

Economic Value and Sustainable Port Development Projects in Thailand

Ministry of Transport (MOT) THAILAND



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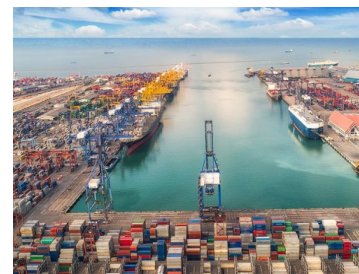
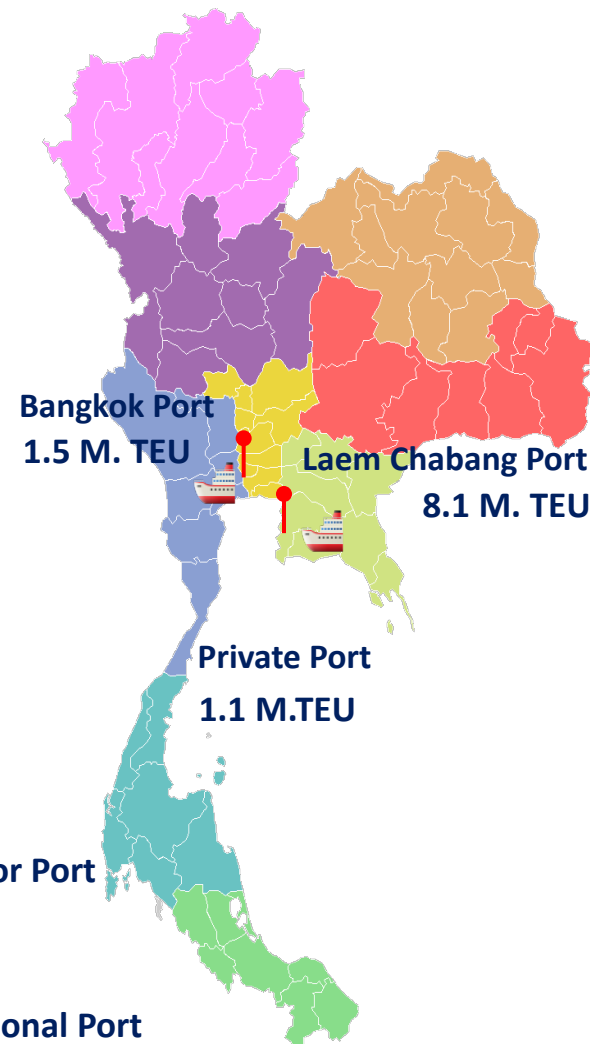
Marines Department

- Private Port

Port Authority of Thailand

- Laem Chabang Port
- Bangkok Port

- Ranong Port
- Chiang Saen Port
- Chiang khong Port



Port Development Projects in Thailand

West Quay

Cargo activity

- 10 Berth Conventional
- 20 Warehouses
- General cargo yard
- LCL Container yard
- Variety equipment
- Many Officer
- Many Labor

East Quay

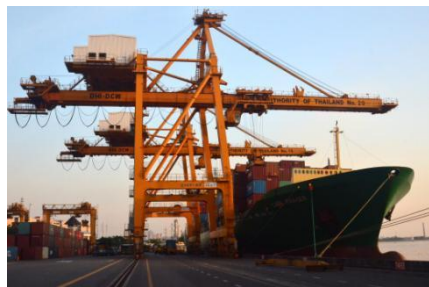
Container activity

- 8 Berth for Container
- 16 Quay Crane
- 38 RTG
- 12,500 TEU FCL Storage
- 120 Trailer
- 800 Reefer Plugs
- etc.

Container Throughput
1.34 - 1.5 M. TEU



BKP's activities in the customs fence area



Bangkok Port Redevelopment Plan

Plan to develop half of west quay of Bangkok in a high rise Building and semi-automatic container yard Platform. This will be the most land utilization.

Plan to use other half of west quay of Bangkok to develop modern port city. for make new business and to have the better return on assets.





