

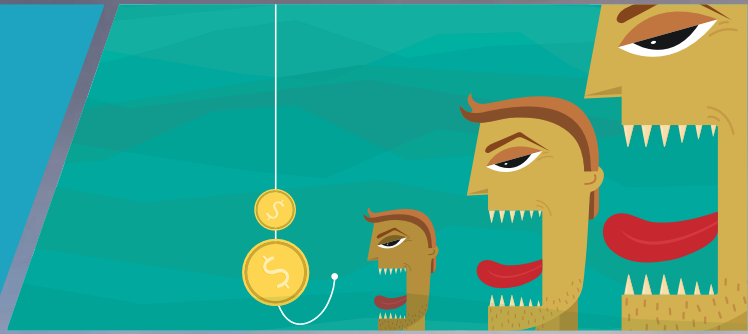
south asia's premier maritime business magazine

maritime gateway

FEBRUARY 2025

WWW.MARITIMEGATEWAY.COM

₹200



MACN: STRENGTHENING INTEGRITY AT SEA



e-trucks at Ports & Beyond **TIME TO CHANGE LANES**

India's rapidly growing logistics sector stands at a critical crossroads, balancing economic expansion with urgent environmental concerns. Ports, the essential hubs of national trade, could greatly benefit from integrating electric trucks (e-trucks).

VS&B CONTAINERS YOUR GLOBAL EQUIPMENT PARTNER

A ONE-STOP SOLUTION FOR YOUR CONTAINER NEEDS

DOMESTIC LEASING (INDIA)

Cost-effective leasing solutions tailored for Indian businesses, ensuring smooth and efficient operations.

INDIA TRADING

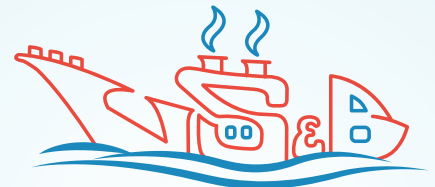
Reliable trading services for container purchases and exchanges within India.

INTERNATIONAL LEASING

Flexible leasing options to meet your specific shipping needs.

NEW & USED CONTAINER SALES

Custom-bulit and standard containers delivered to your location of choice globally.



VS&B CONTAINERS GROUP
SINCE 1996



TAILORED SOLUTIONS



TRUSTED PARTNER



IN YOUR TIME ZONE



WE SPEAK YOUR
LANGUAGE

OUR PRESENCE ACROSS THE SEAS

- INDIA
- SRI LANKA
- SINGAPORE
- UAE
- USA (Virtual)
- AUSTRALIA
- INDONESIA
- GERMANY



GENERAL
PURPOSE
CONTAINERS



HIGH CUBE
CONTAINERS



OPEN-TOP
CONTAINERS



TANK
CONTAINERS



FLAT RACK
CONTAINERS



REEFER
CONTAINERS



SPECIALIZED
REEFERS



CONVERSIONS



CONTACT US TO GET THE CONTAINERS OF YOUR CHOICE

✉ info@vsnb.com | dom@vsnb.com

🌐 www.vsnb.com

SCAN
QR CODE



A step towards maritime leadership?



The Indian government's latest budget signals a renewed focus on bolstering the nation's maritime sector, with a dedicated allocation to promote shipbuilding. The shipping industry has long been recognized as critical for a thriving trade and the broader goal of global economic engagement. By accelerating domestic ship production, India could generate substantial employment opportunities, reduce reliance on foreign vessels, and foster advanced technology ecosystems. The new budget underscores the government's ambition to elevate the shipbuilding sector, partly under the "Make in India" umbrella, aiming to produce competitive, high-quality vessels that could meet both domestic needs and international requirements in future.

Industry stakeholders have largely welcomed this strategic move, highlighting its potential to energize shipyards across the country and draw global attention to India's maritime capabilities. Major players in shipbuilding, including state-owned and private yards, anticipate favorable policy measures such as tax incentives, financing schemes, and support for upgrading infrastructure. Moreover, ancillary sectors like steel, electronics, and engineering stand to benefit, possibly giving rise to new clusters of maritime innovation. However, industry experts caution that ensuring global competitiveness will require streamlined regulations, consistent policy execution, and sustained R&D investments. Collaboration with international shipbuilders could further accelerate technology transfer and manufacturing efficiencies.

While the current budget allocation offers optimism, transitioning India into a formidable shipbuilding nation demands a long-term vision and coordinated efforts between government agencies, private enterprises, and educational institutions. Upgrading skill sets in design, engineering, and operations remains crucial, as does developing robust supply chains to meet stringent quality norms. Moreover, overcoming stiff competition from established global hubs like South Korea and China requires sustained government support and strategic market positioning. If executed effectively, India could leverage its demographic dividend and maritime geography to build a robust shipbuilding ecosystem. In this vein, the budget's impetus is an encouraging step forward.

R Ramprasad
Editor-in-Chief and Publisher
ramprasad@maritimegateway.com

south asia's premier maritime business magazine
maritime gateway

Editor & Publisher
R Ramprasad, ramprasad@maritimegateway.com

Associate Editor
A S L Narasimha Rao, narasimharao@maritimegateway.com

Contributing Editor
S K Pradhan

Design Consultant
Nagaraju NS, Designzone

Marketing & Sales
Satish Shetti, satish@maritimegateway.com, +91 99207 05534

Digital Strategy
Harsha, harsha@maritimegateway.com

IT & Administration
Kishore P V

Client Relations
Madhukar, madhukar@maritimegateway.com, +91 93937 68383

Events
Vinay

Finance
Rakesh U

EDITORIAL ADVISORY BOARD

Sabyasachi Hajara
Former Chairman, SCI Chairman Editorial Advisory Board

Bill Smart
Board Member, Bengal Tiger Lines

Capt Deepak Tewari
Chairman, Container Shipping Lines Association (CSLA)

Adarsh Hegde
Managing Director, Allcargo Logistics

Shardul Thacker
Partner, Mulla & Mulla & Craigie Blunt & Caroe

Dhruv Kotak
Managing Director, JM Baxi Group

Manish Saigal
Managing Director, Alvarez & Marsal

Jasjit Sethi
CSO, TCI Supply Chain Solution

Capt Dinesh Gautama
Senior President, Sarjak Container Lines

Capt Sanjeev Rishi
Promoter, Sanjivik Terminals Private Limited

Capt Navin Passey
Chairman of the Board, Wallem India

Maritime Gateway is printed and published by R Ramprasad on behalf of One Ocean Maritime Media Pvt Ltd, Plot No. 20, 2nd Floor, Capital Park Road, VIP Hills, Siticon Valley, Madhapur, Hyderabad, Telangana - 500 081

Printed at Kala Jyothi Process Pvt Ltd, Plot No.CFC-1&2, Survey No.18, E-City, SEZ, General Industrial Park, Raviryal and Srinagar, Maheswaram, Ranga Reddy District, Telangana - 501359.

Published at One Ocean Maritime Media Pvt Ltd, Plot No. 20, 2nd Floor, Capital Park Road, VIP Hills, Siticon Valley, Madhapur, Hyderabad, Telangana - 500 081

REGD. OFFICE: Flat No 32, Floor - 7, Building No. 3, Tata Mills CHS, Jagannathrao Bhatankar Marg, Parel, Mumbai, Maharashtra - 400012

CIN: U73100MH2024PTC424179

EDITOR: R Ramprasad

Views expressed in the articles are those of the writer(s) and may not be shared by the editor or members of the editorial board. Unsolicited material will not be returned.

COPYRIGHT: No material published here should be reproduced in any form without prior written permission from One Ocean Maritime Media Pvt Ltd.

FEEDBACK: Readers are advised to send all feedback and comments to editor@maritimegateway.com

CONTENTS

FEBRUARY 2025

VOLUME 14 | ISSUE 06

RNI NO: TELENG/2009/30633

09

UNION BUDGET 2025

The Big Transformative Push

Union Budget 2025-26 has been presented by Finance Minister Nirmala Sitharaman in parliament on February 1. It has laid out an ambitious road map for transport and logistics growth.

10

SHIPBUILDING

Unlocking shipbuilding potential from pipe dream to possibility

The article highlights the feasibility and challenges of the Indian shipbuilding industry, and outlines the necessary steps to achieve its ambitious target.

12

IN CONVERSATION

Greening and sustainability are challenges to ports

Kristof Waterschoot

Managing Director of Port of Antwerp.

14

SPECIAL STORY

The Maritime Anti-Corruption Network: Strengthening integrity at sea

Corruption remains a significant challenge in the global maritime industry, affecting trade efficiency, increasing costs, and undermining fair competition. MACN is an industry-led initiative to promote integrity and transparency across maritime operations.



16

IN CONVERSATION

MACN in India steady progress on a long journey

Deepak Shetty, Senior Adviser & Head of Operations (India), Maritime Anti-Corruption Network (MACN).

18

INTERVIEW

"Committed to expand our logistics network"

Prediman K Koul, CEO, Jeena & Company.

19

PORT SCAN: NEW MANGALORE PORT

Thriving against the odds

In an age where the convergence of technology, sustainability and strategic vision defines success, New Mangalore Port emerges as a symbol of what can be achieved when ambition is coupled with innovation. commitment to global trade, regional development, and a sustainable inclusive future.

22

IN CONVERSATION

Navigating adversity

Dr. Venkata Ramana Akkaraju, Chairperson, New Mangalore Port.

25

SECTOR WATCH: CONTAINER CLEANING

ISO tank cleaning: A sunrise sector

The ISO tank container and road tanker cleaning, testing, and repair market is a crucial segment in global logistics, ensuring the safe and efficient transport of chemicals, petrochemicals, and food-grade substances.

27

INTERVIEW

"Professionalism and advanced technology sets us apart"

Capt. Pankaj Mehrotra, Director of Zodiac Tank Container Terminals (ZTCT) and CEO of Samsara Group.

28

COVER STORY

e-trucks at Ports & Beyond Time to change lanes

India's burgeoning logistics sector faces a critical juncture, balancing economic growth with pressing environmental concerns. Ports, vital to the nation's trade, stand to significantly benefit from the integration of electric trucks (e-trucks).

33

ANALYSIS

India's growing maritime role

As the world's most populous country and fifth largest economy, India holds a growing role on the global stage.

36

GOLDEN JUBILEE: INDIAN REGISTER OF SHIPPING

50 years of excellence

Indian Register of Shipping (IRS) concludes 2024 with remarkable achievements across sustainability, innovation, and maritime safety, making its Golden Jubilee year a testament to its legacy and vision.

38

SPOTLIGHT: VS&B CONTAINERS

Navigating the future of container leasing

With a strong presence in key markets and a reputation for reliability, VS&B has continuously adapted to industry shifts, from evolving trade patterns to sustainability initiatives. In this exclusive interview, we speak with the team at VS&B Containers to gain insights into the latest trends in container leasing.



5 REASONS TO SUBSCRIBE

TO SOUTH ASIA'S NUMBER 1 MARITIME MAGAZINE

- ✓ It is South Asia's most-widely read maritime publication
- ✓ It covers all issues of importance related to Ports, Shipping and Logistics
- ✓ It offers insightful analysis
- ✓ It reflects industry opinion
- ✓ It's a complete package for readers on maritime sector

Yes, Maritime Gateway, is one-of-its kind maritime business magazine in South Asia that has become a vital source of information for all ports, shipping and logistics players in the maritime industry. This Magazine addresses key issues and provides insights through analytical articles, comments and features. News, Port Scan, Interviews, Region Update, Technology, Policy, Equipment, Education are some of the regular incisive sections.

Join the Growing Community!

SUBSCRIBE TODAY!

Fill the form & mail

TARIFF

ONE YEAR SUBSCRIPTION

12 ISSUES ₹2,400/-

Shipping Charges Extra

South Asia's premier maritime business magazine

maritime gateway

One Ocean Maritime Media Pvt Ltd
Plot No. 20, 2nd Floor, Capital Park Road
VIP Hills, Silicon Valley, Madhapur
Hyderabad - 500081, Telangana
e-mail: subscribe@maritimegateway.com

payment enclosed send invoice (please tick your choice of subscription)

Name

Address

.....

City PIN / ZIP State

Country Tel Fax

e-mail

I am enclosing a Cheque/DD No
drawn on (specify bank) dated
favouring One Ocean Maritime Media Pvt. Ltd. (payable at Mumbai) for Rs.
amount in wordsonly.

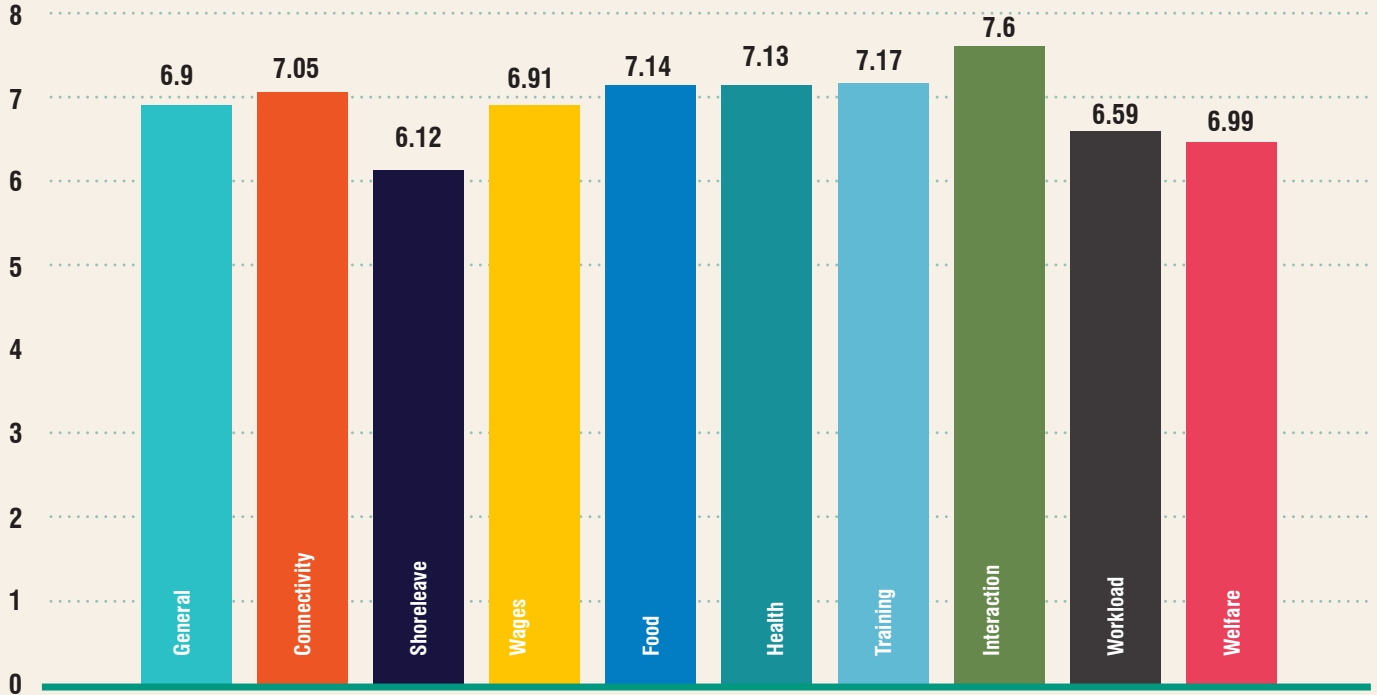
All payments in Indian Rupees (INR) to be made in favour of 'One Ocean MaritimeMedia Pvt Ltd' through A/C payee Cheque / DD payable at Mumbai. Our NEFT/RTGS Details are: KOTAK MAHINDRA BANK, BKC Branch, Mumbai, India. **Current A/c. No. 9749254514; IFSC Code: KKBK0001405; MICR Code: 400485121**
All Payments in US Dollars (US\$) to be made as Wire Transfers in favour of 'One Ocean Maritime Media Pvt Ltd' Bank and wire transfer details will be provided on request.

for subscription related queries, please call:
M.Vinay: +91 8500858201

Maritime Gateway publishes 12 issues a year. Maritime Gateway may also publish occasional and special issues. Maritime Gateway cover price is ₹200/-. Please allow 6-8 weeks for commencement of your subscription. All enquires to be addressed to One Ocean Maritime Media Pvt Ltd, directly. All disputes subject to the exclusive jurisdiction of competent courts in Hyderabad only.

