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National Assessment Report: Thailand

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Abbreviations

ACMECS – Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy

ADB – Asian Development Bank

AFTA – ASEAN Free Trade Area

ASEAN – Association of Southeast Asian Nations

AC – ASEAN Charter

AEC – ASEAN Economic Community

BEZ – Border Economic Zone

BRI – Belt and Road Initiative

CAFTA – China-ASEAN Free Trade Area

CBEZ – Cross Border Economic Zone

CICPEC – China-Indochina Peninsula Economic Corridor

CLMT – Cambodia, Laos, Myanmar, and Thailand

CLMTV – Cambodia, Laos, Myanmar, Thailand, and Vietnam

CPTPP – Comprehensive and Progressive Trans-Pacific Partnership

EA – Executing Agency

EEC – Eastern Economic Corridor

FTZ – Free Trade Zone

GMS – Greater Mekong Sub-region

IA – Implementing Agency

ICT – information and communication technology

ICTI – Internet Content, Technology, and Infrastructure

LMC – Lancang Mekong Cooperation

MARD – Ministry of Agriculture and Rural Development

MDGs – Millennium Development Goals

MRC – Mekong River Commission

MIT – Middle Income Trap

MNEs – Multinational Enterprises

MOC - Ministry of Commerce

MOF – Ministry of Finance

MOFA - Ministry of Foreign Affairs

NDRC - National Development and Reform Commission

NESDB – National Economic and Social Development Board

NSCP – North-South Corridor Plan

NSR – New Silk Road

OBOR – One Belt One Road

OECD – Organization for Economic Cooperation and Development

PPP – Public Private Partnership

PRC – People’s Republic of China

RCI – Regional Cooperation and Integration

RCEP – Regional Comprehensive Economic Partnership

SDGs – Sustainable Development Goals
SEZs – Special Economic Zones
SME – small and medium-sized enterprise
SOE – State Owned Enterprise
TA – Technical Assistance
WTO – World Trade Organization

I. Introduction

1. This Technical Assistance report on Thailand is a country case study of the ADB Policy and Advisory Technical Assistance Study (TA-9123) on the Belt and Road Initiative, or BRI, as initiated by the People's Republic of China (henceforth China).

3. This report proceeds accordingly by sketching BRI's genesis and early trajectory to discern its synergy and compatibility with relevant Regional Cooperation Initiatives and to assess its development prospects in the context of Thailand and its Mainland Southeast Asia neighborhood. After a short context, the report hones in on Thailand's role in BRI. Since Thailand does not lie on BRI routes directly, its place in the Mainland Southeast Asia corridor linking the SREB and MSR – officially known as the “China-Indochina Peninsula Economic Corridor” (CICPEC) – will be discussed. To illustrate Thailand's place in the Mainland Southeast Asia corridor and its contribution in BRI's overall regional cooperation, five case studies will be probed, namely Thailand-China railway development, Thailand's Eastern Economic Corridor, the Holley Group's Thai-Chinese Rayong Industrial Zone, the China-Japan Third Country Business Cooperation, and the “Kra Canal” across southern Thailand.

6. China has become the largest trade and investment partner of Southeast Asia, displacing the United States, Japan, and the European Union, which were dominant just 25 years ago (Suehiro, 2017). But BRI is designed for much more than addressing overcapacity at home and generating business opportunities abroad. China wants to increase its structural economic and financial power by promoting its currency unit, the renminbi (Rmb), as a global reserve currency. That the Rmb is now part of the International Monetary Fund's Special Drawing Rights basket of leading currencies testifies to China's financial ambition. In recent years, the Rmb has faced an uphill task in becoming a global currency. According to the People's Bank of China's data, the Rmb was the 5th most used payment currency in the world in 2016 and 8th in global foreign exchange transactions. Only 29 percent of China's trade was settled in its own currency, and only 10 percent of China's outward direct investment was transacted in Rmb. The Rmb's cross-border role peaked in 2015 but has since been on the decline owing to fears of depreciation, let alone devaluation by the Chinese government. To make the Rmb a global currency would require China to promote global capital mobilization in its own currency to foreign entities.

II. Initial Conditions

10. Having laid out a broad regional context, this discussion now brings Thailand into focus to assess its role in the CICPEC within the BRI framework in view of other RCI projects. On the BRI map, Thailand and the overall Mainland Southeast Asia region are conspicuously uncovered by both the SREB and the MSR routes. This space is one of six corridors linking the overland belt and the maritime road (Aoyama, 2017). CICPEC overlaps Mainland Southeast Asia which comprises CLMTV (Cambodia, Laos, Myanmar, Thailand, and Vietnam). Apart from CICPEC that is aimed to connect Kunming, the capital of Yunnan province in southern China, to Vientiane in Laos and northeast Thailand through Bangkok all the way southwards to Malaysia and Singapore, Myanmar itself contains one separate corridor, linking Kunming to a port in Kyaukpyu in Myanmar's southwest region of Rakhine state. Owing to Myanmar's mountainous terrain that crosses areas of internal conflicts between the Myanmar army and the country's ethnic minorities, the Kunming – Kyaukpyu corridor has made little headway. CICPEC is thus more crucial as a linking corridor between SREB and MSB in Mainland Southeast Asia.

11. The China-Indochina connection has begun from the ongoing Kunming-Vientiane rail project, which is nearly half completed. It is designed to cross the Mekong River at Vientiane and connect with Nong Khai province in Thailand's northeast region. From Nong Khai, the railway would continue all the way through Nakorn Ratchasima province to Bangkok and the Gulf of Thailand as well as through southern Thailand into Malaysia and Singapore, which is the final destination of this corridor. Land-locked Laos has taken a \$5.9 billion loan from China's Export-Import Bank for the railway construction over five years until 2021, when construction is planned for completion by December 2021.

12. On the other side, Thailand's portion of the rail connection from Kunming to Singapore has faced delays because of domestic politics, administrative delays, and cost-benefit concerns. The military government of Prime Minister Prayut Chan-o-cha initially went head over heels for Chinese support after seizing power in a military coup in May 2014.

13. While they are not overly enthusiastic, Thailand's economic policy planners and government leaders remain supportive of BRI, although there are local concerns about a potential debt trap and a raw deal with disadvantageous terms. The military

government has sought, like its neighbors such as Malaysia, to balance Japan's similar interest in regional infrastructure development with China's. The Thai government, in principle, has agreed to allow Japan to build an east-west railway across the central region to connect horizontally with Laos and Vietnam, but this plan remains under a feasibility study phase. With the intention of returning to power after the election in March 2019, the Thai military government has tried to blend its cornerstone "Thailand 4.0" development strategy and its Eastern Economic Corridor (EEC) with BRI.

14. With potential investments upwards to \$50 billion, the EEC is a special economic zone focusing on new industries intended to serve Thailand's economic upgrading and movement up global value chains. Thailand has been stuck in the so-called Middle Income Trap (MIT) for more than a decade, stymied by a globally substandard education system and lack of skills training. The Thai economy remains reliant on the influx of cheap migrant labor from Cambodia and Myanmar. Together, Cambodian and Myanmar migrant workers comprise more than 10 percent of the Thai workforce of 39 million. The resultant flexible labor market has kept GDP growth buoyant in the 3-4 percent range but has also constrained Thailand's economic competitiveness and labor productivity. The "4.0" strategy broadly and the EEC in particular are designed to upgrade competitiveness and productivity.

15. Thai advocates of Thailand's age-old dream and alluring elephant project – a canal across the Kra Isthmus through the peninsula in southern Thailand, connecting the Andaman Sea and the Gulf of Thailand against the backdrop of a second passage between the Indian and Pacific oceans – have become increasingly vocal since the military coup in May 2014. These advocates are mostly comprised of retired military generals but there is broad interest among the population at large for the "Thai Canal" to be seriously considered. The topic as surfaced throughout the past few decades and has once again gained traction recently. Some thought leaders and policymaking circles have suggested that a new reign in Thailand might bring new possibilities. For example, there might be interest to have the Thai Canal under the new reign as a lasting legacy. The Kra Isthmus scheme, if it comes to fruition, would be a game changer for mainland Southeast Asia (see below).

A. National Economy Overview

16. Thailand is the second largest economy in Southeast Asia (after Indonesia), classified as an upper-middle income country. From 1960 to the 1997-98 economic crisis, the Thai economy expanded 6 percent per annum. After the crisis, it has regained a growth trajectory in the 3 percent range, which is considered subpar owing to the country's volatile and polarized domestic politics from 2005 to 2018. Thailand has traditionally relied on exports to drive its economic expansion. The export sector represents 70 percent of GDP, although export growth has slowed in recent years in favor of greater domestic consumption and public investment. The sectoral structure of the economy has increasingly shifted from manufacturing and industry to services. Agriculture remains the backbone of Thai society, providing livelihood to 40 percent of the population but yielding less than 9 percent of national output.

17. Thailand is the hub of Mainland Southeast Asia as well as the birthplace and co-founder of ASEAN. The Thai economy is resilient but must overcome structural barriers before becoming a developed country. Until then, it remains stuck in the Middle Income Trap (MIT), sandwiched between economies with cheaper wages, such as Vietnam, Indonesia and Bangladesh, and those with higher skills and more value added, such as Malaysia, Taiwan, and South Korea. The economic upgrading that is needed to move up the global value chain and into developed-country status is partly hindered by the influx of cheap migrant labor from next-door countries and an underdeveloped education system.

18. According to the IMF, Thailand's GDP is expected to expand at a moderate pace despite domestic political uncertainty. Public investment is projected to remain a key driver, increasing over the next few years, in line with the government's infrastructure plans to attract private investment. Much of this will be rail development consistent with the thrust of CICPEC within BRI framework. In 2017, the Thai economy expanded 3.7 percent and is expected to expand just over 4 percent in 2018, with subdued inflation under 2 percent. The Thai economy has run under practically full employment in the 2010s so far, with negligible unemployment at less than 1 percent. However, the challenge has been skills and productivity of employment, notwithstanding its high rate.

