

# TIR

RECYCLE  
REUSE  
REDUCE

REPRODUCE  
REPROCESS

## CIRCULAR ECONOMY

SHAPING  
A SUSTAINABLE  
FUTURE

# CONTENTS

02

BOI NET APPLICATION

03

COVER STORY

05

INDUSTRY FOCUS

07

SHORT ARTICLE

08

COMPANY INTERVIEW

10

BOI'S MISSIONS & EVENTS

11

THAILAND ECONOMY AT-A-GLANCE

12

ABOUT BOI

## BOI NET APPLICATION

JANUARY-SEPTEMBER 2019



**TOTAL INVESTMENT**  
**1,165**  
Projects  
**US \$10,401.62**  
Million



**TOTAL FOREIGN INVESTMENT**  
**689**  
Projects  
**US \$6,733.97**  
Million

## FOREIGN INVESTMENT BY TARGET SECTORS

Source: Ministry of Commerce

	<b>ELECTRONICS</b> <b>94</b> Projects   <b>US \$1,669.60</b> Million		<b>AUTOMOTIVE</b> <b>60</b> Projects   <b>US \$1,112.78</b> Million
	<b>PETROCHEMICALS &amp; CHEMICALS</b> <b>45</b> Projects   <b>US \$514.04</b> Million		<b>TOURISM</b> <b>9</b> Projects   <b>US \$290.50</b> Million
	<b>DIGITAL</b> <b>93</b> Projects   <b>US \$192.35</b> Million		<b>AGRICULTURE &amp; FOOD PROCESSING</b> <b>48</b> Projects   <b>US \$316.82</b> Million
	<b>BIOTECHNOLOGY</b> <b>4</b> Projects   <b>US \$141.52</b> Million		<b>MEDICAL</b> <b>12</b> Projects   <b>US \$82.28</b> Million
	<b>AUTOMATION &amp; ROBOTICS</b> <b>5</b> Projects   <b>US \$25.50</b> Million		<b>AEROSPACE</b> <b>2</b> Project   <b>US \$18.05</b> Million

## MAJOR FOREIGN INVESTMENTS

Unit: US\$ = 30.2 THB as of 1 November 2019 (Bank of Thailand: Weighted - average Interbank Exchange Rate)

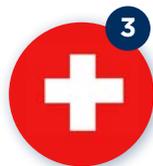
Note: Investment projects with foreign equity participation from more than one country are reported in the figures for both countries. Statistics on net applications are adjusted whenever applications are returned to applicants due to insufficient information. For more details, please see [https://www.boi.go.th/index.php?page=statistics\\_oversea\\_report\\_st](https://www.boi.go.th/index.php?page=statistics_oversea_report_st)



**1**  
**JAPAN**  
**167** Projects  
**US \$1959.83**  
Million



**2**  
**PEOPLE'S REPUBLIC OF CHINA**  
**139** Projects  
**US \$1,504.60**  
Million



**3**  
**SWITZERLAND**  
**15** Projects  
**US \$387.75**  
Million



**4**  
**TAIWAN**  
**44** Projects  
**US \$319.87**  
Million



**5**  
**SINGAPORE**  
**88** Projects  
**US \$308.08**  
Million



**6**  
**HONG KONG**  
**44** Projects  
**US \$295.93**  
Million



**7**  
**NETHERLANDS**  
**30** Projects  
**US \$195.46**  
Million



**8**  
**AUSTRALIA**  
**11** Projects  
**US \$151.13**  
Million



**9**  
**UNITED STATES OF AMERICA**  
**24** Projects  
**US \$101.62**  
Million



**10**  
**SOUTH KOREA**  
**21** Projects  
**US \$80.53**  
Million

For more details, please see [www.boi.go.th](http://www.boi.go.th)

# THE NEW ECONOMIC SOLUTION



**Circular Economy (CE) is not just a trendy buzz word, it's a new reality, and an opportunity, for companies all around the world. Major economies around the globe have started taking action to shift towards CE. The European Union adopted the Circular Economy Action Plan in 2015. The Netherlands aims to be a 100 percent CE economy by 2050, while Finland's goal is to be a leading CE country by 2015. Recently, Thailand stated that the country planned to implement CE within the Eastern Economic Corridor (EEC) special investment zone.**



This fundamental shift has been caused by a growing realization that the old economy model has proven itself to be unsustainable. In the traditional "Take-Make-Waste" linear model, resources are consumed during production, leaving manufacturing waste. The product then is consumed, leaving packaging waste, and finally, at the end of its useable life cycle, the product itself becomes waste. This linear economy model becomes simply not sustainable. Increases in population and consumption lead to more waste and depletion of natural resources which inevitably worsens the climate change problem, that in turn accelerates resource scarcity. Thus, the "Circular Economy" has emerged as an alternative economic approach which searches for opportunities to create value at all levels of the

production and consumption process. This economic model is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems.<sup>1</sup> The global shift toward CE not only has significant environmental benefits, it also creates business opportunities that can boost economies and increase profits through revenues gained from CE activities.

