

FROST & SULLIVAN  
**BEST PRACTICES**



2026

ASIA-PACIFIC  
SMART GREEN PORT

**COMPANY OF THE YEAR**



## Table of Contents

---

<b><i>Best Practices Criteria for World-Class Performance</i></b>	<b>3</b>
<b>Building Resilient and Sustainable Port Ecosystems in the Asia-Pacific Region</b>	<b>3</b>
From Structural Gaps to Strategic Advantage	4
Execution Discipline That Converts Strategy into Value	5
From Customer Trust to Enduring Financial Strength	7
<b><i>Conclusion</i></b>	<b>8</b>
<b><i>What You Need to Know about the Company of the Year Recognition</i></b>	<b>9</b>
<b>Best Practices Recognition Analysis</b>	<b>9</b>
Visionary Innovation & Performance	9
Customer Impact	9
<b><i>Best Practices Recognition Analytics Methodology</i></b>	<b>10</b>
Inspire the World to Support True Leaders	10
<b><i>About Frost &amp; Sullivan</i></b>	<b>11</b>
The Growth Pipeline Generator™	11
The Innovation Generator™	11

## Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each recognition category before determining the final recognition recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Long An International Port excels in many of the criteria in the smart green port space.

RECOGNITION CRITERIA	
<i>Visionary Innovation &amp; Performance</i>	<i>Customer Impact</i>
Addressing Unmet Needs	Price/Performance Value
Visionary Scenarios Through Megatrends	Customer Purchase Experience
Leadership Focus	Customer Ownership Experience
Best Practices Implementation	Customer Service Experience
Financial Performance	Brand Equity

## Building Resilient and Sustainable Port Ecosystems in the Asia-Pacific Region

The smart green port industry in the Asia-Pacific (APAC) is an emerging strategic pillar of regional trade modernization, driven by the convergence of digital transformation and decarbonization imperatives. As APAC remains the world’s most dynamic maritime trade corridor, ports across Southeast Asia, Northeast Asia, Australia, and India are transitioning from conventional infrastructure hubs to digitally enabled, environmentally sustainable logistics ecosystems. Rising investments support this segment’s revenue in automation, smart traffic management, renewable energy integration, electrified cargo-handling equipment, and end-to-end digital platforms that enhance transparency and operational coordination.

Government-led maritime strategies, green corridor initiatives, and public-private partnerships underpin this growth momentum, promoting digitalization and climate resilience. Regional policy frameworks supported by organizations such as United Nations Economic and Social Commission for Asia and the Pacific and Asia-Pacific Economic Cooperation reinforce sustainability standards and cross-border digital interoperability. Financial institutions and classification societies, including Det Norske Veritas, further shape the transition through maritime decarbonization roadmaps and advisory frameworks.

Key industry trends include the deployment of Internet of Things-enabled terminal operating systems, artificial intelligence-driven predictive maintenance, blockchain-based documentation, shore power infrastructure, green bunkering solutions, and the electrification of port equipment. Multimodal connectivity and data-sharing platforms increasingly prioritize congestion reduction and supply chain visibility improvement. Sustainability continues to evolve from compliance-driven action to value

creation, with ports leveraging renewable energy, water recycling, and emissions monitoring to enhance competitiveness and stakeholder trust.

However, the industry faces challenges such as high upfront capital expenditure, legacy infrastructure constraints, cybersecurity risks, fragmented regulatory environments, and uneven digital maturity across developing economies. Skills gaps and resistance to operational change also slow adoption.

Opportunities lie in integrated port ecosystems, carbon-neutral logistics corridors, digital trade facilitation, and collaboration between port authorities, shipping lines, technology providers, and industrial clusters. Within this evolving landscape, Long An International Port (LAIP) represents a new generation of APAC maritime gateways integrating digital process control, multimodal connectivity, and sustainability-driven infrastructure to enhance logistics efficiency while supporting Vietnam's broader green trade ambitions.

## From Structural Gaps to Strategic Advantage

Started operating in 2017 and headquartered in Tay Ninh Province, Vietnam, LAIP started as part of a broader integrated industrial and logistics ecosystem to strengthen regional connectivity and reduce supply chain bottlenecks. Rather than operating as a conventional cargo terminal, the port addresses

*“Frost & Sullivan notes that through a combination of geographic advantages, ecosystem integration, digital transformation, and sustainability leadership, LAIP does not merely respond to current market demands, but it anticipates future logistics paradigms. The company’s development model aligns infrastructure, technology, and industrial growth into a cohesive regional value proposition, positioning it as a smart green port benchmark across APAC.”*

**- Nur Juliana Jusoh**  
**Best Practices Research Analyst**

structural inefficiencies in the Mekong Delta, including congestion, fragmented processes, limited level of information transparency, and high total logistics costs.

