

SC1 · Supply Chain Diversification

Southeast Asia 2026

COMPLIMENTARY PREVIEW · 5 SELECTED PAGES

This preview contains 5 pages selected from the full 59-page report.

Full report includes an Excel model with TCO calculator, country scoring, and risk matrix.

The Strategic Case for Supply Chain Diversification

The China+1 shift is structural, not cyclical. US Section 301 tariffs of 7.5-100% on Chinese goods, compounded by rising Chinese labor costs (+8-10%/yr since 2015) and geopolitical concentration risk, have made Southeast Asia the default diversification destination for global manufacturers. Between 2022 and 2025, over USD 120 billion in manufacturing FDI was announced across the six ASEAN countries covered in this report.

This chapter establishes the macro investment rationale, compares all six countries across seven competitiveness dimensions, maps the SEZ landscape, the FTA framework and the logistics benchmarks.

1.1 The China+1 Imperative: Tariff Exposure by Sector

The Section 301 tariff regime, in force since 2018-2020, imposes an additional 7.5-25% duty on most Chinese manufactured goods entering the US. The May 2024 USTR review retained all existing rates and raised targeted sectors -- EVs to 100%, batteries to 25% rising to 50% in 2026, solar to 50%. In 2025, reciprocal tariff surcharges extended the burden further: Vietnam, Indonesia and Thailand now face ~19-20% effective US tariffs on manufactured exports, but this is still 5-12 percentage points below what Chinese-origin goods face on the same HS codes.

For a manufacturer shipping USD 50 million/yr of electronics to the US, relocating from China to Vietnam saves USD 2.5-6 million in annual duties at current rates.

Section 301 Tariff Rates: China vs SEA by Sector

Sector / HS Code	China rate (301 + MFN)	SEA effective rate (2025 reciprocal est.)
Electronics HS 8471-8542	25-27.5%	~17-20% depending on country
Textiles & apparel HS 61-62	24-32% (7.5% 301 + MFN 16.5%)	~17-20% depending on country
Furniture HS 9403	25-29% (25% 301 + MFN 0-4%)	~17-20% depending on country
Auto parts HS 8708	27.5% (25% 301 + MFN 2.5%)	~17-20% depending on country
Chemicals & plastics HS 28-39	25-32.5%	~17-20% depending on country
EV batteries HS 8507.60	25% now; 50% from 2026	~17-20%; no 301 surcharge
Solar cells HS 8541.40	50% (2024 review)	~17-20%; but AD/CVD risk for VN/TH/MY (see Ch5)

Country-Level US Reciprocal Tariff Rate (2025 est.)

	Vietnam	Thailand	Malaysia	Indonesia	Singapore	Philippines
US reciprocal tariff (est.)	~20%	~19%	~19%	~20%	~17%	~18%
Tariff delta vs China (electronics)	-5 to -8 pts	-6 to -9 pts	-6 to -9 pts	-5 to -8 pts	-8 to -11 pts	-7 to -10 pts
Annual duty saving (USD 50M exports)	~USD 2.5-4M	~USD 3-4.5M	~USD 3-4.5M	~USD 2.5-4M	~USD 4-5.5M	~USD 3.5-5M

Major Documented Relocations (Selected, 2022-2025)

Company / Sector	Destination	Capex (est.)	Key Details
Foxconn / Pegatron (Apple)	Vietnam (Bac Ninh, Nghe An)	USD 1.5B+	iPhone assembly; 15-20% of global iPhone production shifted to Vietnam by 2025
Samsung	Vietnam (ongoing)	Cumulative USD 22B+	Largest global hub: >50% of global Samsung smartphone output
GoerTek (AirPods)	Vietnam (Nam Dinh)	USD 280M	AirPods assembly >80% in Vietnam; explicit China risk diversification
BYD	Thailand (Rayong)	USD 490M	150,000 unit/yr EV plant; serves ASEAN and EU as China export alternative
CATL / LG Energy	Indonesia (Karawang)	USD 500M+	EV battery and assembly; anchored by Indonesia nickel supply chain
Great Wall Motor	Thailand + Malaysia	USD 150-200M	ICE/HEV production to serve ASEAN; tariff arbitrage vs China exports
Lego	Vietnam (Binh Duong)	USD 1B	First SEA factory; operational 2024; EVFTA-driven location decision
Nike / Adidas suppliers	Vietnam + Indonesia	Ongoing	Vietnam: ~50% of Nike shoe production; China now <20% of global footwear sourcing

1.2 Manufacturing Competitiveness Scorecard: 6-Country Comparison

NOTE: Manufacturing cost benchmarks and competitiveness indicators in §1.2 reflect published estimates from primary research providers (see Annex A for full source list). Figures vary by source depending on methodology and reporting period -- independent estimates may differ.