## **RESOURCE CONSUMPTION AND WASTES IN THAILAND**

Since 1960's, Thailand's economy has grown rapidly, recording an average annual growth of 7.5 percent during the economic boom.<sup>2</sup> As the country's economy grew, Thailand became a manufacturing base for several large industries and its economy became increasingly dependent on exports.

<sup>1</sup> <https://www.ellenmacarthurfoundation.org/circular-economy/what-is-the-circular-economy>

<sup>2</sup> <https://data.worldbank.org>



The impact of this growth is that consumption of mineral resources in the kingdom grew by 36 percent, and the import increased by 40 percent, in just ten years.<sup>3</sup> Further, in 2018 the Pollution Control Department reported that Thailand's managed industrial waste was as high as 22 million tons, with only one third of that material being recycled.

Economic growth in Thailand also supported the growth of the middle class, urban community expansion, and increasing domestic consumption. As a result, in 2018, Thailand created over 27 million tons of municipal solid waste. While the majority of that waste was recycled or correctly disposed of, only about 25 percent of the plastic waste was recycled. The data indicates that there are potential CE business opportunities for companies who can create value from this waste management gap.

Already, some Thai firms have taken the first steps to incorporate the concept of CE into their operations. For example, **Magnolia Quality Development Corporation**, a real estate developer, has committed to innovation for sustainability through its value chain, from increasing construction efficiency to reusing plastic waste in property development projects. The plastic waste is supplied by a sustainable partner from the petrochemical sector, **PTT Global Chemical**, who implemented its own upcycling ocean waste project. PTT Global Chemical also established a joint venture with a Japanese company to produce biodegradable,

compostable bio-based PBS plastic from agriculture products. In the telecommunication sector, True Corporation promotes e-waste recycling through its Mobile Phone Recycling Program. True then sends the devices along with other e-waste from its operation for recycling with support from its partners.

### GOVERNMENT SHOWS STRONG SUPPORT

Sustainable development has been a long-term commitment of Thailand. The renowned Sufficiency Economy Philosophy (SEP) by the late King Bhumibol has been applied in the National Economic and Social Development Plan since 2002. SEP along with the United Nations Sustainable Development Goals (SDGs) have been integrated in the country's 20-year National Strategy Framework and the current 5-year National Economic and Social Development Plan in which resource efficiency and waste management are emphasized.

In order to harness the growth potential of the CE and to address the depleting natural resources problem, Thailand has taken advantage of its rich agricultural raw materials, and the already established chemicals and plastics industry, to create the ambitious Biotechnology Policy Framework, and the Strategy to Develop Thailand's Bio-industry (2018-2027). In total, the bio-based economy, made up

of bio-energy, bio-chemicals and bio-pharmaceuticals, is projected to contribute up to 10 percent to the national GDP by 2037.

Apart from development of the bio-industries, becoming a green industry has been a goal of the Ministry of Industry (MOI). The ministry has focused on three key areas: improving manufacturing processes; waste management, reuse, and recycling; and promotions to encourage growth of circular enterprises. In addition, the government recently approved the Roadmap on Plastic Waste Management (2018-2030) to tackle plastic waste issues. The roadmap set a target for all plastic waste to be recycled by 2027. In support of these policies, the Board of Investment (BOI) grants favorable investment incentives for companies that use secondary raw materials, operate waste recycling business or improve production process to be environmentally friendly.

Thailand is well positioned to capitalize on the global shift towards CE. Government policies are seeking to provide a sound investment climate to those looking to start or expand businesses which utilize Thailand's abundance of resources, including agricultural raw materials, industrial waste, municipal solid waste, and plastics, to create increasingly efficient green industries.



<sup>3</sup> <http://www7.dpim.go.th/stat/>

# TRANSFORMING INDUSTRY: CLOSING THE LOOP

## BIG NAMES HAVE STARTED

In addition to its environmental benefits, the Circular Economy (CE) concept is designed to deliver lower production costs, increased competitiveness, reduced emissions and greater profitability. Transitioning to a Circular Economy has become an ambitious goal for firms, particularly those with manufacturing industries that require significant resource inputs. In alignment with their existing corporate sustainability strategies, several leading Thai corporations have incorporated the CE principals, Reduce-Reuse-Recycle, into their strategies, operations and business models. These companies have already started to see returns on their investments.

