



# PORTS

## SOUTHEAST ASIA

In 2024, PSA Singapore reinforced its position as a key connectivity hub, achieving a record 40.9 million Twenty-Foot Equivalent Units (TEUs), 5.5% more than the year before.

Offering 23-metre deep berths and 55-metre quay cranes to efficiently handle high stowage requirements and complex loading plans, PSA Singapore achieved Gross Berth Productivity (GBP) of above 200 for 108 vessels, and GBP of over 300 for seven Mega vessels, reflecting its ability to address customers' operational needs.

During the year, PSA Singapore introduced the concept of 'Agreed Berthing Time' (ABT) to complement its OptEVoyage solution. ABT enables shipping lines to optimise vessel speeds to arrive 'just-in-time' in Singapore, delivering bunker savings, reducing anchorage space and carbon emissions, as well as optimising marine resources.

We continued to ramp up Tuas Port's capacity and capabilities. By the end of 2024, 11 mega berths were operational and equipped with superior infrastructure capabilities – such as with On-Dock Depot; state-of-the-art automated equipment; and yard capacity to support the largest vessels.

As part of Tuas Port's strategic expansion, groundbreaking for the PSA Supply Chain Hub @ Tuas (PSCH) took place on 18 October 2024. Scheduled for completion by 2027, this technologically advanced facility will host a comprehensive suite of value-added services to integrate seamlessly with Singapore's supply chain ecosystem; including a regional distribution centre, container freight station, Automated Storage and Retrieval Systems (ASRS), and the Intelligent Warehouse eXchange (iWX).

PSA Singapore also announced a planned expansion in March 2024, to double Jurong Island Terminal's (JIT) annual handling capacity to 300,000 TEUs. During the year, the terminal handled close to 176,000 TEUs.

Working with JTC Corporation (JTC), the new Dangerous Goods handling and cargo transloading facilities at JIT will be completed in 2025 to meet growing demand from industries based on Jurong Island. Twice-daily barge sailings connect beneficial cargo owners (BCOs) on Jurong Island with PSA's main hubs at Tuas, Pasir Panjang and Brani. Besides being less

labour intensive than trucking, barging generates about 30% less carbon emissions and does not contribute to road congestion.

After 15 years of close partnership, PSA Singapore in 2024 successfully extended its joint venture with world-leading Roll-on/Roll-off (RORO) carriers, NYK and K line, to operate the Asia Automobile Terminal Singapore (AATS) for 12 more years. The established AATS operations team offers proven capabilities for handling different types of general cargoes, along with diverse models of vehicles from global automobile manufacturers.

iBOX is a data-driven solution that provides real-time insights and enhanced visibility and tracking into container movements between logistics facilities and container depots – critical for the timely supply of required equipment to BCOs and manufacturers. In 2024, PSA Singapore rolled out its next-generation iBOX to PT. Majesty Global Sejahtera and PT. Buana Logistik Mandiri Sukses in Batam, Indonesia, to support the advancement of local depot management capabilities. iBOX was previously rolled out successfully in Thailand, India, and Saudi Arabia.

Driving innovation to create smarter and more efficient solutions to meet the evolving needs of global trade, PSA Singapore has been conducting operational trials for a fleet of Autonomous Prime Movers (aPM) at Pasir Panjang Terminals (PPT), with progressive enhancements to support higher levels of productivity in various weather, traffic and wharf conditions. The capabilities of our Automated Quay Cranes (aQC) at PPT also improved with an average cycle time of 132 seconds.

In 2024, PSA Singapore's dedication to operational excellence was recognised by the industry as it was named "Best Container Terminal – Asia" for the 33rd time at the Asian Freight, Logistics & Supply Chain (AFLAS) Awards; and "Container Terminal Operator of the Year" at the Supply Chain Asia Awards. The company's cloud-based transport management solution OptETruck also received a "Recognition of Excellence" award at the 9th Annual Singapore OpenGov Leadership Forum.