Vietnam's Mekong Delta is one of Asia's most productive agricultural zones that historically faced logistical bottlenecks. Cargo often depended on distant ports, increasing transport costs, turnaround times, and carbon emissions. Fertilizer, rice, seafood, and bulk agricultural exports required warehousing, flexible yard capacity, and faster processing capabilities not uniformly available in the region. LAIP identified this structural inefficiency early and positioned itself as the primary logistics gateway for the Mekong Delta, transforming from a traditional

port into a fully integrated logistics ecosystem.

The company's strategic location near the Soai Rap channel provides direct sea access while remaining within proximity to Ho Chi Minh City's industrial and consumption centers. As a privately owned Greenfield port, LAIP retains flexibility in investment planning and infrastructure deployment as an advantage in a market where many ports operate under more rigid governance structures. This agility enables LAIP to scale in alignment with customer demand, ensuring timely execution and a strong capacity to respond quickly to changing market conditions rather than through incremental public-sector cycles.

Beyond infrastructure, LAIP anticipates long-term megatrends shaping APAC trade. First, supply chain resilience and nearshoring accelerate industrial decentralization. LAIP's 1,935-hectare (ha) integrated

development cluster combining port operations with a 700-ha industrial park that creates a seamless production-to-export corridor<sup>1</sup>. Manufacturers can locate factories adjacent to port facilities, minimizing inland transportation costs and inventory dwell times. This proximity model directly addresses manufacturers' need for predictable, cost-efficient export channels.

Second, digitalization is redefining port competitiveness. LAIP's deployment of Terminal Operating Systems (TOS), Auto Gate automation, real-time cargo tracking, SAP S/4HANA enterprise systems, and its E-Port digital transaction platform establishes a transparent, data-driven logistics environment. These solutions reduce manual documentation, shorten cargo processing cycles, and enhance operational predictability as key decision factors for global shippers seeking reliability in emerging markets.

Third, sustainability commitments across APAC, including carbon reduction targets and Environmental, Social, and Governance (ESG) compliance, require ports to operate with measurable environmental accountability. LAIP's Smart & Green initiatives, including solar-powered warehouses, Euro 5-compliant truck fleets, water treatment systems, and environmental regeneration programs, position the port as a future-ready partner aligned with global ESG standards. By embedding sustainability into infrastructure design rather than retrofitting it later, LAIP demonstrates strategic foresight.

Most notably, LAIP is one of the important logistics gateways for fertilizer products serving the Mekong Delta region<sup>2</sup>, a testament to its ability to solve real operational pain points for agricultural exporters. This dominance is not the result of scale alone but of infrastructure tailored to sector-specific requirements with large warehousing capacity, rapid cargo handling, and integrated inland connectivity.

Frost & Sullivan notes that through a combination of geographic advantages, ecosystem integration, digital transformation, and sustainability leadership, LAIP does not merely respond to current market demands, but it anticipates future logistics paradigms. The company's development model aligns infrastructure, technology, and industrial growth into a cohesive regional value proposition, positioning it as a smart green port benchmark across APAC.

## Execution Discipline That Converts Strategy into Value

Execution discipline distinguishes strategy from aspiration. LAIP's operational model reflects a deliberate adoption of global best practices, adapted to Vietnam's regional realities. Rather than incremental upgrades, LAIP integrates infrastructure, digital platforms, and service design to produce measurable operational impact.

Spanning over 1 million square meters of warehousing and yard space<sup>3</sup>, LAIP accommodates diverse cargo categories including dry bulk, breakbulk, containerized cargo, and oversized machinery. This physical scale allows the port to manage high-volume transshipment and provide flexible storage solutions critical to agricultural and industrial customers.

However, infrastructure scale alone does not ensure competitiveness. LAIP's core differentiation lies in its systemic integration of digital technology. The deployment of TOS optimizes berth planning and yard allocation. Auto Gate systems reduce congestion at entry points, cutting vehicle waiting times by 30–

---

<sup>1</sup> Long An International Port Intro Presentation accessed in February 2026

<sup>2</sup> Ibid.

<sup>3</sup> Long An International Port's Interview with Frost & Sullivan, February 2026

50%<sup>4</sup>. Real-time tracking improves cargo visibility, enabling customers to plan downstream distribution more effectively. The E-Port platform digitizes documentation and payment processes, accelerating administrative workflows and minimizing human error.