Vietnam leads on cost for labor-intensive manufacturing; Malaysia and Singapore lead on ecosystem quality for high-value production. Indonesia holds a structural advantage in battery materials. Thailand dominates automotive. The Philippines offers English-fluent, cost-competitive labor for electronics assembly. The table below consolidates the seven most investment-critical indicators; full benchmarks for each country are available in the Country_Compare tab of SC1_Data_Model.xlsx.

Indicator	Vietnam	Thailand	Malaysia	Indonesia	Singapore	Philippines
Min. wage (USD/month, 2025)	~190 (Zone I)	~270 (EEC)	~333 (national)	~180 (Java avg)	~1,400+	~250 (NCR)
Assembly worker (USD/month, est.)	350-380	480-520	750-850	300-400	2,500-3,500	350-450
Industrial electricity (USD/kWh)	0.08-0.09	0.10-0.11	0.09-0.11	0.09-0.12	0.13-0.16	0.15-0.18
Standard CIT rate	20%	20%	24%	22%	17%	25%
Best SEZ incentive	10% CIT / 15 yrs	0% / 8 yrs BOI	0% Pioneer / 5 yrs	0% / 5-20 yrs	5-10% GIP	0% ITH 4-7 yrs
World Bank LPI 2023 (1-5)	3.3 (~43rd)	3.4 (~35th)	3.5 (~26th)	3.0 (~63rd)	4.3 (#1)	2.9 (~68th)
Political stability WGI (pct.)	~42nd	~22nd	~55th	~25th	~90th+	~20th

1.3 Special Economic Zones: Top Industrial Estates by Country

SEZs are the entry point for most foreign manufacturers: they provide pre-approved land, streamlined licensing, tax holidays and shared infrastructure that cut greenfield setup time by 30-50% versus non-SEZ locations. Each country profile below covers two leading export-oriented zones selected for FDI relevance and availability; cost figures are 2025 benchmarks.

Sector Deep-Dives: Which Industries Transfer Best

Not all industries relocate with equal ease. The degree of difficulty depends on three variables: supply chain depth (how many tiers of sub-suppliers must move with you), certification complexity (which compliance frameworks your buyers require), and rules-of-origin exposure (whether SEA processing will satisfy US or EU country-of-origin requirements). Textile and apparel relocation is relatively straightforward for final assembly but requires yarn-forward compliance discipline for EU market access.

Electronics is the most active sector but also the most demanding in terms of supplier ecosystem -- moving PCB assembly without the surrounding component supply chain increases defect rates and lead times. Furniture and wood products face aggressive anti-circumvention enforcement in the US channel. Automotive parts and food processing require sector-specific certification infrastructure that only exists in a subset of SEA countries.

The six profiles below quantify these differences country by country, with the compliance requirements that determine whether a relocated operation will actually clear customs at the destination market.

Sector-Country Fit Matrix: Navigation Guide

The matrix below rates transfer feasibility by sector and country (High / Medium / Low) based on supply chain depth, ecosystem maturity, and rules-of-origin compliance. Use it as a navigation guide before reading the detailed sector profiles.

Sector	Vietnam	Thailand	Malaysia	Indonesia	Singapore	Philippines
Textile & Apparel	Very High	Medium	Medium	High	Low	Medium
Electronics & PCB assembly	Very High	Medium	Very High	Low-Med	High	High
Furniture & Wood Products	Very High	Medium	Medium	Medium	Low	Medium
Automotive Parts (ICE/EV)	Medium	Very High	High	High	Low	Low-Med
Chemicals & Plastics	Low-Med	Medium	Very High	Medium	Very High	Low
Food Processing & Agri	High	Very High	High	High	Low-Med	Medium

3.1 Textile & Apparel: Yarn-Forward Rules and Certification Landscape

China's share of global textile and apparel exports has declined from ~35% in 2020 to ~28-30% in 2025, as buyers diversify to Vietnam (the primary beneficiary), Indonesia and Bangladesh. Vietnam's EVFTA provides a genuine tariff advantage to the EU (0% under yarn-forward rules of origin), while Indonesia and the Philippines benefit from RCEP for intra-Asian trade. Thailand and Malaysia play a limited role in apparel but are relevant for technical textiles and man-made fiber inputs.

