# Chapter 4

## **Status of Other Projects**

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## Chapter 4

## **Status of Other Projects**

#### 4.1 Eastern Economic Corridor (EEC) development plan in Thailand

Since 2014, the administration of Prime Minister Prayuth Chan-o-cha has rapidly developed various policies for the sustainable development of Thailand's economy. The Thailand 4.0 policy is a digital economy policy, border SEZ policy of regional economic promotion, and industrial cluster policy, which looked at the country's future economic development, and the Eastern Economic Corridor (EEC).

However, it is hard to say whether the public is satisfied with the economic policy. The production volume of automobiles, which is a representative index of the Thai economy, fell below that in the previous year in FY 2017. In order to break this trend and realise sustainable economic growth, the government is aiming to raise the economy by positioning the EEC development plan as the centrepiece of policy.

The concept of the EEC development plan is to create ASEAN's leading economic zone for industry, infrastructure, and urban development, which will lead the future of ASEAN, together with industrial agglomeration, infrastructure development, and urban development. It is an economic industrial advancement policy to escape from the 'middle-income trap' led by the government.

The EEC development plan was approved at the Cabinet meeting on 28 June 2016. It stipulated regulations for infrastructure development, city planning, private investment invitation, and the establishment plan for the aircraft maintenance base (Appendix 3). In addition, on 17 January 2017, the National Council for Peace and Order (NCPO) established the EEC Policy Committee with the regulations and contents that guide the EEC development plan (Appendix 4). In February 2018, the EEC development plan was passed into legislation by the National Legislative Body.

The promotion of the EEC development plan is through the reconstruction of infrastructure and large investment benefits. The preferential treatment of automobiles and petrochemicals of target industries in the super cluster in Chonburi Province and Rayong Province includes being exempt from corporate income tax for 8 years and an additional deduction of 50%. In addition, for projects that the Ministry of Finance deems particularly important, there is an exemption from corporate income tax for 10–15 years.

Companies that apply for benefits are obliged to cooperate with educational institutions, research institutes, or core research centres (or centres of excellence) located in the clusters to develop human resources and improve technology. The aim is to achieve

industrial innovation to promote cooperation between educational institutions and companies.

The infrastructure investment plan is divided into a short-term plan (up to 2018), a medium-term plan (up to 2021), and a long-term plan (after 2022). The total investment is estimated at \$1 trillion (US\$33 billion). Of these plans, 30% will be funded by the government, 10% by state-owned enterprises, and the remaining 60% will be promoted through PPPs. Amongst them, the EEC Policy Committee discussed six infrastructure investment plans.

The EEC development plan is a strategy that follows the traditional approach in terms of choosing industries with strengths in Thailand, concentrating on its industry and improving competitiveness. The plan recommendations and timelines are in line with the government's enthusiastic goal to realise further economic growth. Though an initial concept, the EEC development plan is gradually taking shape.

It is important to view the rebuilding of the eastern district called 'Detroit of the East' as a hub associated with the future economic growth of neighbouring countries.

Table 3: Infrastructure investment plan at the Eastern Economic Corridor Policy

Committee on 1 February 2017

Project Name		Summary	Budget
1	U-Tapao Airport	Passenger terminal building expansion (annual/3	<b>\$200</b>
	expansion and	million people)	billion
	related projects	Installation of Maintenance Repair and Overhaul	
	(No. 511)	Center	
		Construction of the second runway	
		Approval of private airport operation rights	
		Development of aviation industrial park	
		Human resources training centre for aviation industry	
		and maintenance centre for aircraft	
2	Map Ta Phut port	In connection with the first phase port facility,	<b>\$1.105</b>
	expansion work	development of the first half 0.8 square kilometres,	billion
		the second half 0.7 square kilometres.	
		Two tanker shore ports of liquefied natural gas and	
		three gas transfer piers	
		Cargo warehouse, natural gas-related establishment,	
		sludge reservoir, breakwater construction	
3	Construction of the	The motorway is the route of the Pattaya–Map Ta	<b>\$</b> 35.3
	motorway	Phut section of National Highway No. 7	billion
	(Pattaya–Map Ta	At present, expansion extension works of 32	
	Phut) (No. 441)	kilometres are progressing, and it is scheduled to open	
		in 2019.	