Port Development Projects in Thailand

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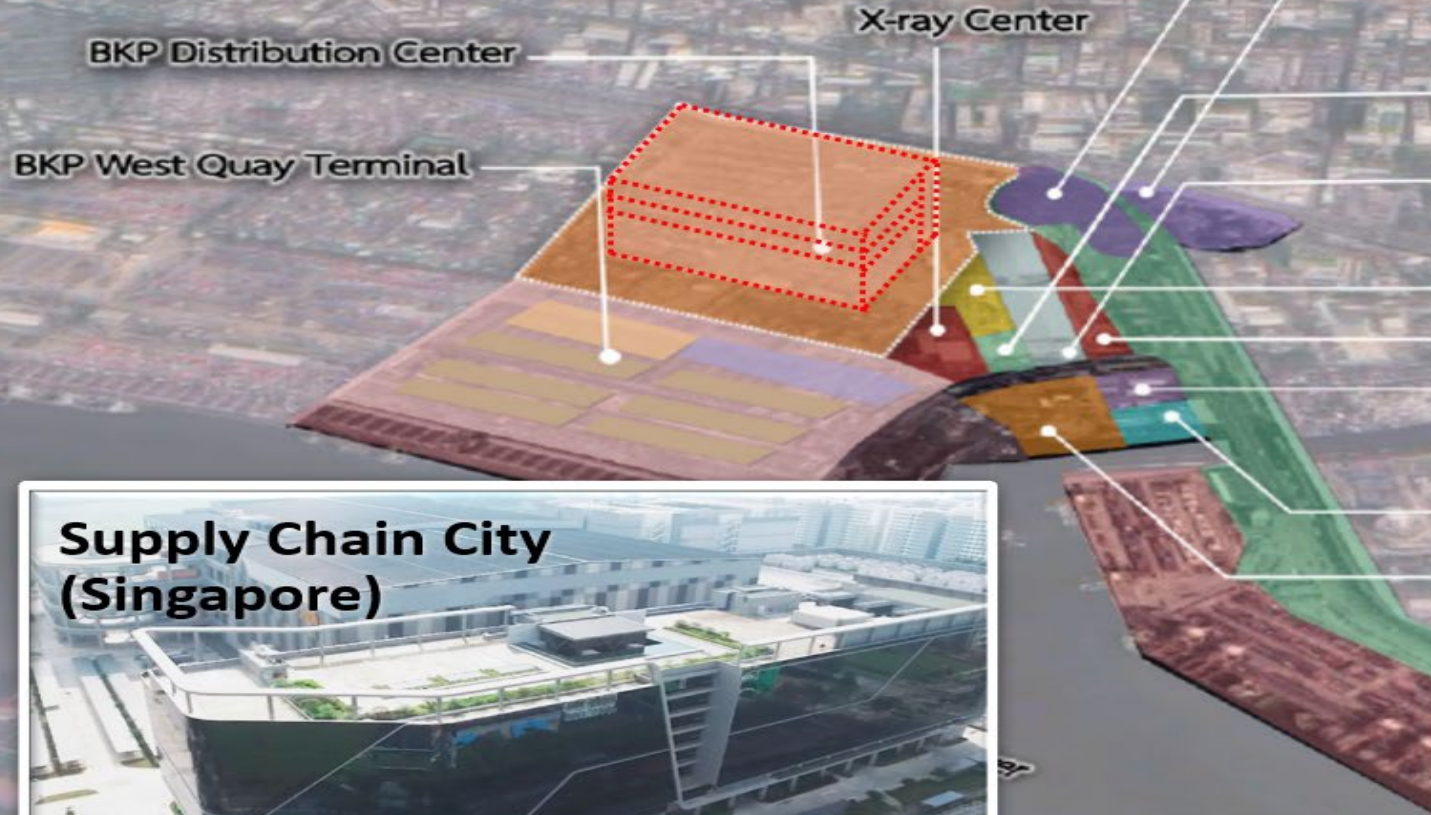




Port Development Projects in Thailand

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Bangkok Port Distribution Center



YCC – Yokohama Cargo Center (Japan)



Supply Chain City (Singapore)



ATL Logistic Center (Hong Kong)

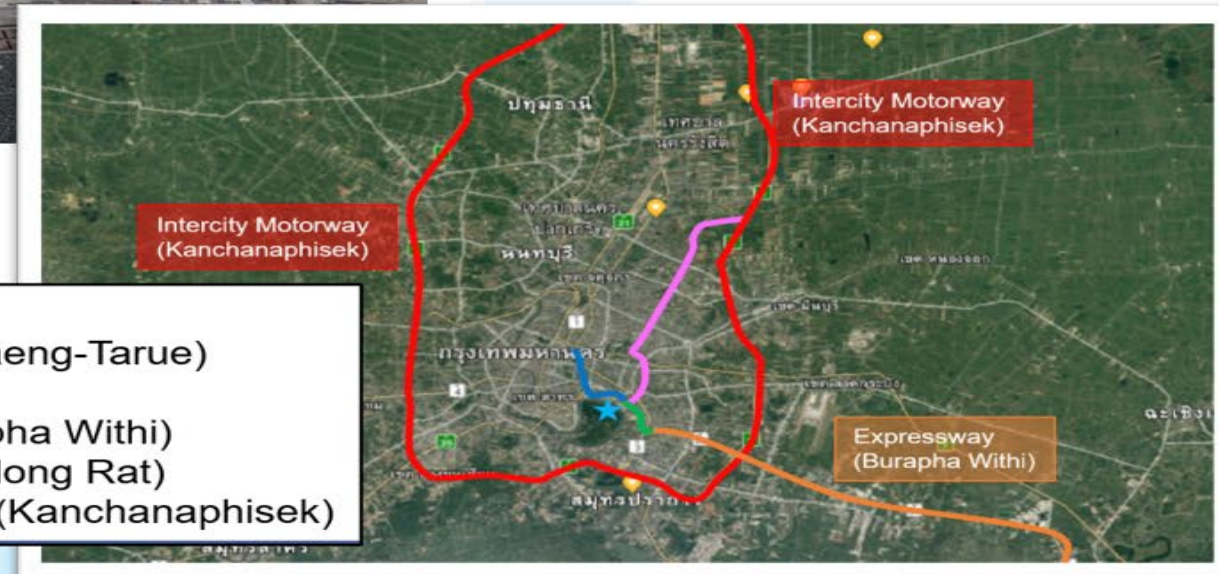




Port Development Projects in Thailand

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Bangkok Port Expressway (S1)