19. The Prayut government’s “National Strategic Plan (2017-2036)” places emphasis on improving the business environment, bolstering economic competitiveness and long-term economic performance through the development of rail, road, airport, and electricity infrastructures. Much of this is underpinned by the “Thailand 4.0” growth strategy. Thailand faces growing regional competition at a time when it needs economic upgrading. The China-US trade conflict is expected to provide a short-term boon to Thailand, as Chinese and US firms may decide to relocate to Mainland Southeast Asia. Yet Thailand is still confronted with long-term risks of a global economic downturn.

20. Moving forward, the Thai economy is banking on regional growth areas from Mainland Southeast Asia to the broader AEC. It is also reliant on public investment and domestic consumption to offset potential economic downturn in ASEAN, China, Japan, the US, and the European Union – Thailand’s key export markets. If Thailand can realize its 4.0 strategy and its attendant EEC, along with fundamental education and bureaucratic reforms, it may be able to usher in a new era of growth and expansion, much like the 1980s and 90s prior to the economic crisis. If Thailand stays in MIT territory for too long without economic upgrading through structural and educational reforms, it risks stagnation.

Main Indicators	2016	2017	2018 (e)	2019 (e)	2020 (e)
GDP (\$ billions)	411.84	455.38e	490.12	524.25	555.23
GDP (Constant Prices, % Change)	3.3	3.9e	4.6	3.9	3.7
GDP per Capita (\$)	5,970	6,591	7,084	7,570	8,011
Government Balance (% of GDP)	-0.8	-0.9	-0.8	-0.8	-1.2
Government Gross Debt (in % of GDP)	41.8	41.9	41.9	41.3	41.2

Main Indicators	2016	2017	2018 (e)	2019 (e)	2020 (e)
Inflation (%)	0.2	0.7	0.9	0.9	1.1
Unemployment (% of the Labour Force)	0.8	0.7	0.7	0.7	0.7
Current Account (\$ billions)	48.24	51.08	44.82	42.52	38.20
Current Account (% of GDP)	11.7	11.2	9.1	8.1	6.9

Source: IMF – World Economic Outlook Database, October 2018.

B. Leading Sectors

21. The Thai economy is still reliant on agricultural commodities, which contribute to 8.2 percent of the GDP. The country is one of the leading producers and exporters of rice, rubber, sugar, corn, jute, cotton, and tobacco among other major crops. Fisheries and frozen seafood are a crucial part of the economy as Thailand is a major exporter of farmed shrimp. However, agriculture's contribution to GDP is declining, while the exports of goods and services have increased.

22. The manufacturing sector accounts for 36.2 percent of the GDP and is well diversified. The leading sectors feature automobile and automotive parts (11 percent of GDP), tourism (9 percent), financial services (9 percent), electrical appliances and components (8 percent), completed by cement, computers and parts, furniture, plastics, agribusiness, beverages, and tobacco. Thailand's top trading partners are China, the US, Japan, and the EU.

23. Tourism has become the country's top foreign exchange earner, rising nearly 10 percent a year over the past decade despite ongoing political instability. More than 41 million are projected to visit Thailand in 2019. The largest source of inbound tourism has been China. Thailand is also a top-ten producer of automobiles,

churning out more than 1 million vehicles per year. Its seafood and agribusiness MNEs, such as Thai Union Group and Charoen Pokphand, have made headways in ASEAN all the way to Africa. But Thailand does not boast any major global brand such as the likes of Samsung or Mitsubishi, a reflection of its inability to climb up value chains.

Breakdown of Economic Activity By Sector	Agriculture	Industry	Services
Employment By Sector <i>(in % of Total Employment)</i>	32.8	22.6	44.6
Value Added <i>(in % of GDP)</i>	8.7	35.0	56.3
Value Added <i>(Annual % Change)</i>	6.2	1.6	4.3

Source: World Bank data.

C. Review of Regional Cooperation Initiatives

24. Regional cooperation in Mainland Southeast Asia is longstanding and intensifying. In concentric circles, the broadest frame is ASEAN, a combined market of 645 million consumers with an overall GDP of \$2.6 trillion, resembling the 6th largest economy in the world. ASEAN in December 2008 launched the ASEAN Charter (AC) to give the 10-member grouping of Southeast Asian a legal entity and to promote regional cooperation and connectivity. The AC consists of the ASEAN Political Security Community, ASEAN Economic Community (AEC), and ASEAN Socio-Cultural Community. The AEC is aimed to make ASEAN a single market and production base, boost regional competitiveness, reduce intra-regional development gaps, and promote global economic integration. The AEC builds on prior intra-regional cooperation, dating to the ASEAN Free Trade Area in 1992.

25. The AEC has made slow progress. Intra-ASEAN trade remains at 25 percent, as it has been for more than a decade. But intra-ASEAN investment has shot up from single digits in the 2000s to 22 percent by 2017. The intra-regional investment growth in the region is attributable to the rise of ASEAN's indigenous multinational enterprises (MNEs) and to ASEAN's hub for global supply chains and production networks. In the footsteps of established MNEs from Western economies, Japan and the Republic of Korea, Chinese firms have spread their presence into Southeast Asia more than ever, as the Thai-Chinese Rayong Industrial Zone attests below. Intra-ASEAN investments also feature Thai companies doing business in Vietnam. Thai-Vietnamese bilateral trade has boomed from \$513 million in 1995 to more than \$16 billion by 2017. Yet the AEC is limited due to the lack of complementarities and different political regime types that are unwilling to deepen economic cooperation into integration. ASEAN is also geographically divided by the South China Sea into maritime and mainland economies. The mainland economies are seeing more connectivity and integration than the overall AEC.

26. The broadest regional economic cooperation scheme is the Regional Comprehensive Economic Partnership (RCEP). It is anchored around ASEAN, with larger member economies that include China, Japan, South Korea, India, Australia, and New Zealand. RCEP represents 45 percent of world population and 40 percent of world trade. It rivals the Trans-Pacific Partnership, which has been re-launched after the US withdrawal as the Comprehensive and Progressive Trans-Pacific Partnership. While the CPTPP is legally binding as a full-fledged trade-liberalization vehicle, RCEP is geopolitical as well as geo-economic. Without the World Trade Organization's multilateral outcomes, RCEP may be able to serve as an alternative regional freer-trade platform. But actual progress is scant. ASEAN's smaller economies may not be ready for enforceable trade liberalization. Friction among members also poses challenges in RCEP's establishment.

27. While ASEAN's internal economic cooperation is limited and ASEAN's centrality in the wider RCEP poses limitations, sub-regional economic cooperation in Mainland Southeast Asia has shown tangible progress with beckoning prospects. The Thai government has been promoting border areas with Cambodia, Laos, and Myanmar as Special Economic Zones (SEZs). These border SEZs are relatively small in scale and scope but expanding briskly. Beyond its borders, Thailand's sub-regional concentric frames start with CLMT – Cambodia, Laos, Myanmar, Thailand – a market of over 150 million with half a trillion GDP in dollar terms. The Thai government in 2003 under former Prime Minister Thaksin Shinawatra also has been promoting the Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS) for CLMT. After years of neglect, the Prayut government renewed interest in ACMECS in 2017-18. This is an informally integrated market for labor, healthcare, and banking. Thailand is a hub of this space. When Vietnam is added,

the CLMTV becomes a market of 250 million with a GDP size approaching one trillion dollars within the next decade. Road connectivity makes it possible to drive within one day from the Thai-Myanmar border through Thailand and Laos to reach central Vietnam. Business opportunities abound in these expanding markets that have relatively young populations and rising incomes.

28. Beyond the CLMT and CLMTV is the Greater Mekong Sub-region, or GMS. This Mekong mainland space puts together CLMTV with Yunnan and Guangxi in southern China. Altogether, the GMS consists of more than 350 million people and \$1 trillion in combined GDP. It was initiated in 1992 by ADB and backed by Japan. But the GMS area with its extensive road connectivity traversing Mainland Southeast Asia is now under China's development shadow. The GMS is most compatible with BRI. Rail development in Mainland Southeast Asia would raise the sub-region's development potential significantly.

29. GMS engagement with BRI should take into account regional commons, including utilization of Mekong River water resources for dam construction and power generation. To this end, China came up with Lancang Mekong Cooperation (LMC) framework in 2015, which has already hosted two summit meetings and set up work committees and a longer-term plan of action. Complementarities and ways to coordinate with MRC can facilitate regional integration and development.

III. Selected Case Studies

For Thailand, the five national case studies are as followed:

Case 1: Thailand – China Railway

Case 2: The Eastern Economic Corridor (EEC)

Case 3: The Holley Group's Thai-Chinese Rayong Industrial Zone

Case 4: The China-Japan Third Country Business Cooperation

Case 5: The Kra Canal

Case 1: Thailand-China Railway

30. The Thailand-China railway project was initiated after the BRI gained momentum after 2013 as part of the China-Indochina rail connectivity, one of the six corridors of overland and maritime routes. This railway line is expected to extend across Thailand to connect to Vientiane in Laos and Kunming in China. It is also planned to reach Malaysia and Singapore in the future, completing the China-Indochina railway route and linking the SREB to the MSR.

31. The 873km-long, THB500bn (USD12bn)-worth project was developed as part of a bilateral agreement between China and Thailand after a memorandum of understanding signed in December 2014. It will run through ten provinces in Thailand, with the depot and operation control centre will be located in Chiangrak Noi district. The first phase of the project, a 250-km high-speed rail line linking Bangkok to Nakhon Ratchasima, is expected to be operational in 2021. The full line is expected to stretch 873 km (542 miles), linking Thailand and Laos at the northeastern Thai city of Nong Khai. Project activities are divided between the two participating nations with Thailand acquiring land, completing environmental impact assessment and providing civil, mechanical and electrical (M&E) works for building services. Thailand will also supply concrete sleepers for track works and perform other ancillary works.

32. Construction of the first section was scheduled to start in May 2016, with completion plan in three years. However, the project has been beset by delays, including disagreements over the design and funding as well as technical assistance. The construction of the first, 3.5km section of the railway was only started in December 2017 in Nakhon Ratchasima, and is expected to be complete within six months, according to the Transport Ministry (Reuters, 21 December 2017). Completion of the Bangkok-Nakhon Ratchasima leg of the route is projected for as early as 2022, according to Transport Minister Arkhom Termpittayapaisith (Nikkei Asian Review, 7 December 2018). Despite the delay, the rail line linking up to Laos is still on the table and should still be considered a priority in the post-election period even though the only visible result in the BRI context, as of January 2019, is the 3.5km section in Nakhon Ratchasima.

