Australia	10,778	2.6%	4.3%
Indonesia	10,069	13.9%	4.0%
Singapore	9,416	13.6%	3.7%
Philippines	7,898	13.7%	3.1%

Top 10 Exports

Goods / Products	Value (USD million)	YoY Growth	Share	Goods / Products	Value (USD million)	YoY Growth	Share
1: Motor cars and parts	28,952	7.1%	11.5%	6: Refined fuels	9,316	29.7%	3.7%
2: Computers and parts	19,752	6.8%	7.8%	7: Chemical products	9,180	23.0%	3.6%
3: Precious stones and jewellery	11,978	-6.6%	4.7%	8: Electronic integrated circuits	8,334	0.8%	3.3%
4: Rubber products	11,024	7.5%	4.4%	9: Machinery and parts	8,202	8.3%	3.2%
5: Plastic beads	10,330	19.1%	4.1%	10: Steel and steel products	6,253	12.5%	2.5%

Source: Ministry of Commerce

Exchange Rates

(Data as of 21 January 2019)



Source: Bank of Thailand

Tax Rate

Corporate Income Tax: 0 - 20%

Personal Income Tax: 5 - 35%

VAT: 7%

Withholding Tax: 1 - 10%

Source: the Revenue Department

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.

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