Seafarers Happiness Score

While there are some brighter spots in terms of interpersonal relationships and professional development. The overall sentiment among seafarers has declined in Q4 2024. The root causes – such as inadequate shore leave, excessive training demands, connectivity shortfalls, and stagnant wages – must be addressed to restore confidence and improve well-being.



Source: The Mission to Seafarers

Cargo Volume: Major Ports Vs Minor Ports

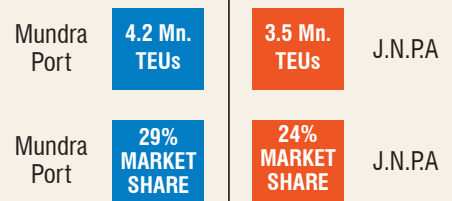
Period	Major Ports	Non-Major Ports	APSEZ	Total	Share of APSEZ
FY 20	704.93	615.05	223.0	13199	17%
FY 21	672.68	577.19	247.0	12498	20%
FY 22	720.05	603.56	312.0	13236	24%
FY 23	784.31	650.96	339.0	14352	24%
FY 24	819.23	721.05	420.0	15402	27%
H1 FY 25 (Apr-Sept 2024)	413.8	383.9	212.2	777.7	27%
CAGR (FY2020-24)	4%	4%	17%		

Container Volume in Million TEUs

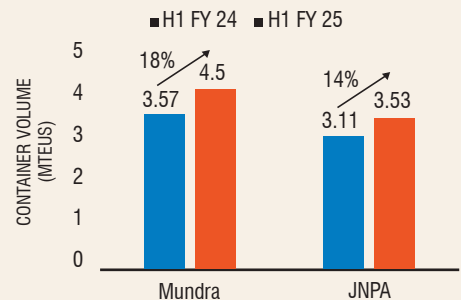
Period	Major Ports	Non-Major Ports	APSEZ	Total	Share of APSEZ
FY 23	11.4	8.7	6.2	20.1	31%
FY 24	12.3	9.7	7.4	22.0	34%
H1 FY 25 (Apr-Sept 2024)	6.6	7.8	5.4	14.4	38%

- APSEZ marketshare in overall cargo volume in India increase from 17% in FY20 to 27% in FY24
- In Container traffic, APSEZ(Mundra) accounted for 34% market share in India FY24 which was 31% in FY23

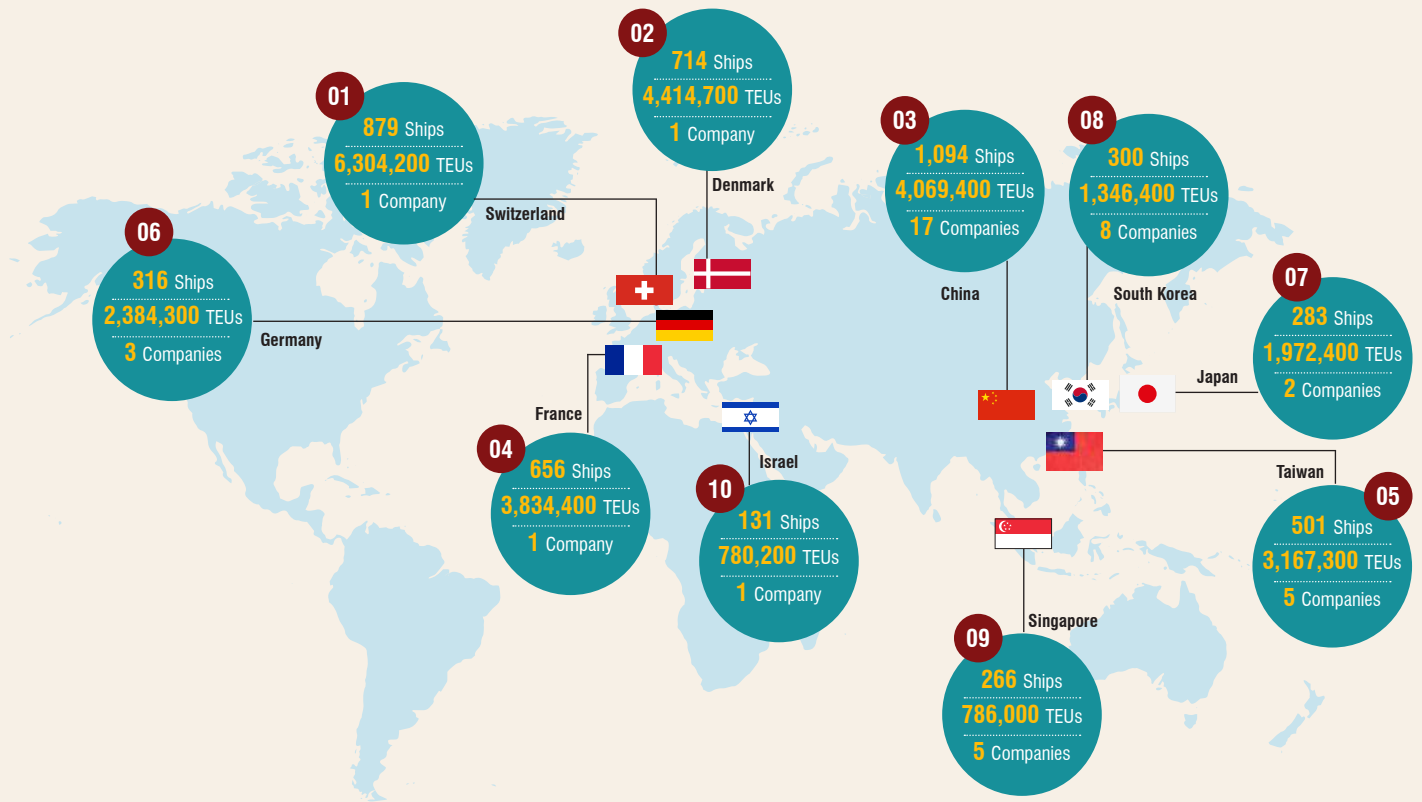
Container Volume Handled in H1 FY 25



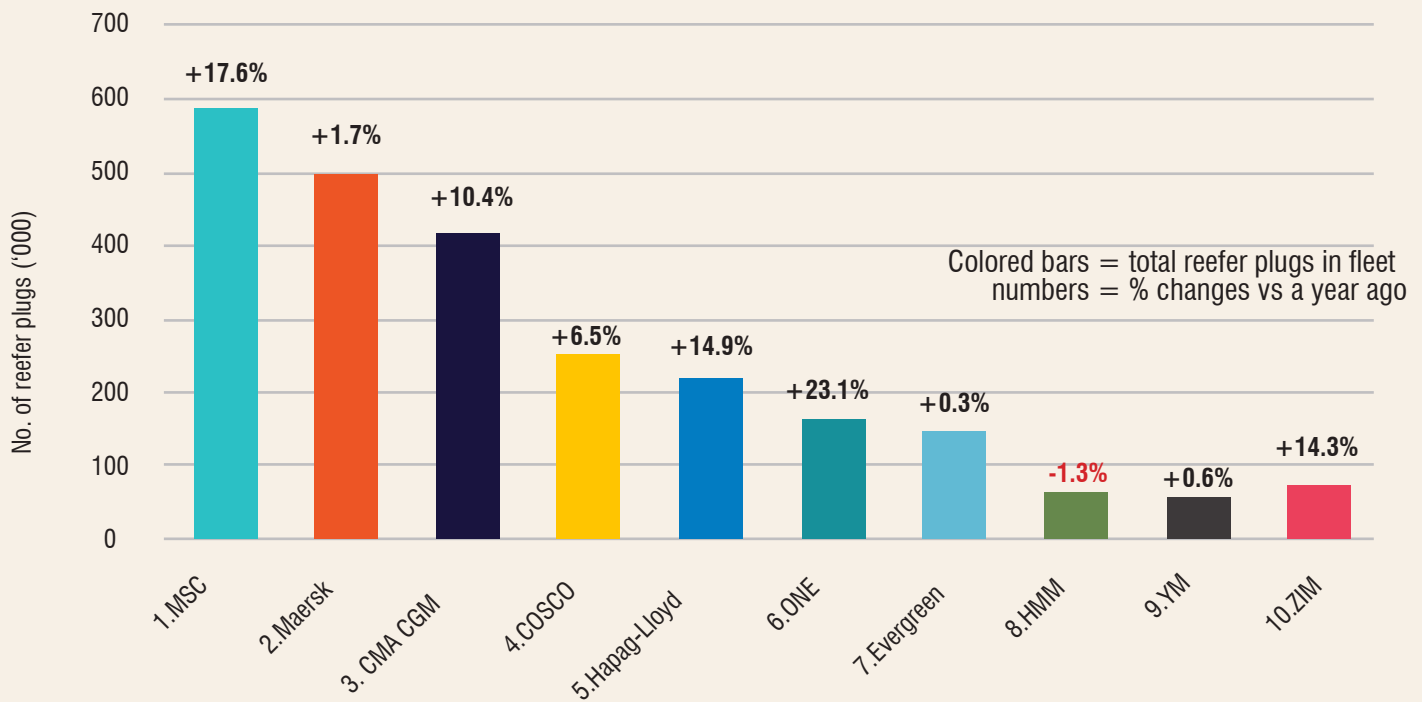
HI FY24 VSH1 FY25 GROWTH MUNDRA VS JNPA



Container Ship-Owning Nations Rankings



Container lines: Reefer Capacities



Source: Alphaliner

DP World Mundra records highest ever annual throughput

DP World has achieved a milestone at its Mundra International Container Terminal (MICT), with highest ever throughput of 1.42 million TEUs in 2024. This remarkable achievement marks a 11 per cent surge in throughput compared to 2023, highlighting DP World Mundra's critical role in Gujarat and its contribution to enhancing India's position in the global trade network, driven by operational excellence and a steadfast commitment to safety and sustainability. Continuing its strong performance momentum in January DP World Mundra achieved a record monthly throughput of 138,000 TEUs and handled 75 vessels. With direct connections to key markets including the Far East, Southeast Asia, the Middle East, East and West Africa and the Mediterranean, DP World Mundra is committed to delivering exceptional value to customers while maintaining the highest standards of safety.

Adani Ports handles highest-ever monthly cargo in January

Adani Ports and Special Economic Zone Ltd (APSEZ) handled its highest-ever monthly cargo volume of 39.9 million metric tonnes (MMT) in January, which was up 13 per cent year-on-year. This included containers (+32 per cent YoY) and liquids and gas (+18 per cent). APSEZ has crossed new milestones of handling 372.2 MMT (+20 per cent YoY) of total cargo (+7 per cent YoY) and liquids and gases (+9 per cent YoY) year-to-date in January. Mundra Port has achieved a series of extraordinary milestones in cargo handling during January 2025, some of which have become national records. Record-breaking performance across various cargo segments underlines Adani Port as a leading global port and an engine of India's economy.



Major ports now handle 819 million tonnes of cargo annually

The cargo handled at India's major ports has increased from 581.34 million tonnes in 2014-15 to 819.23 million tonnes in FY 2023-24, a compound annual growth rate (CAGR) of 3.5 per cent which is comparable to global standards, the Parliament was informed. During 2023-24, the cargo handled comprised 33.80 per cent liquid bulk, 44.04 per cent dry bulk, and 22.16 per cent container cargo, Minister of Ports, Shipping, and Waterways Sarabananda Sonowal told the Rajya Sabha in a written reply. Based on consultation with major ports, state maritime boards, and the Ministries of Railway and Road Transport and Highways, 107 road and rail connectivity infrastructure gaps for major and non-major ports have been identified and included in the Comprehensive Port Connectivity Plan (CPCP) prepared by Department for Promotion of Industry and Internal Trade (DPIIT) in September 2022.

Major ports record 3.2% rise in cargo during December

India's 12 major ports, owned by the Central government, handled 72.2 million tonnes of cargo in December, recording a 3.22 per cent growth over the same month of the previous year. According to data compiled by the Ministry of Ports, Shipping and Waterways, the Deendayal Port in Gujarat's Kandla accounted for the highest volume of 13.03 million tonnes. Odisha's Paradip Port was in the second position with the handling of 12.84 million tonnes (MT) of cargo during the month while the Jawaharlal Nehru port was ranked third with 8.32 MT followed by Vizag (6.51 MMT) and SMP Kolkata (5.44 MMT). It showed that the top five major ports handled 63.94 per cent of total cargo. While overseas shipments accounted for 55.78 MT (77.31 per cent) of the cargo handled at the major ports during December, coastal shipments were at 16.37 MT comprising 22.69 per cent of the total. Kolkata Port, on the other hand, has recorded a nearly 12 per cent decline in cargo this financial year to 44 MT.