These initiatives deliver tangible results: cargo handling productivity increased by 10–15%<sup>5</sup>, transaction processing times significantly shortened, and equipment utilization improved through data-driven scheduling. Importantly, these efficiency gains translate directly into lower fuel consumption, reduced labor redundancy, and optimized asset deployment.

The financial implications for customers are clear. Faster turnaround times reduce demurrage costs. Digital transparency reduces compliance risk and administrative overhead. Integrated multimodal transport and adjacent warehousing reduce inland logistics expenses. By aligning operational efficiency with cost reduction, LAIP delivers strong price-to-performance value, a critical metric for exporters operating on tight margins.

LAIP's integrated service model further enhances this value proposition. Customers benefit from a single logistics ecosystem encompassing container handling, dry bulk operations, multimodal transport, warehousing, and value-added services. This integration reduces coordination complexity and improves supply chain reliability.

Environmental investments reinforce economic performance. Solar panel installations lower electricity expenses while reducing carbon intensity. Euro 5 truck fleets decrease fuel consumption and emissions. Water treatment and environmental management systems ensure regulatory compliance and operational continuity. These green initiatives are not symbolic; they are economically rational investments with measurable returns.

Crucially, LAIP prioritizes initiatives with quantifiable return on investment. Management evaluates projects based on operational impact, scalability, and customer demand signals. Digital transformation initiatives delivered an average return on investments of 10–15%<sup>6</sup>, validating disciplined capital allocation.

The port's strategic integration with its industrial park amplifies price/performance advantages. Manufacturers operating within the adjacent industrial zone benefit from near-zero inland transport distances, streamlined cargo transfer, and synchronized production-export cycles. This proximity reduces logistics costs while enhancing speed-to-market, a compelling competitive differentiator.

Frost and Sullivan views that by harmonizing global best practices with local operational realities, LAIP converts technology and infrastructure investments into measurable value creation. Its execution discipline ensures that innovation is not abstract but embedded in daily operations, resulting in a defensible competitive position defined by efficiency, transparency, and economic performance.

---

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> *Long An International Port Intro Presentation* accessed in February 2026

## From Customer Trust to Enduring Financial Strength

LAIP's operational transformation translates into sustained financial growth, strengthened brand positioning, and elevated customer experience. The port's expansion from a dry bulk facility into a diversified logistics platform broadened revenue streams while improving margin resilience.

Digital transformation initiatives enhance asset utilization and throughput efficiency, contributing to consistent volume growth. The capture of majority of the fertilizer volumes in the Mekong Delta<sup>7</sup> exemplifies both market leadership and sector specialization. This dominant share provides stable cargo flows and reinforces long-term revenue visibility.

The port's container terminal development introduces additional growth vectors, diversifying beyond bulk cargo and positioning LAIP for higher-margin containerized trade. Coupled with integrated logistics services and industrial park leasing, LAIP benefits from multiple revenue channels, including handling fees, warehousing, transport services, and land leasing, reducing dependence on a single cargo category.

*"Frost and Sullivan believes that financial performance, operational excellence, and environmental stewardship collectively reinforce LAIP's brand as the "Port of Choice" for the Mekong Delta and an emerging smart green port benchmark in APAC."*

**- Jeff Tan**  
**Director, SC&L APAC**

Brand equity stems from reliability and trust. Customers increasingly select LAIP not solely for proximity but for predictable service performance. Digital systems eliminate paperwork bottlenecks. Real-time visibility improves planning confidence. Faster gate processing reduces operational uncertainty. This consistency fosters repeat business and long-term contractual relationships.

LAIP's sustainability initiatives further strengthen brand perception. As global shippers prioritize ESG-aligned partners, LAIP's Smart & Green framework includes renewable energy use, emissions-reducing truck fleets,

environmental regeneration, and water treatment systems, positioning the port as a responsible logistics partner. This alignment enhances attractiveness to multinational corporations subject to global reporting standards.

Customer experience at LAIP extends beyond transactional efficiency. A customer-centric investment philosophy ensures that expansion decisions align with client needs. Management actively listens to market feedback when determining scaling priorities, reinforcing collaborative relationships.

The integrated industrial park model enhances ownership experience by embedding customers within a seamless logistics ecosystem. Manufacturers operating within the cluster experience reduced handling complexity, synchronized transport, and improved cost predictability. This ecosystem approach transforms LAIP from a service provider into a strategic growth partner.

Leadership cohesion underpins these achievements. As part of Dong Tam Group, with 57 years of market presence, LAIP benefits from strong governance, financial stability, and long-term strategic orientation. This institutional backing enhances investor confidence and supports sustainable capital deployment.

---

<sup>7</sup> Ibid.