4	Construction of	Connects U-Tapao Airport, Suvarnabhumi Airport, and	<b>\$158</b>
	high-speed railway	Don Mueang Airport	billion
	(Bangkok–Rayong)	Don Mueang Airport and U-Tapao Airport within 1	
	(No. 488)	hour, Suvarnabhumi Airport and U-Tapao Airport	
		within 45 minutes	
		Operated by public-private partnership (PPP) system,	
		transport capacity of 110 million people/year	
5	Laem Chabang	Construction of a wharf to increase cargo handling	₿88
	deep sea port	from current 7 million tonnes/year to 18 million	billion
	extension work	tonnes/year	
	(No. 510)	Building a pier with a depth of 18.5 metres, it is	
		possible to anchor a large ship with a capacity of	
		160,000 tonnes (15,000 TEU).	
		Developed by PPP method	
6	Construction of	Double tracking of existing railway between Laem	<b>\$64.3</b>
	railway double	Chabang Port and Map Ta Phut Port	billion
	tracking		

Source: Ministry of Industry (Thailand), 2017.

#### 4.2 Current status of Dawei development

Dawei is the state capital of Tanintharyi Division in Myanmar, 350 km to the west of Bangkok and facing the Indian Ocean. It is located at the western edge of the Southern Economic Corridor. A big project is planned, including the construction of an SEZ of about 200 km² (No. 322), to be the largest SEZ in Southeast Asia, and a deep sea port (No. 302). Dawei development will open up a route from Thailand to the Indian Ocean directly by land. Compared with the India western route via the Strait of Malacca, travel time will be shorter by about 3 days and the cost of transportation will be decreased. It will benefit enterprises already moving into Thailand, and Myanmar also intends to construct an industrial base including heavy and chemical industries by taking advantage of the deep sea port, vast land, and plentiful labour force.

In 2008, the Thai government and the Myanmar government signed a basic agreement regarding Dawei development. Italian—Thai Development Public Company (ITD) in Thailand achieved the right to develop the Dawei area from the Myanmar government and started developing it. However, ITD stopped the development because of financing difficulties, amongst others. After that, again recognising the importance of Dawei, Thailand and Myanmar signed a memorandum of understanding in July 2012 that made Dawei development a national project in the two countries. In September 2012, a cooperative committee consisting of six groups was founded. Then, in June 2013, Dawei SEZ Development Company, a special purpose vehicle company was founded in Thailand.

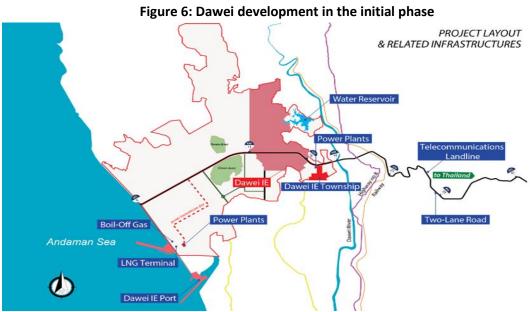
ITD's initial plan was to construct a road from the Thai border to Dawei SEZ, houses, amusement facilities, a residential area for foreigners, and a large reservoir, covering a range of industries from light to heavy around the deep sea port. This plan was reviewed and Dawei development was divided into the initial phase and full phase. The initial phase was undertaken by Myandawei Industrial Estate Company Limited (MIE), which has investment from ITD and Rojana Industrial Park Public Company Limited, which operated an industrial estate in Ayuthaya. The Thai government requested cooperation from Japan and the three countries (Thailand, Myanmar, and Japan) signed a memorandum of intention in July 2015. Still, Dawei development has stopped at the initial phase.

Currently, there is a 138 km earth road from the Thai border (Phunamron) to Dawei (No. 276), which is being maintained by MIE (or actually ITD). Compared with 2 years ago, the situation of the road has not changed. When it rains, it is very difficult to drive on the road even with a four-wheel drive. Moreover, the Karen National Union (KNU), an armed organisation, controls the area, collecting tolls when passing through the road.