South Korea, India to collaborate on global shipbuilding biz

A high-level delegation from Hanwha Ocean Co. Ltd. of South Korea, headed by Senior Vice President Jin Su Lee, travelled to India. They met representatives from the state-owned Cochin Shipyard Ltd., Hindustan Shipyard Ltd., L&T Shipbuilding Ltd., and Swan Defence and Heavy Industries Ltd.'s Pipavav Shipyard. Officials from the Ministry of Ports, Shipping, and Waterways also met with the South Korean group. The two nations are looking into working together in the shipbuilding industry. South Korea has reserved its yards through 2028, while India aims to rank among the world's top 10 shipbuilders by 2030 and among the top five by 2047. Over 50,000 ships will be constructed over the next 30 years, according to statistics. India currently accounts for less than 1 per cent of the world's shipbuilding market.

The Big Transformative Push

Union Budget 2025-26 has been presented by Finance Minister Nirmala Sitharaman in parliament on February 1. It has laid out an ambitious road map for transport and logistics growth with its focus on infrastructure. The allocation of Rs 11.5 lakh crore in the Budget for capital expenditure shows a clear and continuing focus on public spending on infrastructure as a means of economic recovery. About 47 per cent of this investment would be made in transport infrastructure like Roads, Railways, and Ports.



➤ **Focus on State Infrastructure**
A significant portion of the Rs 1.5 lakh crore in long-term interest-free loans provided by the central government to the states will be used for infrastructure development and next-generation reforms. The "Purvodaya" initiative envisions a comprehensive strategy for the overall development of the region, including Andhra Pradesh, West Bengal, Bihar, Jharkhand, and Odisha. This plan encompasses various projects such as airports, electricity generation, road connectivity, industrial node development, and other social infrastructure projects.
Under the Andhra Pradesh Reorganisation Act, Rs 15,000 crore has been allocated to promote industrial development, driving the state's economic growth and infrastructure improvement. This includes basic utilities like water, electricity, roads, and railways in the Kopparthi node on the Vishakhapatnam-Chennai Industrial Corridor and the Orvakal node on the Hyderabad-Bengaluru Industrial Corridor.

➤ **Urban infrastructure push**
Funds have been allocated for various urban development initiatives, including AMRUT (Rs 8,000 crore), Swachh Bharat Mission-Urban (Rs 5,000 crore), Smart Cities Mission (Rs 2,400 crore), and National Urban Digital Mission (Rs 1,150 crore). The plan includes the development of "plug and play" industrial parks ready for investment in or near 100 cities, with 12 industrial parks authorized under the National Industrial Corridor Development Program.
To encourage private sector infrastructure investment, viability gap finance (VGF), a market-based financing mechanism, along with enabling laws and regulations, have been proposed. The adoption of technology to digitize the economy aims to further reduce inequality, with the budget emphasizing bankable projects that will facilitate the service sector, including solid waste management, sewage treatment, and water supply for 100 major cities.
Additionally, a scheme is envisioned to support street vendors

**TO FAST-TRACK...
Budget allocation**

Railways
Rs **2.52** lakh cr

Aviation
Udaan Scheme
Rs **540** cr
(Target: 40mn additional flyers over the next decade)

Highways
Rs **2.87** cr
(Target: 10,000 km of national highways in FY25)

NHAI Debt
Rs **3.35** lakh cr (FY24)
Rs **2.76** lakh cr (Expected in FY25)
(No New borrowings in FY26)

over the next five years, aiming to develop 100 weekly 'haats' or street food hubs in select cities.

➤ **Maritime makeover**
The Union Budget proposes the establishment of a Maritime Development Fund (MDF) to bolster India's maritime sector by providing financial assistance through equity or debt securities. With an initial corpus of Rs 25,000 crores, the government will contribute 49 per cent, while the remaining balance will come from major port authorities, other government entities, Central PSEs, financial institutions, and the private sector. **MS**

Unlocking shipbuilding potential From pipe dream to possibility

The article highlights the feasibility and challenges of the Indian shipbuilding industry, and outlines the necessary steps to achieve its ambitious target.

India has set ambitious shipbuilding targets, aiming to become one of the top 10 global shipbuilding nations by 2030 and top 5 by 2047. The government has outlined a comprehensive strategy, including the establishment of mega shipbuilding parks, financial incentives for green ships, and a Maritime Development Fund in the recent Budget for FY 2025-26.

But India currently holds a market share of just 0.07 per cent in the global shipbuilding industry, ranking outside the top 15. To become a top 10 player by 2030, significant investment will be required. The annual output of Indian shipyards must increase from 0.072 million Gross Tonnes (GT) to 0.33 million GT by 2030, and further to 11.31 million GT annually by 2047 to achieve its top five goal. This ambitious target faces challenges, especially given China's dominance in the shipbuilding sector.

Antony Prince, President & CEO at G T R Campbell Marine Consultants Ltd said, "The target set by for 2030 is rather difficult to achieve, but by 2047 it is achievable provided we plan and execute all that is required to reach the targeted capacity which is ten times present capacity. This will change positively if Shipyards from Korea and Japan establish their presence in India".

Reacting to the recent Budget announcement for Rs 25,000 crore Maritime Development Fund, **Vivek Merchant, Director, Swan Defence and**

Heavy Industries Limited said, "MDF fund is a game-changer, signalling the government's serious intent to make India a global hub for shipbuilding. This investment, coupled with the push for port-led development and logistics efficiency, will drive growth for companies like ours. The Rs 1.5 trillion allocation for infrastructure development is another positive step, ensuring better connectivity for shipyards and ports, which is crucial for scaling up operations."

The government has already started moving towards achieving the goals reaching a collaborative agreement with South Korea to enhance its own shipbuilding capabilities through partnerships with major Korean shipyards like Samsung Heavy Industries, Hanwha Ocean, and HD Hyundai Heavy Industries.

Deendayal Port Authority (DPA) in Gujarat is looking to lease 2,000 acres in Kutch district to develop a shipbuilding cluster. The target is to annually build 50 very large crude carriers (VLCC) or similar class of sea-going vessels with 3.2 lakh dead weight tonnage (DWT) capacity each.

Challenges for shipbuilding sector in India

However, there are a host of challenges to overcome, such as financial constraints, the need for skilled labour, and technological gaps. According to Antony Prince, "Currently the Indian shipyards' order book is generally full until 2028. But one can say that it is overstretched from lack of skilled



"The target set by for 2030 is rather difficult to achieve, but by 2047 it is achievable provided we plan and execute all that is required to reach the targeted capacity which is ten times present capacity. This will change positively if Shipyards from Korea and Japan establish their presence in India."



ANTONY PRINCE
PRESIDENT & CEO, G T R CAMPBELL
MARINE CONSULTANTS LTD



“MDF fund is a game-changer, signalling the government’s serious intent to make India a global hub for shipbuilding. This investment, coupled with the push for port-led development and logistics efficiency, will drive growth for companies like ours.”



VIVEK MERCHANT
DIRECTOR, SWAN DEFENCE AND HEAVY INDUSTRIES LIMITED

manpower, design, and material shortage. Though a marginal capacity increase will take place it will not be sufficient to take additional orders. A major area of shortage will be ship design and capacity enhancement will be challenging as it takes about five years to develop superior design capacity”.

According to Antony Prince, India may not achieve much increase in capacity in spite of infrastructure build up, unless it plans and implements to train ship designers, shipbuilding managers and skilled workforce.

“The expansion of shipbuilding is directly dependent on availability of ship design capability and capacity. Though to some extent we can buy not so up to date designs from abroad, your ability to compete in the global market depends on the quality of design that you can offer to international clients. However, the current design capacity is grossly lacking. This will put a strangle hold onto our efforts to increase the shipbuilding capacity,” Antony Prince opines.

However, he feels that this problem can be vanquished, “If major Japanese Shipyards invest in shipbuilding, we will have increased infrastructure to build more ships. This situation will

also change if the former bankrupt shipyards – Bharati, ABG and Pipavav come back to their planned full capacity.”

Indian Shipyards currently do not have capacity to build bigger vessels, therefore are confined to small commercial vessels, Naval platforms, and Coastguard vessels. On the infrastructure end, Antony Prince believes that it is most important for small shipyards to upgrade and expand their docking capacities to accommodate larger and more sophisticated vessels. This, he believes, will appeal to a wider range of international clients. There are some other challenges which hinder Indian shipbuilding capacity progress including shortage of materials like sufficient shipbuilding steel and structural steel, and not having an

established main engine and ancillary equipment manufacturing base.

Can India challenge China's shipbuilding supremacy?

China has been the top shipbuilder in the world for 14 consecutive years. It is a market leader in tankers, containers, and bulkers. In the last decade, China has invested in dual-use shipbuilding capacity, and its order books extend till 2029, and it has no yard space till 2027. The demand for new ships is fuelled by the need to replace aging vessels and by the growing requirement for low-carbon ships.

China has captured 62.9 percent of the global shipbuilding orders. The Chinese yards have shifted their focus to more complex ship types, particularly gas carriers. Experts feel that It's an enormous task for India to challenge Chinese supremacy in this field, and the country will need to increase investment, foreign collaboration, government support, and capacity expansion.

Contrary to popular opinion, some experts believe that India's competitive edge lies in its ability to cater to smaller vessels—a segment largely neglected by shipbuilders in China, Korea, and Japan. These countries typically focus on large, complex ships, leaving a gap for Indian shipyards to capture a reasonable share of the global newbuilding order in this segment.

Steps to enhance Indian shipbuilding capacity

Among the 35-odd functional shipyards in India, Cochin Shipyard leads with 1.1 lakh DWT capacity, followed by Hindustan Shipyard (80,000 DWT), and Shoft Shipyard (10,000 DWT). But experts feel that there is a need to encourage private sector investment and participation in the shipbuilding industry.

“The industry still needs policy reforms that encourage private sector participation and reduce dependency on imports for critical components. A clear roadmap for defence shipbuilding and incentives for indigenous manufacturing will further strengthen India's maritime ambitions.” said, Vivek Merchant.

Greening and sustainability are challenges to ports



As one of Europe's most vital maritime hubs, the Port of Antwerp-Bruges plays a critical role in global trade, logistics, and sustainability. In 2024, the port faced a dynamic landscape—navigating market shifts, supply chain challenges, and advancing its ambitious green transition. With a strong commitment to innovation and sustainability, the port is setting new benchmarks for efficiency, digitalization, and environmental responsibility. In this exclusive interview, we sit down with **Kristof Waterschoot, Managing Director** of Port of Antwerp-Bruges to discuss the port's 2024 performance, the evolving challenges in the maritime sector, and the roadmap toward a future of green, smart, and resilient ports.

How was your business in 2024, and what is it that you are looking at in 2025?

For the Port of Antwerp-Bruges and the whole shipping industry, 2024 was a very challenging year, but we had grown tremendously in market share, there was growth in containers, and there was growth in RoRo. We became the leading container port in Europe by tonnage, which is a significant achievement measured in TEUs (Twenty-foot Equivalent Units). Finally, we have received all political approvals to add an additional 10 million TEU capacity to ensure further growth of the port in the future. So, we are fully preparing for 2025 to go full steam ahead to

implement and build that new additional capacity.

What is the timeline for this additional 10 million capacity?

The timeline for the 10 million TEU additional capacity is a long preparation, and we hope to have it ready or operational by 2030 or 2031.

From where did this exponential growth come in 2024? What contributed to this growth?

There are two things: on the container part, it is the strong commitment of our existing shipping lines, especially MSC, and also the car sector also remains very strong. Despite the challenging period for the international maritime and port sector, we experienced

a good year with an overall growth of 3 per cent in cargo volumes, which is commendable given the current international circumstances.

How do you see the scenario in geopolitical issues and the challenges?

There are a couple of things to focus on regarding India. Domestic and free trade agreement negotiations between India and Europe have made significant progress last week. Let's hope they continue to work on this and push for the evolution of trade between India and the European Union.

In general, let's hope that positive signs regarding the issue of Gaza ceasefire will lead Houthis to stabilize

in the Red Sea and the reopening of the Suez Canal. This would be beneficial for India-Europe trade, as it serves as a major business artery for us. There are still several challenges on the international front, but 2025 has begun positively with discussions on the Indian Foreign Trade Agreement (FTA) and promising developments in the right direction.

Apart from the trade agreements, how do you see the container infrastructure and the government's positive approach towards maritime growth?

Overall, the government took a very courageous step in the development of mega ports. We believe

that there is some potential still to increase existing infrastructure. We will also join forces with the government to think about policies. The Government of India, for the moment, has a strong will to further develop Indian ports as transshipment hubs. They are looking at what is happening with transshipment in the wider region, and that will become one of the main focuses, and it will still be more capacity-oriented and more transshipment-oriented. In policy it will bring enough attention to bring transition in automation and IT. In

our interactions with the private sector, they are keen to see how fast these policies are implemented and executed. Our partnerships with Indian ports are going very well; we are quite happy with the support we are getting from the Ministry of Shipping and the Ministry of Commerce and Industry.

Apart from the 10 million capacity addition plan, are there any other new initiatives at the port?

We've achieved a major breakthrough in our international port project at Duqm in Oman by signing a significant deal with the

Indian steelmaker Jindal Group. This investment aims to develop a green steel factory at our port in Oman. We are excited to collaborate with Vulcan Green Steel, a subsidiary of the Jindal Group.


The project is already under construction. We're delighted to work with the Indian industry and organizations like FICCI to involve Indian businesses in the growth of our port project in Oman and to create mutually beneficial partnerships.

What are the challenges ports are facing in general today?

There are two primary challenges: greening and sustainability. The first challenge involves making the green transition sustainable by handling substantial amounts of green ammonia, green energy, electrification, and environmental care to reduce shipping emissions. The second challenge is achieving fluent and secure ports that operate at a high pace. This requires international collaboration to integrate port systems, country security systems, customs systems, and revenue systems into a truly unified system. Currently, too many ports, including those in India, lose significant time due to varying formalities across different systems.

Can you elaborate on why they are challenging?

It is challenging because, while there are technical solutions available on the market, they are not yet implemented on a large scale. The industry remains in a phase of innovation and testing.

For example, the Port of Antwerp-Bruges received its first hydrogen-cofired tugboats last year and its first electric tugboats this year. We are constantly testing these new technologies, but none have been implemented on a large scale. The challenge lies in scaling up these solutions and making the green transition, which requires significant investment. There is ongoing debate about who will bear the cost—whether it will be the client or the port itself. That is the crux of the challenge. 



■ ■ There are two primary challenges for ports: greening and sustainability. The first challenge involves making the green transition sustainable by handling substantial amounts of green ammonia, green energy, electrification, and environmental care to reduce shipping emissions. The second challenge is achieving fluent and secure ports that operate at a high pace. This requires international collaboration to integrate port systems, country security systems, customs systems, and revenue systems into a truly unified system. ■ ■



THE MARITIME ANTI-CORRUPTION NETWORK: STRENGTHENING INTEGRITY AT SEA

Corruption remains a significant challenge in the global maritime industry, affecting trade efficiency, increasing costs, and undermining fair competition. The Maritime Anti-Corruption Network (MACN) is a pioneering industry-led initiative dedicated to promoting integrity and transparency across maritime operations. By driving systemic change and fostering a culture of ethical business practices, MACN is making strides toward a more transparent and corruption-free maritime sector. This article explores MACN's impact, initiatives, and the collaborative efforts shaping a fairer global trade environment.

