

ASEAN-6 Trade and Logistics

Structural Trends, Major Infrastructure Initiatives, and Strategic Implications



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Executive Summary

- The ASEAN-6 region has emerged as an increasingly attractive logistics market, driven by strong economic growth and expanding international trade, which amounted to about 3.7 trillion USD and represented around 8% of global trade in 2024.
- Trade flows are expected to grow further as foreign direct investment accelerates, positioning the region as part of the global supply chain for electronics, semiconductors, and EV manufacturing.
- The six countries exhibit distinct transportation characteristics that significantly affect logistics operations:
 - **Singapore** is a high-income country with the most advanced logistics infrastructure and an established position as the regional logistics hub.
 - **Malaysia** has a balanced mix of transport modes and strategic border connectivity, although its geographic fragmentation into two landmasses presents operational challenges.
 - **Thailand** is strategically positioned in the region's center with borders to four countries, serves as a key automotive manufacturing base, but experiences road congestion that impacts domestic freight efficiency.
 - **Vietnam** is heavily road-dependent with a structural north–south freight imbalance that increases logistics costs; however, rapidly growing manufacturing investment offers significant market opportunities.
 - **Indonesia** is the region's largest market by population (284 million) and land area (1.9 million sq.km.), but its archipelagic geography drives high logistics costs and necessitates heavy reliance on sea freight.
 - **The Philippines** faces similar geographic constraints as Indonesia due to its fragmented island structure but has a smaller market scale and notably lacks cross-border connectivity.
- Key trends are reshaping the region's logistics landscape.
 - **Supply chain concentration:** Massive foreign investment inflows in supply chain-intensive industries (semiconductors, electronics, EV) are driving demand for specialized and increasingly complex logistics capabilities.
 - **E-commerce expansion:** Rapid growth and intense competition among platforms and Chinese players are compressing margins and reshaping service requirements.
 - **Trade framework development:** ASEAN trade agreements have significantly reduced cross-border costs and facilitated regional trade, though adoption remains uneven across member states.
 - **Infrastructure development:** Countries are prioritizing port capacity expansion to accommodate growing trade volumes. Multimodal and rail network development are receiving increased focus to reduce transport costs and improve efficiency.
- Global and regional logistics operators are pursuing multiple strategies to capture these growth opportunities. Established operators are investing heavily in physical infrastructure to meet rising regional demand, while accelerating digitalization—via M&A and local partnerships—to serve fast-growing, cross-border e-commerce. Others are pursuing market specialization in high-growth segments such as cold chain through joint ventures and equity investments. Sustainability is also becoming a key differentiator, with operators investing in AI, automation, and green logistics to meet rising demand for efficiency and environmental responsibility.

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I. ASEAN-6 Macro-Logistics Environment

I. ASEAN-6 Macro-Logistics Environment: Economics & Logistics Indicator

- The table summarizes economic and logistics metrics of the ASEAN-6 relevant to logistics operators.
- Singapore stands out as an exceptionally efficient hub with very low logistics friction. Indonesia is dominant in terms of scale. Malaysia, Thailand, and Vietnam offer strong infrastructure and regional land connectivity; the Philippines has no land borders with neighboring countries.

	GDP (USD bn)	Population (million)	GDP per capita (USD)	Total land area (Sq.km.)	Density (Persons per sq.km.)	Urbanization %	2024 Logistics cost (USD mn)	2024 Total international trade in goods (USD bn)	No. of borders*	Land border bordered countries	Average congestion level** %
 Singapore	604	6.1	99,016	736	8,300	100%	41	962	1	• Malaysia	43.9%
 Malaysia	472	34.2	13,801	330,411	103	79.2%	55	630	4	• Thailand • Singapore • Indonesia • Brunei	• Kuala Lumpur 43.7%
 Thailand	577	65.8	8,769	497,407	132	54.3%	71	609	4	• Myanmar • Laos • Cambodia • Malaysia	• Bangkok 67.9%
 Vietnam	514	102.3	5,024	331,344	309	40.2%	86	782	3	• China • Laos • Cambodia	• Hanoi 49.2% • Ho Chi Minh 46.9%
 Indonesia	1,450	284.4	5,098	1,892,410	150	59.2%	314	498	3	• Malaysia • Papua New Guinea • Timor-Leste	• Bandung 64.1% • Jakarta 59.8%
 Philippines	487	116.8	4,170	300,000	389	48.6%	127	208	-	-	• Manila 57%

Note: The data in the table are based on 2025, except for the logistics cost and total international trade, which are from 2024.

* Including artificial land bridge

** Congestion level is calculated by comparing real-world travel times against a fluid, uncongested baseline (free-flow). A congestion level of 40% means that, on average, a journey takes 40% longer than it would if traffic were completely free-flowing.

I. ASEAN-6 Macro-Logistics Environment: Trading Pattern & Key Trading Partners - Export

- ASEAN's export landscape is dominated by electronics and electrical machinery across all six economies.
- Other top exports vary by country: petroleum products in Singapore and Malaysia, automotive in Thailand and Indonesia; metals in Indonesia and the Philippines, and apparel and furniture in Vietnam.
- The US, China, and Japan consistently rank as the top destination markets.

	Export value		2025 Top 5 export products	2025 Top 5 export destinations	
	2025 (USD bn)	CAGR (2023-25)		Countries	Share (%)
 Singapore	566	9%	1. Electrical machinery & parts (IC, phone, semiconductor devices) 2. Mechanical machinery & parts (Machine used for semiconductor, gas turbine) 3. Petroleum products 4. Optical, measuring, medical equipment 5. Gems & jewelry (esp. gold)	1. Hong Kong 2. China 3. Malaysia 4. USA 5. Taiwan	11% 11% 10% 10% 9%
 Malaysia	375	10%	1. Electrical machinery & parts (IC, phone set, semiconductor, SSD) 2. Petroleum products 3. Mechanical machinery & parts (Computer & parts, HDD, used for semiconductor) 4. Animal & vegetable oil & fat (Palm oil) 5. Optical, measuring, medical equipment	1. Singapore 2. USA 3. China 4. Hong Kong 5. Taiwan	16% 15% 12% 6% 5%
 Thailand	338	10%	1. Electrical machinery & parts (ICs, PCBs, phone set, semiconductor) 2. Mechanical machinery & parts (Computer & parts, HDD, Air conditioning) 3. Automobile & parts 4. Gems & jewelry (esp. gold) 5. Rubber & products	1. USA 2. China 3. Japan 4. India 5. Malaysia	21% 12% 7% 5% 4%
 Vietnam*	403	35%	1. Electrical machinery & parts (Phone set, flat panel display modules, ICs) 2. Mechanical machinery & parts (Computer & parts, printing machine) 3. Footwear 4. Apparel 5. Furniture	1. USA 2. China 3. S. Korea 4. Japan 5. Netherlands	30% 15% 6% 6% 3%
 Indonesia	283	5%	1. Fossil fuels (coal, petroleum gas, lignite) 2. Animal & vegetable oil & fat (Palm oil, coconut oil) 3. Processed metal (ferro-alloy, stainless steel) 4. Electrical machinery & parts (Semiconductor, phone set, electrical machines) 5. Automobile & parts	1. China 2. USA 3. India 4. Japan 5. Singapore	24% 11% 6% 6% 5%
 Philippines	84	7%	1. Electrical machinery & parts (ICs, wire & cable, electrical transformers) 2. Mechanical machinery & parts (Computer & parts, printing machine) 3. Optical, measuring, medical equipment 4. Animal & vegetable oil & fat (Coconut oil) 5. Metal ores (Nickel ores, copper ores)	1. USA 2. Hong Kong 3. Japan 4. China 5. Netherlands	16% 15% 14% 11% 4%

Note: *Vietnam's data refer to 2024, with growth measured y-o-y from 2023 to 2024.

I. ASEAN-6 Macro-Logistics Environment: Trading Pattern & Key Trading Partners - Import

- ASEAN's import landscape is dominated by electronic and electrical machinery, mechanical machinery, and fuels across all six economies.
- Top imports vary across nations. Primary polymers and other plastics rank highly for Malaysia, Vietnam, Indonesia, and the Philippines, while iron and steel are prominent imports in Thailand and Vietnam.
- China, Japan, US and Taiwan rank as the top suppliers in the region.