Over in Thailand, Eastern Sea Laem Chabang Terminal Co (ESCO) continued to develop green transportation, specifically by achieving carbon reductions in PSA's trucking business



activities. ESCO utilises electric vehicle (EV) trucks for shuttle services between Laem Chabang Port and Lat Krabang Inland Container Depot (ICD), as well as green trucking services for the CMA CGM Inland Services (Thailand) LTD (CCIS) depot.

During the year, ESCO received the Bronze certificate from the Thailand Institute of Occupational Safety and Health for a third consecutive year, for achieving zero accident in 2024. LCB Container Terminal 1 implemented a Fast Lane service to support customers' needs and increase terminal productivity.

In Indonesia, bolstered by the acquisition of six new services, New Priok Container Terminal One (NPCT1) has plans to increase its handling capacity from 1.5 million TEUs to 1.8 million TEUs by adding a quay crane, seven Rubber Tyre Gantry cranes (RTGs) and seven electric prime movers (ePMs). The terminal will also install mooring dolphins to increase operational capability and safety.

NPCT1 announced a strategic collaboration with Envilog, an Indonesian green logistics platform, to launch a Digital Gate Pass and enhance its one-stop digital platform, ECON, which digitalises the gate pass issuance process. The upgrades will include a Dual Cycle feature, which enables customers to optimise truck fleet resources by pairing trucks with import and export cargoes.

In August, NPCT1 collaborated with KAI and PSA BDP to successfully transport four containers between Jakarta and Bandung as part of the Gedebage – Pasoso rail proof-of-concept, showcasing a greener and more sustainable alternative to traditional trucking.

Over in Vietnam, SP-PSA International Port's (SP-PSA) three-pronged focus – supporting key customers, diversifying its customer base and commodities, and providing value-added services – proved successful in securing new business from PWT (Agri-feed), PTG, and Primewood (Wood Chips). The strategy contributed to the terminal achieving record annual volumes of 5.77 million tons in 2024.

A key performance highlight was SP-PSA's provision of a 15,000-square metre (sqm) leasing yard to PTG for wood chip storage, which also allowed the terminal to fulfil its 2024 target of handling 0.5 million tons of wood chips.

Separately, South Logistics Joint Stock Company – also known as SOTRANS Group (STG) in Vietnam – operates several warehouses, two waterway ICDs, and over 20 barges to bring cargo closer to the hinterland. STG's total ecosystem approach has reduced overall carbon emissions and enabled handling of close to half a million TEUs of cargo close to the hinterland.

## NORTHEAST ASIA

Amid China's ongoing post-pandemic recovery in 2024, PSA Northeast Asia's container volumes grew by 1.4%, reaching 26.1 million TEUs for the year.

Southwest China showcased its integrated ecosystem capabilities with several initiatives led by Beibu-Gulf International Container Terminal (BICT), focusing on innovative and efficient logistics solutions. These included the deployment of fully electric empty container handlers

and a successful pilot project replacing diesel engines with high-capacity battery systems on RTGs.

Beibu-Gulf PSA Renewable Energy (BPRE) installed a sophisticated energy monitoring system and solar panels, while collaborations with China United International Rail Containers Guangxi (CUIRC-GX) supported direct discharge from vessels and rail-port cargo transfers, further boosting intermodal capabilities. Beibu Gulf PSA Portnet (BPPN) played a key role in facilitating seamless data coordination.

To strengthen operational efficiency and capacity, Fuzhou Container Terminal (FCT) added 20 ePMs and optimised direct delivery routes between external depots and the Port. Additionally, in-house digital tools – including patented automobile handling and fumigation systems – provided actionable data insights to streamline specialised cargo handling.

With fully integrated facilities at Fuzhou and Qinzhou, we have significantly enhanced operational synergies, driving greater efficiencies and streamlining logistics across the region through advanced technological solutions and seamless coordination.