### SIAM CEMENT GROUP (SCG)

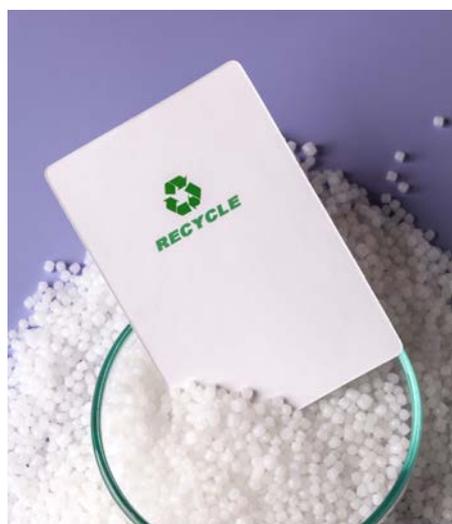
SCG produces cement-building materials, chemicals and packaging materials and currently incorporates CE principles through a three pillar strategy:

- 1) Reduce material use without sacrificing durability,
- 2) Upgrade and replace, and
- 3) Reuse and recycle. Directed by these strategies, SCG has created a number of innovative products, including packaging that requires less raw material to produce yet maintains the same durability. In addition,



production waste is reconditioned and used as an alternative to raw fuel and materials. In 2018, 313,000 tons of alternative raw materials and 131,000 tons of alternative fuel were generated from reconditioned waste products.<sup>1</sup> SCG plans to have 100% of its plastic packaging be recyclable by 2025.

Oceans Thailand” project, a two-year collaboration of PTTGC, the Tourism Authority of Thailand, and the Ecoalf Foundation from Spain, to upcycle ocean plastic waste into fashion products. Additionally, PTTGC is developing bioplastics products to supply the growing eco-friendly plastic market.



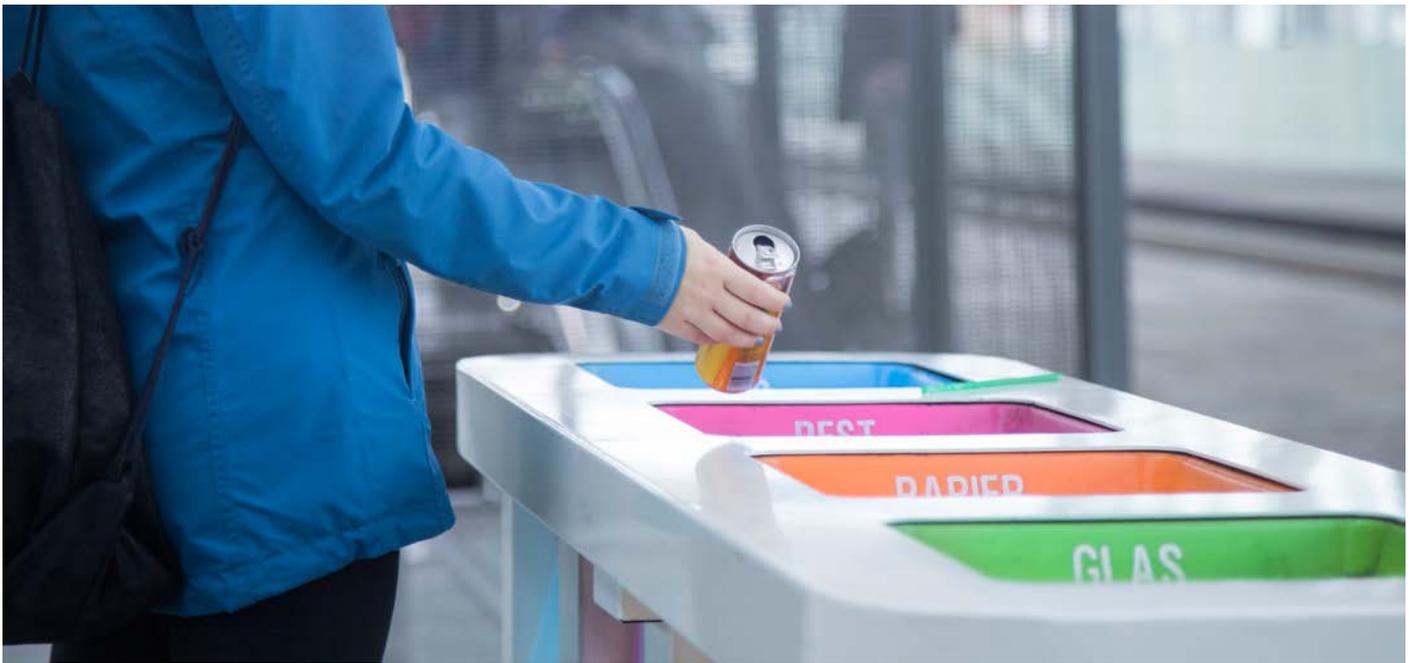
### PTT GLOBAL CHEMICAL (PTTGC)