	Import value		2025 Top 5 import products	2025 Top 5 import sources	
	2025 (USD bn)	CAGR (2023-25)		Countries	Share (%)
 Singapore	504	9%	1. Electrical machinery & parts (ICs, phone, semiconductor devices) 2. Mechanical machinery & parts (jet turbo, gas turbine, computer & parts) 3. Mineral fuels & oils (crude oil, refined petroleum products) 4. Gems & jewelries (gold) 5. Optical, measuring, medical equipment	1. Taiwan 2. China 3. Malaysia 4. USA 5. S. Korea	16% 12% 11% 11% 6%
 Malaysia	339	13%	1. Electrical machinery & parts (ICs, phone, semiconductor devices) 2. Mechanical machinery & parts (Computer & parts, semiconductor machines) 3. Mineral fuels & oils (crude oil, refined petroleum products, coal) 4. Plastics & articles (primary polymers) 5. Automobile & parts	1. China 2. Singapore 3. Taiwan 4. USA 5. Japan	24% 11% 10% 9% 5%
 Thailand	350	9%	1. Electrical machinery & parts (ICs, phone, semiconductor devices) 2. Mineral fuels & oils (crude oil and gas) 3. Mechanical machinery & parts (computer & parts, pumps, compressors, gas turbine) 4. Gems & jewelries (gold) 5. Iron & steel	1. China 2. Japan 3. Taiwan 4. USA 5. UAE	31% 9% 7% 6% 5%
 Vietnam*	379	16%	1. Electrical machinery & parts (ICs, phone, flat panel modules, PCBs) 2. Mechanical machinery & parts (computer & parts, mechanical appliances, printing machines) 3. Mineral fuels & oils (refined petroleum products, gas, coal, coke) 4. Plastics & articles (primary polymers, plastic articles) 5. Iron & steel	1. China 2. S. Korea 3. Taiwan 4. Japan 5. USA	38% 15% 6% 6% 4%
 Indonesia	242	4%	1. Mineral fuels & oils (crude oil, refined petroleum products, gas, coal) 2. Mechanical machinery & parts (computer & parts, construction machines, lab equipment) 3. Electrical machinery & parts (phone, ICs, transformers, wires, cables, electrical apparatus) 4. Automobile & parts 5. Plastics & articles (primary polymers, plastic articles)	1. China 2. Singapore 3. Japan 4. USA 5. Malaysia	36% 8% 6% 5% 5%
 Philippines	142	3%	1. Electrical machinery & parts (ICs, phone, semiconductor devices, wire, cables, PCBs) 2. Mineral fuels & oils (crude oil, refined petroleum products, coal, gas) 3. Mechanical machinery & parts (computer & parts, air con., printing machines, refrigerators) 4. Automobile & parts 5. Plastics & articles (primary polymers, plastic articles)	1. China 2. S. Korea 3. Japan 4. Indonesia 5. USA	28% 8% 8% 8% 6%

Note: *Vietnam's data refer to 2024, with growth measured y-o-y from 2023 to 2024.

II. ASEAN-6 Logistics and Freight Landscape

II. ASEAN-6 Logistics and Freight Landscape (1/3)

- Given wide variations in Logistics Performance Index (LPI), logistics costs, and land characteristics across ASEAN countries, operators entering the region must adopt country-specific operating models calibrated to each market.

	LPI Score (2023) ⁽¹⁾ (up to 5.0)	Global Rank	Logistics Cost to GDP (2024)	Land area characteristics	Challenges
 Singapore	4.3	#1	7.0 - 8.0%	- Small island city-state - Strategic maritime chokepoint (Strait of Malacca)	- Limited land space for warehousing - High operating and labor costs
 Malaysia	3.6	#26	13.0%	Geographically divided into Peninsular Malaysia and East Malaysia (Borneo)	Logistics connectivity gap between Peninsular and East Malaysia
 Thailand	3.5	#34	13.5%	- Centrally located on the Indochinese Peninsula - Share border with several countries	- High reliance on road transport - Port congestion esp. in Laem Chabang
 Vietnam	3.3	#43	18.0%	- Long, narrow coastline (S-Shaped geography) - Share a land border with China	- Poor road infrastructure - Fragmented logistics sector - North-South freight imbalance
 Indonesia	3.0	#61	23.1%	- Vast archipelago (>17,000 islands) - Features massive, expansive islands like Sumatra, Borneo, Java	- Severe traffic congestion esp. Jakarta - High inter island shipping costs
 Philippines	3.3	#43	27.5% ⁽²⁾	- Archipelago (> 7,000 islands) - Tightly grouped, split into 3 main island regions; Luzon, Visayas, and Mindanao	- Mountainous terrain and limited rail - Vulnerability to typhoons - Customs inefficiencies

High-performing and cost-efficient:

Relatively low logistics costs supported by advanced port/road infrastructure and streamlined customs.

Mid-tier with rising cost pressures:

Road transport dominates in the three countries, and Malaysia's division into two islands plus Vietnam's north-south freight imbalance led to empty return trips, producing inefficiencies and higher costs.

Weak position with high structural costs:

Multi-island geography fragments domestic networks and inflates logistics expenses.

Note: (1) Logistics Performance Index (LPI) score is a weighted average measuring a country's trade efficiency across six dimensions: customs, infrastructure, international shipments, logistics competence, tracking, and timeliness.

(2) Philippines' logistics cost to GDP figure is for 2022.

II. ASEAN-6 Logistics and Freight Landscape (2/3)

- Road transport is the primary mode for domestic freight across all ASEAN-6 countries, with particularly high reliance in Vietnam.
- Meanwhile, each country's trade composition determines the modal split for international freight.

Domestic good transport volume by mode (2024-2025)

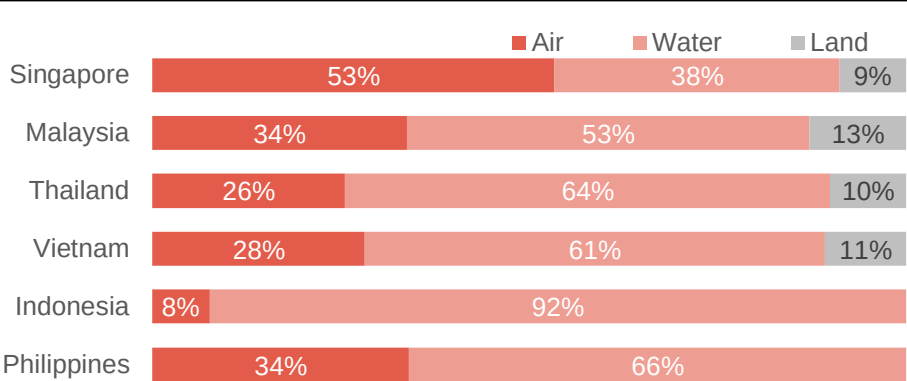
(Million Tons)	Road	Waterway*	Rail	Air**
Singapore	n.a.	-	-	-
Malaysia (2024)	n.a.	n.a.	6	0.12
Thailand	516.9	104.1	12.9	0.03
Vietnam (2024)	2,030.0	410.2	5.1	0.23
Indonesia	n.a.	54.0	74.1	0.67
Philippines	28.3	31.9	-	0.02

- ASEAN-6 countries predominantly rely on road transport for domestic freight. **Vietnam accounts for the largest volume and is highly road-dependent.**
- **Thailand shows a more balanced modal mix** between road and waterways, reflecting a relatively mature logistics infrastructure, while rail freight remains limited across the region due to underdeveloped freight rail networks.
- **Indonesia displays a bimodal pattern with significant waterway and rail transport**, indicating more advanced rail infrastructure.
- By contrast, **the Philippines has negligible rail freight** owing to underdeveloped rail capacity; plans are underway to develop railways to reduce logistics costs.

Note: * Include shipment of freight on rivers, coastal waters, and inter-island routes.
** For Malaysia and Indonesia, the number is unloaded volume of domestic air cargo.

Source: ASEANSEC, Singapore Department of Statistics, Thailand Ministry of Transport, Vietnam National Statistical Office, BPS - Statistics Indonesia, Philippines Statistics Authority

International trade by mode (2024) (value share %)



- **Air dominance in Singapore** (> 50% of trade value) reflects the country's **positioning as a global air transshipment hub**. Beyond re-exporting, the country is also a major manufacturer of semiconductors, electronic components, and biomedical products. Although maritime freight represents a smaller share, Singapore handles millions of TEUs each year as the world's busiest container transshipment hub, primarily routing manufactured consumer goods, oil and petrochemicals, and automotive parts.
- **Indonesia relies heavily on sea freight** for over 90% of its total trade value, as **its principal exports consist of bulk commodities** (coal, nickel, palm oil) that are not time-sensitive and are shipped primarily for cost efficiency.
- By contrast, **the Philippines**, despite similar geographic characteristics, **records a 34% air freight share, reflecting the larger share of high-value electronics in its export portfolio** to the US, Japan, and European markets.
- **Malaysia, Thailand, and Vietnam demonstrate a balanced reliance on maritime and air corridors, complemented by overland routes** accounting for 10-13% of trade value thanks to their geographic positioning as land-bridge economies connecting intra-ASEAN and China trade flows.

II. ASEAN-6 Logistics and Freight Landscape (3/3)

- CEP and e-commerce logistics are the dominant growth driver, increasingly captured by Chinese firms and state-owned operators, while global integrators concentrate in Singapore and Malaysia as regional hubs, leaving local operators entrenched in their home markets due to structural barriers like ownership restrictions and geography.