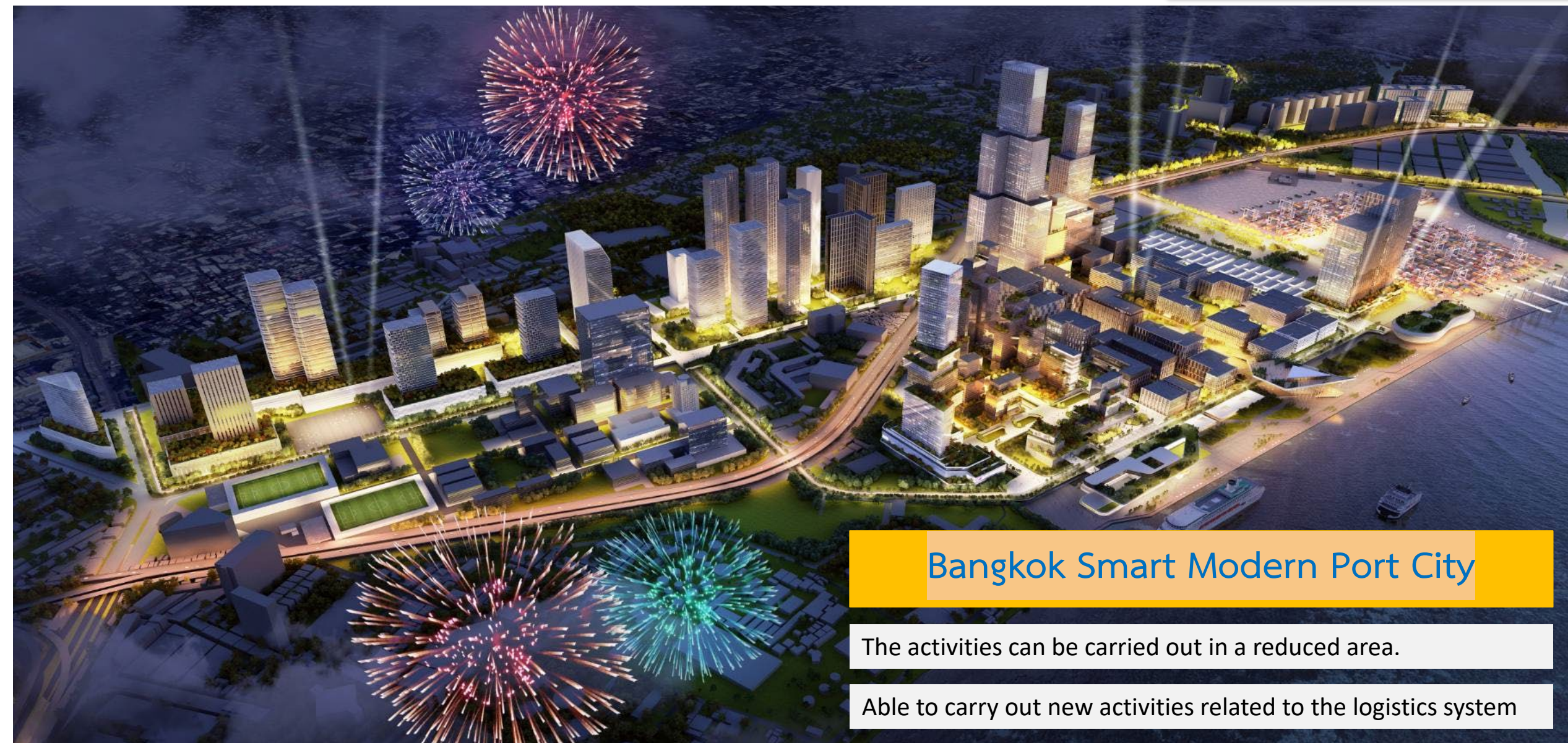


-  Bangkok Port
-  Expressway (Dindaeng-Tarue)
-  Expressway (S1)
-  Expressway (Burapha Withi)
-  Exporessway (Chalong Rat)
-  Intercity Motorway (Kanchanaphisek)



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Bangkok Smart Modern Port City

The activities can be carried out in a reduced area.