PTTGC, an industry leader in crude oil/condensate distillation and chemical/petrochemical businesses, is also adding CE practices to the company's existing sustainability strategy. PTTGC aims to optimize resource use and manage waste throughout its value chain through the philosophy of Reduce, Reuse, Recycle, Renewable and Refuse. The company has identified plastic waste as a corporate risk and has implemented several projects to tackle the issue in collaboration with local and international partners. The company is engaged in the “Upcycling the

### INDORAMA VENTURES (IVL)

IVL, the world's largest PET polymer producer, integrates CE principles, along with UN Sustainability Development Goals, into the company's corporate strategies. The company develops innovative products that perform better and use less carbon by using alternative raw materials, including recycled feedstock. Using its expertise in plastic and polymer technologies, IVL aims to integrate closed loop capabilities in its product design and recycling practices. The company expanded into the recycling business to complete the recyclable loop and

<sup>1</sup> <https://www.scg.com/pdf/en/SD2018.pdf>



emphasize recyclability in all of its products. Between 2011 and 2018, IVL recycled 38 billion PET bottles and has committed to use 750,000 tons of post-consumer PET materials as feedstock in its global polyester production by 2025.<sup>2</sup>

**SHAPING THE FUTURE**

Fueled by a strong industry transformation policy framework from the government, Thailand is paving the way towards sustainable circular industry. The market for green goods is growing for companies that manufacture CE and eco-friendly products, but the supply has not yet met with the demand. Building collaborative inter-firm relationships is critical for the development of an effective and productive CE ecosystem. Larger firms are working to implement a circular economy in a business to business setting, while government agencies are collaborating with industry associations and experts to educate smaller businesses and entrepreneurs.

Driven by a seemingly endless supply of waste and a growing green consumption trend, the transformation from ad-hoc recycling to an intentionally engineered CE industry provides a sustainable and lucrative mechanism for growth. Businesses that focus on recycling and reuse of waste, producing recycled fiber, or recovering

resources from waste materials (urban mining) can benefit from investment incentives through the Thailand Board of Investment. Operators of such businesses are eligible to receive up to 8 years of corporate income tax (CIT) exemption. Due to Thailand’s large agricultural sector, there is an abundance of agricultural by-products and agricultural waste to be used as raw material for production.

Manufacturers of products from such waste are eligible for up to 3 years of CIT exemption, or up to 8 years of exemption with no cap if the raw

materials are used to manufacture fuel that produces electricity or steam.

It is an ideal moment to invest in Thailand’s CE industries. As businesses continue to develop innovative ways to use waste and by products and consumer demand for green products grows, Thailand is ready to **transform business operations and business models. Backed by strong government support and attractive investment incentives**, resource constraints are shifting into opportunities in Thailand for those who can harness advanced technologies to “close the loop.”



<sup>2</sup> <https://www.indoramaventures.com/storage/sustain/report/en/2018-sustainability-report.pdf>

# CIRCULAR IS THE NEW LINEAR

Consumers around the world are becoming more environmentally conscious and governments are encouraging industries to create circular supply chains that help turn the vision of a green economy into a reality. The world's largest economies, including China, the United States, Japan, the United Kingdom, and Germany, have all embraced this sustainability concept and are applying circular economy principles. However, beyond the environmental benefits of this approach, there are also economic advantages such as job creation and reduction in production cost. In fact, in October of 2018, Emma Navarro, president of the European Investment Bank, announced that the EIB has co-financed EUR 2.1 billion in circular economy investment projects in the last five years.<sup>1</sup> According to the Circular Economy Action Plan published by the European Commission in March 2019, there are over four million workers employed in the EU's circular economy related sectors in 2016, an increase of 6 percent from 2012.<sup>2</sup> The Commission also reported that circular economy could create approximately 2 million additional jobs in the EU by 2030.<sup>3</sup>

In Thailand, changing consumer behavior, purchase preferences, and attitudes towards consumption and sustainability indicate that the country has begun to transition from the linear “take-make-dispose” model, to the new circular paradigm of “make-use-return”. This shift is generating an increase in business, employment, and investment opportunities. There are several driving forces behind this disruptive movement, including greater environmental pressures, rising dynamics of social responsibility, and heightened sustainable development awareness among businesses and consumers.