Top 5 logistics operators⁽¹⁾ in ASEAN 6 (by 2023-2024 operating revenue)

	Company name	Geographic scope			Service scope
		Global	Regional	Local	
 Singapore	CWT	✓			Integrated logistics & SCM
	DSV Contract Logistics	✓			Integrated logistics & SCM
	DHL Express (Singapore)	✓			CEP
	Pacbulk Shipping			✓	Tank storage, shipping, freight forwarding
	Vopak Terminals Singapore			✓	Bulk liquid and gas storage
 Malaysia	DKSH Holdings (Malaysia)	✓			Marketing, logistics, distribution (esp. FMCG, pharmaceutical products)
	J&T Express (Malaysia)		✓		CEP (esp. e-commerce)
	Federal Express Services (Malaysia)	✓			CEP
	Ninja Logistics		✓		CEP (esp. e-commerce)
	DHL Global Forwarding (Malaysia)	✓			Freight forwarding
 Thailand	SCGJWD Logistics (SJWD)		✓ ⁽²⁾		Integrated logistics & SCM
	Global JET Express (Thailand) (J&T)		✓ ⁽²⁾		CEP (esp. e-commerce)
	Flash Express		✓		CEP (esp. e-commerce)
	Thailand Post			SOE	CEP (esp. e-commerce)
	WHA Corporation			✓	Warehouse / IE developer
 Vietnam	Samsung SDS Vietnam	✓			IT, freight forwarding & SCM (esp. E&E, IT)
	Vietnam Post			SOE	CEP (esp. e-commerce)
	Saigon Newport Corporation			SOE	Port and terminal operation
	Expeditors Vietnam	✓			Integrated logistics & SCM
	Thuan Phong Express (J&T)		✓		CEP (esp. e-commerce)
 Indonesia	Multi Terminal Indonesia			SOE	Integrated logistics & SCM
	Pelindo Terminal Petikemas			SOE	Container terminal operation
	Mega Prima Lumintu			✓	Freight forwarding
	Citrabati Logistik Internasional			✓	Integrated logistics & SCM
	Pos Indonesia (Persero)			SOE	CEP (esp. e-commerce)
 Philippines	International Container Terminal Services	✓			Terminal operation
	Filoil Logistics			✓	Petroleum transport & storage
	PH Global JET Express (J&T)		✓		CEP (esp. e-commerce)
	Fast Distribution			✓	Marketing, logistics, distribution (esp. FMCG)
	2GO Group			✓	Integrated logistics & SCM

- Courier, express, and parcel (CEP) services have emerged** as a structurally significant segment across ASEAN 6, driven by rapid e-commerce growth. The segment is increasingly **shaped by Chinese firms and commercialized state-owned postal operators** to capture e-commerce last-mile volume.
- Global integrators** like CWT, DSV, DHL, FedEx **concentrate their operations in Singapore and Malaysia**, leveraging both markets' advanced infrastructure, and trade facilitation framework as regional hub anchors.
- Local operators maintain dominant positions across Thailand, Vietnam, Indonesia, and the Philippines**, for the market-specific structural reasons.
 - Thailand:** The legal ownership restrictions and highly localized corporate ecosystem restrict the foreign players from scaling.
 - Vietnam:** SOEs retain state-mandated control over ports, postal infrastructure, and bulk transport.
 - Indonesia and Philippines:** Archipelago geography creates demand for specialized maritime and inter-island logistics services that global and regional players have not penetrated at scale.

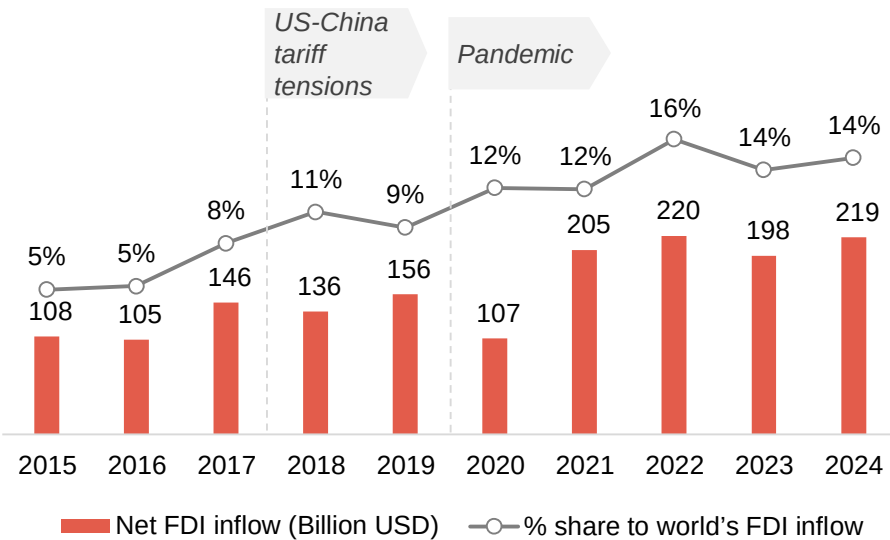
Note: (1) Top providers are selected by NACE codes and include freight transport (road, rail, sea/coastal, inland waterways, air), warehousing, cargo handling, courier services, and transport-support activities, excludes e-commerce platform logistics arms, airline and liner (ship) operations, companies serving only in-house logistics, and non-operational holding companies. (2) The companies began in Thailand as domestic businesses and have since expanded into other ASEAN countries.

III. Trends Reshaping ASEAN-6 Logistics

III. Trends Reshaping ASEAN-6 Logistics: Massive FDI Inflow into the Region

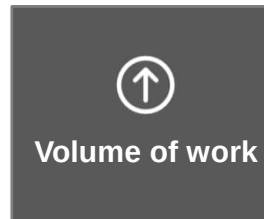
- ASEAN is capturing record FDI, reaching 14% of the global FDI inflow in 2024, driven by US-China tensions and China+1 diversification.
- The supply-chain-intensive sectors like semiconductors and automotive are fueling explosive growth in specialized logistics demand and operational complexity.

FDI Inflow to ASEAN-6

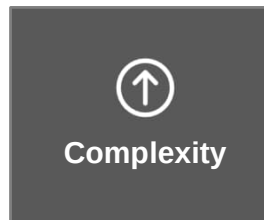


- US–China tariff conflict, together with COVID-19 disruptions to supply chains, prompted multinationals to diversify their manufacturing footprints to mitigate risk.
- ASEAN countries, notably Vietnam, Thailand, Malaysia, and Indonesia, have become the main beneficiaries, drawing significant FDI thanks to its cost advantages, sizable domestic and regional market, trade framework that gives manufacturers preferential tariff access to key markets, and improving infrastructure.
- Significant investment is flowing into supply-chain-intensive manufacturing, especially electronics and electrical products, semiconductors, and automotive, which is increasing demand for logistics both in volume and in operational complexity.

Major countries	FDI inflow 2022-25 (billion USD)	Key sectors/ products
Indonesia	71.1	Metal refining e.g. nickel processing, aluminium refining
Vietnam	56.6	Electronic components, apparels
Malaysia	36.9	Semiconductors, EV components, solar panel
Thailand	30.3	Electronic components, PCB, ICs, EV



- ✓ **E&E and automotive supply chains** require continuous, high-frequency inbound component deliveries and frequent outbound shipments of finished goods.



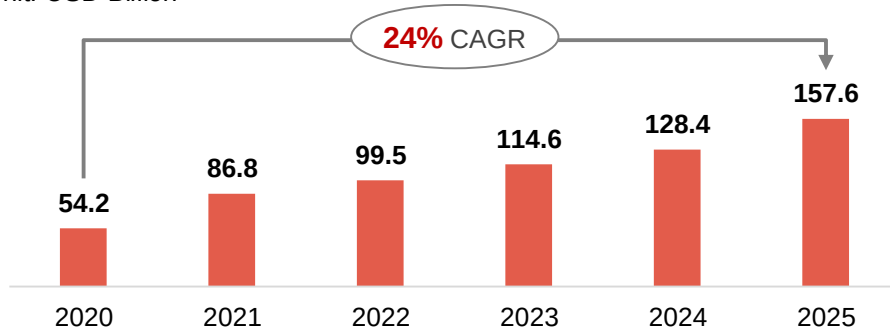
- ✓ These goods often **need specialist handling, such as climate & temperature control, bonded warehousing, multimodal transport, customs brokerage across multiple countries, and just-in-time scheduling.**

III. Trends Reshaping ASEAN-6 Logistics: Fast Growing E-Commerce (1/2)

- As one of the fastest-growing e-commerce regions globally, Southeast Asia is fueling major changes in courier and logistics, from last-mile delivery expectations to expanded distribution center or fulfilment networks.