Able to carry out new activities related to the logistics system



Port Development Projects in Thailand

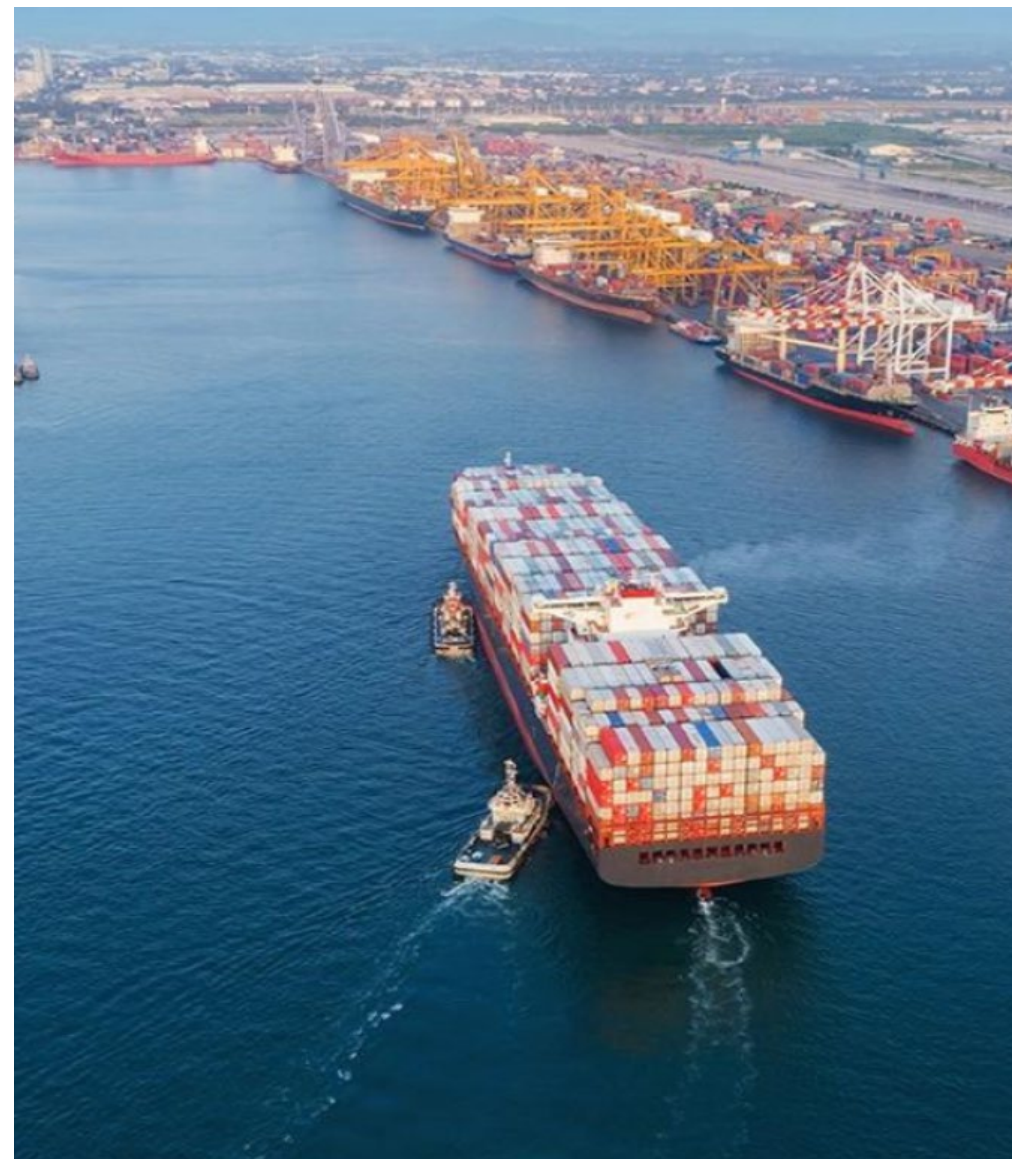
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Laem Chabang Port Development Plan

LAEM CHABANG PORT IS THE MAIN DEEP SEA PORT OF THAILAND, ALSO AS THE LARGEST TRADING PORT IN THAILAND, IS RANKED 21ST (LLOYD'S LIST) IN THE WORLD

LAEM CHABANG PORT HAS BEEN OPERATING BY THE GLOBAL TERMINAL OPERATORS (GTOS), AND ABLE TO ACCOMMODATE VARIOUS CARGO SHIPS THAT INCLUDES AN ULTRA-LARGE CARGO SHIP (SUPER POST PANAMAX) WITH DISTRIBUTION CAPABILITIES INTO BANGKOK AND DESTINATIONS THROUGHOUT THE COUNTRY AND THROUGH VARIOUS MODES OF TRANSPORTATION SUCH AS ROADS, RAILS AND SEA, AS WELL AS PROVIDING SPACE RENTAL SERVICES FOR LOGISTICS AND OTHER BUSINESSES

Phase	Area Size	Capacity	TEU' 2022
I	8,752 RAI (14,003,200 SQ.M)	4.3 M.TEU	8.73 M.TEU
II		6.8 M.TEU	
III	2,846 RAI (4,553,600 SQ.M)	7.0 M.TEU	Operated in 2025





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Laemchabang Port Phase III

IN ORDER TO STRENGTHEN THE ECONOMIC GROWTH IN THAILAND AND TO SUPPORT THE GOVERNMENT 'S THAILAND POLICY, LAEM CHABANG PORT PHASE III HAS BEEN FAST-TRACKED BY THE GOVERNMENT AS PART OF THE EASTERN ECONOMIC CORRIDOR (EEC) DEVELOPMENT PLAN.

THIS DEVELOPMENT PROJECT OF LAEM CHABANG PORT PHASE 3 AIMS TO ENHANCE THAILAND'S COMPETITIVENESS OF MARITIME TRADE, PROMOTE THE COUNTRY AS A MAIN REGIONAL GATEWAY, AND BECOME A REGIONAL LOGISTICS CENTER. ADDITIONALLY, THE IMPLEMENTATION AND USAGE OF INNOVATION AND TECHNOLOGY WILL ADVANCE THIS PORT AS A MODERNIZED DEEP SEA PORT THAT GIVES PRIORITY TO ENVIRONMENT AS WELL..



