

THAILAND BOARD OF INVESTMENT www.boi.go.th

2 | APRIL 2017

BOI NET APPLICATION

(January - February 2017)

Foreign investment by target sector

Electrical & Electronics

9 projects

25.88 M

Agro Processing

5 projects

68.35 M





Digital 14 projects 4.03 M

Automotive

8 projects 71.43 M

Aerospace

projects

- M



Tourism projects - M

Petrochemicals

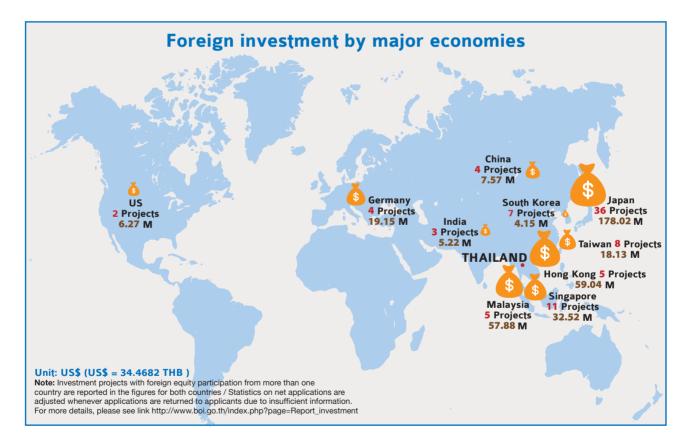
3 projects 9.86 M



Medical 4 projects 53.53 M



Textile & Garment 1 projects 1.07 M



TIR CONTENT April 2017

- 02 | BOI Net Application
- 03 Cover Story
- BOI aims for solid growth in the medical industry 05 | Industry Focus
- The Hub of Wellness and Medical Services **08** Company Interview Otsuka group sees long-term potential in Thailand
- **09** News Bites
- **10 | Missions and Events**
- 11 | Thailand Economy-At-A-Glance
- 12 About BOI

APRIL 2017 I **3**

BOI aims for solid growth in the medical industry

hailand has been facing increasing rates of longevity and low fertility in its population, as the Thai government grapples with the issues of an ageing population and changing demographics.

The Asian Development Bank (ADB) forecasts Asia's elderly population to reach nearly 923 million by the middle of the century. As a result, the region is on track in the next few decades to become one of the oldest in the world. While public policies are being implemented in Thailand to meet this challenge, the government is also utilizing medical technologies and innovation to maintain and improve the quality of life of all Thais.

The BOI supports and is actively promoting investments in this sector

by expanding the incentive scheme to support more medical-related businesses with four main objectives.

First, to increase the living standards of Thais across the country by expanding medical services to rural areas.

Second, to reduce the leading causes of death in Thailand which are attributed to heart-disease, cancer, and kidney-related diseases.

Third, to increase health care accessibility ensuring that patients have access to immediate and quality care at medical facilities.

Fourth, to support traditional Thai medicines and treatments, which have considerable potential given the growing interest in alternative medicines.

Thailand Investment Review



Mrs. Hirunya Suchinai, Secretary **General of the** BOI, said, "The medical device industry plays a significant role in the government's economic reforms, which aims to provide a balanced and sustainable development policy to achieve national prosperity."

Incentives to expand to additional areas

First, Traditional Thai Medical Services businesses will receive A3 incentives with a 5-year CIT exemption on the condition that practitioners have an authorized license or traditional Thai medical institution certificate, while a health center must be certified and passed the TTM evaluation (TTM HA System) at an equal or higher standard than a community hospital.

Second, a Heart, Cancer and Kidney Specialist Center will receive A2 incentives with an 8-year CIT exemption on the condition that the center must have an effective plan to acquire qualified medical personnel and have the required medical devices and equipment as deemed appropriate by the Committee. The center must also have an authorized license from related agencies and follow the regulations of professional practices or other related standards issued by the Ministry of Public Health.

Third, hospitals will receive A2 incentives with an 8-year CIT exemption on the condition that they be located in 20 designated provinces with the lowest income-per-capita; in four border provinces in Southern Thailand - Satun, Yala, Pattani and Narathiwat; four districts in Songkhla including Chana, Na Thawi, Saba Yoi and Thepha; or in Special Economic Development Zones.