Case 2: The Eastern Economic Corridor (EEC)

33. Known in Thai as *khet pattana setthakij pak tawan og*, the Eastern Special Economic Development Zone, the EEC was promulgated very recently, on 15 May 2018. It is set up as a public-private partnership with full government backing, which comes with tax and other investment incentives. The EEC is located in the three eastern provinces around Bangkok, namely Rayong, Chonburi, and Chachoengsao, with a combined area of more than 13,000 square kilometers and a planned investment of \$50 billion over five years, mostly from foreign direct investment. As of January 1, 2019, the EEC has attracted \$9.3 billion in promised FDI, according to data provided by Thailand's Board of Investment (BOI)¹.

34. The government expects to spend \$43 billion (THB 1.5 trillion) for the realization of the EEC over the next five years. This funding will come from a mix of state funds, public-private partnerships (PPPs), and foreign direct investment (FDI). The government has identified four "core areas" essential in making the EEC a renowned economic zone: (1) increased and improved infrastructure; (2) business, industrial clusters, and innovation hubs; (3) tourism and; (4) the creation of new cities through smart urban planning. The government predicts the creation of 100,000 jobs a year in the manufacturing and service industry by 2020 through the EEC.

35. The EEC is an organization which focuses on the implementation of infrastructural development projects that aim to create seamless transport linkages via air, land, rail and sea routes. As such, the EEC infrastructure is based on two projects: (1) the development of the Eastern Aviation Specialized Zone and the Eastern Airport City, which, upon completion, will provide passengers with connections to major airports (Don Meuang, Suvarnabhumi and U-Tapao Airports) via high-speed trains allowing for travel times between the EEC and Bangkok of less than 1 hour, and (2) the development of dual-track railways between China, Lao P.D.R., Thailand, and Cambodia, which is made possible through the implementation of automated transport and seamless operation systems housed at the new distribution center located in Chachoengsao.

36. To implement, the EEC is divided into eight different implementation programs as followed: the EEC Infrastructure Development Implementation Program; the EEC

¹ See <https://www.aseanbriefing.com/news/2018/06/29/thailand-eastern-economic-corridor.html>, accessed on 30 December 2018.

Targeted Industries Development Implementation Program; the EEC Human Resource, Education, Research, and Technology Development Implementation Program; the EEC Tourism Development and Promotion Implementation Program; the EEC New City and Community Development Program; the EEC Business Hub and Finance Hub Development Implementation Program; the EEC PR and Mass Engagement Implementation Program; and the EEC Agriculture, Irrigation, and Environment Implementation Program.

37. As of January 2019, 6 projects have received approval. These projects are as follows: the U-Tapao Airport and Eastern Aviation City; the high-speed railway connecting the 3 major airports; the Map Ta Phut Industrial Port Phase III; the Laem Chabang Port Phase III; the U-Tapao Maintenance, Repair and Overhaul Centre (MRO); and the Digital Industry and Innovation Promotion Zone (Digital Park Thailand). The five infrastructural projects are expected to begin operation by mid-2019, with the winning bidders expected to be finalized by April 2019 (*Bangkok Post*, 4 February 2019).

38. It is the cluster of these sea ports and aviation hubs that underpins the EEC. The most concrete progress so far is the high-speed rail linking the three airports but even there the progress is still incremental, without any results on the ground so far. As a public-private partnership, its cost was set at 200 billion baht (\$6 billion) on a 50-year concessionary basis, with operational readiness set for 2022-23 (Sabpaitoon and Chatrudee, 2018). The Terms of Reference for construction bidding have been issued, although the political uncertainty associated with elections in 2019 may delay the plan.

39. However, EEC projects appear the most suitable to plug into the China-Indochina corridor because of proximity and complementarities. China needs north-south railway development that could connect to Kunming in Yunnan. Any rail development through mainland Southeast Asia would be a boon for the EEC as it would boost critical mass and generate more traffic. Moreover, in Thailand's volatile politics, EEC has earned a measure of consensus. Although it began under a military government, its potential and promise as a second-generation Eastern Seaboard that could provide growth drivers to the Thai economy for the next decade and longer would likely appeal to all major political stakeholders.

Case 3: The Holley Group's Thai-Chinese Rayong Industrial Zone

40. The Thai-Chinese Rayong Industrial Zone has been dubbed the “industrial Chinatown” in Thailand thanks to its focus on attracting Chinese investment and community development. The industrial zone, located 114 kilometers away from Bangkok and 27 kilometers away from the deep-water port of Laem Chabang, has developed not only into a community where Chinese live and work, but also an important industrial zone for Chinese entrepreneurs, especially private ones, to invest in Thailand.

41. Covering an area of 12 square kilometers, the Thai-Chinese Rayong Industrial Zone is an industrial estate jointly developed by the Holley Group (China) and the Amata Corporation (Thailand), particularly for Chinese investors. Amata Corp. is Thailand’s leading industrial estate developer, headed by Vikrom Kromdith. In 1987, China’s Holley Group began to internationalize by investing in foreign countries. It later developed an explicit “go global” strategy, led by foreign trade and direct investment in select countries. Holley has established offices and branches in more than 30 countries globally, with manufacturing bases in Thailand, India, Russia, and Uzbekistan, among others.

42. In Thailand, Holley’s internationalization faced adverse conditions. The firm began in 2000 with an ammeter factory on the outskirts of Bangkok, the first Chinese foreign direct investment of its kind in Thailand. The venture employed fewer than 200 in a run-down building with a floor area of just 1,000 square meters. This difficult experience led Holley Group Board Chairman Wang Licheng to realize that foreign direct investment requires a suitable platform where Chinese enterprises could combine their advantages to augment their projects. As a result, Wang came up with the idea of establishing an overseas industrial cluster for Chinese firms abroad.²

43. Established as a joint venture in 2005, it currently has two industrial estates located in the EEC provinces of Chonburi and Rayong, namely Amata Nakorn and Amata City, with a combined output equivalent to 11 percent of Thai GDP. After the initial agreement, the second phase was implemented in 2010, expanding the land area by another 2.5 square kilometers on top of the original 1.5 square kilometers. This industrial zone currently serves 118 Chinese multinational companies and employs 3,000 Chinese and 32,000 Thais, with revenue of more than \$3.5 billion.

² See <https://chinareportasean.com/2017/08/30/industrial-chinatown-booms-in-thailand-china-thailand>; accessed on 6 January 2019.

Chinese companies there produce motorcycles, auto parts, oil exploration pipelines, solar cells, construction of factories and dormitories, among other mechanical and electrical products.³

Case 4: The China-Japan Third Country Market Cooperation Forum

44. The China-Japan Third Country Market Cooperation Forum was jointly held by Japan's Ministries of Economy, Trade and Industry and Foreign Affairs and China's Ministry of Commerce on 26 October 2018 as an initiative toward the "triple-win relations" between China, Japan and third countries in Asia and around the world through public and private cooperation. The forum was held in Beijing and featured Japanese Prime Minister Shinzo Abe, along with his Minister of Economy, Trade and Industry Hiroshige Seko, and Foreign Minister Taro Kono. The Chinese side was represented by Premier Li Keqiang, Commerce Minister Zhong Shan, and Chairman of National Development and Reform Commission He Lifeng, with an audience of 1,400, including top executives of leading industries from both sides.

45. The visit produced 52 Memoranda of Cooperation (MOC) between the two countries, bilaterally among government agencies, companies, economic associations, and other entities.⁴ These MOCs ranged widely from infrastructure and distribution to IT, healthcare, and finance. What was key for Thailand among the bilateral cooperation agreements was the China-Japan-Thailand "smart city" pilot project.

46. At the forum, EEC secretary general Kanit Sangsubhan and Amata Corp. founder and CEO Vikrom Kromadit made a pitch for Thailand as an investment hub. In fact, Vikrom played an instrumental role because he knew Chinese firms and managers at his Amata City Rayong. From his contacts base, Vikrom was able to propose a link-up between Nanjing and Yokohama through a "smart cities" project in Amata City Chonburi, which is part of the EEC. Vikrom would entice and encourage his Chinese clients in Rayong to join the new project. In turn, Kanit of the EEC offered to push the project to fruition in cooperation with Amata and the Chinese and

³ See www.sinothaizone.com; author's interview with Holley Group Vice President Qun Yue, 29 January 2019.

⁴ See http://www.meti.go.jp/english/press/2018/1026_003.html; accessed 13 January 2019.

Japanese governments.⁵ It would be a major achievement for the EEC if realized. According to a senior Japanese official who was at the signing, “the Chinese were more enthusiastic than expected.”⁶ The project is just getting off the ground, with a workshop planned for March 2019.

Case 5: The Kra Canal

47. Including the Kra Canal in analyzing regional cooperation and integration in Asia in view of BRI is tricky. The Kra Canal, also referred to as *Klong Thai* in Thai, has remained an unattained ideation so far. Yet overlooking Kra Canal can also pose dire consequences if this hitherto outlandish proposal ever comes through. The primary reason it is included in this assessment is attributable to the changing supply-demand equation surrounding the project. Moreover, more recent literature and anecdotal data points pointed to its viability more than ever, and a growing number of lobby groups are pushing it forth as part of their agenda. To quote one veteran observer who thought the canal was a mirage rather than a vision back when he examined the scheme in 1994, “I am much less dismissive of its prospects” after his latest round of research (Mellor, 2018).

48. If ever built, the \$50 billion canal would reduce shipping distance through the Malacca Strait by 1,200 kilometers and upwards to 3,500 kilometers when taking into account the Sunda and Lombok maritime routes. A potential Asian counterpart to the Suez or Panama canals, Kra Canal would cut through the Malay Peninsula in southern Thailand around 800 kilometers from Bangkok and 200 kilometers from the Thai-Malaysian border, thereby linking the Gulf of Thailand and the Andaman Sea. It would be a maritime corridor between the Pacific and Indian oceans, and resemble a geographic linchpin of the “Indo-Pacific.” The Kra passage would alleviate the congestion of the Malacca Strait, which has been the world’s busiest trade route. In 2016, more than 84,000 vessels passed through the Malacca Strait, which is also prone to piracy.

