

Prospects of the EEC

A new platform for development

Executive Summary

The EEC (Eastern Economic Corridor) will serve as a base for targeted industries and a gateway to Indochina. After benefiting from the fruits of the Eastern Seaboard for over 20 years, the area is to be upgraded into the EEC (Figure 1) to cultivate the new industries that will drive the country's growth in the future (Figure 2). And as a gateway to Indochina, it will enable Thailand to leverage the region's growing market and international supply chains, attracting large-scale investment and accelerating a shift to high value-added sectors.

The total planned investment in the EEC from 2019 to 2023 comes to THB1.9trn (US\$50bn), funded by both the private and public sectors (Figure 3). Currently, the authorities are selecting private sector counterparts for major infrastructure projects—the High-Speed Rail, the aviation MRO center, and expansions of the U-Tapao Airport, Laem Chabang Port, and Map Ta Phut Port. The TOR for most of these projects will likely be available in October. The timeframe for general elections (February-May 2019) leaves little room for delays past the 1Q19 contract-signing deadline.

The EEC Act was put in place to ensure project continuity and foster investor confidence. The act, which took effect May 2018, provides a stable legal framework for EEC-related policy implementation by future governments. Furthermore, incentive packages to stimulate investor interest—from land ownership to tax and non-tax measures—are the most generous in the country.

The impact of EEC projects on Thailand's GDP over the next 5 years will come from the construction phase, as it will take several more years for targeted industries to emerge after the infrastructure and necessary investments are put in place. Gradual project implementation would be insufficient to offset the effect of an export slowdown. However, accelerated implementation would help to shore up investor confidence, boosting investment and consumption and providing upside risk of 20-30 bps to GDP growth.

Investors have shown considerable interest in the EEC and its potential, as reflected by the accumulation of THB480bn worth of Board of Investment (BOI) applications from 1Q17 to 2Q18. Going forward, the continuity of EEC project implementation after general elections will be the key to sustaining investor confidence and kick-starting the much-needed investment.

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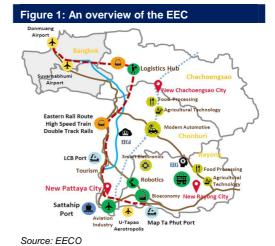
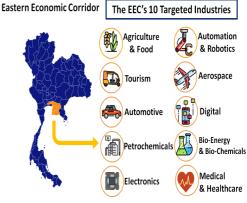


Figure 2: The EEC's 10 targeted industries



Source: BOI

Figure 3: Total investment in the EEC

approximately 1.9 trillion baht for the first 5 Years

New Cities / Hospitals
400,000 million baht

U-Tapao International airport
200,000 million baht

MRO Center
10,309 million baht

Map Ta Put Port Phase 3
52,200 million baht

Laem Chabang Port Phase 3
156,000 million baht

Source: EECO

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The purposes of the EEC

The EEC (Eastern Economic Corridor) will serve as a base for targeted industries. With higher wages and an aging population, Thailand needs to move up the value chain towards innovation-based segments of every sector possible. Therefore, the government aspires to cultivate 10 target industries. In some cases, it seeks to upgrade existing industries—from automotive to electric vehicles; electronics to smart electronics; agriculture to technology-based food and biotechnology; and tourism to high value-added tourism. Others are new industries: aviation, aerospace, digital, biochemical, and medical industries.

The existing Eastern Seaboard, site of existing industrial complexes, was chosen for development of the EEC because it already has much of the necessary infrastructure, such as ports and an airport, as well as production bases for sectors that the authorities intend to upgrade, such as the automotive and electronics industries.

The EEC is also designed to serve as a gateway to Indochina. With a total population of 68 million, Thailand is too small to attract major investments. But Thailand is very much a part of Indochina. The region's GDP growth of 6% YoY on average and its growing population—rising from 363 million to 453 million in the next 35 years (Figure 4)—has the potential for massive growth in demand for an array of products, from food and energy to automotive and electronic goods (Figure 5). Tapping into this regional demand will enable Thailand to attain the required scale to attract the needed investment.