In Chongqing, our Sino-Singapore Chongqing Connectivity and Distribution Centre (SSCDC) handled annual cargo volumes totalling 46,000 TEUs and 91,000 tons.

PSA's terminals in Tianjin advanced their operational capabilities through technology upgrades. Tianjin Port Pacific International Container Terminal (TPCT) introduced Artificial Intelligence Robotic Transportation testing to automate and electrify operations, driving efficiency and reducing fuel consumption. Separately, Tianjin Port Alliance International Container Terminal (TACT) completed automation retrofitting of 33 RTGs, as well as transitioned fully from diesel-powered prime movers to ePMs by the end of the year.

Dalian Container Terminal (DCT) achieved robust performance exceeding 4 million TEUs, supported by its intermodal corridor development. Notably, 6.9% of this throughput came from expanded sea-rail networks in partnership with China United International Rail Containers (CUIRC). New intra-Asia services at four PSA terminals and enhanced intermodal services connecting Northeast China with South Asia and Mexico further contributed to growth.





CUIRC sustained its growth trajectory in 2024, achieving a record 7 million TEUs (+8%). The growth was fuelled by government-backed green logistics initiatives, heightened demand for cross-border block train services, and increased terminal capacity and rail connectivity between China and Europe.

During the year, Guangzhou PSA Logistics' (GPL) new Automated Storage and Retrieval System (ASRS) warehouse became operational. Equipped with automated stacker cranes, conveyors and racking systems, the facility has transformed inbound and outbound processes, enabling both GPL and Guangzhou Container Terminal (GCT) to deliver tailored solutions to customers more efficiently. Meanwhile in Lianyungang, LYG-PSA Container Terminal (LPCT) worked with PSA BDP to explore new opportunities in the petrochemical and battery sectors, reinforcing its strategic position in emerging markets.

The application of PSA's Node to Network strategy within China demonstrated effective collaboration, particularly on service IC39 with BICT and FCT. These efforts delivered key improvements, including optimised stowage through twin-lift pairing, shorter port stays, and lower carbon emissions. This successful implementation highlights PSA NEA's capability to elevate performance while showcasing its franchise value to stakeholders across its domestic network.

Over in South Korea, 2024 was a record-breaking year, with HMM PSA New-Port Terminal (HPNT) and Pusan Newport International Terminal (PNIT) handling 2.7 million and 3.1 million TEUs, respectively. PNIT achieved its highest throughput since inception, setting new productivity records with gross crane rate of 43 boxes per hour and vessel rate of 218 boxes per hour. In addition, PNIT and HPNT jointly launched a smart app for paperless e-slip transactions, optimising inter-terminal transfers and improving gate traffic flow.

In a strategic move to extend our Group's digital and railway capabilities, PSA has expanded into Kazakhstan to support trade along the Middle Corridor. KPMC, our joint venture with Kazakhstan Temir Zholy (KTZ), has led the development of this vital trade route to optimise logistics networks and reduce transit times between Asia-Pacific and Europe. Global Digital Trade Corridor (GDTC), a partnership with Pegasus Logistics, streamlined multimodal processes through the digital trade corridor platform by connecting key markets including Kazakhstan, Uzbekistan, Azerbaijan, Georgia, and Türkiye.

Digitalisation initiatives have boosted the country's capabilities in container operations, enhancing customer support and enabling cross-border communications and trade collaborations. The developments exemplify our commitment to innovation, and to delivering agile and responsive systems to meet evolving market demands.

## MIDDLE EAST SOUTH ASIA

PSA's Middle East South Asia (MESA) region handled 6.9 million TEUs at our deep sea terminals in 2024, achieving a strong 16.9% growth year-on-year.