⁵ See <https://www.eeco.or.th/en/pr/news/china-japan-forum-third-country-business-cooperation>; accessed on 12 January 2019.

⁶ Author’s interview with Hiroki Mitsumata, president and chief representative for ASEAN, Japan External Trade Organisation, 21 December 2018, Bangkok.

49. Although Kra's materialization is still highly unlikely in the immediate term, a canal across the Kra Isthmus seems less inconceivable today than it did in the past with more support coming from prominent Thai leaders, such as former Deputy Prime Minister Bokhin Palakula and ex-army chief of staff Gen. Pongthep Thepprateep (Mellor, 2018). In addition, other business entities, such as China's state-owned Liu Gong Machinery and private Heavy Industry Co. Ltd., have shown interest. If BRI can offer similar market-based drivers, the Kra Canal could become Thailand's most valuable and consequential contribution to China's BRI enterprise. But it should only be considered in line with the maintenance of peace and stability in the region.

IV. Evaluations

A. Assessment Indicators

The five selected case studies are assessed based on their potential contribution to the United Nations Sustainable Development Goals (SDGs). Of all the seventeen goals, five that are most relevant to the Thai case studies are:

Goal 1: End poverty in all its forms everywhere (Poverty reduction)

Goal 8: Promote sustained, inclusive and sustainable economic growth (Economic development)

Goal 9: Build resilient infrastructure (Infrastructure)

Goal 11: Make cities inclusive, safe, resilient and sustainable (Habitation)

Goal 12: Ensure sustainable consumption and production patterns (Consumption & Production)

Table 4.1 presents a summary of how each of the five case studies is assessed based on the above five SDGs. More detailed discussion of each case ensues.

Table 4.1: Summary of Case Assessment based on relevant United Nations Sustainable Development Goals

UN SDGs	Thai-China Railway	EEC	Holley Group	China-Japan Business Cooperation	Kra Canal
1. Poverty Reduction	✓	✓	✓	✓	X
8. Economic Development	✓	✓	✓	✓	✓
9. Infrastructure	✓	✓	✓	✓	✓
11. Habitation	✓	✓	✓	✓	X
12. Consumption & production	X	✓	✓	X	X

Source: Author's assessment.

Case 1: Thailand-China Railway

50. The Thailand-China Railway is fundamentally an infrastructural development project that aims to improve Thailand's rail transport. Its impacts extend beyond physical infrastructure in the following manner:

51. *Poverty Reduction and Economic Development:* As this railway route will pass through Thailand's northeastern provinces, which are known to be among the poorest in Thailand, the construction of the route should lead to regional economic development that subsequently contributes to poverty reduction in Thailand's poorest areas. Three key impacts can be envisaged. First, construction of the rail track could lead to more direct job creation in both low-skilled (e.g. construction workers) and skilled (e.g. engineers) labor in the construction industry. In addition, indirect employment could also be generated in other related industries, such as finance, insurance, trade, real estate and other services.

52. Second, improvement in railway infrastructure should reduce Thailand's reliance on road transport, which is more expensive due to the higher reliance on fuel. The reduction of logistic costs should contribute to Thailand's competitiveness as it maximizes the country's potential to leverage its geographical location. Third, the construction of high-speed rail networks could lead to development of new communities and new economic zones along the routes.

53. *Infrastructure:* The Thai-Chinese rail connectivity could be part of the growing physical connectivity of mainland Southeast Asia that links Cambodia, Laos, Myanmar, and Vietnam with Yunnan and Guangxi provinces in southern China. It would integrate the countries of the Greater Mekong Subregion, and renders Thailand a natural hub of a 333-million-person market with a combined 1.2trillion-dollar GDP. Equally important, the development of mainland Southeast Asia can be integrated with the China-Indochina corridor under BRI.

54. *Habitation:* Due to its poor railway infrastructure, Thailand has long relied on road transport as the main mode for both private and commercial logistics. The need for cars and trucks increases the country's use and consumption of fuel and inevitably leads to congestion and traffic. In addition, congestion is also one of the major causes of increased CO2 emissions. Investment in railway networks should reduce the environmental impacts from road congestion in the long run.

Case 2: The Eastern Economic Corridor (EEC)

55. *Poverty Reduction and Economic Development:* The idea behind the EEC is to replicate the phenomenal success of Thailand's first-generation Eastern Seaboard development in the 1980s. The Eastern Seaboard, which was shepherded by the National Economic and Social Development Board under the government of Gen. Prem Tinsulanond became the linchpin for Thai export-led growth for more than a decade prior to the 1997-98 economic crisis. The EEC envisages a similar undertaking but in an upgraded fashion for the digital development era known under the rubric of Thailand 4.0. Overall, EEC maps out investments in ten targeted "S-Curve" industries, namely next-generation cars; smart electronics; affluent medical and wellness tourism; agriculture and biotechnology; food; robotics for industry, logistics and aviation; biofuels and biochemical, digital and medical services. The development of major infrastructure projects for air, rail and sea transports, along with the generous incentives given to investors, is expected to generate economic momentum that would serve as the key economic development engine for Thailand.

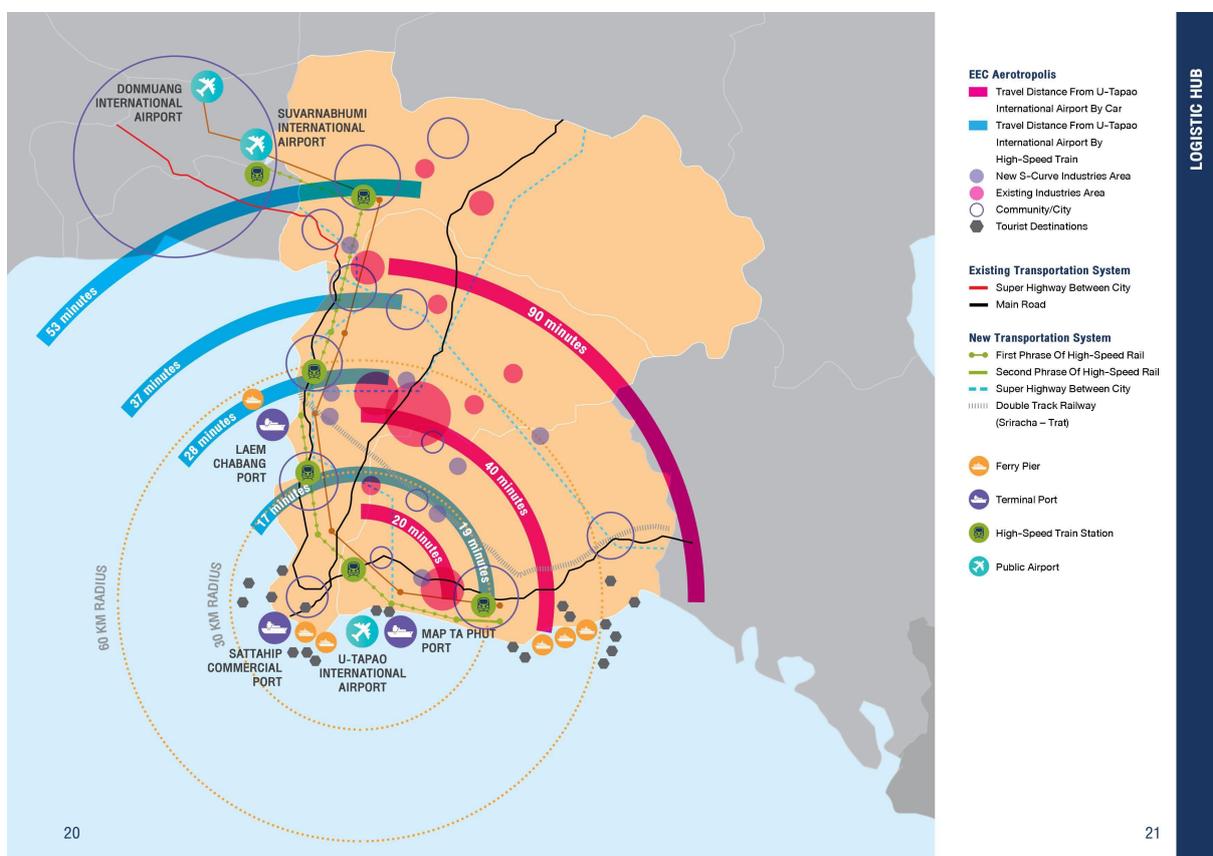
56. *Infrastructure:* With the key infrastructure projects that aim to develop air, sea, and rail transports through the further development of the U-Tapao Airport, the Laem Chabang Port, and the high-speed railway that links U-Tapao to Suvarnabhumi and Don Muang, the EEC would be a critical project to develop multimodal transports that could be linked in a seamless manner. In addition, under the EEC, U-Tapao airport is intended to grow into an international hub serving Thailand's eastern region as a hub for the former Indochina countries of Cambodia, Laos, and Vietnam.

57. Apart from the U-Tapao aviation project, Laem Chabang Deep Sea Port is to undergo a Phase III upgrade to accommodate more containers and cars. Located in Chonburi province, Laem Chabang was the cornerstone of the earlier Eastern Seaboard success. Whereas Laem Chabang deals with bulk shipments, Map Ta Phut port handles natural gas and raw fluid materials, serving Thailand's petrochemical industry. A third-phase upgrade is also earmarked for Map Ta Phut, which is located in adjacent Rayong province. In the same province is the Sattahip Commercial Port, a former US-built naval base during the Vietnam War. Sattahip is planned for handling cruise liners and luxury yachts.

58. *Habitation:* The EEC is expected to serve not only as an infrastructural development project, but also a city development model that features its main airport. Villages and communities around the U-Tapao airport will make up what is

called as the EEC ‘aerotropolis’, which will include the airport city, aviation industry, logistics and free trade areas. U-Tapao is slated to be integrated with Pattaya City, a longstanding and famous beach resort, and its environs. The scheme imagines a work-life balance that can eclectically combine EEC work while having a sea resort livelihood.