Figure 4: Indochina's population and GDP growth 2015 Growth in GDF 150 m \$2,665 br ອີດໃຊ້ທີ່ 65.5 m **☆** \$655 bn 124.6 m **☆** \$917 bn 100 23.6 m **☆** \$102 bn ህው 116 m \$71 bn \$ 0 77.7 m M GDP \$1,285 bi

Figure 5: Indochina's demand growth in the next 20 years

173.74%

490
USD billion

140.91%

53
USD billion

79.53%

Vehicles

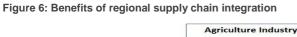
57.62%

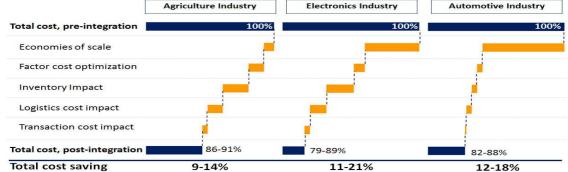
714
Mtoe

Source: Roland Berger

Source: Roland Berger, IEA

Becoming a gateway to Indochina will also enhance regional supply chains. While Thailand has acquired a certain level of managerial expertise, the CLMV countries (Cambodia, Laos, Myanmar, and Vietnam) possess abundant resources and low-cost labor. Consequently, regional supply chains—particularly in the agriculture, automotive, and electronics sectors—have emerged to leverage these different comparative advantages. The result is reduced costs (Figure 6) and increased competitiveness for these industries. Improving logistical connectivity between the EEC and the rest of the regional supply chains will allow further divestment of labor-intensive production and enable Thailand to shift its production towards higher value-added activities within the supply chains, catalyzing the development of the targeted industries.





Source: MGI

200

Progress of major infrastructure projects in the EEC

The government plans to sign Public-Private Partnership (PPP) contracts for major EEC projects before the election. The total planned investment in the EEC from 2019 to 2023 comes to THB1.9 trn (US\$50 bn). This includes 5 major infrastructure projects—the High-Speed Rail project; the aviation Maintenance, Repair & Overhaul (MRO) center; the U-Tapao Airport expansion; the Laem Chabang Port (Phase III); and the Map Ta Phut Port (Phase III)—designed to serve not just Thailand but also the region. The projects will be funded jointly by the public and private sectors, including foreign investors.

Although the timeline of these projects (Figure 7) has been shifted from the one previously announced in 1Q18, this was largely due to the consultant selection process, which has ended. The clarity of the election timeframe specified in the Royal Decree (between February and May of 2019) leaves little room for delays from the 1Q19 contract-signing deadline.

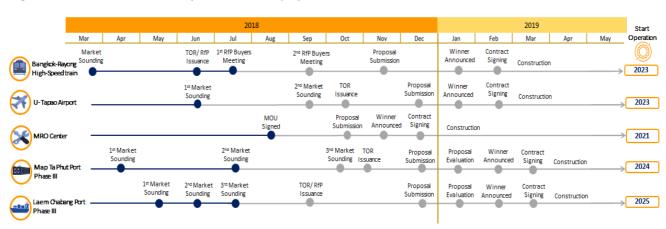


Figure 7: Timeline for the EEC's major infrastructure projects

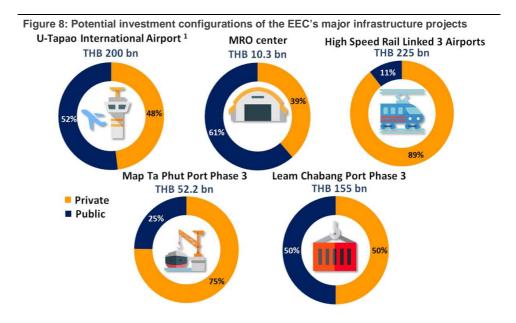
Source: EECO

The progress and the potential private-public investment configurations of the 5 major projects (Figure 8) are as follow:

- 1. The High-Speed Rail connecting the Don Muang, Suvarnabhumi, and U-Tapao Airports aims to reduce the commute time between Bangkok and the EEC area from 3 hours to 45 minutes. The total investment is THB247.1 billion, around 89% of which will be funded by the private counterpart, particularly for the technology and property development around the stations. Over 30 entities, including Thai, Japanese, Chinese, Korean, and French investors, have purchased bidding packages, and they are expected to submit their proposals in November 2018. The contract signing is planned in February 2019.
- 2. The MRO Center (Maintenance, Repair, and Overhaul) in the U-Tapao Airport is designed to serve the region's growing demand for MRO services, which will expand from the current US\$20 bn to US\$36 bn in 2025. Of the THB52.2bn investment, 61% will be financed by the government and 39% will be funded by the Thai Airways-Airbus joint venture. The contract between the government and the joint venture is expected to be signed in December 2018.