## BEYOND RECYCLING: HOW THAI CONSUMERS EMBRACE CHANGE

Until recently, many Thai consumers had little awareness about global environmental issues. However, aided by the internet and social media, Thailand's new generation of consumers is more informed about their environmental impact. As an example, plastic waste has drastic effects on marine wildlife. Social media has helped raise this issue in consumer awareness. A recent story about a young dugong named Marium who died after ingesting plastic went viral online. This story touched the hearts of many Thais, changing the way they think about environmental conservation and plastic waste. The impact of this unlikely social media influencer on Thai awareness about plastic waste was picked up globally as a symbol of conservation by the UN Environment Programme, CNN, Smithsonian Magazine, and other international media.

## THE WAY FORWARD: SUPPORTIVE POLICIES FOR A CIRCULAR FUTURE

Thai government policies are being implemented to encourage circular economy focused investments, particularly in the Eastern Economic Corridor (EEC). These policies were presented at the ASEAN Business and Investment Summit, in November of 2019, under the theme “Circular economy, waste management and sustainability” with the objective of expanding regional cooperation among the public and private sector to enhance trade and investment that support circularity.<sup>4</sup>

## A NEW DYNAMIC OF INVESTMENTS IN THAILAND

Thailand's uniqueness and growing circular economy trends include:

### Sufficient economy

The Thai government embedded the sufficiency philosophy of His Majesty the late King Bhumibol in the country's 20-year National Strategy Framework (2017-2036) in six core areas: security, competitiveness enhancement, eco-friendly growth, social equality, human capital development, and public sector engagement.

### Waste management

The waste management segment offers opportunities for circular products and services. For example, the petrochemical industry's move toward zero landfill waste through the 3R concept (Reduce, Reuse, and Recycle); waste collection service startup Eimdee Recycle; GEPP, a private waste disposal startup from Chiang Mai; and the Energy and Environment Consulting Group, which provides both Waste-to-Energy and environmental sustainability solutions.

### Upcycling trends

The Circular Living Symposium 2019, held recently in Bangkok, revealed strategies for making lifestyle changes to avoid single use plastic in favor of circularity. Another upcycling example is Tlejourn, a social enterprise startup that partnered with the co-founder of Trash Hero Pattani to develop the “KUYA” Sandals, made with pulverized marine plastic debris.

The circular economy is creating vibrant investment opportunities across a range of Thai industries. The circular economy is providing opportunities for Thailand to adopt new resource productivity principles, to improve sustainable product design, and to be leaders in sustainable manufacturing.

1 Development Aid. (2018). First EIB Circular Economy Conference. Retrieved from <https://www.developmentaid.org/#/news-stream/post/32832/first-eib-circular-economy-conference>

2 European Commission. (2019). Report from the Commission to the European parliament, the council, the European economic and social committee and the committee of the regions on the implementation of the Circular Economy action plan.

Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1551871195772&uri=CELEX:52019DC0190>

3 European Investment Bank. (2018). The EIB in the circular economy.

Retrieved from [https://www.eib.org/attachments/thematic/circular\\_economy\\_en.pdf](https://www.eib.org/attachments/thematic/circular_economy_en.pdf)

4 UNIDO. (2019) UNIDO-EEC-TGO seminar promote circular economy, waste management and sustainability.

Retrieved from <https://www.unido.org/news/unido-eec-tgo-seminar-promote-circular-economy-waste-management-and-sustainability>

# TOTAL CORBION PLA DRIVES THAILAND TOWARDS A SUSTAINABLE FUTURE

**Thailand is pushing to transform from a traditional linear economic model to a circular economic model. Production of innovative materials is a key pillar of this transformation. The success of the Total Corbion PLA joint venture in Rayong demonstrates the readiness of Thailand to support investment in sustainable technologies.**

PLA, or Polylactic acid, is one example of these technologies. It is a fully bio-based bioplastic manufactured from Thai sugarcane instead of the fossil-based feedstock of traditional polymers. Because of this, PLA helps to reduce CO<sub>2</sub> emissions. PLA is also a biodegradable polymer, which offers several sustainable end-of-life options, including industrial composting, biogas plant treatment, and recycling. This bioplastic is just as durable and versatile as conventional polymers, and manufacturers are taking note—the worldwide PLA market has been growing at 10 to 20% per year for the past decade.