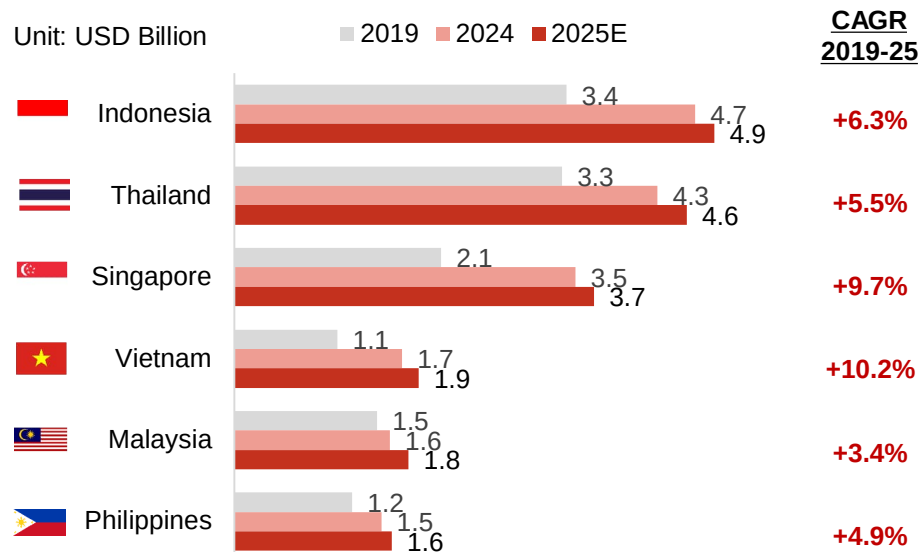
Southeast Asia E-commerce Platform GMV

Unit: USD Billion



CEP Service Revenue Growth of ASEAN 6

Unit: USD Billion

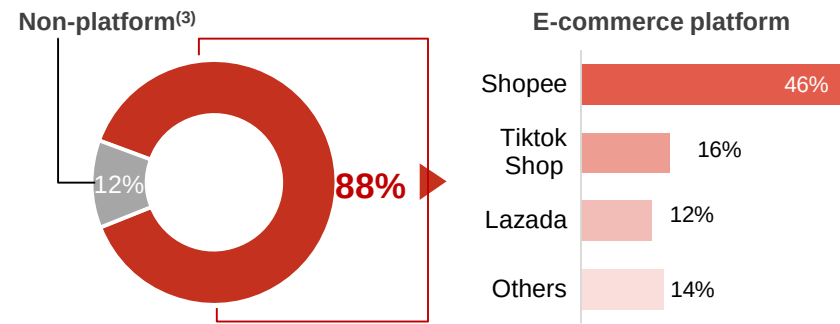


- Southeast Asia's e-commerce market expanded rapidly during 2020-2025, largely due to the pandemic's shift of consumer behavior to online shopping.
- This boom accelerated digital adoption, particularly in digital payments and social commerce, and reshaped the logistics sector, driving a major rise in courier and delivery demand across the SEA region.
- As consumers increasingly rely on e-commerce, demand for seamless shopping experiences, particularly faster delivery, is rising.
- Indonesia and Thailand lead courier-service revenue in Southeast Asia, driven by their large digitally active consumer bases.
- Vietnam and Singapore experienced the fastest growth in courier revenues, largely fueled by rising cross-border e-commerce.
- In prominent courier markets such as Indonesia and Thailand, standard services like **same-day delivery, express delivery and cash-on-delivery** have forced logistics operators to redesign their distribution networks for last-mile delivery expectation.
- Additionally, **the growth of cross-border e-commerce, especially from China, is accelerating localized fulfilment** across SEA markets, including Vietnam, Thailand and Singapore.

III. Trends Reshaping ASEAN-6 Logistics: Fast Growing E-Commerce (2/2)

- E-commerce growth has fragmented demand into unpredictable and high-cost last-mile deliveries.
- E-commerce platforms dominate ASEAN logistics by controlling order flow and keeping profitable routes in-house, while logistics startups face massive losses from heavy investment to serve platform-driven.

Market share of ASEAN E-commerce GMV (2024)



Business performance of CEP in ASEAN-6

Type of operator	Rev. CAGR (22-24) ⁽¹⁾	NPM ⁽²⁾	Main customers	Services focused/ advantages
Platform in-house delivery (SPX, Lazada Exp.)	16%	3%	Platform sellers	Integrated fulfilment, marketplace connectivity
Logistics startups (J&T, Flash Exp.)	22%	-8%	Platform sellers	Speed, cost efficiency, last-mile network density
SOE postal carriers	-10%	1%	Micro merchants, individuals	Reliability, extensive coverage with rural reach
Global CEPs (DHL, FedEx)	-12%	2%	MNEs (platforms, brand.com)	Value-added and end-to-end service e.g. special size, fulfilment

Demand Transformed

B2C e-commerce growth not only increases the CEP demand in volume but also shifts demand from predictable, consolidated, and scheduled B2B shipments to more complex service requirements.

- **Fragmentation** with high last-mile cost
- **Velocity and peakiness**, with demand spikes during promotional events, such as double-day sales, payday sales, flash sales
- **Service expectations**, such as real-time tracking, easy returns, cash-on-delivery (COD)

E-commerce platforms seized control the market

- In ASEAN, e-commerce is dominated by a few super-platforms: Shopee, Lazada, Tiktok Shop. These platforms own the order flow and decide which carrier delivers it.
- **The platform normally keeps high-volume, densely-routable, profitable for their in-house fleet, and allocates low-margin works** (such as remote last-mile delivery and special-sized items) to 3PL partners.

Competitive landscape restructured

- **Logistics startups:** Startups were built to serve B2C ecommerce demand. They invest aggressively on technology and last-mile facilities to expand coverage and drive cost per parcel down. This creates **high revenue growth but massive losses from heavy investment spending and thin last-mile margins**.
- **Platform in-house delivery:** Platforms (Shopee, Lazada) integrate delivery in-house to capture last-mile margin, reduce dependency on third parties, and control customer experience. They leverage existing customer relationships and platform data to optimize routing and consolidation, achieving lower cost per parcel.
- **SOE postal carriers:** SOE operate with subsidized capital and government backing, enabling them to **maintain extensive networks even with low margins**.
- **Global CEPs:** Global CEPs operate integrated networks spanning air, ground, and international logistics, enabling premium pricing and high margins on complex shipments. In the e-commerce market, **they differentiate through premium fulfilment and value-added services, targeting large enterprise clients** who prioritize quality and reliability over cost.

Note: (1) Numbers are derived from major players' financial statements available for the period 2022–2024.

(2) Weighted average profit margin of the top players during 2022-2024.

(3) Non-platform includes transactions on social platforms, brand.com, multi-brand retailers, etc.

Source: Momentum Works, Orbis, EMIS

III. Trends Reshaping ASEAN-6 Logistics: ASEAN Trade Framework Development

- ASEAN Trade Frameworks form a complementary stack that dramatically reduces cross-border logistics costs, but only for operators positioned to invest in compliance infrastructure, such as digital integration and vehicle permits.
- Uneven country adoption creates bottlenecks: operators move freely on mature corridors (e.g., Singapore–Malaysia–Thailand) but face unpredictable customs delays and missing IT systems elsewhere.

Process & Operational Facilitation Tools

	ASW <i>ASEAN Single Window</i>	AFAFGIT <i>ASEAN Framework Agreement on the Facilitation of Goods in Transit</i>	AFAFIST <i>ASEAN Framework Agreement on the Facilitation of Inter-State Transport</i>	ASEAN AEO-MRA <i>ASEAN Authorized Economic Operator Mutual Recognition Arrangement</i>
How it works	• A regional digital platform that connects National Single Windows (NSWs) that enable electronic customs document exchange between ASEAN member states.	• Govern cross-border movement of goods in transit across ASEAN. • Allow transit cargo to pass through without being subject to customs duties at through intermediate border	• Governs cross-border vehicle permits and inter-state transport rights • Allow registered truck to cross-border without cargo transfer or per-trip permits	• Focuses on granting qualifying, licensed vehicles the right to deliver goods directly into a neighboring country
Benefits	• Single submission of trade documents, eliminate parallel filings to multiple agencies • Faster pre-arrival processing • Reduce paperwork	• Duty suspension (no import duties paid at the intermediate borders) • Reduce dwell time at border crossing • Lower risk of cargo damage from repeated unloading/ reloading	• Door-to-door trucking without transshipment at borders, major cost and time saving • Elimination of empty return leg cost as trucks can carry return cargo in both direction	• AEO operators get priority lanes, fewer inspections, reduced dwell time.
Future plan	• Expand the partnerships with dialogue partners (China, Japan, S.Korea, US) • Expand document scope to cover e-Phytosanitary certificates and e-Animal Health certificates.	• Extend the system to railways, inland waterways, maritime, air connections, enabling true door-to-door multimodal transit declarations.	• Raise the quota of vehicle permits (from 500 vehicles per country)	• Progressing from the core phase (Brunei, Malaysia, Singapore, Thailand, Philippines, Indonesia) to full 10-country adoption.
Adopted nations	• Singapore, Malaysia, Thailand, Vietnam, Indonesia, Philippines, Brunei	• Singapore, Malaysia, Thailand, Vietnam, Indonesia	• Malaysia, Thailand, Vietnam, Laos, Cambodia	• Active bilateral: Singapore-Thailand, Singapore-Malaysia, Singapore-Philippines, Singapore-Indonesia, Thailand-Malaysia
Instrument/enabler	• NSW system integration • ASEAN Custom Declaration Document (ACDD)	• ASEAN Custom Transit System (ACTS) • Vehicle standard compliance and registration • Custom bonds*	• Cross-border vehicle permit • Vehicle standard compliance and registration	• AEO certification (in home country)

Note: *Financial guarantee that ensure duties will be paid if the goods don't complete the transit as planned.