Indicator	Vietnam	Thailand	Malaysia	Indonesia	Singapore	Philippines
T&A exports 2025 (est.)	USD 42-44B	USD 5-6B	USD 3-4B	USD 9-10B	Negligible	USD 3-4B
Primary market	US + EU	Japan + ASEAN	ASEAN + Japan	US + EU	n/a	US + Japan
Labor cost vs China	~40%	~20%	~15%	~50%	n/a	~25%
Local fabric sourcing	~45%	~35%	~30%	~40%	n/a	~20%
EU tariff under FTA	0% (EVFTA, yarn-forward)	MFN ~12%	MFN ~12%	MFN ~12%	0% (EUSFTA)	MFN ~12%

Indicator	Vietnam	Thailand	Malaysia	Indonesia	Singapore	Philippines
Semiconductor fab presence	None (assembly only)	None	None (OSAT only)	None	TSMC, GlobalFoundries	None (test only)

Key Standards & Qualifications

Standard	Scope	Relevance for SEA Manufacturers
ISO 9001:2015	Quality management system	Baseline requirement for all electronics OEM/EMS; prerequisite for most buyer audits
IECQ QC 080000 (HSPM)	Hazardous substance process management	Required for RoHS supply chain compliance (EU, California)
RoHS (EU 2011/65/EU)	Restriction of hazardous substances in electronics	Mandatory for all electronics sold in EU; covers Pb, Hg, Cd, Cr6+, PBBs, PBDEs
IPC-A-610	Workmanship standard for electronic assemblies	Industry standard for PCB solder quality; required by most Tier-1 OEMs
IATF 16949:2016	Automotive quality management	Required for automotive electronics supply chain (Thailand, Indonesia, Malaysia)
AEO / C-TPAT	Customs security certification	Required by US importers for CBP fast-lane clearance; recommended for all SEA exporters

Vietnam and Malaysia serve fundamentally different roles in the electronics supply chain. Vietnam (Bac Ninh, Bac Giang, Binh Duong) is the assembly and component manufacturing hub, driven by Samsung and Foxconn anchor investment; it is the right choice for volume consumer electronics and PCB assembly where labor cost dominates. Malaysia (Penang, Kulim) is the advanced packaging and semiconductor test hub, with higher IP protection, English common law, and the most extensive OSAT infrastructure outside Taiwan and South Korea.

For companies handling proprietary chip designs, trade secret processes or advanced packaging, Malaysia's IP framework is the decisive differentiator.

3.3 Furniture & Wood Products: Origin Rules and Anti-Dumping

US Section 301 tariffs on Chinese furniture (25-35%, HS 9403) have driven significant relocation to Vietnam, which is now the world's #2 furniture exporter with USD 14-15B in exports (2025 est.), predominantly to the US. Indonesia's Jepara cluster (Central Java) is the second major base for solid wood furniture, with strong European market access. Both countries face LACEY Act (legal timber) and EUDR (deforestation) compliance requirements, which are increasingly enforced at the importer level.

Indicator	Vietnam	Thailand	Malaysia	Indonesia	Singapore	Philippines
Furniture exports 2025 (est.)	USD 14-15B	USD 2-3B	USD 2-3B	USD 4-5B	Negligible	USD 0.5-1B
Primary market	US (~55%)	Japan + ASEAN	ASEAN + Japan	EU + US	n/a	US + Japan
US tariff (post-301)	~20% reciprocal	~19% reciprocal	~19% reciprocal	~20% reciprocal	~17%	~18% reciprocal
EU tariff (MFN / EVFTA)	0% (EVFTA)	MFN 2-5.6%	MFN 2-5.6%	MFN 2-5.6%	0% (EUSFTA)	MFN 2-5.6%
CARB ATCM Phase 2 compliance	High (major exporters)	Medium	Medium	High (Jepara)	n/a	Low-Med
EUDR compliance readiness	Medium	Medium	High	Low-Med	n/a	Low-Med
LACEY Act risk	Low (FSC adoption rising)	Low	Low	Medium (verify chain of custody)	n/a	Medium
Lead time FOB to LA	30-35 days	28-33 days	25-30 days	32-38 days	20-25 days	32-38 days

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