

FROM FACTORIES TO FRONTIERS: CHINA PLUS ONE, ASEAN, AND THE NEED FOR GREEN INDUSTRIAL INTEGRATION

BY ALEX LEW

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Photo: Toyota and Bridgestone are among the roughly 700 companies operating out of Amata Nakorn Industrial Estate near Bangkok. Credit: Nikkei Asia

"Emerging industrial clusters in the Mekong Subregion reflect the growing impact of China Plus One strategies across Southeast Asia."

Introduction: Recalibrating the Factory of the World

The 38th Asia-Pacific Roundtable, convened under the theme "Recalibrating Asia's Frontiers," tackled a wide array of strategic shifts in the region. One of the sessions that struck closest to my research was the discussion on "China Plus One: reshaping global supply chains." The panel featured a diverse mix of thinkers—from Ex-Harvard Professor Danny Quah and Malaysia's Deputy Minister YB Liew Chin Tong—who offered a regional view into the restructuring of production networks beyond China.

The China Plus One discourse presents a profound inflection point. It isn't just about shifting factories—it's about reshaping Southeast Asia's future development path, ideally toward a more inclusive, sustainable, and integrated economic model.

For decades, China stood unrivaled as the world's manufacturing hub, commanding nearly 29% of global industrial output. With its well-developed infrastructure, low labor costs, and unmatched supply chain integration, it was the go-to destination for global production. But recent years have exposed the vulnerabilities of overreliance on a single country, pushing global enterprises to rethink their supply chain strategies. Enter the China Plus One Strategy — a diversification approach that maintains operations in China while simultaneously expanding into alternative markets like India, Vietnam, or Mexico.

Several factors drive this pivot. First, geopolitical tensions such as the U.S.-China trade war and sanctions have disrupted global trade, adding up to 25% tariffs on Chinese goods. This has increased procurement costs and threatened operational continuity. The COVID-19 pandemic further exposed the fragility of concentrated manufacturing, with lockdowns in key Chinese regions causing 3–4-month shipping delays and a 300% surge in logistics costs.

Beyond disruption risks, rising operational costs in China — including increasing wages, aging workforce challenges, and stringent environmental laws — have made alternative manufacturing destinations more attractive. Foreign companies also face compliance hurdles with China's Data Security Law and IP protection concerns, making long-term investment riskier.

Amid this, countries like India have emerged as prime beneficiaries. With large-scale infrastructure development, special economic zones, a skilled workforce, and business-friendly policies like the Production-Linked Incentive (PLI) scheme, India offers a compelling case. India is rapidly evolving into a hub for electronics, semiconductors, and green manufacturing, aligning with global sustainability goals.

Take the case of Frigate, a global manufacturer that has established a high-resilience hub in India. By localizing raw material sourcing and maintaining global compliance standards Frigate exemplifies how companies can transition successfully from a China-centric model to a distributed and digitally enhanced supply chain.

The China Plus One Strategy isn't just a trend—it's a necessary evolution for companies aiming for resilience, regulatory agility, and ESG compliance in today's volatile world. For young leaders shaping global business strategy, understanding this shift is vital. It reflects a broader transformation in how value chains are designed: not solely for cost, but for adaptability, transparency, and long-term competitiveness in a multipolar world.

There's no denying that the movement to diversify manufacturing away from China has accelerated in response to U.S.-China tensions, supply chain shocks post-COVID, and risks surrounding overcentralization. But as Professor Simon Tay- the moderator rightly noted, the drivers are not merely geopolitical. Labor cost advantages, digital infrastructure readiness, and regional trade **RCEP** (Regional arrangements like the Comprehensive Economic Partnerships) and ASEAN Economic Community (AEC) also matter.

One of the panelists, YB Liew Chin Tong's comments stood out: he emphasized that "Malaysia's second takeoff" requires not just attracting relocated firms but embedding them in a coherent industrial policy anchored by the New Industrial Master Plan (NIMP 2030). This reinforces a key point often missed in Western discourse: Southeast Asia is not a passive recipient of global shifts—it's actively shaping its own narrative.

From my perspective, the China Plus One trend is particularly relevant to the Greater Mekong

Subregion (GMS)—comprising Cambodia, Laos, Myanmar, Thailand, and Vietnam. This subregion, already integrated through the Asian Development Bank's GMS Economic Cooperation Program, is emerging as a new production zone for textiles, electronics, and agro-industrial goods.

However, this rapid industrialization has a dark underbelly. Poor environmental governance, limited labor rights protections, and the spillover effects of dirty industries relocating to zones with weaker regulation pose serious risks.

For instance, a relocation of electronics supply chains to Vietnam or Myanmar can be seen as an economic win, but when paired with unregulated ewaste, increased water usage from already-stressed rivers, and labor exploitation, it becomes a zerosum game. This is why I advocate for a reframing: China Plus One should not mean "pollution outsourcing".

Regional Integration with Climate and Human Rights in Mind

What the China Plus One narrative often misses is the opportunity for ASEAN to lead a new model of "green integration." That means encouraging industrial diversification that is not just geopolitically convenient but also environmentally sound and socially inclusive.

Drawing from my ongoing research on environmental rights in ASEAN, I argue that the China Plus One shift should be accompanied by:

- Stronger environmental safeguards tied to FDI (foreign direct investments) approvals.
- Cross-border labor protections, particularly for migrant and informal workers in Mekong corridors.
- Regional green supply chain standards, potentially aligned with the ASEAN Taxonomy on Sustainable Finance.
- A shift from race-to-the-bottom industrial parks to sustainable economic corridors, such as those piloted by the Greater Mekong Subregion Program

or the Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area (BIMP-EAGA).

One striking thread that emerged across APR sessions was the strategic anxiety about Southeast Asia being caught between great powers. But another, more hopeful thread is the idea of agency. Countries like Vietnam and Malaysia are not just diversifying trade—they are thinking about their strategic autonomy, investment in digital infrastructure, and long-term climate resilience.

From the environmental rights perspective, this is a critical decade. The choices Southeast Asia makes today—about what industries to welcome, how to regulate them, and who benefits—will determine whether the region thrives or fractures. The shifting frontiers of geopolitics are real, but so too are the moral frontiers of development: what do we owe our people, our environment, and our future?

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