**UP TO 18
M.TEUS/YEARS**

**TO INCREASE THROUGHPUT
CAPACITY**

**11 MILLION TEUS TO
18 MILLION TEUS**



30%

**TO INCREASE RAILWAY
CAPACITY**

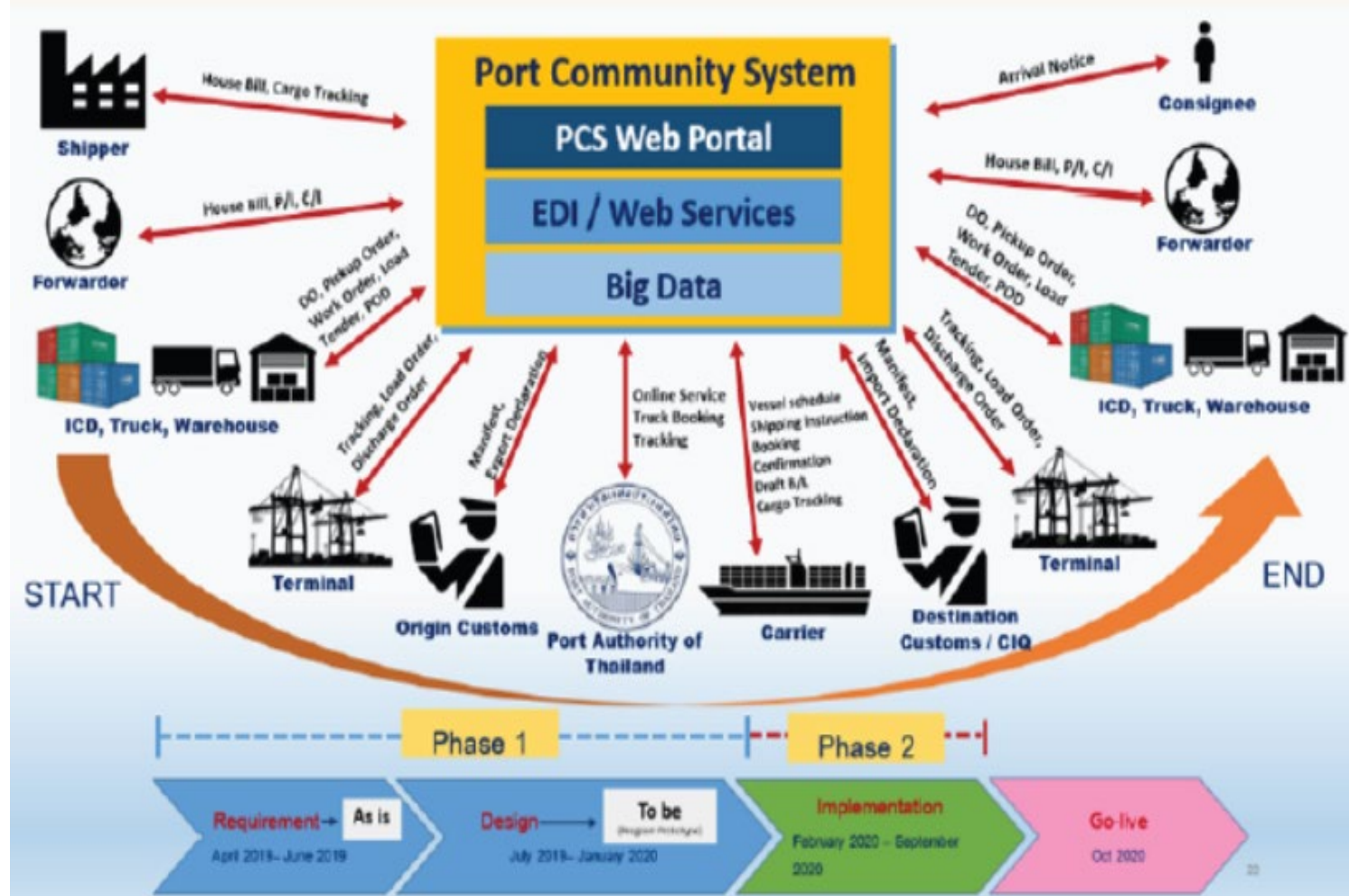
**2 MILLION TO 6 MILLION TEUS
(SHIFT FROM ROAD TO RAIL UP TO 30%)**

2019	2021	2020-2022	2025	2029	2030	2033	2036
Recruiting Privat Sector for Invest	GPC Inter, Terminal Sign a Contract (F1/F2)	Recruiting Contractors for the Construction Port infrastructure	Open Terminal F1	Open Terminal F2	Open Terminal E0	Open Terminal E1	Open Terminal E2



Port Community System

1. TO PROVIDE A MARITIME TRANSPORT SINGLE WINDOW PLATFORM FOR ALL STAKEHOLDERS
2. TO FACILITATE MOVEMENT OF GOODS FOR THAILAND'S LOGISTICS SYSTEM -TRACK AND TRACE.
3. TO STRETCH THE GLOBAL OUTREACH FOR THAI EXPORTERS, ESPECIALLY SMES.
4. TO EFFECTIVELY AND EFFICIENTLY CONTRIBUTE TO THE POSITIVE SUSTAINABILITY OF PORT DEVELOPMENT PROJECTS.