## SET UP FOR SUCCESS

Corbion began its investment journey in Rayong, Thailand in 2005, when the company began construction of its largest lactic acid plant. Over 1 million tons of lactic acid have been produced since operations commenced in 2007. Encouraged by the success of the lactic acid plant, Corbion invested in a 75 kiloton



lactide plant, which opened in 2011. Total has been active in Thailand for 30 years, with operations covering exploration and production, marketing of lubricants and special fluids, specialty chemicals, solar & renewable energies.

When Total and Corbion joined forces to create the Total Corbion PLA joint venture in 2017, the lactide plant was purchased and a 75 kiloton PLA plant was built on the same site in Rayong to create fully integrated production from sugar to PLA. Thailand's Board of Investment (BOI) also been an active partner to Corbion, Total, and now Total Corbion PLA in their development of sustainable products

through the promotion of a supportive investment environment. Total Corbion PLA highlighted that "Kingdom of Thailand has always been very hospitable and generous in supporting Corbion on its journey" and that the company "looks forward to continue to work with BOI, as they are knowledgeable and committed to transform Thailand into a strong global bio-economy hub."

## TOTAL CORBION PLA JOINT VENTURE

Total Corbion explained that Thailand is an ideal location for the production of PLA due



to “the abundance of responsibly grown sugar cane—the key raw material used for the production of Luminy© PLA—the ability to attract highly skilled staff, and excellent infrastructure.” Typically, sugarcane is used to produce sugar and energy, but when Corbion transforms sugarcane into lactic acid, its value is greatly increased. When the lactic acid is converted into PLA, which is just as strong and durable as traditional polymers, there is virtually no waste. All of the by-products are sold to interested customers as inputs to their production processes. As governments, brand owners and the general public worldwide have realized that the old linear economy model is not sustainable, the contributions that PLA can make to a circular economy are evident.

### THE FUTURE OF BIOPLASTICS IN THAILAND AND THE REGION

Total Corbion’s mission is to make Luminy © PLA available to as many consumers as possible. The circular economy is all about reducing waste, reducing pollution and increasing the use of renewable raw materials. The Thai government and supporting agencies are playing leading roles in the transition. The company

explained that “the southeast Asian region is also undergoing a sea change in regards to sustainability. Many countries and cities are banning plastic shopping bags in favor of mandatory use of reusable or compostable bags. In other countries there is a growing preferential treatment for bio-based products in government procurement in order to accelerate the transition to circular economy. The creation of infrastructure to collect and recycle plastic products or to channel compostable PLA products to industrial composting or biogas treatment facilities will help to reduce pollution and will drive resource efficiency.”

Total Corbion notes that “Thailand is taking clear steps to implement a circular economic model which, combined with the availability of resources and labor, provides a stable basis for further expansion of PLA manufacturing in both the country and the region.” Demand for sustainable materials driven by growing local, regional and global consciousness regarding sustainability and strong government support and attractive investment incentives make this an ideal time to invest in Thailand’s circular economy.

“  
**Demand for sustainable materials driven by growing local, regional and global consciousness regarding sustainability and strong government support and attractive investment incentives make this an ideal time to invest in Thailand’s circular economy.**  
 ”





**ASEAN-ROK COMMEMORATIVE SUMMIT**

**25 NOVEMBER 2019** H.E. General Prayut Chan-o-cha, Prime Minister of Thailand, attended the 2019 ASEAN-ROK Commemorative Summit held at BEXCO, Busan in South Korea. The Prime Minister was welcomed at the BOI exhibition booth by Ms. Ratchanee Wattanawisitporn, Director of Foreign Investment Marketing Division and Ms. Vannipa Pipupchaiyasit, Director of the BOI Office in Seoul. Both Thai private and public companies attended the event that was organized to promote Thailand's capabilities in Next-Generation Automotive, especially charging stations, IOT and the digital industry.



**MOU SIGNING CEREMONY**

**29 NOVEMBER 2019** The Thailand Board of Investment signed a Memorandum of Understanding (MOU) with the Federation of Hong Kong Industries (FHKI) to encourage collaboration between Thailand and Hong Kong on trade and investment, including factory re-location. The event was witnessed by Mrs. Carrie Lam, Chief Executive of Hong Kong, and Mr. Somkid Jatusripitak, Thailand's Deputy Prime Minister in charge of the economy.