In the Middle East, Saudi Global Ports (SGP) terminals in Dammam and Riyadh grew significantly, driven by rapid expansion in the non-oil sector of the Kingdom's economy. Providing a resilient alternative to affected ports along the Red Sea and Western Coast of Saudi Arabia, SGP also cemented cargo moves to the capital of Saudi Arabia, Riyadh via the Eastern gateway of Saudi Arabia, Dammam. The company continued its investment strategy by enhancing its operations at King Abdulaziz Port Dammam (KAPD), while optimising and developing terminal-adjacent services and intermodal cargo movement through its three nodes under the Riyadh Dry Port (RDP) Ecosystem – namely, Riyadh Dry Port, Riyadh Empty Yard and Dammam Empty Container Yard.

In May 2024, SGP handled its 10 millionth TEU at KAPD since the start of commercial operations in 2015. Additionally in December, the terminal recorded the highest volumes handled in a single month at 308,000 TEUs, registering 42% growth in volumes over the whole year. SGP collaborated with shipping lines to welcome eight new services at KAPD, strengthening the connectivity of cargo flows through Dammam, serving key industrial cities and Riyadh. In keeping with its commitment to increase the handling capacity and efficiency of KAPD's container terminals with a focus on sustainability, SGP commissioned three new quay cranes, 18 Hybrid RTGs and 80 ePMs in 2024.

At SGP's inland operations, SGP Riyadh facilitated sustainable intermodal container transportation by promoting cargo movements via rail. This included broadening the Empty Express Service by onboarding more shipping lines and facilitating the supply of empty containers to the petrochemical industry in Jubail. Notably, SGP continued efforts to promote the use of rail to transport export cargo from Riyadh to KAPD, handling a historical high of 5,200 TEUs of laden export containers for the year. SGP Riyadh also achieved a significant milestone by handling 3 million TEUs since commencing operations in March 2022.

Over in India, PSA India celebrated 26 years of operational excellence and contributions to India's logistics transformation. PSA Mumbai won the titles of "Container Terminal of the Year (Growth Category)" at the India Maritime and Logistics Awards 2024 and "Best Terminal for Health, Safety & Environment" at the India Maritime Awards. PSA Ameya was recognised as "Container Freight Station Operator of the Year" at the India Maritime Awards and the 11th Gujarat Star Awards.





PSA Mumbai achieved an important landmark in January 2024, becoming the first container terminal in India to operate with 100% renewable electricity. In August, it became the first in Jawaharlal Nehru Port to surpass a monthly throughput of over 200,000 TEUs. These notable achievements highlight the terminal's commitment to achieving efficiency and sustained growth.

PSA Mumbai's Phase 2 expansion also continued apace during the year as it embraced sustainable construction practices, such as using "green concrete" for the wharf with ground granulated blast furnace slag to reduce carbon emissions by approximately 32,000 tCO<sub>2</sub>e. The terminal's additional 1,000 metres of berth and 40 hectares of container stacking yard will be phased in for operations from early 2025.

At PSA Chennai, the terminal launched new services, such as the weekly India East Coast Express 2 (IEX2) service which directly connects Singapore and Colombo. These services will strengthen regional trade routes and the export potential of businesses in the region.

In a strategic move to bolster its inland logistics offerings, PSA India partnered with GR Logistics Park (Indore) Private Limited, a subsidiary of G R Infraprojects Ltd., to develop a rail-linked ICD at the Multimodal Logistics Park in Indore. Covering approximately 255 acres, this new facility is expected to drive greater efficiency and cost savings for businesses in India, create significant employment opportunities, and contribute to economic growth in the region.

## EUROPE & MEDITERRANEAN

PSA's Europe and Mediterranean region handled over 19 million TEUs (+6.5%) in 2024.

During the year, significant investments were made to upgrade our infrastructure and operational capabilities.

In Belgium, PSA Antwerp's Project Emerald represents a transformative rejuvenation of Europa Terminal. This project includes the construction of a new quay wall with increased draught capacity, and the installation of Automated Stacking Cranes (ASCs). These enhancements will enable Europa Terminal to accommodate megaships, significantly boost its annual handling capacity to 2.5 million TEUs, and support PSA and the Port's vision of becoming climate neutral.