Fourth, transport services for patients, physicians or medical device companies will receive A3 incentives with a 5-year CIT exemption on condition that the company be approved by the related agencies and follow the regulations and standards in providing the patient's transport service and have advanced tools and equipment in accordance with standards issued by the Ministry of Public Health or other standards approved by the BOI.

According to the latest promotional incentives, investment in manufacturing of medical foods or food supplements, advanced medical devices, or products commercialized from public sector research can obtain A2 incentives including an 8-year CIT exemption plus merit-based incentives in which specific activities in the development of research, technology and innovation will be eligible for an additional expenditure deduction up to a 200% cap.

Government's strategic plan is right on track

The investment incentives are part of the Thai government's policies transition the country into a hub for wellness and medical services within 10 years. Its strategic plan, which is being implemented from 2016-2025, will turn Thailand into a medical hub focused on four major areas: wellness, medical services, academics and medical products. The medical device and technology sector has also been prioritized as a top target for investment.

With the government's assistance and incentive schemes, this sector has attracted rising investment. In the second half of 2016, investment applications increased from THB 4.41 billion (USD 126 million) in July to THB 6.88 billion (USD 197 million) in December.

While research-based technology and innovations are taking shape, investors in the medical device industry believe there is a need for more investments to accelerate innovation and commercialization of inventions, which will ultimately enhance technology and knowledge transfer, paving the way for Thailand to become the medical hub for this region in the near future.

APRIL 2017 I 5



The Hub of Wellness and Medical Services

B uilding on its world-class infrastructure in medical products and services, Thailand is actively pursuing its ambition of becoming the leading destination for medical tourism.

In 2015, the medical tourism segment maintained its record of strong growth, with local media reporting revenue from medical tourism accounting for roughly 0.4% of GDP at a value of THB 105 billion (USD 3 billion) from income earned by private hospitals. This represents revenue growth of up to 15% year-on-year.

While the health services segment of the tourism industry represents only a fraction of overall arrivals and revenue, it is a growing and increasingly profitable market. Current estimates indicate that roughly two million foreign patients come to Thailand annually for some form of medical treatment. This number is set to grow as the government is firmly behind continuing to build Thailand as a regional powerhouse in-line with moving the country forward through the "Thailand 4.0" economic model, for which Medical Hub is one of ten key strategic growth engines.

In-line with the growth, foreign investment in the Thai health sector is also increasing. Greater overseas interest, from Japan, Malaysia and Singapore in particular, should serve as a spur to locally-based service providers, which will need to work harder to maintain their competitive edge in the market as the segment is expected to consolidate in a bid to expand its reach.

Private hospitals are taking action. For example, Bangkok Dusit Medical Services (BDMS) is investing THB 4 billion (USD 122.7 million) on new facilities at its Bangkok Hospital. BDMS is adding 300 beds to be Hospitals in **Bangkok** serve more than 43% of medical tourists coming to Asia. In-line with this growth, foreign investment in **Thailand's** health sector is also increasing.

Thailand's vitamin and dietary supplements market has high potential due to strong demand, as Thais are among the top consumers of vitamins and dietarv supplements in the world. In 2013, the sales value of dietary supplements in **Thailand was** estimated at USD 833 million, with a projected annual growth rate of 10-15 percent over the next five years, reaching USD 1.7 billion in 2018. reserved for overseas patients, of which 100 will be dedicated to customers from the Middle East and Myanmar with the balance for patients from western countries.

Boosting Thailand's Medical Hub status

In 2016, the Thai Government announced a ten-year strategic plan to be implemented from 2016-2025. The plan aims to develop and consolidate the economy as a hub for wellness and medical services. It further envisages four interweaving strands of related activities: Wellness (including preventive treatments), provision of medical services, outputs from academic research, and medically-related products such as vaccines and medical technology and equipment. Collectively, these strands will greatly strengthen the healthcare sector.