**THAILAND PLUS OPPORTUNITIES FOR HONG KONG INVESTORS**

**28 NOVEMBER 2019** Ms. Duangjai Asawachintachit, Secretary General, Thailand Board of Investment, welcomed a group of Hong Kong investors to Bangkok and presented on the topic, "Thailand Plus - Opportunities for Hong Kong Investors". Over 70 leading Hong Kong companies participated in the event to learn about Thailand's basic infrastructure, digital industry and high-value added industry, as well as the Thai SME and Start-up programs to elevate technology and innovation for Thai businesses.



**WELCOME DELEGATIONS FROM FUKUOKA, JAPAN**

**26 NOVEMBER 2019** Mr. Chokedee Kaewsang, BOI Deputy Secretary General, welcomed a delegation of executives and investors from Fukuoka Prefecture, Japan, to the BOI head office to study investment opportunities in Thailand and to discuss future areas of collaboration with the BOI.



**DELEGATION FROM DAEGU TECHNOPARK**

**27 NOVEMBER 2019** Mr. Narit Therdsteerasukdi, Deputy Secretary General, Thailand Board of Investment, welcomed a group of South Korean investors and a delegation from Daegu Technopark, to the BOI Head office. The delegation discussed investment opportunities in Thailand and future collaboration with the BOI.



**CEBIT ASEAN THAILAND 2019**

**28 NOVEMBER 2019** Mr. Narit Therdsteerasukdi, Deputy Secretary General, Thailand Board of Investment, and Mr. Narucha Ruchuphan, Investment Promotion Division 5 (Creative and Digital Industries), welcomed delegates from the Hong Kong Software Industry to the BOI head office to learn about investment opportunities in Thailand. The delegation was part of the CEBIT ASEAN Thailand 2019 event.

## KEY ECONOMIC FIGURES



GDP  
(2018)

**US \$506.2**  
BILLION



GDP PER  
CAPITA  
(2018)

**US \$7,462**

### 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 2018



POPULATION  
**69.6**  
Million

MINIMUM WAGE  
PER DAY  
THB **325**

\$ APPROXIMATE  
**US \$10.5**

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

**US \$52**  
Billion

### IMPORT FROM THE WORLD

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

### EXPORT TO 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-OCTOBER 2019

**214,048.14**

US \$  
MILLION

### TOP 10 INDUSTRIES



Motorcars and Parts  
\$24,122.57  
Share 11.3%



Computers and Parts  
\$15,507.70  
Share 7.2%



Precious Stones  
and Jewelry  
\$14,397.23  
Share 6.7%



Rubber Products  
\$9,519.03  
Share 4.4%



Plastic Beads  
\$7,995.06  
Share 3.7%



Chemical Products  
\$6,635.84  
Share 3.1%



Electronic  
Integrated Circuits  
\$6,476.80  
Share 3%



Refined Fuels  
\$6,352.97  
Share 3%



Machinery  
and Parts  
\$6,338.81  
Share 3%



Iron, Steel  
& Products  
\$4,885.21  
Share 2.3%

### TOP 10 MARKETS



USA  
\$29,616.99  
Share 12.7%



China  
\$27,282.46  
Share 11.7%



Japan  
\$23,427.12  
Share 10%



Vietnam  
\$11,488.05  
Share 4.9%



Hong Kong  
\$11,137.24  
Share 4.8%



Malaysia  
\$9,917.12  
Share 4.2%



Australia  
\$9,877.57  
Share 4.2%



Indonesia  
\$8,715.56  
Share 3.7%



Singapore  
\$8,412.05  
Share 3.6%



India  
\$7,023.78  
Share 3%

Source: Ministry of Commerce

## EXCHANGE RATES

(Data as of 1 November 2019)

\$	£	€	¥	¥
THB	THB	THB	THB	THB
<b>30.2</b>	<b>39.5</b>	<b>34</b>	<b>28.3</b>	<b>4.3</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



## HEAD OFFICE, OFFICE OF THE BOARD OF INVESTMENT

555 Vibhavadi-Rangsit Road., Chatuchak, Bangkok 10900, Thailand  
Tel: (+66) 2553 8111 Fax: (+66) 2553 8222 Email: head@boi.go.th

### BEIJING

**Thailand Board of Investment,  
Beijing Office**  
No.21 Guanghua Road,  
Chaoyang District, Beijing,  
P.R. China 100600  
Tel: +86 10 8531 8755-57  
+86 10 8531 8753  
Fax: +86 10 8531 8758  
Email: beijing@boi.go.th