➤ The scale of corruption in maritime trade

The maritime industry, often hailed as the backbone of global trade, is grappling with deep-rooted corruption that continues to cost billions of dollars annually on a global scale. In India alone, an estimated Rs 850 crore (approximately \$100 million) is lost each year to illicit payments at Ports, a statistic that underscores the urgent need for systemic reform. This corruption manifests in many forms—from facilitation payments made by shipping companies to expedite cargo clearance, to large-scale bid rigging in shipping contracts that unfairly favours certain operators, undermining healthy competition and economic growth.

Corruption in maritime trade is not merely an economic issue; it is intricately linked with broader security concerns. Bribery and fraudulent documentation allow for smuggling and illicit trade, including the illegal movement of drugs, weapons and counterfeit goods. Such activities not only erode government revenue but also compromise national security and the integrity of international trade systems. In regions where weak enforcement and opacity in operational procedures prevail, these corrupt practices become deeply entrenched, making reform both challenging and essential.

➤ Efforts to combat corruption

One organization that has taken

centre stage in the fight against maritime corruption is the Maritime Anti-Corruption Network (MACN). Operating as a global initiative, MACN has particularly made a significant impact in India's maritime sector. According to recent reports, MACN has successfully resolved 41 corruption cases in India with a 100 per cent success rate, thereby saving the industry an estimated US\$6 million. These achievements are bolstered by the implementation of electronic Port Clearance Systems, which have drastically reduced bureaucratic delays and minimized opportunities for bribery. Furthermore, MACN's establishment of an anonymous whistleblower mechanism has empowered seafarers and Port workers to report corrupt practices without fear of retribution—a critical step in fostering a culture of accountability.

➤ Key challenges in tackling maritime corruption

The road to eliminating corruption in the maritime sector, however, is fraught with challenges. Despite the existence of robust anti-corruption laws, weak enforcement mechanisms

and lack of transparency often allow fraudulent practices to continue unchecked. Port operations, in particular, suffer from an excessive reliance on manual processes that are susceptible to manipulation. In many instances, Port officials and Customs officers engage in facilitation payments to expedite cargo processing, a practice that inflates operational costs and undermines the fairness of market competition. This systemic inefficiency not only stifles growth but also deters foreign direct investment, further impacting the broader economy.

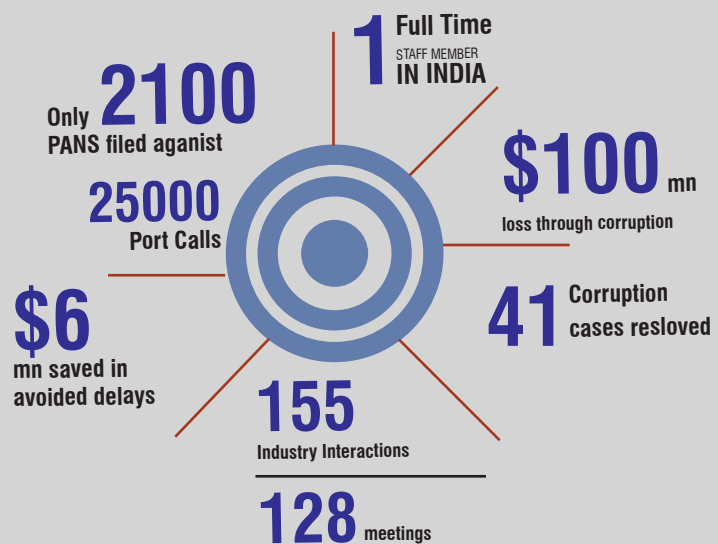
➤ **Policy reforms and technological solutions**

Addressing these multifaceted challenges requires a comprehensive, multi-pronged strategy. Strengthening governance and transparency is paramount. Governments need to enforce stringent anti-corruption measures and conduct independent audits of Port operations to ensure accountability. Establishing clear public procurement policies and imposing severe penalties for violations can serve as effective deterrents against corrupt practices. Additionally, digitalization of Port procedures—through Electronic Clearance Systems and Blockchain technology—can significantly reduce human intervention, thereby curtailing opportunities for bribery. Ai-driven risk assessment tools, for example, can flag suspicious transactions in real time, allowing authorities to intervene before fraudulent activities escalate.

➤ **South Asia: A region-wide problem requiring cooperation**

Regional and international cooperation is also essential in combating maritime corruption. In South Asia, corruption transcends national borders, affecting not just India but also neighbouring countries like Sri Lanka, Bangladesh and Pakistan. Cross-border collaborations and intelligence sharing are critical to dismantling corruption networks that operate across these countries. Global agencies such as the United Nations Office on Drugs and Crime (UNODC) have the expertise and resources to help regional governments adopt

MACN India in numbers



best practices and coordinate efforts against corruption. Such international cooperation can help align regional strategies with global standards, thereby enhancing the overall integrity of the maritime industry.

➤ **Private sector and industry engagement**

The private sector has a crucial role to play as well. Shipping companies and Port operators must adopt zero-tolerance policies towards bribery and corruption, creating an environment where ethical business practices are the norm. Mandatory anti-corruption training for Port and shipping personnel, coupled with increased participation in networks like MACN, can raise industry standards and foster greater accountability. Private sector engagement is vital in creating an industry-wide culture of integrity, which in turn encourages more companies to report corrupt practices through anonymous channels and whistleblower programs.

➤ **Public awareness & whistleblower protection**

Public awareness is another critical component in the fight against maritime corruption. Many maritime workers remain unaware of their rights or the mechanisms available to report corruption. Targeted awareness campaigns can educate these individuals on both their responsibilities and the importance of maintaining ethical standards in

their work. Moreover, providing robust legal protection for whistleblowers is essential. When workers are confident that their identities will be safeguarded, they are more likely to come forward, providing valuable intelligence that can help authorities identify and prosecute corrupt practices effectively.

➤ **Stakes too high for inaction**

Looking ahead, India's Maritime Vision 2030 encapsulates the country's ambition to transform its maritime sector into a model of transparency, efficiency and global competitiveness. Central to this vision is the elimination of corruption, ensuring that trade flows unimpeded and that the country can fully capitalize on its strategic maritime advantages. The successes of organizations like MACN highlight that, with sustained commitment and coordinated action, it is indeed possible to eradicate corruption from one of the world's most critical economic sectors. The journey towards a corruption-free maritime industry is complex, but the stakes are too high for inaction. Every day, billions of dollars are lost, and national security is compromised due to corrupt practices that undermine not only the economy but also the integrity of global trade. With India and South Asia poised to become even more significant players in the global maritime arena, addressing these challenges has never been more urgent. 🇮🇳



MACN in India Steady progress on a long journey

In an exclusive interview with Maritime Gateway, **Deepak Shetty, Senior Adviser & Head of Operations (India), Maritime Anti-Corruption Network (MACN)**, elaborates its role in combating corruption at ports, involving customs, immigration, quarantine, port state control, and maritime administration.

There is a perception that the shipping industry is one of the most corrupt. Do you agree?

I wouldn't concur entirely with that perception. While there is some truth to it, corruption in any industry is often a reflection of the larger societal environment. There is no documented, empirical evidence to claim

that the shipping industry is the most corrupt. Corruption exists across sectors, and unless we address it systematically, it will continue to manifest in various forms.

How serious is corruption in the maritime industry, especially in the Indian subcontinent?

The issue is significant. In

2011, the Maritime Anti-Corruption Network (MACN) was founded by Maersk to uphold business integrity. Today, MACN has grown into a global movement with over 220 companies committed to combating corruption. If India wants to achieve its economic growth goals and improve its ease of doing business ranking,

tackling corruption is crucial. Though the process is tedious and complex, we have made a start, and there is a growing awareness in the industry.

Where does India rank in maritime corruption?

There is no specific ranking for corruption in the shipping industry. However, global indices like Transparency International's Corruption Perception Index rank India between 70 and 100 among 193 nations. Given that India is the world's fifth-largest economy, this is concerning. It calls for serious introspection by policymakers and the industry.

MACN focuses on corruption at ports, involving customs, immigration, quarantine, port state control, and maritime administration. We operate globally in eight key jurisdictions, including Nigeria, Argentina, Ukraine, Indonesia, Egypt and South Asia (India, Bangladesh and Pakistan). We also have a reporting mechanism through a help desk, where ships can notify us of corrupt practices.

What are the major pain points reported by the shipping industry?

The most common grievances involve customs and immigration. Issues range from delays in granting port clearance to demands for bribes. Some cases arise due to incomplete or incorrect declarations by shipmasters, which customs officials can legally act upon. However, we have seen instances where officials exploit these situations for personal gain. Customs is the most frequently reported

entity, followed by port administrations.

How does MACN resolve complaints and authenticate reports?

We follow a rigorous vetting process. Once a complaint is received, we request documentary evidence such as ship logs, CCTV footage, audio recordings, or photographs. We assure confidentiality through a robust whistleblower mechanism.

If a master has failed to comply with the law, we inform them that MACN cannot intervene. However, if an official is exploiting the situation for illicit gains, we escalate the matter immediately. I personally reach out to the highest-ranking officer in the relevant jurisdiction, ensuring a swift resolution, usually within four to five hours.

What actions have been taken against corrupt officials?

In most cases, we have successfully recovered

extorted money and had apologies tendered. Some officials have been transferred to non-sensitive positions, while others have faced departmental disciplinary action. Our interventions have led to a 100 per cent success rate in reported cases.

What reforms have you proposed to tackle systemic issues?

We have submitted policy recommendations to the government, focusing on business process re-engineering. Two key proposals include: Digitalizing Port Clearance (PC): Currently, PC is issued manually by customs officials, often leading to delays and corruption. We recommended making PC applications electronic, integrating them with an e-payment gateway. This proposal has been accepted and is being implemented under the National Logistics Portal (Marine). Single-Window Reporting: Ships currently submit

redundant information to multiple agencies (customs, immigration, port health, etc.), leading to inefficiencies. We proposed a centralized electronic submission system, aligned with IMO's Facilitation (FAL) Convention. This, too, is being adopted by the Indian government.

What should public and private stakeholders do to curb corruption?

MACN has engaged extensively with both the private sector and government agencies. We have held over 155 interactions with industry stakeholders and 128 high-level meetings with government bodies, including customs, immigration, the Ministry of External Affairs, and major port authorities. Private sector companies must actively engage with MACN and ensure their crews file Pre-Arrival Notices (PANs) with us. Currently, only about 2,100 PANs are filed annually, compared

"In most cases, we have successfully recovered extorted money and had apologies tendered. Some officials have been transferred to non-sensitive positions, while others have faced departmental disciplinary action. Our interventions have led to a 100 per cent success rate in reported cases."

to 25,000 port calls, which leaves us blindsided in many cases.

On the government side, we have conducted training workshops for customs officials to sensitize them. There is a growing recognition that corruption must be tackled, and our efforts have led to an improved port user experience.

What has been the overall impact of MACN's initiatives in India?

The results have been promising. We have successfully resolved 41 cases, recovering millions of dollars for the industry. More importantly, our interventions have ensured that vessels sail on time, avoiding additional operational costs. MACN's initiatives have potentially saved the industry around \$6 million in avoided delays and extorted payments. While much remains to be done, we are making steady progress in transforming India's maritime sector into a more transparent and efficient space. This is a long journey, but we are on the right path. 🚢



"Committed to expand our logistics network"

Prediman K Koul, CEO, Jeena & Company, highlights his company's focus in forging collaborations to enhance service capabilities, expanding its network, and driving innovation in logistics and supply chain solutions.



What is Jeena & Company's long-term vision for expanding its logistics network?

As India continues to strengthen its position as one of the best-performing emerging markets, Jeena & Company remains committed to expanding its logistics network to support the country's growing trade and supply chain demands. With 125 years of industry leadership, our long-term vision focuses on innovation, sustainability, and digital transformation to enhance operational efficiency and customer experience. We aim to: The company plans to enhance its multimodal capabilities, invest in digital infrastructure,

expand warehousing and cold chain facilities, adopt sustainable growth and green logistics, and expand its global market presence in key international markets like Australia, Europe, and the US to support Indian exporters and global trade networks.

For 2025-26, our strategic focus remains on projects, the defense, the automotive, and the pharmaceutical sectors, ensuring we cater to these high-growth industries with specialized logistics solutions. Through strategic expansion, digital transformation, and a commitment to sustainability, we aim to set new benchmarks in supply chain efficiency and global connectivity.

What strategic advantages does Jeena & Company aim to achieve through its merger with JBS Group?

Jeena & Company has merged with JBS Group to strengthen its presence in Gujarat, a manufacturing hub. The merger will enhance customs brokerage, freight forwarding, and logistics solutions. The move aims to expand Jeena's service portfolio, improve operational efficiencies, and provide seamless logistics solutions to diverse industries.

How is Jeena leveraging technology, such as AI, automation, or blockchain, to enhance supply chain efficiency and customer experience?

Jeena's World of Digital Solutions integrates technology to streamline logistics operations and improve customer experiences. It uses automation, real-time tracking, data analytics, and AI to simplify supply chain processes. The company introduces paperless, faceless, and contactless initiatives, and is expanding automation to reduce human error and improve efficiency.

What are the steps being taken to reduce carbon footprint and to promote

green logistics?

We are focusing on sustainability as a key part of its growth strategy. We are implementing green logistics solutions to reduce the carbon footprint and promote environmentally responsible supply chain practices. These include digitizing operations, optimizing energy consumption, partnering with fuel-efficient carriers, and exploring carbon-neutral initiatives. We are also partnering with Sangti Solutions for AI-driven route optimization and carbon footprint tracking, enhancing operational efficiency and reducing greenhouse gas emissions.

How do you ensure customer satisfaction and maintain a competitive edge in a market?

Jeena & Company is a global logistics company that prioritizes customer satisfaction and adapts to market changes. They focus on agility, technology-driven solutions, sustainability, and carbon footprint reduction. They are a member of the Air Cargo Forum India Foundation and contribute to the future of air cargo and logistics. They source 30 per cent of their seasonal workforce from Tier 3 cities, promoting operational efficiency and inclusivity. 

Thriving against the odds

In an age where the convergence of technology, sustainability and strategic vision defines success, New Mangalore Port emerges as a symbol of what can be achieved when ambition is coupled with innovation. From its humble beginnings to its visionary plans for the future, NMP is a testament to India's unwavering commitment to global trade, regional development, and a sustainable, inclusive future.