III. Trends Reshaping ASEAN-6 Logistics: Transport Infrastructure Enhancement

- All ASEAN-6 countries are expanding port capacity to serve rising trade, but with distinct strategic focuses.
- Singapore is advancing port automation to retain its role as a global transshipment hub. Malaysia aims to preserve its position as the leading regional container hub.
- Thailand and Vietnam are positioning themselves as land-transit and multimodal gateways, while Indonesia and the Philippines are prioritizing connectivity improvements and reductions in logistics costs.

Infrastructure Development Focus Area		Key Objectives	Mega project examples
Singapore	● Green and full port automation: Utilize 100% Battery-Powered AGVs, automated yard cranes, AI-coordinated operations, etc. at Tuas Mega Port ● Port capacity consolidation: Merging 4 terminal locations (Tjong Pagar, Keppel, Brani, and Pasir Panjang) into one at Tuas Port. ● Integrated logistic hub: Integrated with Singapore's extensive supply chain ecosystem, offering unparalleled connectivity and scale as a Regional Distribution Centre and a Container Freight Station	● Position as the world's busiest transshipment hub ● Establish global benchmark for automated, AI-driven and green port operations ● Consolidated fragmented terminals to reduce inter-terminal haulage costs	● Tuas Mega Port ● PSA Supply Chain Hub
Malaysia	● Expanding port capacity: e.g. Westport Port Klang expansion, Tanjung Pelepas, Penang North Butterworth Container Terminal ● Rail-port integration: To connect East and West Malaysia freight corridor	● Position Port Klang in a global top-10 container rankings ● Create an integrated east-west freight corridor to reduce logistics costs	● East-Coast Rail Link ● Port Klang, Westports Expansion ● Carey Island Mega Port
Thailand	● Expanding port capacity: e.g. Laem Chabang Port Phase 3 to serve the manufacturing investment growth ● Multimodal & corridor integration: Upgrade U-Tapao airport into tri-modal junction linking air, sea (Map Ta Phut Port) and high-speed rail within EEC. ● Cross-border & connectivity: Thailand-China high-speed railway creates a direct physical link to Laos-China and rail freight corridor to Kunming.	● Position as ASEAN's principal land transit hub connecting China, Indochina and Indian Ocean ● Increase port capacity to absorb rising EB and electronics export volume ● Create multimodal land bridge alternative to Malacca Strait routing for East-West trade	● Laem Chabang Port Phase 3 ● Thailand-China High-Speed Railway ● Southern Land Bridge
Vietnam	● Upgrading deep-sea port: Upgrading from shallow feeder ports to deep-sea gateways ● North-South corridor expansion: North-South expressway with the route connecting with key economic centers, ports, and border gates and parallel with the high-speed railway	● Reposition to handle direct mega-vessel exports to Western markets ● Reduce logistics costs and improve supply chain efficiency ● Strengthen cross-border connections (southern China)	● Lach Huyen Deep-Sea Port ● North-South Expressway ● North-South High-Speed Railway
Indonesia	● Expanding port capacity: Develop new port and expand to serve for the export growth ● Expanding rail network: Construction new railway from 7,000 km to 12,000 km to shift more freight traffic from road to rail.	● To reduce logistics costs, reduce carbon emission, and support the booming regional automotive industry	● Patimban Port ● Trans-Sumatra Railway
Philippines	● Connectivity: Multiple development projects, including railways, highway networks, airports, link major economic zones and inter-island	● To improve inter-island connectivity, untie traffic bottlenecks, and reduce transport cost	● Subic-Clark-Manila-Batangas Railway

IV. Key Infrastructure Projects in ASEAN-6

IV. Key Transport Infrastructure Projects: Singapore

- Singapore is developing the Tuas Mega Port, the world's largest fully automated container terminal, complemented by the Supply Chain Hub integrating advanced automation and digital connectivity to position Singapore as the premier global maritime and supply chain hub.

Tuas Mega Port

Project overview and key features:

- Singapore's Tuas Mega Port **will be the world's largest fully automated container terminal**, occupying approximately 1,337 hectares of reclaimed land on the country's western coast.
- The port will **feature 66 deep-water berths** spanning 26 km, capable of accommodating the world's largest container vessels exceeding 450 meters in length.
- At full completion, the port will **handle 65 million TEUs annually**, nearly double current total port throughput, consolidating all existing city terminals (Tanjong Pagar, Keppel, Brani, Pasir Panjang)
- The port employs **full automation**, AI-powered yard management systems, automated guided vehicles (AGVs), and automated rail-mounted gantry cranes.

Progress:



PSA Supply Chain Hub

Project overview and key features:

- PSCH is state-of-the-art logistics facility spanning over 2 million sq.ft. (approximately 186,000 sq.m.) and is strategically situated within the Free Trade Zone, directly adjacent to Tuas Port, enabling seamless port-to-warehouse cargo flows.
- PSCH will serve as both **a regional distribution center and a container freight station**, offering value-added services that extend Singapore's logistics network across Southeast Asia and beyond.
- The hub integrates **cutting edge technologies; Automated Storage and Retrieval Systems (ASRS), the intelligent Warehouse Exchange (IWX) platform, robotics-assisted cargo handling**, and full SGTraDex* supply chain data connectivity.

Progress:



Note: *SGTraDex (Singapore Trade Data Exchange) is a digital infrastructure platform that enables trusted, secure sharing and exchange of supply-chain and trade data among ecosystem participants

Source: Maritime and Port Authority of Singapore (MPA), Singapore Ministry of Transport (MOT), U.S. Trade Intelligence, Public news

IV. Key Transport Infrastructure Projects: Malaysia

- Malaysia is revolutionizing its logistics efficiency through two strategic pillars: the ECRL, which bridges the economic gap between the East and West Coasts, and OMEGA 1, Asia's largest multi-tenant Infrastructure-as-a-Service (IaaS) smart warehouse.

East Coast Rail Link (ECRL)

Project overview and key features:

- The project proposes a **665-km overland rail network** that will link the East Coast of Peninsular Malaysia (Kota Bharu, Kelantan) directly to the West Coast's main maritime gateway (Port Klang, Selangor).
- The project aims to bridge the economic gap between the east and west coasts, transform regional logistics, and offer an alternative land-bridge bypass to the congested Straits of Malacca.
- However, the project has faced scrutiny regarding its long-term financial viability, shifting alignments under different administrations, and concerns over environmental disruption through forest reserves.

Progress:

2017	Formal commencement of construction
2026	Overall construction progress surpassed 92.62%
2026-2027	Phase 1 (Kota Bharu - Gombak): Expected construction completion by December 2026, with full operations starting in 2027.
2027-2028	Phase 2 (Gombak – Port Klang): Expected construction completion in 2027.



OMEGA 1 Bukit Raja (Smart Warehouse)

Project overview and key features:

- The project features OMEGA 1 Bukit Raja, a multi-story smart warehouse located in the industrial hub of Bukit Raja, Klang, with a total floor area of 171,000 sq.m. (land area: 112,000 sq.m.). This flagship hub was developed by Taiwan's Ally Logistic Property (ALP) in a 30:70 joint-venture partnership with Malaysia's Employees Provident Fund (EPF).
- The mega warehouse aims to digitalize Malaysia's supply chain sector by introducing the **"Infrastructure-as-a-Service" (IaaS)* model**.
- While it significantly enhances e-fulfilment and regional distribution efficiency, challenges remain regarding high initial technology integration costs and the readiness of local SMEs to adopt such advanced automated systems.

Progress:

2022	Commencement of construction
2024	Completion
2026	Achieved full operation and official recognition as the region's largest operational, multi-tenant, multi-storey Infrastructure-as-a-Service (IaaS) warehouse, boasting 100,000 automated pallet positions.



Note: *Infrastructure-as-a-Service (IaaS) is a business model where companies rent access to advanced, fully automated warehousing infrastructure on a flexible, pay-as-you-use basis

IV. Key Transport Infrastructure Projects: Thailand (1/2)

- Thailand is developing two strategic high-speed railway corridors, which are expected to become operational by 2030-2032, establishing the country as a key node on the Kunming-Singapore rail route.