Currently, the national infrastructure for healthcare provision is comprised of over 1300 hospitals. This includes over one thousand government-funded hospitals and more than three hundred private hospitals. To strengthen the stated ambition of becoming the hub for the provision of wellness and medical services, the Thai government is emphasizing the importance of quality, especially through external assessment by accrediting institutions. Accreditation means that leading providers of medical infrastructure can serve as useful models for other institutions.

Quality Healthcare through Quality Accreditation

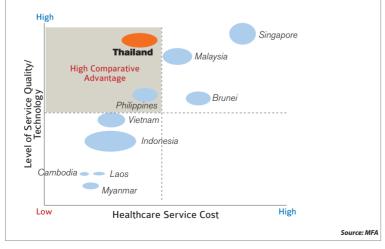
The Joint Commission International (JCI) is considered the quality benchmark for global healthcare industries. To date, JCI has accredited 53 hospitals nationwide from Chiang Mai and Phitsanulok in the north to Phuket and Hat Yai in the south. Additionally. the Healthcare Accreditation Institute of Thailand has awarded four hospitals with the Advanced Healthcare Accreditation (HA). The Institute's stated mission is to support, enhance and develop the quality of healthcare provision. Recognition by domestic and international agencies helps convey trust and a balance between the ongoing quest for guality medical services and the broader goal of national economic development.

A 2015 consultancy white paper described the development of facilities for healthcare provision in Tier-2 cities. These regional cities, including Chiang Mai, Khon Kaen and Phuket, have comparatively large populations but healthcare infrastructure that is less developed than in Bangkok. Tier-2 cities serve as important regional hubs for healthcare provision, including specialist treatment and care. As such, these cities can lead in the development of the quality of infrastructure in provinces that are geographically removed from the capital thereby strengthening the medical footprint for quality services and care nationwide.

Data from the Economist Intelligence Unit and the World Health Organization (WHO) suggests that Thailand invests 4.2% of GDP in healthcare (2012 data). This is some way behind OECD countries such as the US, Germany and Japan, but is above average for the member-states of the ASEAN Economic Community (AEC). By 2015, government spending on healthcare was THB 12.5 billion (USD 376.3 million), while privatelyfunded healthcare amounted to THB 4 billion (USD 115.8 million). A critical success factor is the recruitment, training and retention of qualified medical professionals, who are currently in comparatively low numbers in the Thai healthcare infrastructure.

Realizing that a shortage of qualified healthcare professions may impede efforts to achieve satisfactory levels of economic and social development, part of the strategic initiatives focus on enhancing current human and technological resources. Generous benefits for incoming expatriate medical professionals and educators address the other important dimension of human resources.

Competitiveness of Thai Private Hospital vs. Others in ASEAN Countries



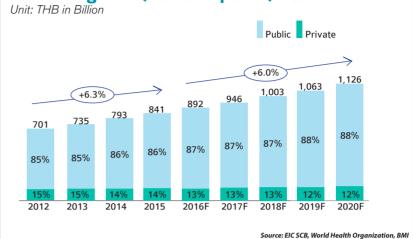
Pharmaceuticals playing to Thailand's strengths

While wellness and medical tourism represents a huge and growing segment, the industry extends further into related sectors that also play to Thailand's strengths. The country's pharmaceutical market is considered to be the largest and most developed in Southeast Asia, and is projected to achieve the rank of the eighth largest market in the entire Asia-Pacific region in 2017. Against this backdrop, the pharmaceutical market in ASEAN is growing at an unprecedented pace. Thailand's export of pharmaceutical products has grown steadily over the past five years, more than 6% annually, with most exports going to countries in the ASEAN region. The pharmaceutical manufacturing industry, both brand name and generic, has ample room to grow in Thailand, not only in increasing exports, but also as substitution for imported drugs, and is thus encouraging investment in this sector.

The pharmaceutical market in Thailand is expected to increase from THB 203 billion (USD 5.91 billion) in 2015 to THB 325.3 billion (USD 9.47 billion) by 2020, according to research and consulting firm GlobalData. The company's report from November 2016 states that the primary driver of this strong pharmaceutical expansion in Thailand is the treatment of chronic diseases in the elderly population. Obesity and other noncommunicable diseases such as diabetes, hypertension, and cancer have increased over the past few years due to an increasing elderly population and less healthy lifestyles.