Nestled between the glistening Arabian Sea and the majestic Western Ghats, the New Mangalore Port (NMP) stands as a symbol of India's maritime excellence and strategic foresight. Often compared to the Rock of Gibraltar for its pivotal location, NMP has evolved over five decades from a modest regional facility into a major maritime hub. Handling a diverse range of cargo—from containerized goods to liquid and dry bulk commodities—this dynamic port is poised to become a “Mega Port” by 2047. As a catalyst for economic growth in Karnataka and

beyond, NMP plays a critical role in shaping India's trade and commerce landscape.

A 50-Year journey of growth and transformation

Celebrating its 50th anniversary in 2024, NMP has come a long way since its inception in 1974. Over the decades, the port has expanded its infrastructure, embraced technological innovations, and adopted sustainable practices, setting benchmarks in the maritime industry. Early milestones included the mechanization of berths and the introduction of containerized cargo operations. The establishment

of India's second-largest LPG-handling facility further underscored its growing capabilities.

A defining feature of NMP's evolution has been its commitment to sustainability. The port is now one of India's first 100% solar-powered ports, with a 5.19 MW solar plant energizing its operations. In FY 2023-24, NMP achieved a record cargo throughput of 45.71 million metric tons (MMT), while container traffic grew at a compound annual growth rate (CAGR) of 14% over the past decade, reaching 1.96 lakh TEUs (Twenty-foot Equivalent Units). This journey from modest beginnings

to a modern, technologically advanced facility is a testament to the vision and perseverance of NMP's leadership and workforce.

Cargo handling capabilities: A diversified portfolio

NMP's strength lies in its ability to handle a wide range of cargo types, supported by 16 well-equipped berths and a single-point mooring (SPM) facility, giving it a total usable capacity of 74 million tons per annum (MTPA). This extensive capacity enables the port to efficiently process diverse cargoes, catering to the needs of various industries with precision. For dry bulk cargo, NMP plays a crucial role in transporting commodities like iron ore, coal, cement, and fertilizers, with the recent resurgence of iron ore exports showcasing its adaptability to market dynamics. In liquid bulk cargo, the port handles petroleum, oil & lubricants (POL), liquefied petroleum gas (LPG), and edible oils, with specialized terminals streamlining operations and solidifying its reputation as a reliable hub for liquid bulk trade. Containerized cargo has also seen significant growth, with traffic reaching 1.96 lakh TEUs in FY 2023-24, a 6% increase from the previous year, driven by upgrades like Berth 14, which allows the simultaneous handling of two vessels under a public-private partnership (PPP) model, reducing turnaround times and enhancing efficiency. Additionally, the port's adoption of RFID-based gate automation and automated weighbridges has optimized cargo movement, setting new benchmarks in precision and speed.

Containerized cargo: A growing segment

As global trade increasingly relies on containerized cargo, NMP has adapted and innovated. Dedicated container facilities have attracted major shipping lines like CMA CGM and MSC, pioneering direct calls to routes spanning the Middle East and Africa. However, many EXIM containers are still routed through transshipment hubs like Colombo and Mundra due

India's first 100% solar-powered port with **5.19 MW** plant

Record throughput of **45.71** mmt in FY 2023-24

Container traffic at a CAGR **14%** for the past decade

16 berths and one single point mooring

1.96 lakh TEUs handled in FY 2023-24 – **6%** y-o-y growth

to limited direct mainline services. To address this, NMP is engaging with stakeholders to expand direct container services and tap into emerging global trade routes. Strategic investments in container handling infrastructure underscore NMP's commitment to diversifying its cargo portfolio and reducing dependency on traditional transshipment hubs. By continuously upgrading its facilities and leveraging technological advancements, NMP ensures it remains at the forefront of containerized trade.

EXIM trade scenario: Connecting Karnataka to the World NMP is a vital gateway for Karnataka's export-import (EXIM) trade, connecting industrial and agricultural hubs like Bengaluru, Mysuru, and Mangalore to global markets. Karnataka's hinterland, rich in agricultural produce and manufactured goods, relies on NMP for seamless trade. Key exports such as coffee, marine products, and gherkins find their way to international markets through NMP. Meanwhile, the port handles essential imports like cashew, chemicals, and tiles. **Road and rail connectivity: Challenges and initiatives**

Efficient last-mile connectivity is critical to NMP's success. The incomplete widening of NH-75, the

vital highway linking Mangaluru to Bengaluru, remains a significant impediment. This issue increases transit times and logistics costs for exporters and importers.

On the rail front, the single-track line across the Western Ghats and double freight charges undermines cost-effectiveness. In response, NMP is collaborating with state and central governments to prioritize key infrastructure projects, including the widening of NH-75, the development of dedicated freight corridors, and the doubling of the Hassan-Mangaluru rail line. These initiatives aim to reduce congestion, lower logistics costs, and enhance connectivity to Karnataka's industrial hubs.

Surrounding industries: A catalyst for growth

NMP's economic vitality is closely linked to the robust industries in its hinterland. The region is a thriving ecosystem of agriculture, chemicals, and manufacturing. For instance, NMP is a major export hub for coffee, serving industry giants like Sucden Coffee and Tata Coffee.

The port's strategic location has also made it a focal point for port-led industrialization. Plans to develop logistics parks and free trade warehousing zones (FTWZs) in the vicinity are set to stimulate local economic activity, attract investments, and generate employment opportunities.

Future growth prospects: A vision for 2047

NMP has laid out an ambitious roadmap to transform into a "Mega Port" by 2047, in line with India's Maritime Vision. Short-term plans focus on enhancing cargo handling capacity and streamlining operations through infrastructure upgrades and digitalization. Medium-term goals include deepening navigation channels and attracting more direct mainline calls from global shipping lines. Long-term ambitions are even more transformative. NMP envisions establishing a comprehensive ship repair facility, integrating AI and

IoT technologies for operational automation, and shifting toward 100% green fuels to achieve carbon neutrality. These initiatives aim to boost operational efficiency and position NMP as a leader in sustainable maritime logistics.

Sustainability initiatives: Leading the green revolution

Environmental stewardship is central to NMP's operations. The port runs entirely on solar energy, thanks to its 5.19 MW solar power plant. Shore-to-ship power systems allow vessels to plug into the local electrical grid while berthed, minimizing emissions.

Water conservation and waste management are also priorities. NMP's rainwater harvesting system collects 1.31 lakh kilolitres of water, and its 1.2 MLD sewage treatment plant recycles wastewater for industrial and landscaping use. These initiatives reduce the port's environmental footprint and contribute to regional sustainability goals.

Cruise tourism: A new frontier
Recognizing the potential of cruise tourism, NMP is developing state-of-the-art infrastructure to attract international and domestic cruise liners. Berth 4 has been designated as a dedicated cruise berth, equipped with modern amenities like an air-conditioned lounge, immigration counters, and duty-free shopping facilities. Initiatives such as heli-taxi services are being introduced to connect cruise passengers with popular tourist destinations like Jog

As global trade increasingly relies on containerized cargo, NMP has adapted and innovated. Dedicated container facilities have attracted major shipping lines like CMA CGM and MSC, pioneering direct calls to routes spanning the Middle East and Africa.

Falls, Belur, and Halebeedu. Each cruise visitor is estimated to contribute significantly to the local economy, with projected expenditures on shore excursions ranging between US100 to US150 per passenger. This emerging segment diversifies NMP's revenue streams and supports local businesses.


The role of technology and digitalization

NMP is harnessing cutting-edge technologies to optimize operations. RFID-based access control systems and automated weighbridges have streamlined cargo handling, reducing delays and increasing efficiency. AI-powered cargo management systems and predictive analytics enable proactive decision-making. Blockchain technology is being explored to create a secure, transparent documentation process, accelerating clearance procedures and

ensuring smooth cargo flow. **Investment opportunities: A hub for PPPs**
NMP is actively inviting investments through Public-Private Partnerships (PPPs) to enhance infrastructure and services. Successful PPP models include Berth 14 for container handling and Berths 15 and 16 for coal operations. Future opportunities include developing Berth 17 as a deep-draft container terminal and establishing LNG bunkering facilities. Plans for port-led industrialization, including logistics parks and FTWZs, are set to attract private sector investment, stimulate regional economic activity, and position NMP as a central node in India's economic development strategy.

A bright future ahead

As NMP charts its course for the future, its influence extends far beyond its physical infrastructure. The port is a vital conduit for international trade, a beacon of sustainability, and a driver of technological innovation and community development. With a strategic location, diversified cargo handling capabilities, and a visionary plan to transform into a Mega Port by 2047, NMP is set to play an indispensable role in India's maritime sector.

For businesses, investors, and policymakers, the opportunities presented by NMP are transformative. Its focus on digitalization, sustainability, and infrastructure enhancement ensures it remains competitive globally while fostering regional prosperity. As global trade patterns shift and new maritime technologies emerge, NMP's story will continue to inspire innovation and drive economic growth across Karnataka and beyond. With visionary leadership, robust infrastructure, and an unwavering commitment to excellence, New Mangalore Port is more than just a maritime facility—it is a gateway to global trade and regional prosperity, poised to usher in a new era of economic dynamism and sustainable development. 





Navigating adversity

Celebrating its 50th anniversary, New Mangalore Port Authority has transformed from a modest regional facility into a state-of-the-art maritime gateway under the visionary leadership of **Dr. Venkata Ramana Akkaraju, Chairperson**. In this exclusive interview, Dr. Akkaraju traces the Port's evolution into a technologically advanced, sustainable hub and discusses key milestones, strategic investments, and innovative initiatives that are enhancing connectivity and operational efficiency. He also shares insights on overcoming challenges and charting a course toward becoming a future-ready, globally competitive maritime powerhouse.

New Mangalore Port has completed 50 years of operations. Could you share some key milestones in its journey and explain the Port's role in India's maritime sector?

Since our inception in 1974, New Mangalore Port Authority (NMPA) has been a cornerstone of India's maritime trade. Our journey began when the Port was declared India's ninth major Port, and over the years, we expanded our infrastructure during the 1980s and 1990s to support petroleum, iron ore, and agricultural trade. In the 2000s, we introduced containerized cargo operations, achieved ISO certification, and met ISPS standards. More recently, our focus on public-private partnerships, mechanization of berths, and transition to 100% solar-powered operations has boosted cargo throughput while reinforcing our commitment to sustainability. Today, NMPA is a critical link

that connects Karnataka's industrial hubs with global markets and drives economic growth.

How has the Port's cargo profile evolved over the years, particularly regarding containerized cargo?

Initially, our primary focus was on bulk and liquid cargoes like petroleum products, cement, and iron ore. Over time, we diversified our portfolio to include containerized cargo, LPG, and breakbulk commodities. Our dedicated container berth now accommodates vessels up to 350 meters, and container traffic has grown at a compound annual rate of 14 percent. While traditional cargoes remain important, new commodities such as bitumen and coal pitch tar have emerged, demonstrating our ability to adapt to changing global trade patterns. This evolution enables us to handle both high-value container trade and varied

bulk shipments, ensuring steady growth despite market fluctuations.

What are the main drivers behind the Port's growth, and what challenges have you encountered along the way?

NMPA's growth has been fuelled by expanding industrial activity in Karnataka, significant infrastructure upgrades, and supportive government initiatives that promote efficient logistics. Investments in deepening berths, adopting smart Port technologies like RFID-based access control, and implementing fixed-window scheduling have greatly improved our operational efficiency. However, we face challenges such as connectivity issues—exemplified by the prolonged expansion of National Highway 75, which creates cargo evacuation bottlenecks. Additionally, our reliance on feeder services for container transshipment

and competition from emerging private ports on the West Coast pose ongoing challenges. Despite these obstacles, our strategic investments and collaborative efforts with government agencies continue to enhance both connectivity and reliability. **Could you elaborate on the measures being taken to enhance last-mile connectivity?**

Improving last-mile connectivity is vital for reducing logistics costs and ensuring smooth cargo movement. We are expediting the widening of National Highway 75 and upgrading NH-66, which links the Port to major industrial centres such as Bengaluru and Mysuru. Additionally, efforts to double the Hassan-Mangaluru rail line and rationalize freight charges in challenging ghat sections are underway. These improvements, along with digital solutions like automated gate operations

and real-time cargo tracking, are expected to minimize delays and significantly boost cargo evacuation efficiency.

Containerized cargo volumes have experienced fluctuations, especially during 2024. What factors have contributed to these changes, and how is the Port addressing them?

The fluctuations in containerized cargo volumes are mainly seasonal, driven by variations in key commodities such as raw cashew, coffee, and fish meal. Typically, the first half of the fiscal year shows robust growth from strong export and import activity, followed by a slowdown during the monsoon, with a mild recovery later on. To manage these variations, we are diversifying our commodity mix and optimizing our operations. Enhancements in storage facilities, customized support for various cargo types, and flexible scheduling have all been part of our strategy to swiftly adapt to changing trade patterns.

With increasing competition from private ports along the West Coast, what strategies is NMPA implementing to remain competitive?

We are taking a multifaceted approach to stay competitive. We work closely with global shipping lines to secure direct mainline calls, reducing our dependence on transshipment hubs. At the same time, we have boosted our operational efficiency through the mechanization of berths, digitalization of documentation, and fixed-window scheduling. Continued investments in

hinterland connectivity, multimodal logistics, and sustainable operations further reinforce our competitive edge. These initiatives not only attract more cargo but also ensure that our Port remains a preferred gateway for both domestic and international trade.

Sustainability is a key focus for NMPA. What green initiatives have been introduced, and how do they contribute to reducing the Port's carbon footprint?

Sustainability is central to our long-term vision. We have achieved 100% renewable energy usage with a 5.2-megawatt solar power plant powering our entire operation. We are also transitioning to electric cargo handling equipment and have implemented a shore-to-ship power supply system to minimize vessel emissions while docked. Our comprehensive approach includes rainwater harvesting with a capacity of 1.31 lakh kilolitres and a robust waste management system focused on recycling and circular economy practices. These measures not only lessen our environmental impact but also set new standards for green Port operations across the country.

Cruise tourism appears to be an emerging focus. How is NMPA preparing to attract more cruise vessels, and what facilities are being developed to enhance the cruise experience? Recognizing the potential of cruise tourism, we have designated a dedicated cruise berth and are investing in a state-of-the-art cruise terminal. The facility includes an

The fluctuations in containerized cargo volumes are mainly seasonal, driven by variations in key commodities such as raw cashew, coffee, and fish meal. Typically, the first half of the fiscal year shows robust growth from strong export and import activity.

air-conditioned lounge, streamlined immigration counters, and modern baggage handling and security systems. Additionally, we are developing exclusive entry points and access roads to facilitate smooth passenger flow. Collaborations with Karnataka Tourism and the introduction of heli-taxi services to nearby attractions further enrich the cruise experience. These initiatives aim to position NMPA as a top destination for both domestic and international cruise liners, thereby boosting local tourism and economic activity.