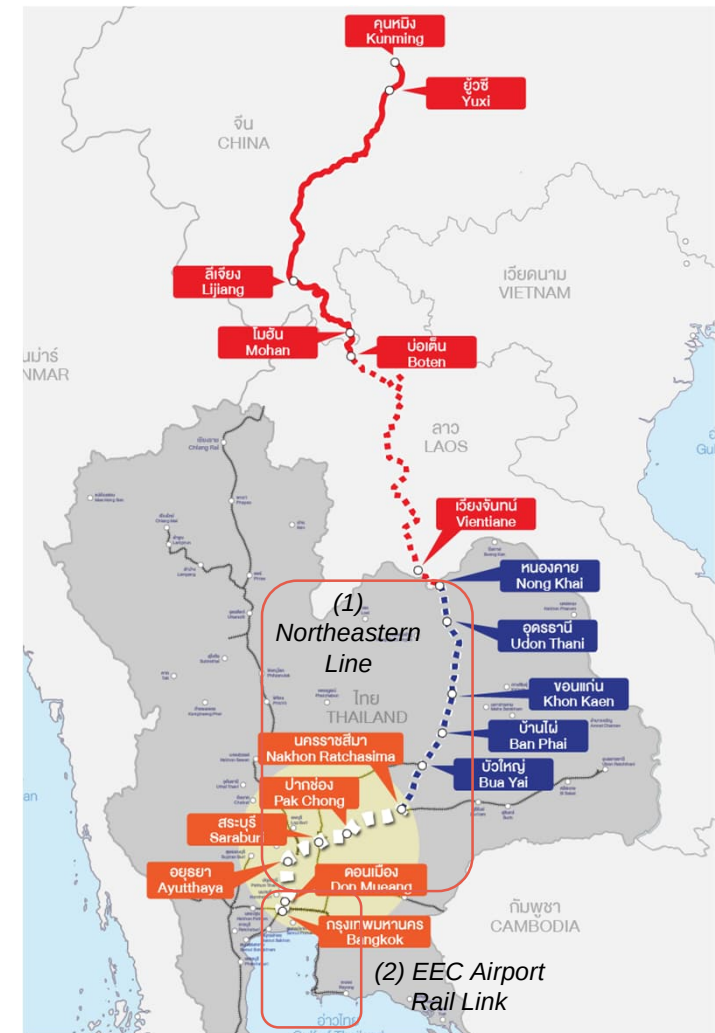
High-Speed Railways

Project overview and key features:

- Thailand is developing its first high-speed railway (HSR) network as a multi-phase infrastructure program, primarily in partnership with China under the Belt and Road Initiative (BRI) framework. The railway is envisioned as a **major connection along the Kunming-Singapore railway central line**.
- The network consists of two strategically linked corridors: **(1) Northeastern Line (Bangkok-Nong Khai)** and **(2) Eastern Economic Corridor Three-Airport Rail Link**.
- In addition, the development of a dedicated freight transshipment hub at Nong Khai, which is designed with multimodal functionality to integrate three freight modes at a single node; road-to-rail and rail-to-rail cross-border transfer, enabling seamless, cost-efficient cargo movement.

Key progress & project timeline:

	(1) Northeastern Line	(2) EEC Three-Airport Link
2026	- The construction of Phase1 (Bangkok – Nakhon Ratchasima) has reach 50% progress. - Phase 2 (Nakhon Ratchasima – Nong Khai) got approval from the Cabinet.	The project is undergoing contract revisions, awaiting cabinet approval, which is expected to be granted within this year.
2030	Phase 1 is expected to begin operations.	
2032	Phase 2 is expected to begin operations, which will connect with China-Laos route.	With an estimated construction period of five years, the construction is expected to be finished in 2032.



IV. Key Transport Infrastructure Projects: Thailand (2/2)

- Thailand is advancing to major infrastructure initiatives, the Land Bridge Project and Laem Chabang Port Phase 3.
- Both projects are aimed at positioning the country as a premier regional logistics and transshipment hub.
- However, execution risks remain significant, with the Land Bridge still in regulatory review and facing viability concerns, while Laem Chabang's construction progress is uneven and key terminals are likely delayed beyond 2031.

Land Bridge Project

Project overview and key features:

- The project proposes an 87-90 KM overland corridor, which will link deep-sea ports in Ranong (on the Andaman Sea) with those in Chumphon (on the Gulf of Thailand).
- It includes **dual-track railways, 6-lane highway, and oil pipelines systems.**
- The project aims to transform Thailand into a pivotal logistics hub, enhancing regional connectivity, offering an alternative to the congested Malacca Strait.
- However, significant concerns have been raised about the project's potential to attract sufficient traffic and achieve profitability, given its THB 1 trillion total investment. Additionally, the community has expressed apprehension regarding the environmental impact.

Key progress:

- 2023** • Cabinet approval in principle
- 2024** • Primary feasibility study completed
- 2026** • The regulatory review and EHIA approval are currently in progress.



Laem Chabang Port (Phase 3)

Project overview and key features:

- Laem Chabang Port Phase 3 is under the EEC development plan.
- The project spans a total area of 1,600 rai (256 hectares) to accommodate multiple facilities, including 7 container berths and terminals for vehicles and general cargo, and 2 rail freight yards.
- This development phase will **increase container throughput capacity from 11 to 18 million TEUs annually** and enable handling of mega container ships of up to 20,000 TEUs. Vehicle handling **capacity will rise from 2 to 3 million vehicles per year.** In addition, an automated container handling system will be installed.
- The project aims to strengthen Thailand's status as a premier Southeast Asian logistics and transshipment hub. By expanding deep-sea infrastructure and integrating automated technologies, it dramatically boosts regional trade connectivity and reduces overall transport costs.

Key progress & project timeline:

- 2026** • Marine works and land reclamation are over 90% complete, while buildings, infrastructure (roads, rails), bridges, and utilities progress remains minimal.
- 2028-2031** • The first terminal is slated to finish construction by 2028 and begin operations in 2031, with timelines for the remaining terminals still undisclosed and likely delayed.



IV. Key Transport Infrastructure Projects: Vietnam (1/2)

- Vietnam's sea logistics infrastructure is expanding rapidly in both the northern and southern regions, with the strategic goal of bypassing transshipment hubs to enable direct export-import logistics.

Can Gio International Transshipment Port (Southern)

Project overview and key features:

- The project has partners of world class container shipping line Terminal Investment Limited holding 49%, a member of Mediterranean Shipping Company (MSC), Vietnam Maritime Corporation (36%), and Saigon Port (15%).
- The project spans 571 hectares, with a main wharf stretching about 7.5 kilometers, designed to **handle massive container vessels with deadweight tonnage of up to 250,000 tons.**
- The port capacity is projected to **reach 4.8 million TEUs by 2030, eventually scaling up to 16.9 million TEUs by 2047.**

Project timeline:

- | | |
|-----------|---|
| 2025-2026 | <ul style="list-style-type: none"> • Project approval and roll out by early 2026 |
| 2027 | <ul style="list-style-type: none"> • Develop 2 to 4 berths with a total length of >2 km., reaching a capacity of about 4.8 million TEUs |
| 2047 | <ul style="list-style-type: none"> • Expand to 13 berths, with a total capacity of 16.9 million TEUs. |



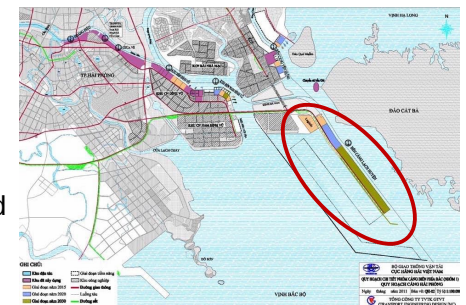
Lach Huyen International Gateway Port (Northern)

Project overview and key features:

- The Lach Huyen International Gateway Port is an extension of the Port of Hai Phong.
- It is designed to transform Northern Vietnam's maritime trade by accommodating massive container deep-draft container vessels (up to 200,000 DWT) and **help transport goods directly to Europe and USA without having to transit through a third country.**
- The Lach Huyen port cluster is expected to have a combined **capacity of 6 million TEUs by 2030.**

Project timeline:

- | | |
|-------------|--|
| 2013 – 2018 | <ul style="list-style-type: none"> • Construction began in 2013 • Terminals 1 and 2 began operations in 2018 with capacity of 1.1 million TEUs annually. |
| 2025 | <ul style="list-style-type: none"> • Terminals 3–6 were completed and opened in early 2025, adding more than 3 million TEUs of capacity and enabling the port to accommodate vessels up to 200,000 DWT. |
| 2026 – 2027 | <ul style="list-style-type: none"> • Terminals 7 and 8 are slated to open by 2027 adding annual capacity of 1.9 million TEUs. |
| 2030 | <ul style="list-style-type: none"> • The fully developed 15-berth complex is expected to have a capacity of 15 million TEUs annually. |



IV. Key Transport Infrastructure Projects: Vietnam (2/2)

- Vietnam has completed its expressway spine and is now pivoting to high-speed rail, together signaling a structural shift from fragmented connectivity to premium corridor infrastructure, positioning the country as Southeast Asia's major logistics and manufacturing hub.

North-South Expressway (Eastern Section)

Project overview and key features:

- The North-South Expressway delivered as a continuous corridor of more than 3,500 km, replacing previously fragmented long-haul routes.
- The expressway **connects about 74% of seaports, 75% of economic zones, and 16 of 23 airports**, supporting multimodal cargo flows and access to major industrial clusters.
- However, significant concerns remain: land clearance bottlenecks, material shortages, and delays in rest stops construction.

Key progress & project timeline:

2025-2026

- The core corridor of Eastern North-South Expressway (3,000 km) is scheduled to be completed and open to traffic.

2026-2030

- Upgrading existing 2-4 lane expressways to 6-lane scale, with the goal of completing the entire route by 2030.



North-South High-speed Railway

Project overview and key features:

- The project spans 1,541 km from Ngoc Hoi Station (Hanoi) to Thu Thiem Station (Ho Chi Minh City), **passing through 20 provinces and cities with 23 passenger stations and 5 cargo stations**.
- Designed as a double-tracked, standard-gauge electrified line operating at 350 km/hr., cutting Hanoi-HCMC travel time from ~30 hours to approximately 5 hours.
- Key concerns include land clearance complexity (route crosses 20 provinces, relocation of power infrastructure required), dependency on Chinese technical standards and joint-venture contractors, and managing cost overruns across a decade-long build cycle.