National Shipping Lines Development Project (Feasibility Study Only)

- TO ENHANCE THE MARITIME TRANSPORT COMPETITIVENES

- PAT CONDUCT FESIBILITY STUDY ON THE ESTHABLISHING NATIONAL SHIPPING LINE

- THREE POSIBILITY SHIPPING ROUTES OF THE NATIONAL SHIPPING LINES

1. MAPHAPHUT - LAEMCHABANG PORT
2. SAMUTPRAKARN - LAEMCHABANG PORT
3. LAEMCHABANG PORT – SURATTHANEE



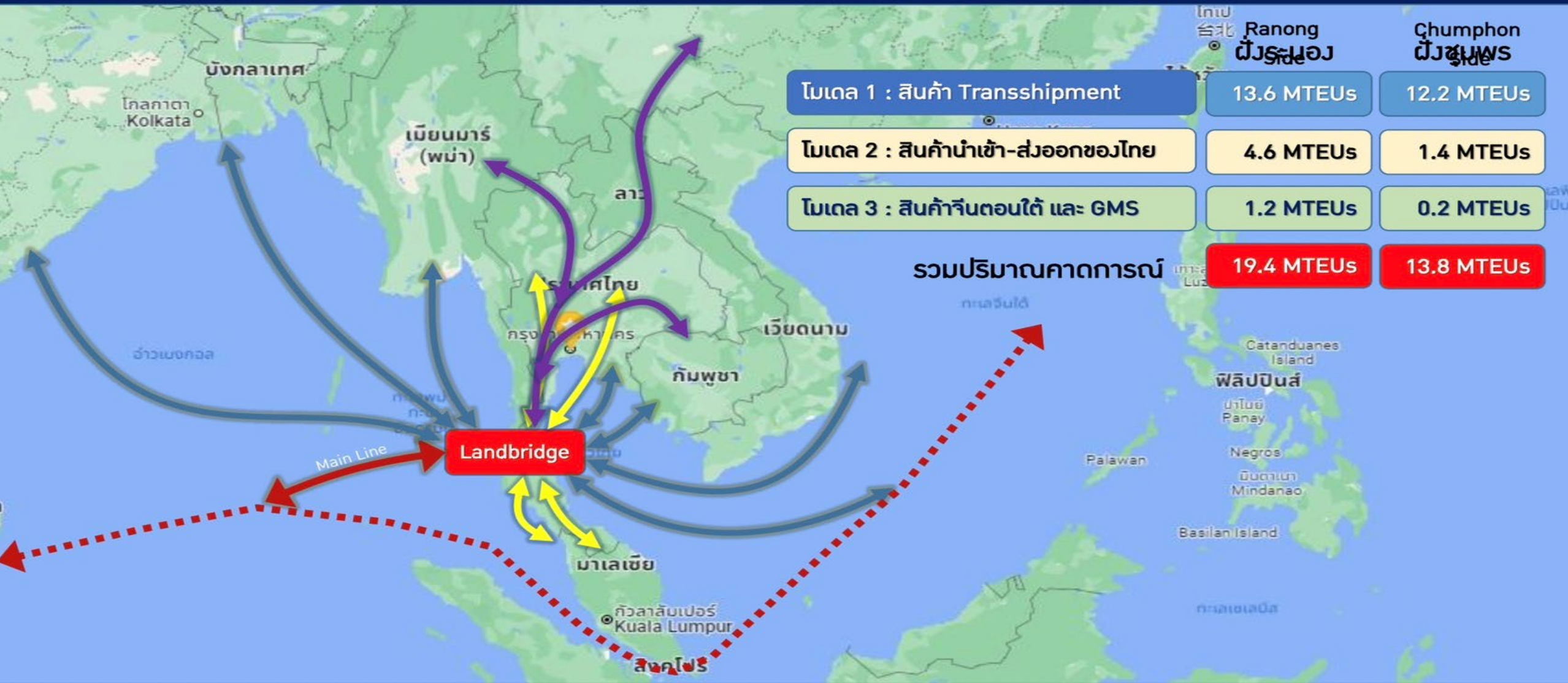


LANDBRIDGE PROJECT

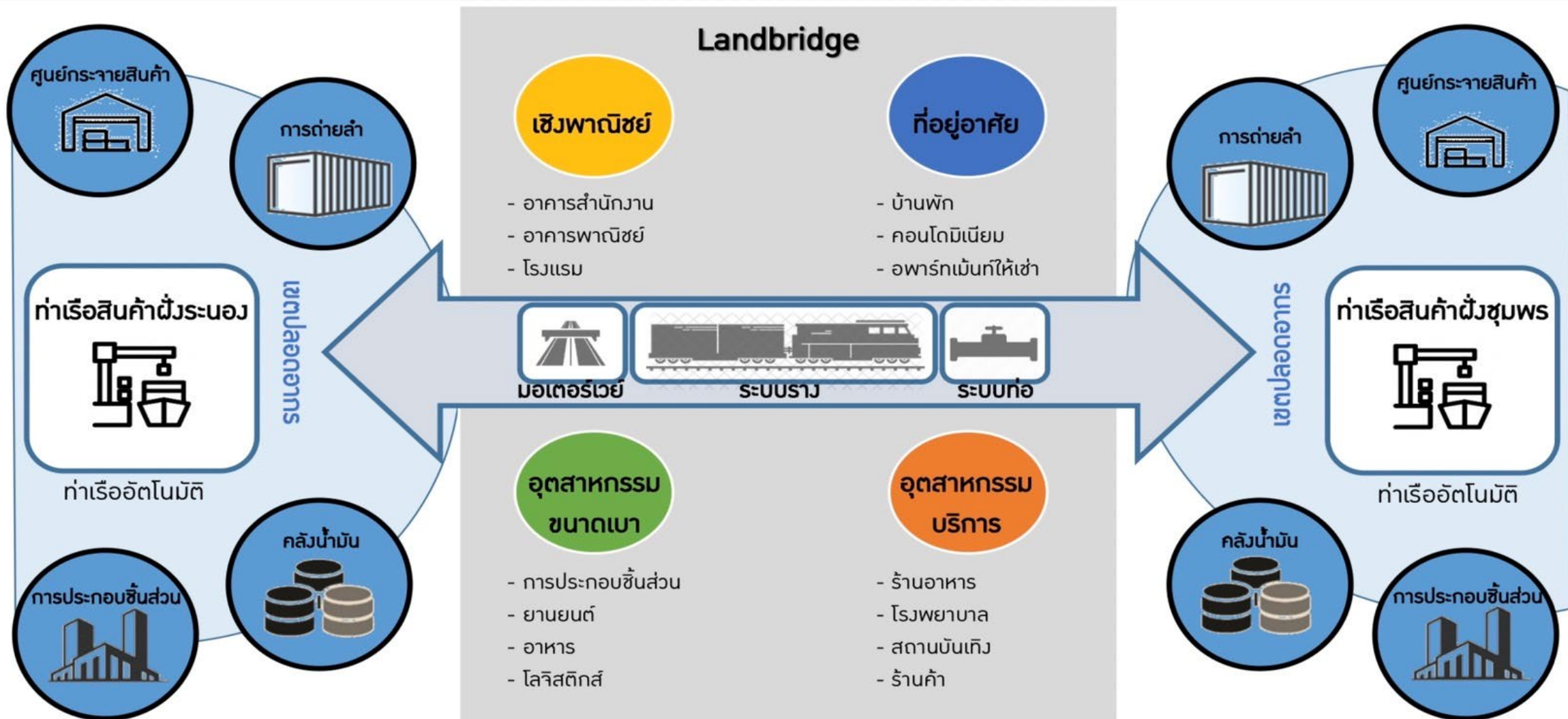
Credit : OTP-MOT

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โมเดลรูปแบบการเคลื่อนที่ของสินค้าผ่านโครงการ Landbridge



องค์ประกอบของโครงการแลนด์บริดจ์ (Landbridge)





LANDBRIDGE PROJECT

Credit : OTP-MOT

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องค์ประกอบของโครงการแลนด์บริดจ์ (Landbridge)