As the country moves towards becoming Asia's healthcare hub through its medical tourism sector, the pharmaceutical industry is riding on its success, says the report.

The BOI will promote the manufacture of pharmaceuticals and medical devices to strengthen competitiveness in this industry. As part of the new policy, the BOI offers pharmaceutical manufacturers a five-year corporate income tax exemption. If such entities apply for BOI privileges in 2017, they will receive a corporate income tax exemption for up to eight years.



Increasing Healthcare Expenditures in Thailand

Building on world-class medical infrastructure

The government's ambitions to turn a comparative advantage into a competitive advantage through Thailand as a regional hub for wellness and healthcare are strengthened through an acknowledged world-class medical infrastructure. This is a crucial dimension to implementing the stated vision, while the country must further pursue advancements and deepen its on-going commitment to the vital contributions made by science and technology to both the medical sector.

The BOI, in setting out a strategic policy to promote Thailand as a medical hub, understands and supports the increased demand in the healthcare market, which can lead to greater opportunities in medical services, as well as the manufacture of pharmaceuticals and medical devices, which will contribute to strengthening Thailand's strong position.

With the Thai government's progressive policies focusing on innovation and long-term sustainable growth, and within the frame-work of Thailand 4.0, Thailand is well-placed to realize its stated vision of becoming the foremost global destination for medical tourism, and a hub of wellness and medical services driving economic and social development both domestically and throughout the region.

Medical devices in Thailand show the best growth opportunities, especially in surgical procedure equipment, diagnosis equipment and devices for lung and heart diseases treatment.

8 I APRIL 2017 COMPANY **INTERVIEW**

Otsuka group sees long-term potential in Thailand

he Otsuka group of companies began operations in Tokushima, Japan in 1921 with the ambitious objective to improve people's health worldwide.

In 1973, the group undertook its first international expansion, establishing Thai Otsuka Pharmaceutical in Bangkok, Thailand. Since that era the company has strived for over 40 years to enhance the health and quality of life of all Thais.

In 2015, Otsuka group companies generated revenues of JPY 1.45 trillion (approximately USD 12 billion), making Otsuka group the second largest pharmaceutical company in Japan.

The largest and fastest growing pharmaceutical market

The pharmaceutical market in Thailand has been growing at a steady pace, with a value of over THB 140 billion (USD 4 billion) in 2016.

Mr. Shinsuke Yuasa, president of Thai Otsuka, revealed three key reasons behind this promising market landscape which are driving demand for pharmaceutical products: increasing income per capita, resulting in increased healthcare spending, an increasing ageing population, which requires additional healthcare services, and an increase in health consciousness among the population.

Today, Thai Otsuka's product portfolio comprises four main business categories intravenous solutions, clinical nutrition including medical foods, pharmaceutical products, and medical devices.

When Otsuka started its operations in Thailand, its core business was focused on basic intravenous solutions. The company successfully captured the largest market share in Thailand and today, Thai Otsuka is well-recognized as a market leader with high quality products. The company achieved double-digit growth rate in 2016, far outpacing the industry's growth rate in Thailand.

Thai Otsuka is building on this success by expanding its production vertically over time.



Mr. Shinsuke Yuasa, President of Thai-Otsuka

Today it has a full-line in-house production processes, one of the largest in the region.

Beginning in 1989, seeing considerable market potential, the company expanded its business into medical foods. Thanks to the vision of its management team, the company has been enjoying double-digit annual revenue growth over the past five years in medical foods, for which Thai Otsuka is the only manufacturer in Thailand. The company has just built a new production plant to meet the growing demand, with a current production capacity four times larger than the previous plant. Thai Otsuka is looking to strengthen its entire supply chain by attracting its suppliers to Thailand to benefit both the company and the country's competitiveness in this important industry.

Mr. Yuasa noted that the company's aspiration to improve the health of all Thais through the company's high-quality products at affordable prices also aligns with the Otsuka group's philosophy.

Mr. Yuasa stated the company's aspiration to improve the health of all Thais through the company's high-quality products at affordable prices.