In a meeting between Thailand and Myanmar held at the end of July 2017, the Myanmar government accepted a \$4.5 million soft loan (grace term: 10 years, repayment term: 20 years, interest rate: 0.1%) as funds for public works, which essentially the Thai government had offered earlier for the construction of the road. In another meeting, this time including Japan, the Myanmar government proposed to spend the \$4.5 million soft loan to expand the road and improve the slope. The purpose of the road is to transport goods and workers to develop Dawei. In the full phase, construction of a new four-lane road is planned.

The apparent reason for stopping the Dawei development is that Thailand is now focusing on internal policies such as Thailand 4.0, including the Eastern Economic Corridor. Thus, the degree of priority of Dawei has declined in Thailand. It is also thought that Myanmar has postponed the Dawei development plan because there are many other infrastructure projects in the country and there are not enough resources and money for investment. Though Japan has already signed the memorandum of understanding, they cannot propose a definite policy because the development progress of the initial phase is unclear.

Dawei development is a promising project and needs actions for several decades. Sellers in the crowded market of Dawei town offer varieties of seafood and cashew nuts. Facilities for travellers are increasing and the town is changing little by little. In order to open the future of Dawei, it is important to improve medium-grade connectivity by constructing the road to the Thai border and create local businesses such as agriculture/food processing, labour-intensive industries, and tourism.



Souce: Myandawei Industrial Estate Company Limited (MIE), 2015

Table 4: Current status of Dawei development in the initial phase

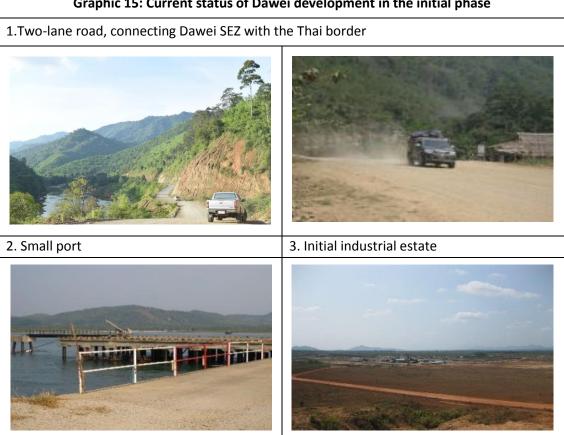
Projects in initial phase		Outline	Current situation
1	Two-lane road, connecting Dawei SEZ with the Thai border (No. 276)	Construct a 138-kilometre (km), two- lane expressway from the entrance of the special economic zone (SEZ) to the Thai border (Phunamron) and divide into three sections (51 km, 43 km, and 44 km respectively) Asphalt concrete pavement, lane width 3.5 × 2 metres (m), outer lateral clearance 1.5 m, maximum super- elevation 10%, maximum gradient 4– 12%, vertical clearance 5 m	Construction has not started. Myandawei Industrial Estate Company Limited is in charge of operations and maintenance. Visibility while driving is bad because of dust clouds. Car collisions and falls from cliffs occur because there are many places with steep slopes and curves.
2	Small (IE) port	Construct a small port with two berths and 8 m approach channel for light industries.  First birth: 100 m, 13,000 deadweight tonnage (DWT), and 400 TEU (twentyfoot equivalent unit) multipurpose vessels can get to the shore.  Second berth: 150 m, 25,000 DWT, and 1,600 TEU Feeders can get to the shore.	First berth is already completed. Construction of second berth has not started.
3	Initial industrial estate (IE)	Develop a 27 km <sup>2</sup> industrial estate for light industries. It is divided into four sections (A–D), each to take 2 years to develop (8 years in total).	In A2 of Area A, 160 acres are already developed as a mock-up. Reservations of moving into this area have already started.