- ระยะทางประมาณ 89.35 กิโลเมตร
- ประกอบด้วยทางหลวงพิเศษระหว่างเมือง (Motorway) ทางรถไฟ (Railway) ระบบการขนส่งทางท่อ (Pipeline) และถนนบริการ
- เป็นทางระดับพื้น ทางยกระดับ และอุโมงค์ในช่วงผ่านพื้นที่ภูเขา



พัฒนาเชิงพาณิชย์
 อุตสาหกรรมโลจิสติกส์
 คลังสินค้า ศูนย์รับ-ส่ง พัสดุ

แหลมรีว จ.ชุมพร (ฝั่งอำเภอไทย)

จุดเริ่มต้นโครงการ
 กม. 0+000

จุดสิ้นสุดโครงการ
 กม. 89+350

แหลมอ่าวอ่าง จ.ระนอง (ฝั่งอินทามัน)

พัฒนาเชิงพาณิชย์
 อุตสาหกรรมโลจิสติกส์
 คลังสินค้า ศูนย์รับ-ส่ง พัสดุ

สัญลักษณ์

- แนวเส้นทาง ทางหลวงพิเศษระหว่างเมืองและทางรถไฟ
- แนวอุโมงค์

การพัฒนาโครงการท่าเรือบริเวณแหลมรีว จังหวัดชุมพร และท่าเรือบริเวณแหลมอ่าวอ่าง จังหวัดระนองเป็นส่วนหนึ่งของโครงการแลนด์บริดจ์

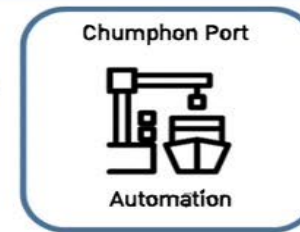
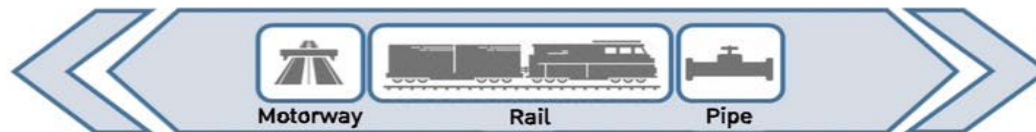
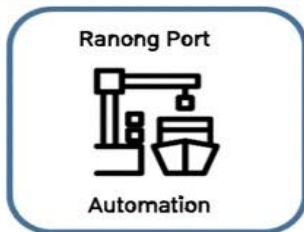