Frost and Sullivan believes that financial performance, operational excellence, and environmental stewardship collectively reinforce LAIP's brand as the "Port of Choice" for the Mekong Delta and an emerging smart green port benchmark in APAC. Its ability to convert infrastructure scale, digital innovation, and ecosystem integration into measurable economic and customer value substantiates its position as a deserving recipient of the Company of the Year Award.

## Conclusion

---

In conclusion, Long An International Port has evolved beyond the role of a traditional cargo terminal to become a strategic logistics enabler for the Mekong Delta and Southern Vietnam. Its problem-first foundation, combined with disciplined execution, has translated structural regional challenges into scalable competitive advantages. By embedding digitalization, sustainability, and multimodal integration into a unified operating model, the port delivers measurable improvements in reliability, cost efficiency, and customer outcomes.

This integrated approach strengthens not only operational performance but also financial resilience, brand credibility, and long-term customer trust. Through ecosystem integration and value-driven service design, the port has built a durable growth platform anchored in total logistics cost optimization rather than price competition alone. As regional trade volumes expand and supply chains modernize, Long An International Port is well-positioned to serve as a future-ready maritime gateway that supports Vietnam's broader economic ambitions. With its strong overall performance, Long An International Port earns Frost & Sullivan's 2026 APAC Company of the Year Recognition in the smart green port industry.

## What You Need to Know about the Company of the Year Recognition

---

Frost & Sullivan's Company of the Year Recognition is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

### Best Practices Recognition Analysis

For the Company of the Year Recognition, Frost & Sullivan analysts independently evaluated the criteria listed below.

#### Visionary Innovation & Performance

**Addressing Unmet Needs:** Customers' unmet or under-served needs are unearthed and addressed to create growth opportunities across the entire value chain

**Visionary Scenarios Through Megatrends:** Long-range scenarios are incorporated into the innovation strategy by leveraging megatrends and cutting-edge technologies, thereby accelerating the transformational growth journey

**Leadership Focus:** The company focuses on building a leadership position in core markets to create stiff barriers to entry for new competitors and enhance its future growth potential

**Best Practices Implementation:** Best-in-class implementation is characterized by processes, tools, or activities that generate consistent, repeatable, and scalable success

**Financial Performance:** Strong overall business performance is achieved by striking the optimal balance between investing in revenue growth and maximizing operating margin

#### Customer Impact

**Price/Performance Value:** Products or services offer the best ROI and superior value compared to similar market offerings

**Customer Purchase Experience:** Purchase experience with minimal friction and high transparency assures customers that they are buying the optimal solution to address both their needs and constraints

**Customer Ownership Excellence:** Products and solutions evolve continuously in sync with the customers' own growth journeys, engendering pride of ownership and enhanced customer experience

**Customer Service Experience:** Customer service is readily accessible and stress-free, and delivered with high quality, high availability, and fast response time

**Brand Equity:** Customers perceive the brand positively and exhibit high brand loyalty, which is regularly measured and confirmed through a high Net Promoter Score®

## Best Practices Recognition Analytics Methodology

### Inspire the World to Support True Leaders

This long-term process spans 12 months, beginning with the prioritization of the sector. It involves a rigorous approach that includes comprehensive scanning and analytics to identify key best practice trends. A dedicated team of analysts, advisors, coaches, and experts collaborates closely, ensuring thorough review and input. The goal is to maximize the company’s long-term value by leveraging unique perspectives to support each Best Practice Recognition and identify meaningful transformation and impact.

STEP		VALUE IMPACT	
		WHAT	WHY
1	<b>Opportunity Universe</b>	Identify Sectors with the Greatest Impact on the Global Economy	Value to Economic Development
2	<b>Transformational Model</b>	Analyze Strategic Imperatives That Drive Transformation	Understand and Create a Winning Strategy
3	<b>Ecosystem</b>	Map Critical Value Chains	Comprehensive Community that Shapes the Sector
4	<b>Growth Generator</b>	Data Foundation That Provides Decision Support System	Spark Opportunities and Accelerate Decision-making
5	<b>Growth Opportunities</b>	Identify Opportunities Generated by Companies	Drive the Transformation of the Industry
6	<b>Frost Radar</b>	Benchmark Companies on Future Growth Potential	Identify Most Powerful Companies to Action
7	<b>Best Practices</b>	Identify Companies Achieving Best Practices in All Critical Perspectives	Inspire the World
8	<b>Companies to Action</b>	Tell Your Story to the World (BICEP*)	Ecosystem Community Supporting Future Success

\*Board of Directors, Investors, Customers, Employees, Partners