Figure 1: A plan of the aerotropolis, or airport smart-city, which is expected to be develop in the EEC, with the U-Tapao airport at its center. Source: Thailand’s EEC Office



59. Consumption & Production: The EEC project is aimed to upgrade production activities that are undertaken in Thailand for global industries. With the plan to develop the more sophisticated ‘S-Curve’ industries that build on Thailand’s previous industrial base in the Eastern Seaboard area, the EEC is expected to allow Thailand to engage in value-adding activities of industries such as transports and logistics. In addition, the generous investment-promotion schemes, including long-term land lease, tax and investment incentives, and more relaxed visa requirements, are geared to accommodate high-tech and knowledge-intensive industries to produce

higher value-added products and export them worldwide with seamless transport connectivity. This should result in Thailand's ability to integrate into the higher value-adding activities in global industries. The first set of the five S-Curve industries that are expected to start working in the first phase of the EEC are: the next-generation automotive industry (electronic vehicles), intelligent electronics, advanced agriculture and biotechnology, food processing, and tourism.

Case 3: Thai-Chinese Rayong Industrial Zone

By its nature, the Thai-Chinese Rayong Industrial Zone is an economic zone that is located within the EEC area and is therefore likely to generate similar impacts on the assessment indicators. This section discusses the five SDG impacts from this case study.

60. Poverty reduction & Economic development: The Thai-Chinese Rayong Industrial Zone has effectively become China's expanding industrial outpost in Thailand. Xu Genluo, chairman of Thai-Chinese Rayong Industrial Realty Development Co., the Chinese company that is the joint developer of the industrial estate, commented that his project has benefitted a lot from the China-proposed Belt and Road Initiative and the Thai government's "Thailand 4.0" strategy (*Xinhua*, 13 May 2017). Thanks to the BRI's infrastructure-driven policy and Thailand's industrial transformation goal under the 4.0 strategy, the Thai-Chinese Rayong Industrial Estate has drawn many of Chinese investors who find Thailand an attractive investment location due to its large Thai-Chinese community and a gateway to Southeast Asia's 600 million consumers.

61. The social setting and other trade directions are also conducive. Chinese tourists now make up the largest component of Thailand's tourist receipts, which altogether account for 12 percent of Thai GDP. The famous Chinese movie "Lost in Thailand" in 2012 also popularized Thai provinces beyond Bangkok, Chiang Mai in this case, where film was set.⁷ On the ground, the Chinese Embassy has played a coordinator

⁷ See <https://www.reuters.com/article/thailand-china-investment/from-car-parts-to-condos-faltering-thailand-lures-chinese-money-idINKCN0Y72DF>; accessed on 13 January 2019.

role for the industrial zone, positioning the country's relation with the BRI as the China-Indochina Peninsula Economic Corridor makes greater headway in Thailand.⁸

62. The Holley Group's humble beginnings have thus panned out into a major industrial platform for Chinese enterprises in Thailand in line with BRI's "going global" premise for domestic firms. According to data from the Board of Investment of Thailand, Chinese direct investment in Thailand totals 28 billion baht (about USD 800 million), making it the 6th largest foreign investor in Thailand. Chinese investment in Thailand has flowed into the agricultural products, mining, ceramics, light industry, mechanics, electronic products, chemical industry, papermaking and infrastructure sectors.

63. Chinese investment in the Thai-Chinese Rayong Industrial Zone is concentrated in automobile parts, new energy such as solar, mechanic-electronic and other industrial sectors. These investment projects could lead to further economic development for local firms that could serve as suppliers and could lead to other indirect spillovers for the regional economy.

64. While BRI could provide additional momentum for Chinese investment in Thailand, the Holley Group's industrial zone in Rayong is likely to continue to expand, irrespective of BRI's success. The Rayong zone has earned enough critical mass to rival what the Japanese multinationals have been doing in Thailand since their expansion into the country from the late 1980s. Yet BRI could provide the lift and thrust to these Chinese enterprises to achieve their goals earlier and on a larger scale.

65. *Infrastructure and Habitation:* Thanks to its location in the vicinity of the EEC, the Thai-Chinese Rayong Industrial Zone could leverage the broader overall infrastructural development of the EEC project. However, with its specific effort to promote green development, the Thai-Chinese Industrial Zone adopted a rule that all Chinese enterprises in the zone must build their facilities in accordance with ISO 14001 environmental standards and pass Thailand's Environmental Impact Assessment.

66. *Consumption & Production:* Given the rise of trade tensions between the United States and China, Southeast Asia has been considered as an alternative location for

⁸ See <http://www.chinaembassy.or.th/eng/sgxw/t1500549.htm>; accessed on 13 January 2019.

many Chinese enterprises. This has been reflected in the investment motives of companies located in this industrial zone. Avoiding trade conflicts was the number one investment motive, representing 46 percent of all the Chinese enterprises locating in the Thai-China Rayong Industrial Zone. Expanding local market followed next with 27 percent of respondents, and expanding production chain accounted for 21 percent, while using local materials only represented 6 percent of the enterprises. This ratio confirms, however, that most of the Chinese investment in this industrial zone aims to use it as an export base to avoid increased tariffs imposed on Chinese exports. While this practice is in line with China's BRI intention, more integration into the local economy should be further promoted to generate local benefits to domestic suppliers.

Case 4: The China-Japan Third Country Market Cooperation Forum

67. For Thailand, the China-Japan Third Country Market Cooperation Forum has been closely tied to the EEC as an investment hub that could welcome investors from both Japan and China. As there has yet to be any clear direction on how this could proceed, it is difficult to assess the project impacts based on the selected assessment indicators. However, should the project go ahead with the "smart cities" concept, it could be a win-win proposition for Thailand not only as a third party that could entice a tripartite cooperation between China and Japan, but also as an added momentum for its EEC. Its impacts, therefore, would reflect potential *Poverty Reduction, Economic Development, and Habitation* in a similar manner that the EEC would.

68. Institution: If it proceeds as planned, this "smart cities" pilot project can serve as a case of China's willingness to adjust and Japan's ability to accommodate. This could be considered as an important international institution that could promote more peaceful and inclusive development, especially given the rising hesitance from many countries with regard to the BRI. However, the jury is out on whether and to what extent this kind of tripartite "third country" setup can be linked to BRI and the China-Indochina economic corridor. As with the Holley Group, it is conceivable that such a China-Japan cooperation through third parties like Thailand and this "smart cities" scheme could continue and build regardless of the success of BRI and its corridors.

Case 5: The Kra Canal

69. The Kra Canal should be assessed not only from an economic perspective, but also a political one, given the security risks it may pose to Thailand. The following assessment focuses on *Economic Development, Infrastructure, and Institution*.

70. *Economic Development & Infrastructure:* Of all the East Asian countries that would benefit from the Kra Canal as a shorter and a strategic shipping route alternative, China would stand to gain the most. While the Malacca Strait handles 30 percent of the world's seaborne trade, it accommodates 80 percent of China's energy trade route. If BRI and its assortment of financing agencies are partly about diversifying China's energy insecurity, then Kra Canal is one bold answer. Kra makes immense sense from the demand side (Menon, 2018; Lam, 2018). Demand for the Kra Canal has never been more self-evident and pressing as it would address China's "Malacca Dilemma" (see Lam, 2018).

71. *Institution:* But, pure economic benefits rising from demands for an alternative sea passageway from the Indian Ocean to the South China Sea need to be considered in view of potential conflicts the Kra Canal could expose. Kra Canal would raise Thailand's role and profile but it may undercut Singapore's status as the region's maritime hub. As a consequence, ASEAN unity and centrality may be undermined. The Kra Canal through southern Thailand would also pose domestic conflicts. The Thai mindset is glued to a unitary state and geographical cohesion after past decades of imperial threats and territorial concessions to Britain and France. Cutting through Thailand's southern peninsula and putting a canal in its place would also bear ramifications for the virulent Malay-Muslim insurgency in southernmost border provinces. Despite periodic interest in public discourse, the domestic wherewithal among the populace and officialdom has been seen as insufficient to make the Kra Canal happen in the past. Thus if Kra were to take shape, it has to be seen as a win-win proposition. The argument would be that there is enough shipping traffic through the South China Sea to have not one but two passageways that would allow Thailand to become another maritime hub in Southeast Asia, in addition to Singapore

B. Stakeholder Engagement

72. Among the 17 in-depth stakeholder interviews—3 NGO workers, 3 academics, 6 private sector executives, 3 household individuals, 2 community leaders—the results were mixed. The private sector executives were generally enthusiastic about all five case studies, although two of them were skeptical about the Kra Canal’s feasibility. These executives are eager for the EEC to make more progress more quickly. They believed it can be a breakout for Thai economic growth to upgrade and reach a trajectory of 4-5 percent economic expansion for the next decade. One executive associated with the Thai-Chinese Rayong Industrial Zone believed Thailand is the gateway for Chinese MNEs to enter Southeast Asian markets more widely in view of the China-US trade conflict. All executives are supportive of the Thai-China railway plan and criticized its lack of momentum due to government inertia. None of the executives opposed any of the five case studies.

73. The three NGO workers were skeptical of the Thai military government’s Thai-China rail, EEC, and Kra Canal projects. They viewed these three projects as politicized and manipulated by the government for political gains ahead of the March 2019 election. The rail and EEC both took place only after the May 2014 military coup and thus did not carry democratic legitimacy. These NGO workers did not oppose but questioned China’s motives because the giant neighbor had worked so closely with the coup government. The NGO workers opposed the Kra Canal because they think it would lead to environmental degradation and large-scale corruption. Here they are in line with the three academics (two economists and one political scientist) who viewed Kra as destabilizing for both domestic politics and regional relations. Kra may also not be cost-effective in terms of return on investment. The one political scientist and three household individuals also feared Kra’s physical partition of southern Thailand could worsen the Malay-Muslim insurgency in Thailand’s border provinces next to Malaysia.