The top destination for medical-related investments

Mr. Yuasa discussed the key factors that made Thailand an attractive destination for Otsuka's first entry to market outside Japan over 40 years ago.

Market demand was, and remains, a critical factor for Otsuka when making business investment decisions. And Thailand offered immediately accessible market demand as well as strong potential for growth.

Production elements were a second critical factor the company considered. In this regard, Thailand was well-endowed with an abundance of raw materials, strengthening its competitive advantage in this industry, which has a strong and integrated supply chain.

Production plants in Thailand are also operating at a global standard and at a competitive cost, capable of supplying markets in Thailand, neighboring countries, Japan and throughout the Asia-Pacific area.

Furthermore, the company appreciates the exceptional quality of its Thai staff, and is confident in the high level of labor skills among the Thai people, as seen in the company's collaborations with both Ramathibodi and

Thai Otsuka is looking to strengthen its entire supply chain by attracting its suppliers to Thailand to benefit both the company and the country's competitiveness in this important industry.

Siriraj hospitals in research and development in order to create innovate products, and in particular medical foods.

Finally, the government's support in offering tax and non-tax incentives was a factor. Mr. Yuasa noted that. The Thai government has provided considerable support to our business. The decision to expand the company's production base to Thailand was approved easily by Otsuka's leadership because of the BOI's attractive incentives.

The company's track record demonstrates its strong commitment to Thailand, Simultaneously the country's significant growth potential enables companies to succeed by moving into other high-growth sectors. These two reinforcing factors ensure that Thailand will remain a central part of the Otsuka group's growth strategy in Asia.



Robots coming to Sririraj Hospital's pharmacies

Siriraj Hospital plans to introduce eight robots into the dispensing process at its pharmacies to improve patients' safety and speed up its services. The machines can help increase accuracy in preparing prescriptions and improve patient safety. In the initial stage, robots will be installed at the pharmacy for the Medicine Department, one of the hospital's busiest departments. They will be ready for use at the end of this year. The department handles more than two million lists of medicine per year for patients. The robots were created in a collaboration between Siriraj Hospital, the Thailand Centre of Excellence for Life Sciences, Institute of Field Robotics' King Mongkut's University of Technology Thonburi and Supreme Hitera Co., Ltd. The machines will mainly be used to prepare medicine that comes in package and blister packs, working to 100% accuracy in preparing medicines for patients, and are expected to help cut wait times for pharmacy services.

Samitivej named top-10 medical tourist hospital globally

Samitivej Hospital has won a place in the top 10 of the world's best hospitals for medical tourists in 2017, according to Medical Travel Quality Alliance's (MTQUA) annual list. With more than three decades of international recognition as a centre of excellence in medical care to its credit, Samitivej Hospital made the top 10 for the first time. MTQUA reviews hospitals in Asia, the Middle East, Europe and the Americas for excellence in treating and caring for medical tourists from around the world. Medical tourists come from all countries and travel globally to get the best medical attention they can afford. The MTQUA team conducts site visits and selects hospitals based on the quality of medical treatment and on several non-clinical factors including quality of care, communications, marketing, value for money, cultural and social sensitivity, privacy, safety, and leadership support of medical tourism.

10 I APRIL 2017 BOI'S MISSIONS AND EVENTS



BOI Deputy Secretary General, Ms. Duangjai Asawachintachit (second from left), led an investment mission to the Netherlands and Belgium from March 6-10, 2017. The mission included an investment seminar in the Hague and Brussels, company visits and networking meetings with several organizations involved in agrotech, food processing, food biotech, high-tech horticulture, agro-industry and R&D in the agro and food industry.



On March 9, 2017, Mr. Chokedee Kaewsang, BOI Deputy Secretary General (fourth from right), and Mr. Akihiko Uchikawa, Economic Minister, Embassy of Japan (left), co-chaired the 7th meeting of the Sub-Committee on Enhancement of Business Environment (EBE) under the Japan-Thailand Economic Partnership Agreement (JTEPA) at the Landmark Hotel in Bangkok. The meeting included delegates from related Thai government agencies, the Japanese government and private sector. The participants discussed how to improve cooperation and further enhance the business environment in Thailand.