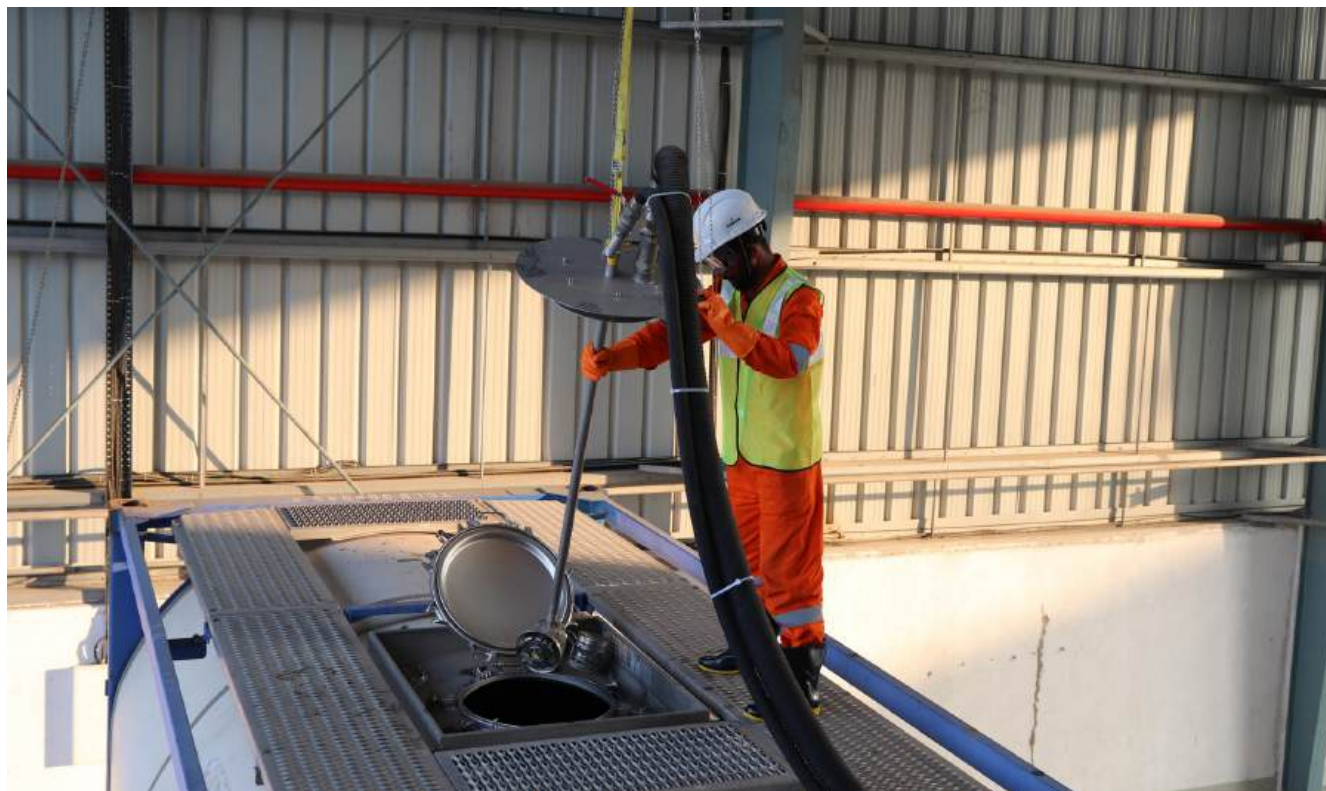
What are your short, medium and long-term goals for the Port, and how do these align with India's broader maritime vision?

In the short term, our focus is on enhancing cargo handling capacity and operational efficiency through projects like deepening existing berths and upgrading mechanized facilities such as Berth 14. In the medium term, we plan to further expand our infrastructure by developing new deep-draft terminals, improving hinterland connectivity, and increasing direct mainline vessel calls. Looking ahead, our long-term vision is to transform NMPA into a mega Port capable of handling over

150 million metric tonnes annually, fully integrated with smart technologies and a complete transition to green fuels. These goals align closely with national initiatives such as Maritime India Vision 2030 and Amrit Kaal Vision 2047, which aim to elevate India's maritime industry on the global stage.

Finally, what message would you like to convey to Port users, investors, and other stakeholders about the future of New Mangalore Port?

New Mangalore Port is undergoing a transformative journey to become a smart, sustainable, and globally competitive maritime hub. Our commitment to operational excellence, innovative infrastructure, and green initiatives is paving the way for enhanced trade efficiency and robust economic growth. To our Port users, we promise improved service and reduced logistics costs; to our investors, we offer exciting opportunities through public-private partnerships and port-led industrialization projects. I invite all stakeholders to join us in shaping a future where New Mangalore Port not only meets but exceeds global standards in maritime trade. The future is bright, and we are ready to lead the way. 🌊



ISO tank cleaning: A sunrise sector

The ISO tank container and road tanker cleaning, testing, and repair market is a crucial segment in global logistics, ensuring the safe and efficient transport of chemicals, petrochemicals, and food-grade substances. With stringent safety regulations, increased global trade, and growing environmental concerns, this sector is witnessing steady expansion. India, in particular, is experiencing a transformation, with increasing demand for high-quality tank container services.

📌 Global market overview

The global tank cleaning services market was valued at approximately \$1.27 billion in 2023 and is projected to reach \$1.61 billion by 2030, reflecting a compound annual growth rate (CAGR) of 3.43 per cent. This growth is driven by rising safety requirements, stringent environmental regulations and the need

for operational efficiency in storage and transportation.

The industrial tank cleaning market is also poised for expansion, growing from \$527.4 million in 2024 to an estimated \$738.6 million by 2032, at a CAGR of 4.3 per cent. The ISO tank container market, integral to bulk liquid transport, is expected to surge

from \$0.74 billion in 2022 to \$1.70 billion by 2032, growing at a robust CAGR of 8.7 per cent. This growth is attributed to the increased adoption of ISO tank containers for their safety, efficiency and cost-effectiveness.

📌 Indian market dynamics

India's tank container market is witnessing substantial growth, valued at approximately \$498 million in 2020 and projected to grow at a CAGR of 3.12 per cent from 2021 to 2027. This expansion is fuelled by the rapid development of the chemical and petrochemical sectors, requiring safe and efficient transportation solutions.

Furthermore, the India ISO tank container market is expected to grow from \$27.12 billion in 2023 to approximately \$96.16 billion by 2032, showcasing an impressive CAGR of 15.10 per cent. This boom is largely attributed to regulatory reforms, infrastructure development and an increasing shift from traditional bulk liquid transport methods to ISO tank containers, which offer superior safety and compliance.

Industry drivers and challenges

The tank container and road tanker cleaning, testing and repair industry are being propelled by several key growth factors while simultaneously facing significant challenges that hinder its full potential.

Key growth factors

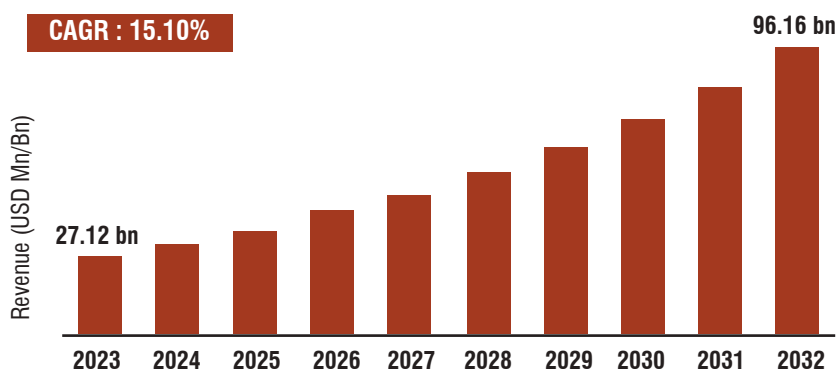
One of the primary drivers of growth in this sector is regulatory compliance. Stringent safety and environmental laws worldwide are compelling businesses to adopt high-standard cleaning and testing procedures to prevent contamination and enhance operational efficiency. Companies that align with these regulations are seeing increased demand for their services, ensuring safer and more reliable transportation of hazardous and non-hazardous materials.

The expansion of the chemical and petrochemical industries is another crucial growth factor. With India's chemical industry projected to grow from \$300 billion in 2025 to \$1 trillion by 2040, the demand for safe transportation and maintenance of tank containers is set to rise exponentially. As the industry scales, so does the need for professional and compliant services that ensure the integrity of transported goods.

Technological advancements are also reshaping the industry. Companies are increasingly investing in automated cleaning technologies to enhance efficiency, minimize water consumption and reduce environmental impact. The integration of such advanced solutions is improving service standards and operational effectiveness across the sector.

Sustainability initiatives are further driving market transformation. With a growing emphasis on carbon neutrality, energy-efficient processes and eco-friendly cleaning solutions, businesses are prioritizing environmentally sustainable practices. The adoption of solar power, biodegradable detergents and zero liquid discharge techniques is becoming more prevalent, ensuring that industry players align with global sustainability goals.

India ISO Tank Container Market Size, 2018-2023 (USD billion)



Challenges faced by the sector

Despite its steady growth, the sector faces several challenges that impede its progress. One of the most significant hurdles is the high cost of compliance and service delivery. Many customers are reluctant to pay premium prices for superior cleaning and maintenance services, instead opting for lower-cost alternatives that often do not meet international standards. This price sensitivity limits the widespread adoption of advanced cleaning and testing solutions.

Infrastructure constraints also pose a major challenge. While Europe boasts over 600 high-standard tank cleaning facilities, India has only about 20-25. This stark contrast underscores the urgent need for investment in developing a more extensive and advanced infrastructure to meet the growing demand for professional tank container cleaning and maintenance services.

Additionally, a lack of industry awareness hampers market expansion. Many transporters and businesses remain unaware of the long-term benefits of ISO tank containers over traditional bulk liquid transport methods such as flexi bags and drums. While ISO tank containers offer superior safety, compliance and cost efficiency in the long run, the industry's resistance to change and lack of education on these advantages slow the rate of adoption.

Addressing these challenges


requires a concerted effort from industry stakeholders, regulatory bodies and market leaders. By fostering greater awareness, investing in infrastructure and encouraging compliance with international standards, the sector can continue to grow while ensuring safety, efficiency, and sustainability in global and Indian logistics.

Regulatory and market shifts

Recent government regulations are reshaping the industry. A key development is the Indian customs authority banning the import of petrochemicals in flexi bags for products with flash points up to 95-96°C. This move has led to a surge in demand for ISO tank containers, as they provide a safer and more compliant alternative.

Moreover, organizations like the Petroleum & Explosives Safety Organization (PESO) are tightening regulations on the movement and storage of hazardous chemicals, further boosting the need for professional tank container cleaning and testing services.

Expanding infrastructure

Leading players like Zodiac Tank Container Terminals (ZTCT), a part of the Samsara Group, have set up state-of-the-art facilities near Nhava Sheva, offering automated cleaning, testing and repair services with German technology. Companies are now evaluating opportunities for expansion, particularly in South and North Gujarat, to cater to the increasing demand. 

"Professionalism and advanced technology sets us apart"



Capt. Pankaj Mehrotra, Director of Zodiac Tank Container Terminals (ZTCT) and CEO of Samsara Group, delves into the nuances of the tank container industry in India and globally. He highlights the strides made by ZTCT in offering state-of-the-art tank cleaning, testing, and repair services while shedding light on the challenges and opportunities in this vital sector.

Could you provide an overview of ISO tank container and road tanker cleaning operation?

Tank cleaning is an essential service in the logistics and chemical sectors, ensuring that containers are thoroughly cleaned, tested, and repaired for safe transportation. At Samsara Group, we handle diverse cargoes, including chemicals, through our extensive network with global ISO tank operators. India's logistics infrastructure has significantly evolved over the past two decades, improving ports, railways, roads and airports.

However, the chemical and effluent handling sectors still require better infrastructure that meets international standards.

How has your experience been with ZTCT over the past four years?

Our journey has been both rewarding and insightful. Over the past four years, we have established a state-of-the-art facility near Nava

Sheva, fully compliant with stringent ISO standards, including ISO 45001. Unlike many disorganized setups in India, ZTCT focuses on professionalism, advanced technology, and automation, setting us apart in a competitive market. Despite our efforts, pricing remains a challenge as customers often hesitate to pay a premium for higher standards and compliance. Nevertheless, our facility has garnered recognition from chemical manufacturers and global ISO tank operators, leading to a steady increase in service volumes.

Who are your key customers?

Our clientele includes chemical manufacturers, ISO tank operators and other logistics providers. While many facilities in India lack international-standard infrastructure, ZTCT distinguishes itself through paved land, stringent compliance and ESG initiatives, such as solar power integration. These efforts resonate well with global chemical companies

prioritizing sustainability and quality.

Can you walk us through your strategy for engaging with chemical manufacturers?

We actively participate in industry forums like the Indian Chemical Council and the International Tank Container Organization, educating stakeholders about the benefits of our professional services. Companies like Nestle, Unilever and Ferrero have recognized our capabilities, choosing ZTCT for their tank cleaning needs.

What expansion plans does ZTCT have to leverage this trend?

The global ISO tank market has doubled over the past decade, with projections suggesting a rise to 1.5 million containers by 2030. India's chemical industry, valued at \$300 billion, is expected to reach \$1 trillion by 2040. As the industry grows, so does the need for compliant tank cleaning facilities. ZTCT plans to expand further, starting with a second facility in South Gujarat, and eventually moving north. India needs to scale its

facilities from the current 20-25 to match Europe's 600+ sites.

What differentiates your facility in terms of technology?

Owning our land allowed us to invest significantly in infrastructure. We utilize advanced German technology for precise cleaning, ensuring even the smallest residues are removed to prevent contamination. Adhering to ISO standards is not just about certification—it's about daily practice. We also focus on sustainability with solar panels and efficient energy use.

What do you think industry should be doing?

The drive for better compliance must come from within the industry. Chemical manufacturers should demand and support compliant facilities. ESG commitments need genuine budgeting and implementation, not just boardroom discussions. While the government plays a role, especially through regulations like those from PESO, the industry itself must champion these changes for a safer and more sustainable future. 



e-trucks at Ports & Beyond
**TIME TO CHANGE
LANES**

India's burgeoning logistics sector faces a critical juncture, balancing economic growth with pressing environmental concerns. Ports, vital to the nation's trade, stand to significantly benefit from the integration of electric trucks (e-trucks). While challenges like high upfront costs and limited charging infrastructure exist, government initiatives, industry collaborations, and technological advancements are paving the way for widespread e-truck adoption."