Key progress & project timeline:

2024-2025

- National Assembly passes investment resolution
- Feasibility study preparation begins

2026-2028

- Full appraisal and approval of tender proposal selection of contractor are scheduled through Q4 2028

2035

- Targeted full-corridor completion.



IV. Key Transport Infrastructure Projects: Indonesia (1/2)

- Indonesia is developing Patimban Port to relieve congestion at the overburdened Tanjung Priok Port in Jakarta and to strengthen the nation's export logistics.
- The project is being carried out in three phases and will reach a full capacity of 600,000 CBUs and 7.5 million TEUs by 2027 and 2042, respectively.

Patimban Seaport

Project overview and key features:

- The Patimban Seaport, located in Subang, West Java, is a new port developed and a national strategic **project aimed at alleviating congestion at Jakarta's Tanjung Priok port** and support the expansion of country's manufacturing production.
- The port is designed to **serve as a primary export gateway for Indonesia's automotive and manufacturing industries**, handling high volumes of Completely Built-Up (CBU) vehicle exports and international container flows to markets in Asia, Australia, and ASEAN.
- The facility is projected to reach the **total operational capacity of 600,000 CBUs in 2027 and 7.5 million TEUs by 2042.**
- As part of the long-term plan, a dedicated port railway will be constructed to link Patimban to the national rail network, significantly improving logistical efficiency and cutting transport times to nearby industrial zones in West Java.

Project timeline:

Phase I. 2018-2022

- Partially completion of Ro-Ro and container terminal
- Container terminal: 250,000 TEUs
 - Ro-Ro terminal: 200,000 CBUs

Phase I-2. 2023-2027

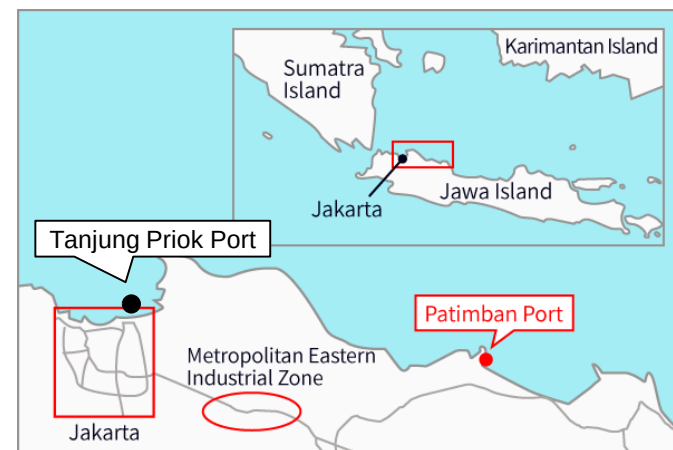
- Continued expanding the capacity of Ro-Ro and container terminal.
- Container terminal: 3.39 million TEUs
 - Ro-Ro terminal: 600,000 CBUs (Fully completion)

Phase II. 2028-2032

- Continued expanding the capacity of container terminal to 6.12 million TEUs.
- Construction of liquid bulk terminal and piping
- Expansion of service boat terminal and state boat terminal

Phase III. 2033-2042

- Fully completion of the container terminal with total capacity of 7.5 million TEUs.
- Construction of port railway to connect with the national rail network.



IV. Key Transport Infrastructure Projects: Indonesia (2/2)

- Indonesia's National Railway Master Plan aims to vastly expand rail networks and freight capacity to boost regional connectivity and shift transport from road to rail.
- Key regional initiatives include large-scale Trans-Sumatra reactivation and expansion and new construction of Trans-Kalimantan backbone route to serve cities, ports, and heavy industries.

National Railway Master Plan (RIPNAS 2030)

- By 2030, Indonesia's National Railway Master Plan (RIPNAS 2030) aims to expand the active rail network to 12,100 km across the major islands.
- The plan emphasizes regional connectivity and a modal shift from road to rail, featuring urban transit systems, high-speed corridors, and port-to-port industrial links.
- Freight capacity will grow accordingly, with procurement projected at about 2,475 cargo locomotives and 48,000 freight wagons within the same timeframe.
- Major infrastructure projects are planned for Java-Bali, Sumatra, Kalimantan, Sulawesi, and Papua.
- The master plan faces significant delays due to prolonged administrative and regulatory approvals, complex land acquisition conflicts, and ongoing pre-construction route studies across diverse regions.



Trans-Sumatra Railway

- The plan is to expand from ~1,400 km of fragmented routes to a 2,900 km interconnected network stretching from Aceh in the island's north to Lampung in the south.
- The project, which planned to revive dormant routes and expand new rail lines totaling 1,100 km, **aims to link economic hubs, coal, petroleum, palm oil, and rubber production areas, along with ports and airports, completing inter-city connections.**
- The initial phase focuses on reactivating inactive tracks. As of June 2026, the 478 km Banda Aceh–Besitang route is in detailed engineering design, and funding has been approved for pre-construction work on 248.5 km of dormant track across West Sumatra. The construction of the new lines has not yet begun.

Trans-Kalimantan Railway

- Having previously had no operational railways, Indonesia is now studying plans for a 2,772-km railway network to link all provinces on the island.
- It is designed **to act as an integrated transport backbone to move massive cargo loads such as coal, bauxite, palm oil, rubber, timber** and link major cities directly to the new capital, Nusantara (IKN).
- As of early 2026, the project is undergoing feasibility studies to fine-tune route corridors to avoid overlapping with protected rainforests and existing mining concessions.
- The construction timeline has not been confirmed.

IV. Key Transport Infrastructure Projects: Philippines

- The Philippines is developing its infrastructure through the Build Better More program, which prioritizes connectivity, aiming to strengthen the country's logistics networks, including Subic-Clark-Manila-Batangas Railway project and Cavite-Laguna Expressway project.

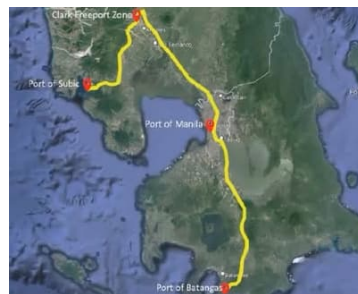
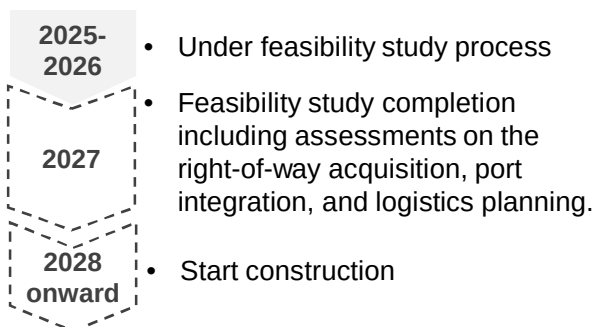
Build Better More (BBM) Program

- The BBM program (2023-2028) aims to elevate the country's infrastructure, building upon the previous administration's 'Build! Build! Build! (BBB) initiative, as identified by the National Economic and Development Authority (NEDA).
- The program comprises 198 high-impact infrastructure flagship projects (IFPs), with a total investment of PHP 8.8 trillion.
- The program focuses primarily on physical connectivity including railways, highway networks, airports, and bridges**, which together account for over 80% of total project costs, aiming to expand inter-island connectivity and link major economic zones to strengthen the country's logistics and freight networks as well as improve transportation and alleviate traffic bottlenecks.

Example Logistics Projects under BBM Program

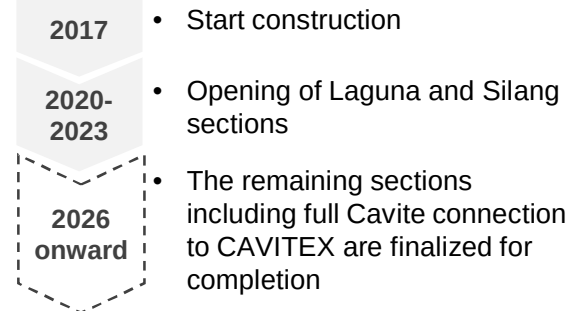
Subic-Clark-Manila-Batangas (SCMB) Railway

- Project overview:** A 280-km freight and cargo railway designed to **link the Port of Subic, the Port of Manila, the Port of Batangas and Clark International Airport**, the Luzon's primary economic hubs.
- The project aims to **decongest Manila Port to ensure timely movement of products between major industrial and port hubs.**



Cavite-Laguna Expressway (CALAX)

- Project overview:** A 44.58 km expressway connecting CAVITEX in Kawit, Cavite to SLEX at the Mamplasan Interchange in Binan, Laguna.
- The project aims to **reduce the travel time between two provinces which are hosting major economic and industrial zones** including Laguna Technopark.