- 3. The U-Tapao Airport capacity expansion will allow it to receive 30 million passengers/year within the next 5 years. With a vision of becoming an Airport City and a new business center for Thai and international investors, its design also includes features such as a Free Trade Zone and Business Zone. Of the THB200 bn investment, potentially 52% will be funded by the government and 48% by the private counterpart.
- 4. The Laem Chabang Port (Phase III) expansion intends to increase the port's capacity to over 18 TEU containers and 3 million cars per year, and help it realize its aspirations as a regional transshipment port. The government plans to finance the port structure (including land reclaimation), which will likely account for 45-50% of the THB155 bn investment, while the private counterpart is expected to fund the port superstructure (including automated operations systems).
- 5. The expansion of the Map Ta Phut Energy Port (Phase III) entails investments of THB 52.2 bn. Similar to the Laem Chabang Port, the port structure (which could potentially be up to 25% of the total investment) will be funded by the government, while the superstructure will be financed by the private sector.

For the latter 3 projects, the market-sounding stage is concluding, and the Terms of Reference (TOR) will likely be launched in October. Private sector selection and contract-signing are expected to take place in 1Q19.



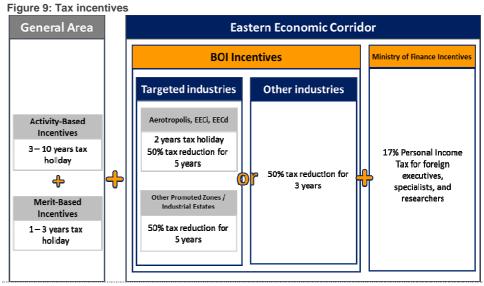
Source: EECO

¹ Based on the government's prior announcement that for the EEC projects, 40% will be financed by the government budget and 60% by the PPP model (of which 80% will be financed by the private sector and 20% by the public sector)

EEC-related regulatory support and incentives

The EEC Act helps to ensure the continuity of the EEC projects after the election and facilitate investment in the area. The EEC Act, effective since May 2018, specifies the status of the EEC area as a special development zone and provides a legal framework for EEC-related policy implementation. To expedite EEC-related investment, the Act also provides the EEC Secretary-General the authority to grant approval, permission, licenses, or consent related to activities such as land allocation, factory registration, and building controls.

Investment incentives in the EEC range from land ownership to tax and non-tax incentives. The EEC Act grants foreign investors the rights to own land (for business operations) and condominiums as well as to purchase 50-year leases (of state land) with possible renewals of 49 years. On top of the non-EEC tax holiday (up to 13 years), investment in the EEC will be granted a 50% tax reduction for 3 to 5 years. Investment in the zones of Aerotropolis, EEC of Innovation (EECi), and Digital Park Thailand (EECd) will also receive an additional 2-year tax holiday. The personal income tax for foreign executives, specialists and researchers will be 17%, the lowest in ASEAN (Figure 9). Non-tax incentives include rights to enter and remain in Thailand for up to 4 years and exemption from work permit requirements.



Source: BOI, EECO

Investor interest in the EEC area

Domestic and international investors have shown considerable interest in the EEC. From 1Q17 to 2Q18, EEC-related investment applications for Board of Investment (BOI) privileges came in at THB480bn, THB200bn of which were from foreign investors, primarily Japanese, European, Singaporean, and Chinese (Figure 10). The main industries of interest were automotive, electronic, and petrochemical. A number of international and domestic investors have also announced investment plans in the EEC—Alibaba plans to invest in an e-commerce and digital hub (US\$343 mn), SAAB and Amata in aircraft parts, Bangchak (US\$3.5 bn) and PTT (US\$2 bn) in the energy sector, and Origin, Pruksa, and Supalai in real estate development (US\$ 2.5 bn).

BOI Investment Applications BOI Investment Applications from (1Q17-2Q18) International Investors Hong Kong Korea Others 2% 1% EEC Taiwan 3% ■ Non-EEC US. 48% China THB 446.5 billion Japan 10% 49% 52% THB 480 billion Singapore 10% Europe 12%

Figure 10: BOI applications

Source: BOI, JETRO

In addition, existing industrial estates in the EEC area have expressed their preference in investing in the targeted industries (Figure 11).