A key milestone in the project was achieved in July 2024 with the installation of six new ASCs, enabling container stacking of up to six units high. In addition, the first phase of the refurbishment, targeted for completion by 2026, includes the installation of a shore power system which is projected to reduce CO<sub>2</sub> emissions by approximately 10,000 tons annually.

In the summer of 2024, PSA Breakbulk's Project Cargo Ecosystem (PCE) successfully facilitated the handling of the first heavy-lift components for INEOS Belgium's Project ONE, a groundbreaking initiative to establish Europe's most sustainable ethane cracker at the Port of Antwerp. The PCE serves as a comprehensive breakbulk terminal facility, offering industrial partners a dedicated location equipped with infrastructure, equipment, and value-added services to efficiently load, unload, store, consolidate and assemble high-end project cargo.

Over in Gdansk, Poland, construction works on Baltic Hub's new T3 terminal expansion project continued and in October, the terminal received the first four of seven new ship-to-shore (STS) cranes. With the new terminal, Baltic Hub's handling capacity will increase from 3 million TEUs to 4.5 million TEUs annually. The expansion is expected to be fully completed by the end of 2025. To meet rising demand for rail capacity, Baltic Hub added a fourth Rail Mounted Gantry crane in its railway siding, raising rail capacity to more than 800,000 TEUs per year.

In Türkiye, development works on Mersin International Port's (MIP) East Med Hub 2 (EMH2) project commenced in early 2024 to address the robust growth in Mersin's hinterland. MIP will be extending its existing quay by 380 metres and creating a 176,000-sqm back area, to enable the handling of two mega container ships simultaneously. The first phase will be launched in May 2025. Upon completion in 2026, the port's container capacity will increase from 2.6 million TEUs to 3.6 million TEUs.

In addition to infrastructure developments to its port facilities, PSA Europe and Mediterranean (EuroMed) is making significant investments to strengthen supply chains, enhance connectivity to the European hinterland, and develop sustainable logistics solutions – including eco-friendly rail and barge services. A major milestone in 2024 was PSA's acquisition of an 85% stake in Loconi Intermodal S.A., one of Poland's leading intermodal operators. The strategic acquisition enhances our existing connections from Baltic Hub and will enable PSA's reach into new markets across Central and Eastern Europe, reinforcing our position as a key player in the region's intermodal logistics network.

In Germany, Duisburg Gateway Terminal (DGT) was officially inaugurated on 16 September 2024. Strategically located in the Port of Duisburg, DGT is set to become both the largest inland container terminal and the largest climate neutral terminal in Europe. It will offer seamless rail, road, and barge connections to the North Sea, as well as Eastern and Central Europe, significantly enhancing regional and international logistics connectivity.

In 2024, several terminals in the EuroMed region were recognised with prestigious awards, underscoring their commitment to service excellence and operational quality. PSA Antwerp was named "Best Container Terminal – Europe"



for the sixth time at the Asian Freight, Logistics, and Supply Chain (AFLAS) Awards, reaffirming its industry leadership. MIP won the “Best Port of the Year” award at the 37th annual International Consumer Quality Summit, and the “Port Facility that Handled the Most Cargo” at the third annual Türkiye Maritime Summit. Baltic Hub received the Special Award from the Gdansk Employment Office and Employers of Pomerania for its pivotal role in driving investment and creating employment opportunities in the metropolitan region.

## THE AMERICAS

PSA's Americas region achieved creditable growth of 15.8% in 2024, compared to the year before.

In November 2024, Exolgan Container Terminal in Buenos Aires, Argentina, was awarded a 10+10 year extension of its concession. Under the new concession terms, Exolgan has committed to an extensive investment plan to completely rebuild Berth 1. This ambitious project, set to begin in the first half of 2025 and expected to take up to 36 months to complete, will transform the berth to accommodate Neo-Panamax vessels of up to 366 metres in length, 52 metres in width, and a capacity of up to 14,000 TEUs. Additionally, the terminal will invest in four new STS cranes capable of handling these larger vessels, further enhancing the terminal's operational capacity and positioning it to meet future demands in the region.