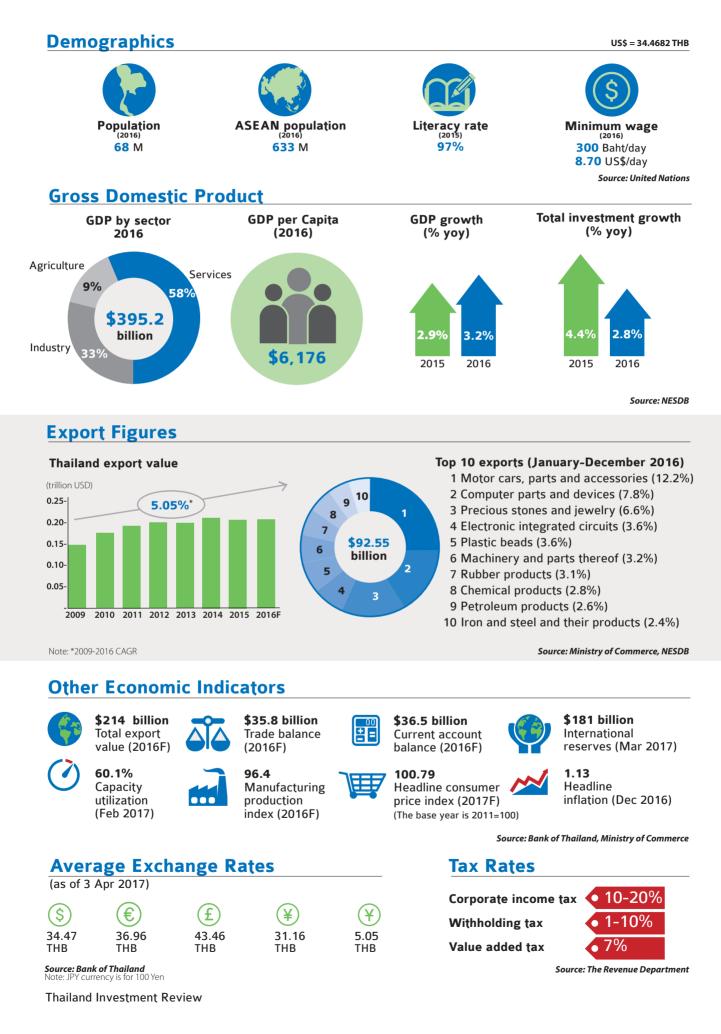
On March 28, 2017, Mr. Chokedee Kaewsang, BOI Deputy Secretary General (fifth from left) gave a presentation on "Thailand: Business Environment and Investment Policy Update" at the Lotte Seoul Hotel. Mr. Wasawasdee Choocherd from the Revenue Department (far left), Mr. Apichat Prasertsud from the Department of Business Development (second from left) and Dr. Kannika Taenkhum from the Department of Labor Protection and Welfare (far right) also gave presentations at the seminar. There were 170 Korean businessmen from 106 companies in attendance. In the afternoon, the BOI also held one-on- one meetings in order to exchange and discuss investment information and opportunities regarding investing in Thailand.



The Director of the BOI Shanghai Office, Ms. Aree Ngamsiripattanagul (fifth from right) together with officers from BOI's Bangkok Headquarters, led an investment mission to Chengdu, Sichuan province, China from March 12-16, 2017. The mission's activities included a seminar on "Investment Opportunities in Thailand" and meetings with Chinese companies involved in electrical energy, machinery, medical devices and electric trains and equipment.



The Director of the BOI Taipei Office, Ms. Ratanawimon Naree Sukreekhet, led an investment mission in Taiwan from March 19-23, 2017. Mr. Nanthapol Sudbanthad, Senior Investment Promotion Officer Bureau 1 gave a presentation on "Development and Opportunities in Thailand for Agrofood Industry" on March 21, 2017 in order to attract investors in this sector.