S K Pradhan

The logistics industry in India is at a crossroads, where economic growth meets the pressing need for environmental sustainability. Ports, the linchpins of global trade, are critical in this equation, handling a significant portion of the country's import and export activities. Against this backdrop, the adoption of electric trucks (e-trucks) promises to be a game-changer, offering a sustainable solution to reduce emissions, curb costs and modernize logistics operations. For stakeholders, investors and logistics providers, understanding this transformative potential is imperative.

➤ **India's trucking landscape: Challenges and opportunities**

India's trucking industry is the backbone of its logistics sector, accounting for 64 per cent of freight movement with a massive fleet of 1.47 crore trucks. Despite its critical role in the economy, the sector faces significant challenges that threaten its sustainability and efficiency. High fuel costs, reliance on diesel, and outdated practices inflate operational expenses, while trucks contribute a staggering 41 per cent of CO2 emissions from road transport, making the sector one of the largest polluters.

Furthermore, traffic congestion and inefficiencies in logistics operations lead to extended transit times and higher costs. Yet, these challenges present opportunities for innovation, particularly through the integration of electric trucks. With reduced fuel dependency, lower emissions, and cost advantages over the long term, e-trucks emerge as a promising alternative, especially for Port operations.

➤ **The global push for electric trucks**

Around the world, e-truck adoption is gaining momentum. China has emerged as a leader, achieving a 7 per cent sales penetration for e-trucks

in 2023, driven by targeted subsidies and supportive policies. Europe and the United States are also making strides, spurred by stringent emission regulations and advancements in battery technology. Ports such as Long Beach in California and Gothenburg in Sweden have successfully integrated e-trucks into their operations, showcasing their viability and benefits in real-world applications.

➤ **The Indian scenario: A nascent yet promising market**

India's journey with e-trucks is still in its early stages. In 2024, the country saw the sale of 6,220 e-trucks, a modest figure compared to the 8.34 lakh trucks sold that year. However, the sector is poised for exponential growth, with projections indicating a compound annual growth rate (CAGR) of over 25 per cent by 2030.

This growth is underpinned by increasing awareness of sustainability, government incentives, and advancements in battery technology. For Ports, the implications are significant, as e-trucks align perfectly with the operational demands and sustainability goals of Port-centric logistics.

➤ **E-Trucks in port logistics: Applications and benefits**

Ports serve as strategic hubs within India's logistics network, facilitating a substantial portion of the country's trade. Integrating electric trucks (e-trucks) into Port operations offers numerous advantages. In drayage operations, e-trucks excel in short-haul movements between Ports, warehouses, and inter-modal hubs, significantly reducing emissions in these high-traffic areas. Within Port premises, e-trucks can efficiently transport goods from ships to storage yards or warehouses, improving operational efficiency and minimizing congestion. Furthermore, e-trucks are well-suited

for handling various cargo types, including containers, bulk materials, and hazardous chemicals due to their advanced control systems and lower environmental impact.

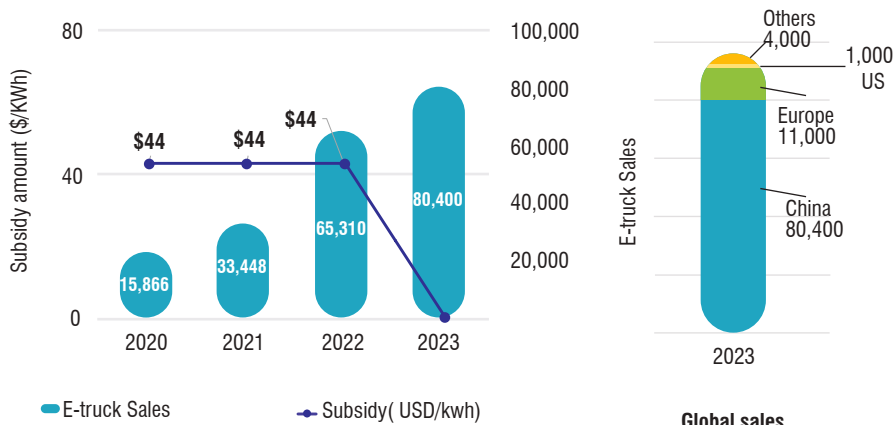
➤ **Operational characteristics of port-related trucks**

Port logistics operations present a compelling case for the adoption of electric trucks. A significant portion of trucks operating within Port ecosystems are owned by fleet aggregators (55 per cent), followed by companies (30 per cent) and individual operators (15 per cent). This ownership structure facilitates the transition to electric vehicles, as fleet aggregators and companies are better positioned to invest in and manage charging infrastructure and vehicle maintenance. Furthermore, the typical daily mileage for Port-related trucking activities, ranging between 90 and 250 kilometres, aligns well with the current range capabilities of most modern electric trucks. This operational characteristic further strengthens the case for e-truck adoption within this sector, contributing to reduced emissions and improved sustainability within the Port logistics ecosystem.

➤ **Challenges to e-truck adoption**

Despite their potential environmental and economic benefits, the widespread adoption of electric trucks in India faces several significant barriers. A primary obstacle is the high upfront cost, typically 2-3 times higher than diesel counterparts. For instance, an 18.5-tonne e-truck can cost ₹105 lakh, compared to ₹31 lakh for a diesel equivalent, posing a major hurdle for many operators. Furthermore, the lack of adequate charging infrastructure in and around Port areas limits the operational feasibility of e-trucks, hindering their widespread deployment. Range limitations of current e-trucks,

Subsidies helped early market uptake in China



typically 100-300 kms, while sufficient for short-haul operations, may not be adequate for longer routes, restricting their operational flexibility. Finally, the increased electricity demand from a large-scale transition to e-trucks could strain India's existing power grid, necessitating substantial infrastructure upgrades to ensure reliable and sustainable energy supply.

Support systems for e-truck deployment

The government is actively facilitating the adoption of electric trucks through various initiatives. These include offering subsidies and tax waivers to reduce upfront costs, investing in the establishment of charging stations at key Ports and along major freight corridors, and providing priority lending support for e-truck purchases and associated infrastructure development. Concurrently, the private sector is playing a crucial role. Original equipment manufacturers (OEMs) like Tata Motors, Ashok Leyland, and IPLTech are developing e-trucks tailored to Indian conditions. Major companies like Amazon, Flipkart and CONCOR are integrating e-trucks into their fleets, signalling a significant shift towards sustainable practices. Building a robust charging network is critical for scaling e-truck adoption. Key initiatives focus on installing fast chargers at every 100 kilometres along major freight corridors, establishing dedicated charging stations at Ports

What Industry needs from government

Ministry of Power

- Waiver of high-tension demand charges
- Lower EV tariffs for e-truck charging for captive users

Ministry of Heavy Industries

- Subsidy to reduce the upfront cost of e trucks
- PMP lead time to be given
- Disallow CKD / SKD (EV components from India only)
- No subsidy for imported vehicles
- Availability of charging infrastructure

Ministry of Finance

- Priority sector lending
- Lower interest rates
- Accelerated depreciation for heavy duty charging equipment

State Governments

- Waiver of registration fee and road tax
- Availability of HT network on key routes for setting up chargers

and logistics hubs, and encouraging private investments through incentives and public-private partnerships.

Opportunities for stakeholders

The electrification of Port logistics presents a significant opportunity for various stakeholders. Original Equipment Manufacturers (OEMs) can capitalize on this by developing cost-effective e-truck models with enhanced range and payload capacities, catering to the specific demands of Port operations. Port authorities can play a crucial role by establishing robust charging infrastructure within Port premises and incentivizing e-truck adoption to attract environmentally conscious logistics partners. Logistics providers stand to benefit significantly by transitioning to e-trucks, achieving cost savings and meeting their sustainability targets. Finally, investors can capitalize on the growing demand for green logistics solutions by funding innovative projects related to e-truck development, charging infrastructure, and related technologies.

The case for port electrification

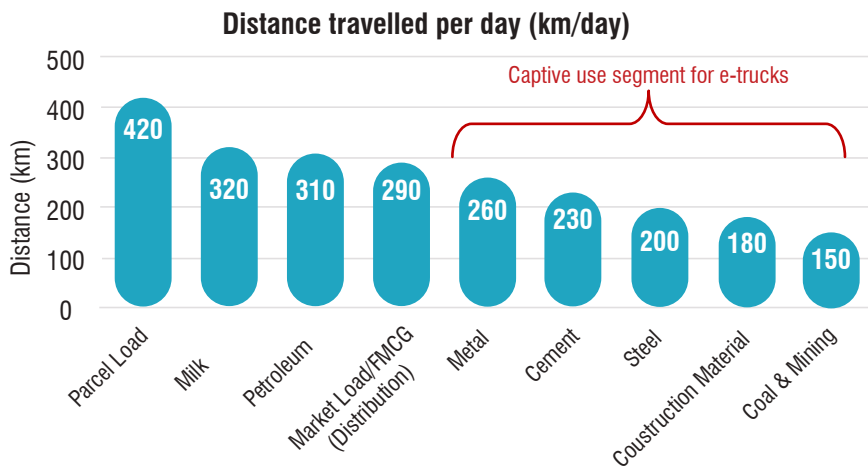
India's maritime sector plays a crucial role in the country's economic growth, with Indian ports handling nearly 95% of India's trade by volume. However, ports are also major contributors to carbon emissions, air pollution, and noise pollution. As India pushes toward its net-zero emissions target by 2070, electrifying port operations through the adoption of electric vehicles (EVs) offers a transformative opportunity.

Opportunities for EVs at Indian Ports

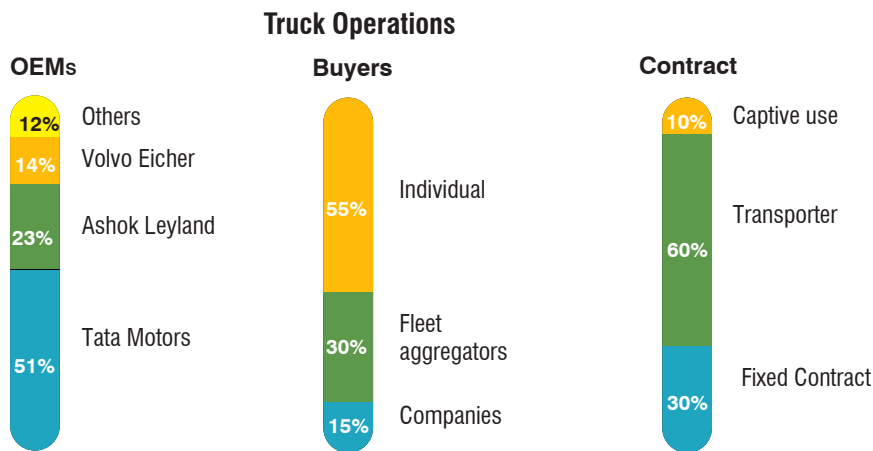
1. Reducing emissions & aligning with sustainability goals

Port electrification & net-zero Goals: India has committed to reducing its emissions intensity by 45% by 2030 under the Paris Agreement. Electrifying trucks, cargo handling equipment, terminal tractors, and port logistics vehicles will help achieve these targets.

Reduction in air pollution: Indian ports, especially those in Mumbai, Chennai, and Visakhapatnam, suffer from severe air quality deterioration due to diesel-powered equipment. Replacing diesel with EVs can



Source: Compiled by Climate Group, based on real world operations of trucks



Source: Climate Group

Barriers and solutions to truck electrification

High upfront costs

EVs require 3X the capital investment compared to a diesel truck

Downtime

EVs have 6X higher refuelling downtime compared to diesel truck

Range Anxiety

Insufficient and time-consuming charging infrastructure hinders fleet operation and scalability

Unbundling

Separating ownership of e-truck and battery; significantly reducing capital investment

Battery Swap

5-minute battery swapping minimises downtime, keeping operations efficient

Smart Scheduling

Fleet management software optimises battery swapping and charging schedules enabling high-efficiency operations

Use of E-Trucks at Indian Ports

- Jawaharlal Nehru Port Authority (JNPA) plans to replace more than 6,500 trucks operating in and around the port with battery-powered vehicles as part of its 'Zero Emission Trucking' strategy. The shift to ZET will take place in phases over five years period.
- Adani Group has ordered a total of 400 BYD electric trucks for service at ports in Ennore, Katupalli, Hazira, and Mundra. Five of the electric trucks have already arrived at the Katupalli port and have been put into operation. The BYD Q1R electric trucks, which will be used as terminal tractors, are being transported by sea to four Adani Group ports in India.
- Mormugao Port Authority (MPA) introduces battery-powered trucks and hybrid-electric harbour cranes imported from Germany for container operation marking a significant shift towards sustainable operations.
- DPA Kandla deployed electric wheel loaders for port operation. In line with the Government of India's 'Harit Sagar' Green Port Guidelines, the port has taken another significant step towards sustainable port operations by supporting the deployment of four SDLG L956HEV electric wheel loaders by Swayam Shipping Services Private Limited.

significantly reduce NOx, PM2.5, and CO₂ emissions.

2. Economic & operational cost savings

Lower fuel costs: Electricity is cheaper than diesel, and as India increases its renewable energy capacity (solar & wind), the cost of charging EVs will decline further.

Lower maintenance costs: EVs have fewer moving parts than diesel vehicles, leading to lower maintenance expenses over their lifespan.

Incentives for electrification: The Indian government offers subsidies & incentives through programs like FAME II (Faster Adoption and Manufacturing of Electric Vehicles) and the National Green Hydrogen Mission, which could support port electrification.

3. Enhancing port efficiency & future-proofing

Automation & digitalization: Indian ports are undergoing modernization

The case for EV adoption in the ports sector is only getting stronger



The Emissions Challenge: A Growing Concern

45 per cent of the road transport emissions come from medium and heavy-duty vehicles. Despite being only 2 per cent of the total vehicle pollution, they have a significant emissions footprint.



Renewable energy: Fuelling clean mobility

Aligns with India's 450 GW renewable energy target by 2030. Enables sustainable transport solutions that drive corporate sustainability goals.



Electrification: A step toward NetZero

Reduces greenhouse gas emissions and air pollution. Strengthens India's priorities in air quality, energy security and industrial competitiveness.

under the Sagarmala Programme, which includes automation and smart port technologies. EV adoption aligns with these efforts by enabling smart charging and fleet management solutions.

Integration with renewable energy: Many ports, such as Jawaharlal Nehru Port (JNPT) and Cochin Port, are investing in solar and wind energy projects. EV charging stations can be powered by on-site renewable energy, further reducing reliance on fossil fuels.