74. The local community leaders echo the view of the NGOs. They are concerned about environmental damage and workers’ rights, about who would benefit from the construction of the rail and EEC. They also questioned whether Kra Canal is necessary and whether it can be done as an overland link instead of cutting a strip through southern Thailand. Apart from Kra Canal, the three household individuals find the other four projects favorable. Residing in the EEC-related area, they see benefits from the other four cases. The household individuals are less concerned about who is in government and more keen on progress in these areas. They did

raise the issue about the terms of reference and preferred Thai laborers and workers to take the lead in all projects, not Chinese.

75. No interviewee opposed the China-Japan Third Country cooperation. All three academics and private sector executives concertedly agreed that China-Japan cooperation is a win-win for Thailand, and if Thailand can facilitate greater bilateral collaboration between the two large Asian economies, then all the better. China's MNEs are making unprecedented inroads in the Thai economy, much like their Japanese counterparts did in the late 1980s and 90s. If China and Japan can join forces, this would be a boost to Thailand's growth prospects.

76. Overall, the Thai-Chinese Rayong Industrial Zone and the China-Japan Third Country cooperation were well received by all interviewed stakeholders. Kra Canal was the most controversial but everyone agreed that it potentially held the largest payoff for Thailand if corruption can be controlled and the environment can be protected. The Thai-Chinese railway and the EEC were received with mixed blessings. Those with business interests and direct benefits were in favor but community leaders and NGOs were more skeptical.

C. Opportunities

77. While there has been substantial and extensive infrastructure investment in Mainland Southeast Asia since the early 1990s—much of it under the GMS rubric—the resultant connectivity in the North-South and East-West corridors has been confined to road construction. There has been scant rail development. Within Thailand itself, the national rail system has not been updated for nearly one hundred years. Part of the reason road has been preferred over rail is attributable to the burgeoning automotive industry where foreign carmakers have few incentives to promote rail. The auto sector comprises 11 percent of Thai GDP. CICPEC, with its long overdue Thailand-China railway, can be a game changer for logistics and economic development in Mainland Southeast Asia as Thailand is the hub of it.

78. In Thailand, Chinese MNEs are focused on other industries than vehicle production, unlike the previous generation of Japanese carmakers who set up shop in Thailand from the late 1980s after the Plaza Accord. Rail connectivity from Kunming to Bangkok would give southern China a direct route to the Gulf of Thailand

and development benefits along the way, particularly Thailand's growing provincial markets and upcountry middle classes.

79. Thailand would gain from in-country rail travel and reduced transaction costs. Coupled with extensive highways crisscrossing Mainland Southeast Asia, rail development can further integrate the Mekong mainland infrastructure across CLMTV, creating myriad multiplier effects, such as jobs, retail commerce, household consumption, income generation and redistribution.

80. All four case studies – China-Thailand Railway, the EEC, the Thai-Chinese Rayong Industrial Zone, and China-Japan Third Country Market Cooperation Forum – are mutually reinforcing. Not only would Chinese visitors and firms gain greater foothold in Thailand by expanding their base at the Rayong Industrial Zone and the China-Japan Third Country cooperation but they would be boosting the EEC and promote Thailand's 4.0 growth strategy.

81. The GMS and ACMES stand to benefit from all four projects in favor of RCI more broadly. GMS itself, which includes Yunnan and Guangxi, would be deepened by these four projects. Thailand's ACMECS drive can be made compatible with GMS. The more GMS and ACMECS make headway, the AEC prospects will brighten, as CICPEC solidifies Mainland Southeast Asia's supply chains and production networks among Chinese and Thai firms. The concentric circles centered on Thailand from CLMT, CLMTV and ACMECS to GMS would expand and tighten at the same time.

83. The five case studies of this report harbor a mix of public sector initiatives and private sector drivers. The Thailand-China Railway is so-far-state-driven but has made little progress. A public-private partnership can provide momentum by alleviating local fears of a debt trap and efficiency gains through profit motives as private firms play a greater role. The EEC, the Thai-Chinese Industrial Zone, and the China-Japan Third-Country Cooperation are good examples of government-guided and private sector-driven outcomes.

84. The Kra Canal is an outlier but it offers the greatest yields if it gains momentum. It would boost all of the other four projects, and uplifts China's overall BRI by connecting the Pacific and Indian oceans. Its commercial benefits are immense to all parties concerned, including local job creation, increased maritime traffic, reduction of congestion in the Malacca Straits, and lower shipping costs. Even if scaled down

into a land bridge without a canal, the passage through Thailand between the two oceans would profoundly complement BRI.

D. Potential Risks

85. Financial concerns abound. The Thailand-China Railway is costly and its financing is unclear. In Laos' case, the government borrowed a large sum of more than half of Lao GDP to fund the Kunming-Vientiane rail line. Local concerns about a potential debt trap are also evident in Thailand and elsewhere. Thailand's public debt profile is already considerable, and no private firm has stepped up to meet the financing challenge. The same goes for the Kra Canal. Neither the Thai government nor private entities appear prepared to shoulder its financing. But the financing needs of the EEC, Thai-Chinese Industrial Zone and the China-Japan Third-Party cooperation appear more forthcoming from both the Thai government and private sector.

86. Environmental concerns are rife among stakeholders for all projects, most on the Kra Canal and least on the Thai-Chinese Industrial Zone. Thailand has had controversies surrounding environmental issues at its Eastern Seaboard in the past. NGO stakeholders are wary of the EEC. The Thai-Chinese Industrial Zone and the China-Japan Third Party cooperation are not as resistant because they reside on privately owned land at Amata City. When the Thailand-China Railway makes more headway, it will have to contend and overcome stringent Environmental Impact Assessment and the scrutiny of NGOs and local community leaders.

87. The Thailand-China Railway will also risk more transnational crime and the trafficking of persons and drugs. Past incidents have shown human trafficking among the GMS economies. These could worsen with rail connection across Mainland Southeast Asia. The lack of harmonized law enforcement across countries concerned may also compound this risk.

88. Local concerns also center on labor and land use rights for the Thailand-China rail. It is feared that Chinese firms, engineers and workers would stand to benefit at the expense of Thai counterparts. This fear may hinder future progress of the project.

89. Thailand's ongoing political instability and associated policy uncertainty are a major concern. BRI and the CICPEC have sprung up during the military government.

Elected governments in 2019 and beyond, especially if headed by civilians, could slow, shelve or upend entire projects altogether, particularly the Thailand-China Railway, the EEC, and the revived Kra Canal proposal. The Thai-Chinese Industrial Zone and the China-Japan cooperation scheme appear safe from policy vicissitudes. But there appears to be sufficient pro-growth consensus to retain and build on both the railway and the EEC, although with potential modifications.

E. Maps

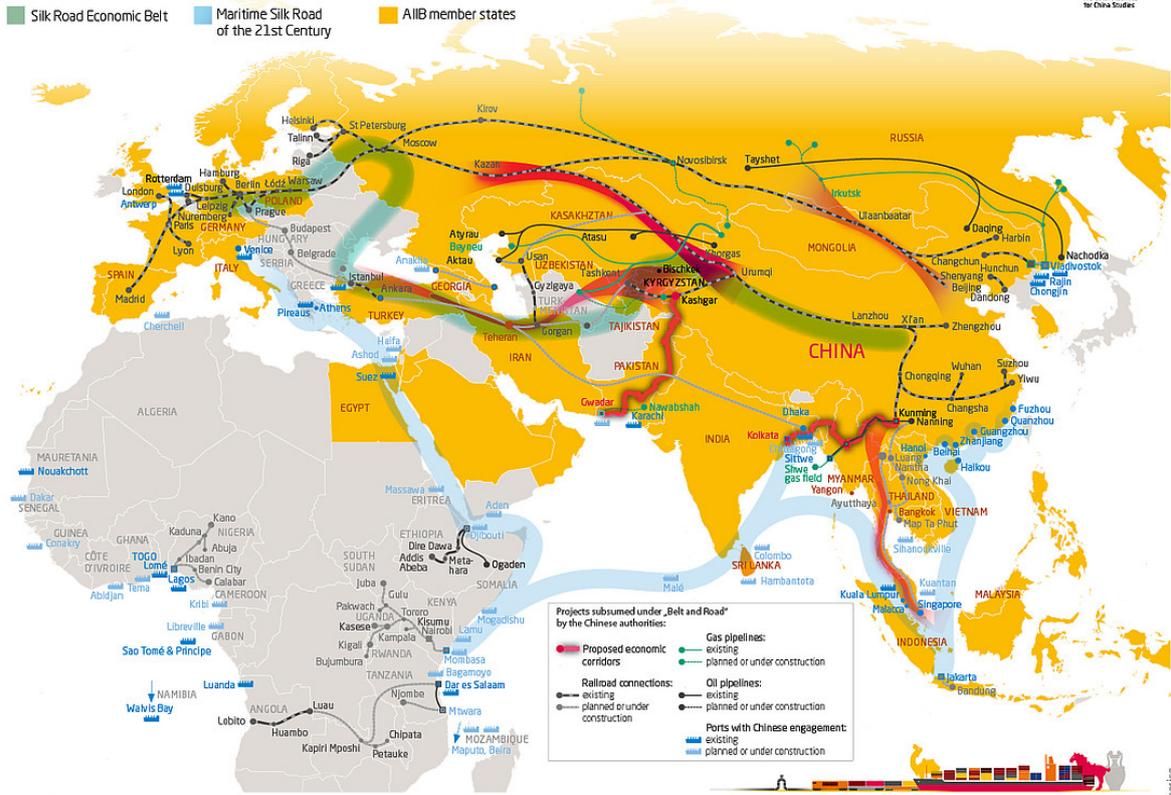
Figure 4.2: Belt Road Initiative



Source: <https://georgemagnus.com/>

Figure 4.3: Belt Road Initiative

China aims to build a global infrastructure network
 "Belt and Road" infrastructure projects, planned and completed (March 2017)



Source: MERICS research

Source: Mercator Institute for China Studies.