LANDBRIDGE PROJECT

Credit : OTP-MOT

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ปัจจัยแห่งความสำเร็จของโครงการ



One Port
Two Side



Investor



Law

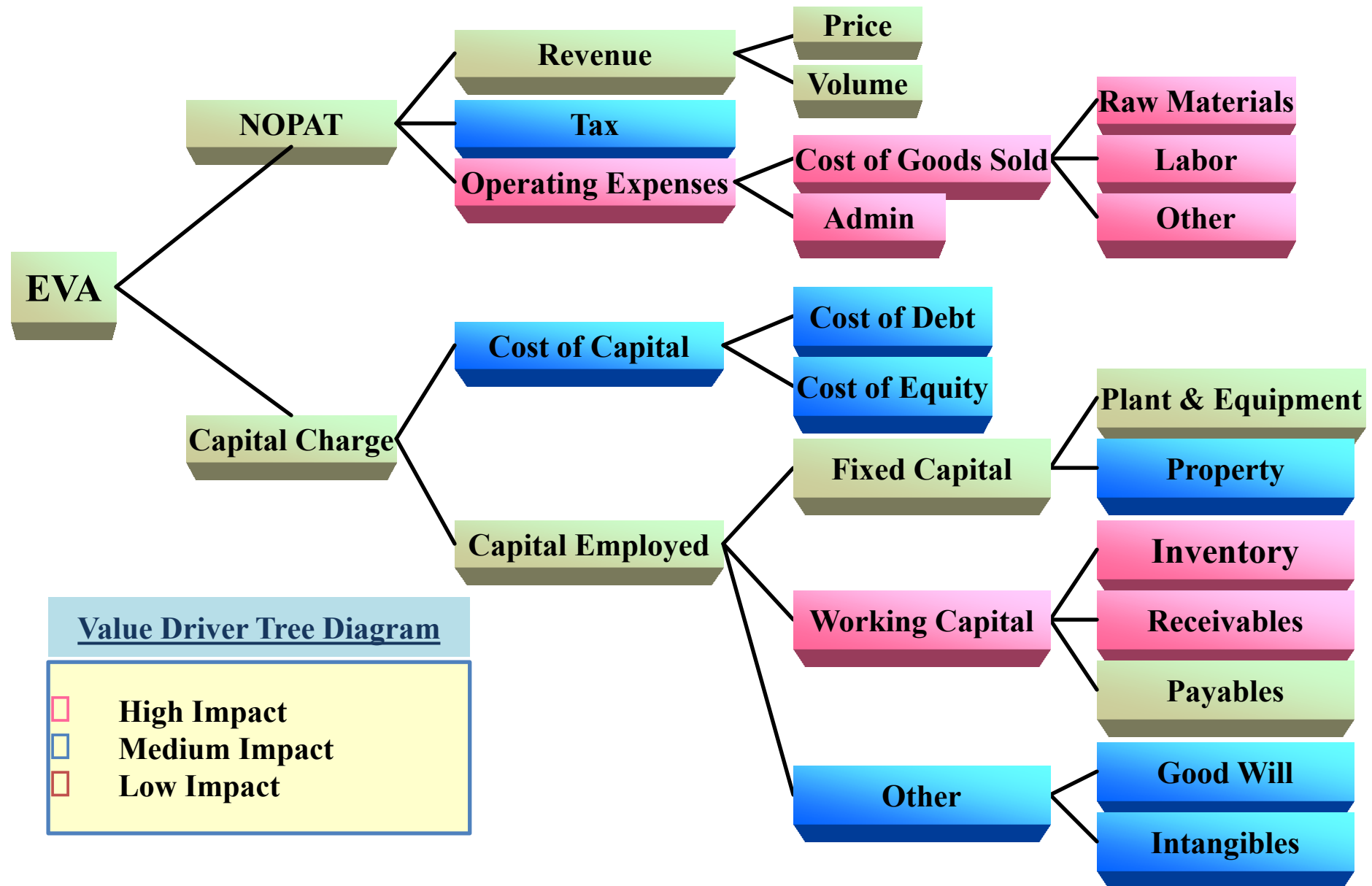


Public
Participation

Environmental
Management



ECONOMIC VALUE DRIVER TREE (EVA = NOPAT-IC x WACC)





Conclusion for sustainable port development projects in Thailand

- 1) There are huge amount of investment for several port and related projects.
- 2) Some of them may have to face with high risks and uncertainties.
- 3) Considering on the Economic Value created may be help to minimize risks.

$$(EVA = NOPAT-IC \times WACC)$$

- 4) Cost of Capital for each Project is the most crucial and sensitive factor.
- 5) Over Investment or Over Supply must be recognized and very carefully!!!



Thank you





Any Question?