12 I APRIL 2017 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.



Head Office, Office of the Board of Investment 555 Vibhavadi-Rangsit Road, Chatuchak, Bangkok 10900 Thailand Website: www.boi.go.th Email: head@boi.go.th

New York

Thailand Board of Investment, New York Office 7 World Trade Center, 34th FL, Suite F 250 Greewich St, New York, NY 10007 USA Tel: +1 212 422 9009 Fax: +1 212 422 9119 Email: nyc@boi.go.th

Los Angeles

Thailand Board of Investment, Los Angeles Office Royal Thai Consulate-General Boulevard, 3rd FI, Los Angeles, CA 90004 USA Tel: +1 323 960 1199 Fax: +1 323 960 1190 Email: boila@boi.go.th



Paris

Thailand Board of Investment, Paris Office Ambassade Royale de Thailande 8, Rue Greuze 75116 Paris, France Tel: +33 1 5690 2600-1 Fax: +33 1 5690 2602 Email: par@boi.go.th

Frankfurt

Thailand Board of Investment, Frankfurt Office Bethmannstr 58, 5.0G 60311 Frankfurt am Main Federal Republic of Germany Tel: +49 69 9291 230 Fax: +49 69 9291 2320 Email: fra@boi.go.th

Stockholm Thailand Board of Investment, Stockholm Office Stureplan 4C, 4th Fl, 114 35 Stockholm, Sweden Tel: +46 8 463 11 58, 72, 74-75 Fax: +46 8 463 11 60 Email: stockholm@boi.go.th

Mumbai

Thailand Board of Investment, Mumbai Office Royal Thai Consulate General Express Tower, 12th Fl, Barrister Rajni Petel Marg, Nariman Point, Mumbai, Maharashtra 400021 Tel: (91 22) 2204 1589-90 Fax: (91 22) 2282 1525 Email: mumbi@boi.go.th

Taipei

Thailand Board of Investment, Taipei Office Taipei World Trade Center, 3rd FI, Room 3E40, No.5, Xin-yi Road, sec.5, Taipei 110, Taiwan, R.O.C. Tel: +88 6 2 2345 6663 Fax: +88 6 2 2345 9223 Email: taipei@boi.go.th

Seoul

Thailand Board of Investment, Seoul Office #1804, 18th FI, Daeyungak Tower 25-5, 1-KA, Chungmu-Ro, Chung-Ku, Seoul, 100-706, Korea Tel: +82 2 319 9998 Fax: +82 2 319 9997 Email: seoul@boi.go.th

Beijing

Thailand Board of Investment, Beijing Office Royal Thai Ambassy, No.40 Guang Hua Road, Beijing, 100600, P.R. China Tel: +86 10 6532 4510 Fax: +86 10 6532 1620 Email: beijing@boi.go.th

Shanghai

Thailand Board of Investment, Shanghai Office Royal Thai Consulate General 2nd FI, 18 Wanshan Road, Changning District, Shanghai 200336, P.R. China Tel: +86 21 6288 3030 ext.828,829 Fax: +86 21 6288 3030 ext.828.827 Email: shanghai@boi.go.th

Guangzhou

Thailand Board of Investment, Guangzhou Office Royal Thai Consulate General, No. 36 Youhe road, Haizhu District, Guangahou, P.R.C. 510310 Tel: +86 20 8385 8988 ext.220-225 +86 20 8387 7770 (direct line) Fax: +86 20 8387 2700

Email: guangzhou@boi.go.th

Tokyo

Thailand Board of Investment, Tokyo Office Royal Thai Ambassy, 8th Fl, Fukuda Building West, 2-11-3 Akasaka, Minato-ku, Tokyo 107-0052 Japan Tel: +81 3 3582 1806 Fax: +81 3 3589 5176 Email: tyo@boi.go.th

Osaka

Thailand Board of Investment, Osaka Office Royal Thai Consulate General, Bangkok Bank Building, 7th Fl, 1-9-16 Kyutaro-Machi, Chuo-Hu, Osaka 541-0056 Japan Tel: +81 6 6271 1395 Fax: +81 6 6271 1394 Email: osaka@boi.go.th

Sydney

Thailand Board of Investment, Sydney Office Level 1, 234 George Street, NSW 2000, Australia Tel: +61 2 9252 4884 Fax: +61 2 9252 2883 Email: sydney@boi.go.th