Figure 4.4: Eastern Economic Corridor - High-speed train



Source: <https://www.eeco.or.th/en>

Figure 4.5: Eastern Economic Corridor -Laem Chabang Deep Sea Port



Source: <https://www.eeco.or.th/en>

Figure 4.6: Eastern Economic Corridor - Mab Tha Put



Source: <https://www.eeco.or.th/en>

Figure 4.7: Eastern Economic Corridor - Satthahip



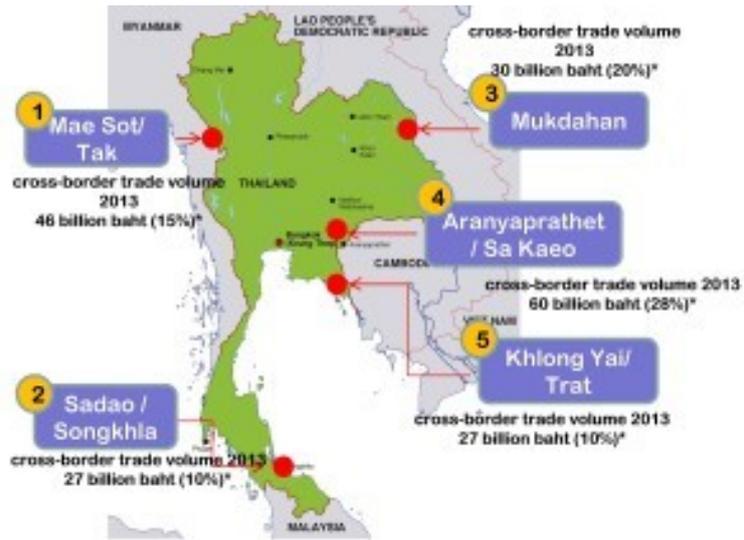
Source: <https://www.eeco.or.th/en>

Figure 4.8: Eastern Economic Corridor - U-Tapao Airport



Source: <https://www.eeco.or.th/en>

Figure 4.9: Thailand's Special Economic Zones



Source: NESDB.

Figure 4.10: Special Economic Zones in Thailand

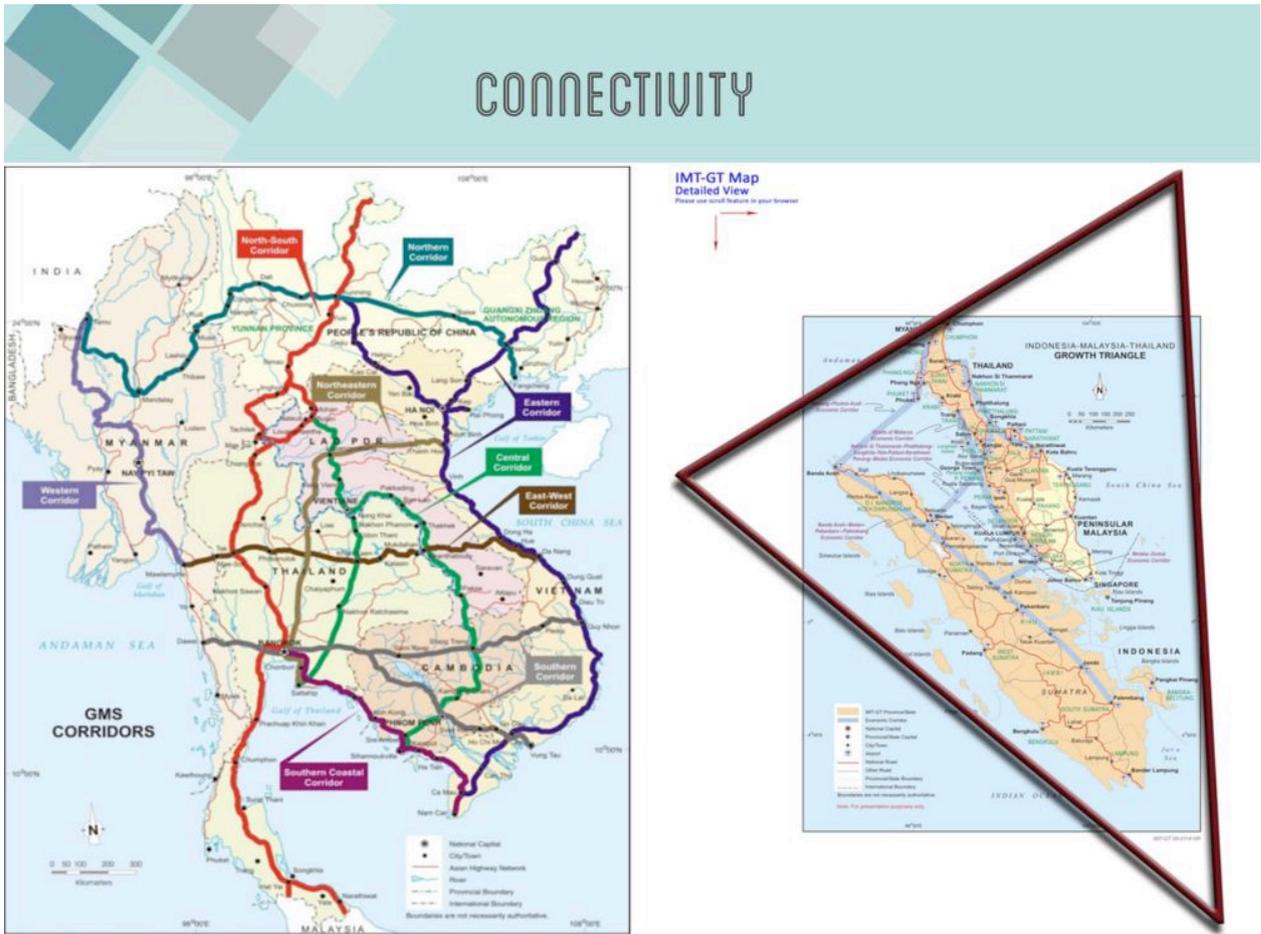


Figure 4.11: Eastern Economic Corridor



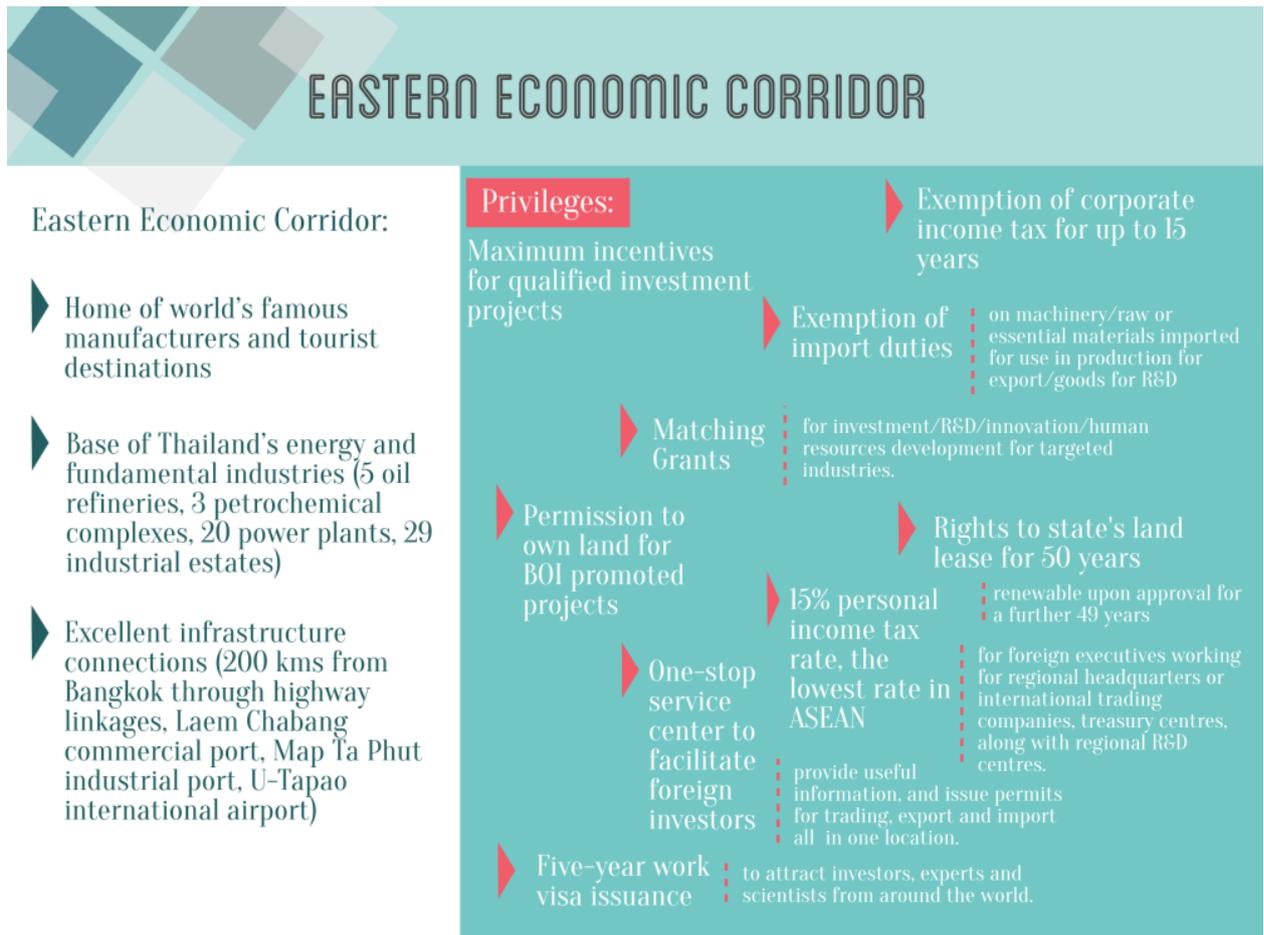
Source: NESDB.

Figure 4.12: Regional Cooperation and Connectivity



Source: NESDB.

Figure 4.13: Privileges granted for Investment in Eastern Economic Corridor



Source: NESDB.