Projects in initial phase		Outline	Current situation
4	Temporary power plant and boil-off gas power plant	Construct liquefied natural gas (LNG) fired power plants for developing SEZ. Temporary power plant: 15 megawatts (MW) Boil-off gas power plant: 15 MW	Temporary power plant and boil-off gas power plant have not been constructed at all. There are a gas engine (1 MW) and diesel generator (1.5 MW) for the ITD camp. The gas engine has stopped operating.
5	Initial phase power plant (combined- cycle gas turbine)	Construct a power plant and increase the output sequentially considering the power demand of industrial estate (No. 3). It is expected that final power demand will be 421 MW and power supply will be 460 MW.	No progress.
6	Small water reservoir	Construct two reservoirs for industrial use.  Pa Yain Byu Reservoir: Active storage of 7.70 million cubic metres (1,700 million gallons)  Ta Laing Gya Reservoir: Active storage of 2.70 million cubic metres (600 million gallons)	Pa Yain Byu Reservoir is already completed. Construction of water treatment facility has not started.  Construction of Ta Laing Gya Reservoir has not started.  When the number of enterprises moving into the industrial estate increases and there is a concern about water shortage, the construction will start.
7	Telecommunic ations landline	Connect communication line from the Thai border to SEZ	Optical fibre with overhead wiring is already connected between the Thai border and SEZ along the temporary road.
8	Initial township	Construct nine apartments for workers, offices, amusement facilities, residence for foreigners (limited to supervisor and middle manager), golf course, etc. Residence for foreigners and golf course will be constructed in the northern edge of the SEZ along the coastline.  Apartments for workers are five stories with 180 units; one room	One apartment for workers is already completed. Renovation of the office and KM 3 camp are also completed.

		(220.4 square metres) can	
		accommodate four workers.	
	LNG terminal	Construct facilities that import and	Construction has not started. A
		supply gas for the power plants of the	joint venture was formed
		No. 4 project.	between ITD, LNG Plus
9		Storage capacity: Minimum 125,000	International, and Royal Dutch
		m <sup>3</sup> , incoming carrier size: up to	Shell, but Royal Dutch Shell
		170,000 m³, ultimate throughput: 2.0	left, so looking for a new
		metric tonnes per annum (MTPA),	partner for the joint venture.
		LNG send-out to shore: 300 m <sup>3</sup> /h.	

Source: EAIC Team.

Graphic 15: Current status of Dawei development in the initial phase



## 5. Initial phase power plant



6. Small water reservoir



8. Initial township



9. LNG terminal



Source: EAIC Team.

#### **Bibliography**

- Anh, L. (2016), 'HSBC urges Viet Nam to equitize infrastructure SOEs', *The Saigon Times*, 2 November. Available at: <a href="http://english.thesaigontimes.vn/50578/HSBC-urges-Viet Nam-to-equitize-infrastructure">http://english.thesaigontimes.vn/50578/HSBC-urges-Viet Nam-to-equitize-infrastructure</a> (accessed 9 July 2018).
- Business World Online (2018), Tag: infrastructure. Available at: <a href="http://bworldonline.com/tag/infrastructure/">http://bworldonline.com/tag/infrastructure/</a> (accessed 9 July 2018).
- Chanco, B. (2017), 'All systems go?', *The Philippine Star*, 3 January. Available at: <a href="http://www.investphilippines.info/arangkada/all-systems-go/">http://www.investphilippines.info/arangkada/all-systems-go/</a> (accessed 9 July 2018)
- Chantanusornsiri, W. (2018), 'Dawei-road-loan-near', *Bangkok Post*, 13 April. Available at: <a href="https://www.bangkokpost.com/news/transport/1445562/dawei-road-loan-nears">https://www.bangkokpost.com/news/transport/1445562/dawei-road-loan-nears</a> (accessed 9 July 2018).
- Committee for Acceleration of Priority Infrastructure Delivery (KPPIP) (2018)

  'Soekarno-Hatta International Airport (SHIA) Express Railway', Available at:

  <a href="https://kppip.go.id/en/priority-projects/railway/soekarno-hatta-international-airport-shia-express-railway/">https://kppip.go.id/en/priority-projects/railway/soekarno-hatta-international-airport-shia-express-railway/</a> (accessed 9 July 2018).
- de Vera, B. O. (2016), 'Duterte admin to hike infrastructure spending to up to 7% of GDP', Inquirer.net 3 June. Available at: <a href="http://newsinfo.inquirer.net/789048/duterte-admin-to-hike-infrastructure-spending-to-up">http://newsinfo.inquirer.net/789048/duterte-admin-to-hike-infrastructure-spending-to-up</a> (accessed 9 July 2018).
- Economic Research Institute for ASEAN and East Asia (2015), The Comprehensive Asia Development Plan 2.0 (CADP 2.0): Infrastructure for Connectivity and Innovation. ERIA Research Project Report FY2014 No. 4, Jakarta: ERIA. Available at: <a href="http://www.eria.org/research/the-comprehensive-asian-development-plan-20-cadp-20-infrastructure-for-connectivity-and-innovation/">http://www.eria.org/research/the-comprehensive-asian-development-plan-20-cadp-20-infrastructure-for-connectivity-and-innovation/</a>
- Economic Research Institute for ASEAN and East Asia (2016), Lao PDR at the Crossroads: Industrial Development Strategies 2016–2030. ERIA Research Project Report FY2015 No.2, Jakarta: ERIA. Available at: <a href="http://www.eria.org/research/lao-pdr-at-the-crossroads-industrial-development-strategies-2016-2030/">http://www.eria.org/research/lao-pdr-at-the-crossroads-industrial-development-strategies-2016-2030/</a>
- IPC (Indonesia Port Cooperation) Port Developer (2015), 'Kalibaru Terminal Tanjung Priok Port as supporting economic growth and connectivity in national and international', Available at: <a href="http://www.portdevco.com/wp-content/uploads/2015/03/E-Newsletter-March-By-Pak-Hambar-English-version.pdf">http://www.portdevco.com/wp-content/uploads/2015/03/E-Newsletter-March-By-Pak-Hambar-English-version.pdf</a> (accessed 9 July 2018).
- Japan Bank for International Cooperation (JBIC) (2014), 'Project Financing for Sarulla Geothermal Power Plant Project in Indonesia', (In Indonesian) Available at: <a href="https://www.jbic.go.jp/ja/business-areas/environment/projects/contents/pdf/4080">https://www.jbic.go.jp/ja/business-areas/environment/projects/contents/pdf/4080</a> 1.pdf (accessed 9 July 2018).
- Limsamarnphun, N. (2016), 'Infrastructure spending spree kicks into gear', article by Nophakhun Limsamarnphun, 14 September. *The Nation* Available at:

- http://www.nationmultimedia.com/politics/Infrastructure-spending-spree-kicks-into-gear-30295227.html (accessed 9 July 2018).
- Myandawei Industrial Estate Company Limited (MIE), (2018) 'Project Overview',
  Available at:
  <a href="http://www.daweiindustrialestate.com/page-a.php?cid=86&cname=Project%2">http://www.daweiindustrialestate.com/page-a.php?cid=86&cname=Project%2</a>
  OOverview(accessed 9 July 2018).
- Ministry of Industry (Thailand), (2017) 'Eastern Economic Corridor Development project Driving Forward 15 February, 2017', Available at: <a href="http://www.industry.go.th/industry\_award/wp-content/uploads/2017/02/EEC-pack-for-BOI-fair\_Rev4.3.pdf">http://www.industry.go.th/industry\_award/wp-content/uploads/2017/02/EEC-pack-for-BOI-fair\_Rev4.3.pdf</a> (accessed 9 July 2018).
- Ministry of Transport (Viet Nam) (2009). 'Master plan on development of Vietnam seaport system through 2020, with orientations toward 2030', December 24, 2009.
- Shah, I. (2016), 'HSR will have a great multiplier effect', *New Straits Times*, 4 August. Available at: <a href="http://www.nst.com.my/news/2016/08/162868/hsr-will-have-great-multiplier-effect">http://www.nst.com.my/news/2016/08/162868/hsr-will-have-great-multiplier-effect</a> (accessed 9 July 2018).
- Shiino, K. (2016), 'Asian industrial clusters change', *JETRO Sensor*. Available at: <a href="https://www.jetro.go.jp/ext images/">https://www.jetro.go.jp/ext images/</a> Reports/01/4ac75c3f6aa30f29/2016004
  4.pdf [in Japanese] (accessed 9 July 2018).