V. Expansion Strategies of Major Logistics Operators

V. Expansion Strategies of Major Logistics Operators (1/3)

- Global logistics operators are significantly expanding their warehouse and distribution infrastructure across ASEAN 6 countries to capitalize on rapid regional investment growth.
- These expansions position them to capture growing demand for logistics and supply chain services in Southeast Asia.

Strategic Direction of the Logistics Operators: Expanding Investment in ASEAN 6 (2023 onwards)

Key strategies	Purpose	Strategic Intentions & Market Context
Infrastructure & capacity build-up	Add physical capacity to capture the rapid rising investment in the region	DHL - DHL is expanding its warehouse footprint by 400,000 sq.m., including built-to-suit and cold facilities in Indonesia, Malaysia, Philippines, and Singapore. ✓ 40,000 square meters DHL Maheswara Green Logistics facility in West Java, Indonesia ✓ 18,000 square meters Penang Logistics Hub 5 (PLH5) in Malaysia ✓ 50,000 square meters built-to-suit facility in the Philippines ✓ 60,000 square meters of space acquired from a local business in Singapore
		FedEx - FedEx expanded its Laem Chabang facility (in EEC) to 4,900 square meters, making it nearly four times larger than the previous location. This state-of-the-art hub features advanced sortation technology and multi-modal freight solutions designed to support local exporters and importers. - FedEx is also developing a 100,000-square-foot integrated logistics and air cargo facility within the upcoming Penang International Logistics Aeropark (PILA), Malaysia.
		YCH Group (SG) - In partnership with Vietnam's T&T group, YCH Group is investing to develop Vietnam SuperPort, which is designed with a capacity of approximately 530,000 TEUs. It integrates dry container terminals, bonded warehouses, and rail capabilities. - Invest in Malaysia Supply Chain City (MSC), a 2,158 hectares smart logistics complex. The complex acts as a centralized global hub for e-commerce fulfilment, cold chain operations, and end-to-end B2B/B2C cross-border distribution.
		Kuehne +Nagel The company acquired City Zone Express, a Malaysia-based cross-border logistics operator, for an estimated \$50 million, adding over 260 vehicles and 80,000 sq. m. of warehousing and substantially strengthening their cross-border presence in Malaysia, Singapore, Vietnam, Thailand and China.

Source: Companies' websites, Public news

V. Expansion Strategies of Major Logistics Operators (2/3)

- Major logistics operators are strategically expanding their ASEAN presence by investing heavily in digitalization and operational efficiency to capture explosive e-commerce growth, with a particular focus on cross-border commerce capabilities.

Strategic Direction of the Logistics Operators: Expanding Investment in ASEAN 6 (2023 onwards)

Key strategies	Purpose	Strategic Intentions & Market Context
Cross-border e-commerce supply chain integration, efficiency & optimization	Enable fast and cost competitive services to dominate ASEAN e-commerce	Flash Express (TH) Scaling its ASEAN logistics network by heavily investing in a proprietary, 100% in-house tech stack. Dedicating roughly 10% of annual spend to R&D, they integrate AI-driven route optimization, smart automated hubs, and digital logistics tools to process millions of daily parcels across the region.
		Viettel Post Viettel Post is investing in the Danang Logistics Center, a highly automated hub that utilizes a Smart Management System that links warehouse and transportation data in real time. The AI system features automated load balancing and predictive routing, which is expected to reduce parcel processing times by 33%.
		Ninja Van Ninja Van invested over US\$100 million into digitalization and operational efficiency to upgrade its Southeast Asian supply chain. These technology-driven initiatives include deploying automated sorting hubs, AI-powered route optimization, and scalable cloud-based support to shorten delivery times and increase productivity.
		SF Express The company acquired Kerry Express Thailand to accelerate its international expansion into Southeast Asia while financially rescuing and technologically transforming Thailand's leading courier service.
		UPS UPS announced a strategic partnership with Ninja Van (Malaysia) to establish authorized retail and drop-off services. The alliance will let UPS use Ninja Van's local network to expand its market presence and speed up deliveries in Malaysia.
		CJ Logistics The company entered into a cross-border partnership agreement with Ninja Van (Singapore HQ) that designates Ninja Van as CJ Logistics' official partner for cross-border delivery and customs clearance in six Southeast Asian markets.

V. Expansion Strategies of Major Logistics Operators (3/3)

- Leading logistics operators are strategically investing across ASEAN 6 to capitalize on high-growth cold-chain and sustainable logistics markets, leveraging advanced temperature-controlled infrastructure and green technologies to strengthen competitive advantage. This expansion is driven by rising regional demand in pharmaceuticals perishables, and eco-conscious supply chains.

Strategic Direction of the Logistics Operators: Expanding Investment in ASEAN 6 (2023 onwards)

Key strategies	Purpose	Strategic Intentions & Market Context	
Market specialization in the high growth segment and strengthening competitiveness	Capitalize on cold storage market growth across ASEAN (Temperature-controlled logistics critical for pharma, dairy, seafood exports)	Kuehne + Nagel	- K+N opened a 2,800 sq.m. Container Freight Station (CFS) in Bangkok, strategically located near Laem Chabang Port. - Also, the company completed expansion of 12,000 sq.m. to its 48,000+ sq.m. Singapore Logistics Hub to expand multimodal healthcare fulfilment with integrated cold-chain storage and specialized services. The upgrade includes 15–25 ° C, 2–8 ° C and –20 ° C zones, sterilization, bundling, and rapid last-mile response. The project aims to meet rising Southeast Asia healthcare demand, replicate the Singapore model in Malaysia.
		SJWD	- SCGJWD is expanding its footprint from CLMV and China into major high-growth ASEAN economies. - The company leverages several joint ventures and equity stakes, such as the Royal Cargo JV in the Philippines, investments in SWIFT and ANI, and a JV with SWIFT Haulage in Malaysia, to roll out a regional cold-chain network, with Malaysia's strategic position as a key bridge connecting cross-border routes between China, Thailand, and Singapore.
Sustainability & green logistics	Enhance competitiveness advantage by being early mover to gain regulatory favor and customer preference	Kuehne+ Nagel	The company's rollout of a regional EV fleet across Southeast Asia, featuring about 40 prime movers and 100 containers, handles less-than-container-load (LCL) pickups and completely replaces traditional combustion vehicles to reduce carbon emissions.
		DHL	- DHL supply chain features solar panel integration and fully automated, energy-efficient sorting structures designed to operate at a carbon-neutral baseline for its warehouses in various countries. - DHL eCommerce is deploying electric shuttle vehicles and heavy linehaul trucks, with plans to convert 50% of its owned Bangkok last-mile delivery fleet to electric alternatives.
		FedEx	FedEx plans to achieve 100% all-electric global parcel pickup and delivery by 2040, with a phased approach in the ASEAN-6. Across Southeast Asia, the company is actively deploying zero-emission vans, installing localized EV charging infrastructure, and conducting pioneering cross-border EV delivery trials (Singapore-Malaysia) to meet its corporate net-zero milestones.

VI. Concluding Remarks & Implication

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- Instead of chasing the high-volume but thin-margin e-commerce market, logistics operators should prioritize strategic investment in manufacturing supply-chain management, which delivers superior profitability through durable partnerships, specialized skills, and contract stability.

Key facts & findings

Increasing FDI in supply-chain-intensive manufacturing sector is driving strong demand in specialized logistics:

- Multinationals are rapidly increasing investment in ASEAN to diversify production in response to US–China tensions and COVID-related supply-chain disruptions.
- This influx into supply-chain-intensive sectors, electronics, semiconductors, and EV manufacturing, has raised transport volumes and driven demand for specialized logistics such as climate- and temperature-controlled handling, bonded warehousing, complex customs compliance, and just-in-time precision.

The rapidly expanding e-commerce is driving substantial demand for logistics, but margins are low:

- ASEAN is one of the fastest-growing e-commerce regions, driving strong demand for fulfilment, cross-border logistics, and last-mile delivery.
- Conversely, e-commerce logistics is unprofitable for several reasons:
 - ⚠ Major platforms (Lazada, Shopee, TikTok) control order flow and internalize high-margin routes to their own delivery arms;
 - ⚠ Fragmented geographies and demanding services (returns, COD) inflate last-mile costs;
 - ⚠ Intense price competition from Chinese operators often pushes last-mile operations into loss.
- Even Global courier, express and parcel (CEP) providers that differentiate with premium fulfilment and value-added services typically earn only thin margins.

Implication for logistics operators

- Complexity raises the barrier to entry and shifts competition from price to reliability, quality, and depth of service, making manufacturing supply chain management a high-value, sustainable growth opportunity.
- **Operators that invest early in these specialized capabilities e.g. climate/ temperature management, bonded warehousing, customs expertise, will be able to command premium pricing and long-term contracts** by positioning themselves as trusted partners to factory operations rather than commodity transport vendors.
- **Avoid competing in last-mile delivery** as the segment is capital-intensive, highly commoditized, and margin-squeezing.
- Logistics operators with existing assets and facilities should **instead prioritize higher-value services**, e.g. labeling, repackaging, kitting, quality inspection, and **focus on premium product flows and multinational clients that transact off-platform**. This approach preserves margins, reduces exposure to price competition, and better leverages owned infrastructure.

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