Figure 4.14: Eastern Economic Corridor Budget



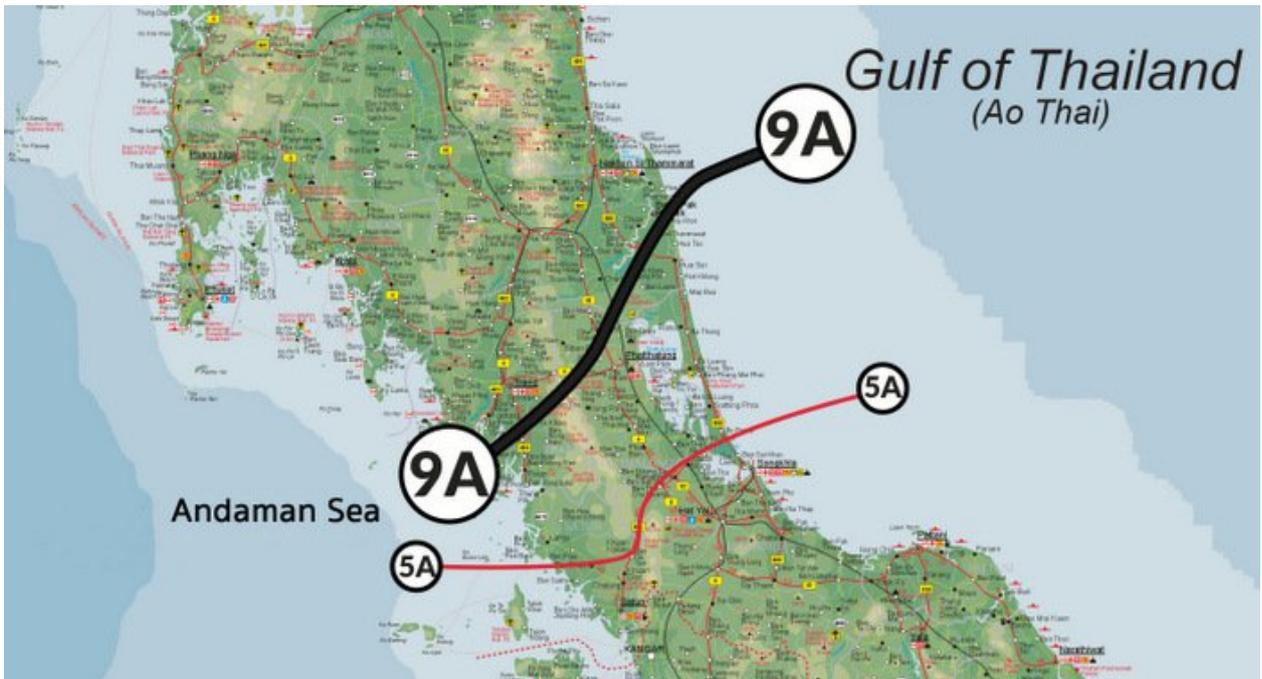
Source: NESDB.

Figure 4.15: Location of Eastern Economic Corridor



Source: <https://www.eeco.or.th/en>

Figure 4.16: Thai Canal



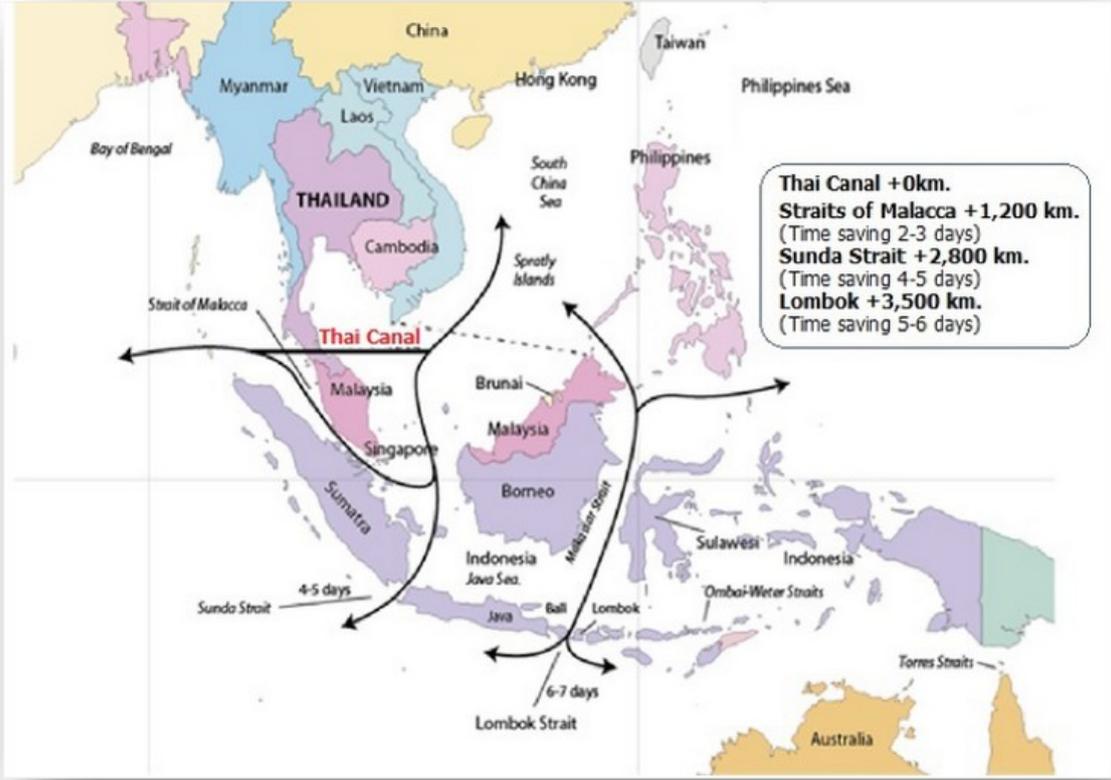
Source: www.asiasentinel.com

Figure 4.17: Kra Canal



Source: www.independent.co.uk

Figure 4.18: Kra Canal



Source: ASEAN Briefing.

V. Summary and Conclusions

90. It is worth recalling that the entire BRI momentum so far has coincided with Thailand's military coup in May 2014 and its consequent military government. Such concurrence reflects BRI's relatively short lifespan thus far and the Prayut government's initial embrace of China for superpower succor that led to the rail development talks. While China was keen to move the project forward, the inertia with regards to the Thailand-China rail plan owes more to the Thai government's lack of policy thrust, bureaucratic inefficiency, and geopolitical winds. This last point in particular references the roles of Japan in the initial post-coup stage and the US after Trump came to power and reengaged with the Prayut government.

91. The north-south train project in Mainland Southeast Asia is thus stagnant. However, time is on its side. China will not lose interest but it may need to revise terms and adopt a more consultative approach. The lack of consultations has been BRI's chief weakness, but China is learning from it. In many ways, all the case studies in this paper, from the Thailand-China railway development and Thailand's Eastern Economic Corridor to the Holley Group's Thai-Chinese Rayong Industrial Zone, the China-Japan Third Country Market Cooperation Forum and the Kra Canal, can be linked to BRI. As stakeholder interviewees have noted, all Chinese business presence and activities in Thailand can ultimately be categorized under the BRI umbrella. BRI's progress will influence the future of these projects as well. The projects will likely remain operational and viable without BRI but can move faster and perhaps on a wider scale if BRI and its CICPEC prove more effective and successful.

92. As Thailand goes through another murky election year in 2019, its post-election government is likely to revisit Chinese rail possibilities because it would not want to miss out on BRI's prospects. For the same reason, the EEC is likely to be continued irrespective of which cliques and clans, parties and factions, come to power after the poll. The EEC is tantamount to Thailand's rice bowl for the next decade and longer, much like the Eastern Seaboard helped deliver solid and steady growth throughout the 1980s and early 1990s. Progress may not be dramatic but the EEC already has a built-in momentum from an earlier generation of industrial policy. The Kra Canal is an outlier that will always be discussed without much confirmation in regards to course of action. The key to Kra's development will be whether a new kind of politics emerges during the new reign, whereby growth strategies that seemed infeasible in the past will be seen as vibrant and viable in the near future.

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VII. Annex 1

1. On 25 September 2015, the 193 Member States of the United Nations adopted the Sustainable Development Goals (SDGs), a set of 17 aspirational objectives with 169 targets expected to guide development actions of governments, international agencies, civil society and other institutions over the next 15 years (2016-2030).
2. The 17 SDGs aim to end poverty and hunger while restoring and sustainably managing natural resources. They integrate the three dimensions of sustainable development – economic, social and environmental. They are indivisible – no one goal is separate from the others, and all call for comprehensive and participatory approaches. And they are universal – the 2030 Agenda is as relevant to developed as it is to developing nations.

Figure A1.1: Sustainable Development Goals for the UN Agenda 2030



3. Harmonized indicators are essential to measuring progress, and SDGs will ultimately be turned into management tools to help countries develop implementation strategies and allocate resources accordingly, measure progress towards sustainable development, and help ensure the accountability of all stakeholders in achieving the SDGs. Because all the countries participating in the current TA are signatories to the 2030 Sustainable Development Agenda, it is appropriate to use SDGs for evaluation of our RCI and BRI initiatives.

Table A1.1: United Nations Sustainable Development Goals

	Topic	Title
1	Poverty	<u>End poverty in all its forms everywhere</u>
2	Food	<u>End hunger, achieve food security and improved nutrition and promote sustainable agriculture</u>
3	Health	<u>Ensure healthy lives and promote well-being for all at all ages</u>
4	Education	<u>Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</u>
5	Women	<u>Achieve gender equality and empower all women and girls</u>
6	Water	<u>Ensure availability and sustainable management of water and sanitation for all</u>
7	Energy	<u>Ensure access to affordable, reliable, sustainable and modern energy for all</u>
8	Economy	<u>Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</u>
9	Infrastructure	<u>Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</u>
10	Inequality	<u>Reduce inequality within and among countries</u>
11	Habitation	<u>Make cities and human settlements inclusive, safe, resilient and sustainable</u>
12	Consumption	<u>Ensure sustainable consumption and production patterns</u>
13	Climate	<u>Take urgent action to combat climate change and its impacts</u>
14	Marine-ecosystems	<u>Conserve and sustainably use the oceans, seas and marine resources for sustainable development</u>
15	Ecosystems	<u>Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</u>
16	Institutions	<u>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</u>
17	Sustainability	<u>Strengthen the means of implementation and revitalize the global partnership for sustainable development</u>