### LOS ANGELES

**Thailand Board of Investment,  
Los Angeles Office**  
Royal Thai Consulate-General,  
611 North Larchmont Boulevard,  
3<sup>rd</sup> Floor Los Angeles  
CA 90004, USA  
Tel: +1 323 960 1199  
Fax: +1 323 960 1190  
Email: boila@boi.go.th

### SEOUL

**Thailand Board of Investment,  
Seoul Office**  
#1804, 18<sup>th</sup> Floor,  
Daeyungak Tower 25-5,  
1-ga, Chungmu-to, Junggu  
100-706, Korea  
Tel: +82 2 319 9998  
Fax: +82 2 319 9997  
Email: seoul@boi.go.th

### FRANKFURT

**Thailand Board of Investment,  
Frankfurt Office**  
Royal Thai Consulate-General,  
Investment Section  
Liebfrauenberg  
26, 60313 Frankfurt am Main,  
Federal Republic of Germany  
Tel: +49 69 92 91 230  
Fax: +49 69 92 91 2320  
Email: fra@boi.go.th

### MUMBAI

**Thailand Board of Investment,  
Mumbai Office**  
Royal Thai Consulate-General  
12<sup>th</sup> Floor, Express Towers,  
Barrister Rajni Patel Marg,  
Nariman Point Mumbai  
400021, India  
Tel: +91 22 2204 1589  
+91 22 2204 1590  
Fax: +91 22 2282 1525  
Email: mumbai@boi.go.th

### SHANGHAI

**Thailand Board of Investment,  
Shanghai Office**  
Royal Thai Consulate General,  
No. 18, Wanshan Road,  
Changning District, Shanghai  
200336, P.R. China  
Tel: +86 21 5260 9876  
+86 21 5260 9877  
Fax: +86 21 5260 9873  
Email: shanghai@boi.go.th



## 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

**Thailand Board of Investment,  
Guangzhou Office**  
Royal Thai Consulate-General  
No.36 Youhe Road, Haizhu  
District, Guangzhou 510310  
P.R. China  
Tel: +86 20 8385 8988  
ext. 220-225  
+86 20 8387 7770  
(Direct Line)  
Fax: +86 20 8387 2700  
Email: guangzhou@boi.go.th

### NEW YORK

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

### STOCKHOLM

**Thailand Board of Investment,  
Stockholm Office**  
Stureplan 4C, 4<sup>th</sup> Floor  
114 35 Stockholm, Sweden  
Tel: +46 8 463 1158  
+46 8 463 1174  
Fax: +46 8 463 1160  
Email: stockholm@boi.go.th

### HANOI

**Thailand Board of Investment,  
Hanoi Office**  
26 Phan Boi Chau Str.,  
Hoan Kiem, Hanoi, Vietnam  
Tel: +81 24 3823 5092-4  
Email: hanoi@boi.go.th

### OSAKA

**Thailand Board of Investment,  
Osaka Office**  
Royal Thai Consulate-General  
Bangkok Bank Building,  
7<sup>th</sup> Floor 1-9-16 Kyutaro-Machi,  
Chuo-ku 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**  
Suite 101, Level 1, 234 George  
Street, Sydney, NSW 2000,  
Australia  
Tel: +61 2 9252 4884  
Email: sydney@boi.go.th

### JAKARTA

**Thailand Board of Investment,  
Jakarta Office**  
Royal Thai Embassy,  
Jl. DR Ide Anak Agung Gde  
Agung Kav. E3.3 No.3 (Lot 8.8),  
Kawasan Mega Kuningan,  
Jakarta 12950, Indonesia  
Email: jkt@boi.go.th

### PARIS

**Thailand Board of Investment,  
Paris Office**  
8 Rue Greuze 75116  
Paris, France  
Tel: +33 156 902 600-01  
Fax: +33 156 902 602  
Email: par@boi.go.th

### TAIPEI

**Thailand Board of Investment,  
Taipei Office**  
Taipei World Trade Center  
Room:3E40 No.5 Xinyi Rd.,  
Sec.5, Taipei110 Taiwan R.O.C.  
Tel: +81 2 2345 6663  
FAX: +81 2 2345 9223  
Email: taipei@boi.go.th

### TOKYO

**Thailand Board of Investment,  
Tokyo Office**  
8<sup>th</sup> Floor, 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



[www.boi.go.th](http://www.boi.go.th)