Figure 11: Preference of industrial estates in investing in the targeted industries

	First S-Curve Industries					New S-Curve Industries				
	Next- Generation Automotive	Intelligent Electronics	High Wealth and Medical Tourism	Advanced Agriculture & Biotechnology	Food Processig Industry	Digital	Robotics	Aviation and Logistics	Comprehen sive Healthcare	Biofuel and Biochemical
Amata Nakorn Industrial Estate (Project 2)	4	4	4	4	4	4	4	4	4	
Pinthong Industrial Estate (Project 4)	4	4			*	4	4	4		4
Smart Park Industrial Estate			4	4		4	4	4	4	
Amata Nakorn Industrial Estate	4	4	4			4	4	4		
Pinthong Industrial Estate (Project 5)	4	4			4	4		4		4
C.P. Industrial Estate	4	4				4			4	
Amata City Industrial Estate	4	4	4					4		
Hemaraj Eastern Seaboard Industrial Estate 3	4						4	4		
Hemaraj Eastern Seaboard Industrial Estate 2	4	4					4			
Hemaraj Eastern Seaboard Industrial Estate	4	4					4			
Hemaraj Eastern Seaboard Industrial Estate 4	4						4	4		
TFD Industrial Estate 2	4	4						4		
Hemaraj Rayong 36 Industrial Estate	4						4	4		
Hemaraj Industrial Estate Chonburi 2		4				4		4		
Hemaraj Industrial Estate Chonburi	4					4		4		
Yamato Industries Industrial Estate	4	4								
Pinthong Industrial Estate	4							4		
Eastern Seaboard Industrial Estate	4	4								
Pinthong Industrial Estate (Project 3)	4									
Pinthong Industrial Estate (Laem Chabang)	4									
Hemaraj Eastern Industrial Estate (Map Ta Phut)										4
Total	18	12	4	2	3	8	9	13	3	3

Source: EECO

Potential impact of EEC projects on Thailand's GDP growth in the next 5 years

Over the next 5 years, EEC projects will be having an impact on Thailand's GDP due to infrastructure construction. It will take several more years for targeted industries to emerge after the infrastructure and necessary investments are put in place. Infrastructure investment will be coming from both the public and the private sectors. At the same time, the private sector's non-infrastructure investment in the EEC will also be starting, as indicated by the BOI applications. We have calculated the effects of such investment on GDP under 3 scenarios: gradual implementation, accelerated implementation, and delayed implementation (Figure 12).

Scenario 1: Gradual Implementation—Gradual disbursement of public and private investment in EEC infrastructure would be accompanied by gradual non-infrastructure investment, as investors would wait for further clarity on the timing of project completions. Given that the ratios of total private and public investment (EEC and non-EEC) to GDP are relatively small (18% and 6%, respectively), and that infrastructure investment entails heavy import content, gradual project implementation would be insufficient to offset the effects of an export slowdown as external tailwinds subside.

Scenario 2: Accelerated Implementation—However, accelerated implementation of infrastructure projects to meet targeted timelines would help to shore up investor confidence and lead to a rise in non-infrastructure investment in later years, which would in turn help to boost consumption. This would increase GDP growth by 20-30 bps over the first scenario.

Scenario 3: Delayed Implementation—This scenario contemplates the effects of slower-than-expected public investment in the EEC, particularly in the initial phase such as land acquisition and reclamation, which would delay the subsequent private sector investment. This would decrease the GDP growth by 20 bps from the first scenario.

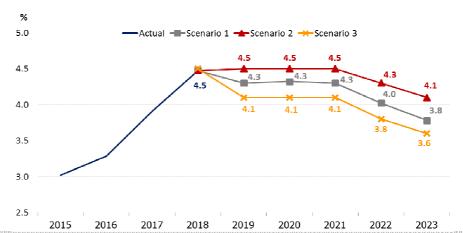


Figure 12: Potential impact of the EEC projects on Thailand's GDP growth

Source: Bangkok Bank Economic Analysis Team

Our Assessment

Thailand's development benefited greatly from the establishment of the Eastern Seaboard over 20 years ago. But the economy is currently at a more mature stage, and the development of the EEC is needed to cultivate new industries as the next growth drivers. Leveraging Thailand's connectivity with Indochina and the existing regional supply chain is a way to accelerate the process.

As global growth is projected to be slowing, with downside risks from the trade tensions, spillovers from exports into private investment will likely dissipate. Therefore, the implementation of infrastructure projects, including the EEC, will be an important driver of domestic investment going forward. Given investors' considerable interest in the area and its potential, continuity of EEC project implementation after the elections will be the key to fostering confidence and thus kick-starting the much-needed investment, particularly in the targeted industries. In addition, other issues of concerns, such as the sufficiency of human resources, will need to be addressed continuously.

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