In late 2024, Sociedad Puerto Industrial Aguadulce (SPIA) in Colombia started its terminal expansion project, a transformative initiative aimed at enhancing capacity and operational efficiency. The project includes extending the quay wall to 900 metres, expanding the yard by 55,000 sqm, and adding two new quay cranes and eight RTGs. Scheduled to be executed in three phases, the expansion is expected to be completed by early 2026. Once finished, SPIA will become the only facility on Colombia's Pacific Coast capable of accommodating Ultra Large Container Vessels (ULCVs) exceeding 400 metres in length, solidifying its position as a key regional hub for global trade.

In the USA, PSA's Penn Terminals (Penn) undertook infrastructural upgrades to enhance its operational capacity and efficiency. In January 2024, quay improvements were completed, enabling the simultaneous berthing of a vessel and a barge within the terminal's 350-metre dock space. In September, Penn further enhanced its capabilities by commissioning a new STS crane, replacing two older units. Additionally, the completion of a new dedicated outbound gate for trucks in March 2024 increased the terminal's gate capacity by 20%, streamlining operations and improving service levels for its customers.

PSA Halifax in Canada implemented significant equipment upgrades at its Atlantic Hub terminal to enhance efficiency and service capabilities for ULCVs. In January 2024, two new STS cranes were commissioned, increasing the terminal's STS crane capacity to seven. The largest cranes, with an outreach spanning 24 container rows and a lift height of 52 metres, are fully equipped to handle vessels exceeding 20,000-TEU capacity. Additionally, Atlantic Hub strengthened its yard operations by deploying eight new electric RTGs, further demonstrating the terminal's commitment to sustainable and efficient operations. At the Fairview Cove terminal, preparations are underway to implement a new terminal operating system to improve operational productivity in 1H2025.

In 2024, Ashcroft Terminal in Canada completed the construction of a new cross-dock facility, enabling the efficient transloading of goods from import containers transported by rail from the Port of Vancouver, into domestic containers for distribution across the country. This facility supports a significant modal shift from road to rail, reducing unproductive container trucking and cutting CO<sub>2</sub> emissions.

The region reached a number of important milestones during the year. In August, PSA Panama set its own movement record by moving 9,839 TEUs on the MSC PALAK. In September, SPIA welcomed APL Fullerton at its terminal. With a capacity of 19,856 TEUs and measuring over 398 metres in length and 51 metres in width, the ULCV is the largest ship to dock on the Colombian Pacific coast.

## MARINE

In January 2024, PSA Marine was awarded a long-term contract from Siemens Gamesa Renewable Energy for the charter of a purpose-built 21-metre Crew Transfer Vessel (CTV) to serve the Jeonnam offshore wind farm in Korea. The contract further expands PSA Marine's presence in providing maritime support in the international offshore wind market.

Through its joint venture with NFC Co Ltd, PSA Marine received the first four of six new Z-Tech tugboats in the latter half of 2024. The other two tugboats are scheduled for progressive delivery in 2025. Equipped with 50-tonne bollard pull, the tugboats will be deployed at Map Ta Phut Industrial Port – including PTT LNG's Map Ta Phut LNG Terminals 1 and 2 – and Laem Chabang Port in Thailand. The first tugboat, RS SKYE, commenced operations in October.

During the year, PSA Marine and Bangladesh were presented Letters of Commendation by the Maritime and Port Authority of Singapore (MPA) at the International Safety@Sea Week 2024, for exceptional contributions in search and rescue efforts, and ensuring safer seas. PSA Marine also received the “National Safety & Security Watch Group Outstanding Individual Award” from the Singapore Police Force and Singapore Civil Defence Force for its exemplary efforts in fostering workplace safety through crime prevention, fire safety enhancement, and emergency preparedness.