➤ Green charging

Electric mobility powered by renewable energy is emerging as a transformative force in addressing the dual challenges of environmental degradation and fossil fuel dependence. By powering Electric Vehicles (EVs) with cleaner energy, India can significantly reduce its carbon emissions. One of the most critical aspects of integrating renewable energy into electric mobility

is the development of green charging infrastructure.

Solar-powered EV charging stations not only mitigate grid dependency but also ensure that EVs are charged with cleaner energy. We need a transformative project aimed at developing a comprehensive charging infrastructure for electric vehicles.

➤ EV financing

Additionally, while there are various government incentives and rebates available, aimed at reducing the financial burden of purchasing an EV, these measures may not fully offer the high purchase prices, making affordability a critical issue that needs to be addressed for broader adoption of electric vehicles.

India's EV financing system still lags behind global standards. The financing penetration remains low at 10-15 per cent compared to 40 per cent in developed countries.

➤ Future outlook: A sustainable logistics ecosystem

By 2030, advancements in battery technology and falling costs, coupled with supportive government policies, are poised to significantly strengthen the proposition for e-trucks within India's logistics sector. Key projections include a substantial reduction in battery costs, with prices expected to decline from US\$115/kWh in 2024 to US\$80/kWh by 2026, making e-trucks more financially viable. This, combined with a robust ecosystem of manufacturers, policymakers, and users, is expected to fuel exponential growth in e-truck sales. For Ports, this transition promises substantial benefits, including reduced emissions, significant cost savings, and enhanced operational efficiency. As global trade continues to expand, the adoption of e-trucks will not only modernize India's logistics sector but also firmly align the country with global sustainability goals.

Electric trucks are poised to revolutionize India's logistics sector, particularly in Port-centric operations. By addressing environmental concerns, reducing costs, and enhancing efficiency, e-trucks represent a sustainable solution for the future. However, the transition demands collective effort from policymakers, manufacturers, port authorities, and logistics providers.

With the right mix of innovation, infrastructure development and collaborative efforts, the electrification of logistics is no longer a distant vision but an achievable reality. For Port users, stakeholders and investors, embracing this transformation is not just an opportunity but a necessity for a sustainable and competitive future.

➤ Conclusion

The shift to electric vehicles at Indian ports presents a transformative opportunity to reduce carbon emissions, cut fuel costs, and improve air quality. While high upfront costs, infrastructure gaps, and grid reliability remain challenges, strategic investments, policy support, and renewable integration can accelerate the transition. With India's ambitious clean energy targets, growing EV ecosystem, and port modernization programs, the future of electrified, sustainable ports is within reach.



India's growing maritime role

As the world's most populous country and fifth largest economy, India holds a growing role on the global stage. Within parts of the maritime ecosystem, development has been mixed, lagging potential. But as a key hub for operations and crewing, and now the largest seaborne importer after China, ambitions to further develop fleet, ports & shipbuilding have renewed government support.

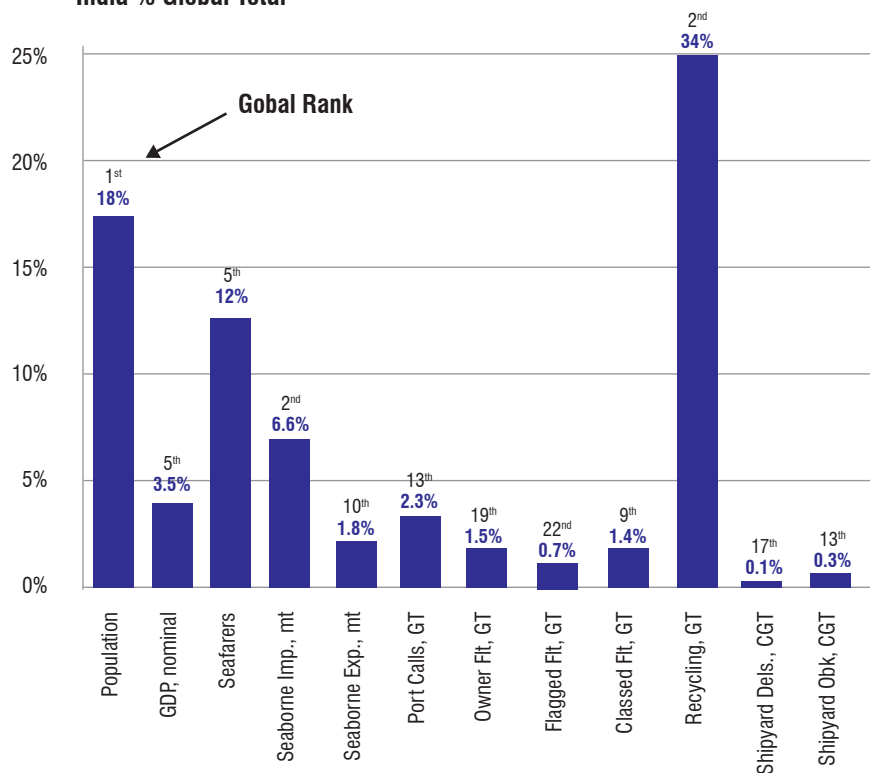
Shipping heritage

With a population of 1.5 billion, India is the world's fastest growing major economy (2025f: +7 per cent), and on track to become the third largest globally by 2030. Against this backdrop, India's role in maritime is evolving, with the government increasing strategic focus on the sector. India is already the fifth largest source of seafarers (12 per cent of world total, government target 20 per cent). And India has for many decades been a prominent recycling destination, with facilities handling a third of tonnage recycled 2004-24. In 2024, India ranked second for volumes (30 per cent share) but Indian re-cyclers also seem to be leading Bangladesh and Pakistan in preparing facilities for compliance with the HK Convention green treaty (in force from June 2025).

Demand driver

Across global seaborne trade, India is an increasingly key driver. Over the last decade, Indian seaborne imports grew by a CAGR of 2.9 per cent (global 1.7 per cent, China 4.1 per cent) to reach 830mt in 2024, 7 per cent of the global total and second only to China (3.2bt, 25 per cent). India is now the second largest importer of a range of key car-goes, including coal (19 per cent of global total), crude oil (12 per cent, including a shift to longer haul Russian crude since 2022) and LPG (16 per cent), and across all cargoes has driven 15 per cent of growth in global trade in the last decade (again behind only China that has contributed 55 per cent of growth). We project the balance of this growth share will lean towards India in the next decade, with India reaching >1.2bt of imports by 2035 (this would still be a third of China however). Indian exports have shown more muted growth, totalling 225mt in 2024, 2 per cent of the global

India % Global Total



Source: Clarksons Research

total (India: 10th largest ex-orter), up only slightly vs 2010 (218mt), with oil products exports steady, and more minor bulk and container exports offsetting lower iron ore. Meanwhile, India's >80 ports handled >70,000 vessel calls last year (largest tonnage handler, Mundra, is only the 50th largest globally with 224.5m GT of port calls in 2024, policy targets three 'mega' ports by 2030).

Maritime goals

The Indian government has a range of policies aiming to strengthen the maritime sector, including across ports, shipbuilding and recycling. Today, India is the 19th largest ship owning cluster (an underweighted 1.5 per cent of world fleet, headed by SCI,

Great Eastern, Chellaram and Seven Islands) and 22nd largest flag state (0.7%), but aims to have a top 5 fleet of 100m GT by 2047. Shipbuilding (and ship repair) has a long history in India (although with a some-times mixed track record), and policy is targeting a top 10 builder by 2030 and top 5 by 2047 (2024: 13th largest order-book by CGT, 0.3 per cent share, Cochin leading). Shipbuilding is incredibly competitive (China 58 per cent of orderbook), but there may be good potential initially in smaller ships. ^{me} (The author of this feature article is Steve Gordon. Any views or opinions presented are solely those of the author and do not necessarily represent those of the Clarksons group.)

The Hellman Vision: “For the better, together”

Being the biggest in the market is not our goal, we want to be seen as an innovative company, investing in its people, competencies, digital space where technology becomes a key value proposition to our customers, while specialising in verticals to build strong relationship with customers.



A freight forwarding company that was established about 153 years ago in Germany has come a long way, expanding its network globally. While a lot of things have changed over the years, especially the speed of logistics, the ethics and values ingrained into the culture of the company remain robust. Detailing on what has changed and what has not changed at Hellman Global over the years, **Reiner Heiken, CEO** says, “This is still a family owned company. We have always tried to be innovative and forward thinking as an entrepreneur. This is still “a people’s business,” our employees have a sense of ownership. We have a decentralised management strategy.”

Over the years Hellman has evolved to become more global and cosmopolitan with a diversity driven culture. Even at the company’s head office, a lot of Indians have moved into several positions, be it Finance or IT. Hellman had been a very decentralised organisation managed by a few trusted people and directly controlled by the owners, but this has changed since

Reiner Heiken took over, the company has also transformed from being an owner-run company to an executive managed business. “In the past, we had a lot of entrepreneurial spirit all the way, but lacked proper governance, which is not good for a global company. In the past 5 years we have brought in a lot of good governance, but not in a bureaucratic way because we continue to maintain the values and culture of the organisation,” explains **Madhav Kurup, Regional CEO IMEA**.

As the company expanded its global footprint, a huge network of offices was established which needed to be utilised optimally for proper growth of the company. In 2019, when Reiner Heiken travelled globally he observed that regional offices were functioning as individual pockets, which was not a good sign for a global company. To ensure the services remained agile, their good governance practices helped them secure large volumes of cargo both in exports and imports. Hellman today has dedicated systems in place, one each for sea freight, air freight, accounting systems, and a massive

digitisation move that has ensured use of new technologies connecting global offices into a proper structure, which also helped in creating better touch points for customers, upping the benchmark in efficiency and quality.

The vision of the company is “for the better, together,” Which Reiner Heiken explains as, “We want to do it better for our customers, become a better employer, contribute to better our environment, lots of opportunities are here and all of this has to be done together by the management and teams. The most important thing for us is carrying high values as part of the company culture, be reliable, forward thinking, build strong relationships with customers to understand their pain points and become their logistics partner of choice.” As a result, the turnover last year was \$5 billion as compared to \$4 billion in 2022.

In a one-to-one with Maritime Gateway, Reiner Heiken, CEO, Hellman Worldwide Logistics and Madhav Kurup, Regional CEO IMEA, detail on the company’s strategy, digitisation and plans for the Indian market.

Today we are in a world of volatility and uncertainty. How do you navigate these challenges?

Reiner Heiken: To navigate these complexities first of all you need to have a proper structure that clarifies who is responsible for what? Responsibility and ownership needs to be very clear. We are in about 60 countries and we have four main products. We have experts to deal with these operations and navigate through these complexities. Like Madhav Kurup is responsible for

everything in the Indian subcontinent, Africa and Middle East (IMEA) region. The issues and challenges are different in APEC and the Americas.

What has been the impact of digitalisation on your operations and service delivery?

Reiner Heiken: We have a history of experimenting with new things, even if it fails, we keep trying for new things. Today, we are a strong global forwarding network, but many German companies have not tried expanding at the right time and now they have missed to expand their global footprint. We are also exploring new technologies like AI, ChatGPT etc., and there are a lot of interesting startups in these domains which makes sense to invest in them. We are always open for investing in startups. Last year, when I took over we changed the position of CIO to include Systems & Network, then we have a Chief Digital Officer who takes care of the systems and is also the board member taking care of innovation. As forwarders we are not used to talking to people with innovative ideas, but you can't cover all, so we need to have people in the team who are able to achieve this.

In Hamburg we have an innovation hub in the logistics sector and we have decided to become a member there. There we will get a chance to interact with people who control other businesses. Innovation for a small – medium sized company like ours is important to compete and ensure we are proceeding as planned and be competitive.

How important is the Indian market in your global operations?

Madhav Kurup: Within the IMEA region, India is the largest market in terms of the share size. This region extends from Bangladesh all the way to South Africa. We have 20 operating entities, of which 14 are country organisations, then we have six specialised joint ventures. We have vertical specialisations, in automotive aftermarket spare parts we are the market leaders in the Middle East. Then we have joint ventures in healthcare and chemicals. We are very strong in road freight in Europe,



“India was already expected to be an upcoming market 25 years ago and for the past ten years we are seeing it happen at an extremely high speed. The surrounding market potential is also large between Middle East, Africa and Far East. ”

REINER HEIKEN
CEO, HELLMAN WORLDWIDE LOGISTICS

where we started about 153 years ago. We have always expanded with organic growth and not by making acquisitions like others. We started expanding organically in Hong Kong and then moved to US, Australia, South Africa, expanding our network as customers demanded. Today India is the fifth performing country globally and going by the size of the market, in India we can say we are still in our early days. We had opened our first office about 17 years ago and we still feel young in India.


In India we are mainly a freight forwarding organisation and we particularly focus on two main products – air cargo, sea cargo and Customs clearance. Our plan is to grow more here, for example, in automotives we operate a warehouse for Ford Motors in Sanand, and we are establishing another warehousing



“Within the IMEA region, India is the largest market in terms of the share size. This region extends from Bangladesh all the way to South Africa. We have 20 operating entities, of which 14 are country organisations, then we have six specialised joint ventures.”

MADHAV KURUP
REGIONAL CEO, IMEA
HELLMAN WORLDWIDE LOGISTICS

operation in Mumbai for Hauser. We also have pockets of our warehousing activity across the country. Many of our customers are looking at creating hubs in India so that they can reach out to any market within India in 48 hours through road or rail. In road logistics, we will create solutions on digital platforms for specific industries.

Reiner Heiken: India was already expected to be an upcoming market 25 years ago and for the past ten years we are seeing it happen at an extremely high speed. The surrounding market potential is also large between Middle East, Africa and Far East. Again we have learnt from the war in Ukraine, because Germany had high dependency for oil & gas from one country. We are exporting too much to China which is not good, so India emerges as China plus one option. Our main investment in future will go into India. 

50 years of excellence

Indian Register of Shipping (IRS) concludes 2024 with remarkable achievements across sustainability, innovation, and maritime safety, making its Golden Jubilee year a testament to its legacy and vision.



From spearheading decarbonisation projects to reviving India's maritime heritage, IRS has reinforced its leadership role in the global maritime sector.

In line with global sustainability goals, IRS achieved significant milestones in decarbonisation and technology. It classed a next-generation electric ferry, furthering the push for cleaner

IRS: A legacy of trust and innovation

P K Mishra, Managing Director, Indian Register of Shipping (IRS), in this interview shares IRS's journey over the past five decades, and how it has gained recognition from 52 leading maritime administrations worldwide.



Can you reflect on the key milestones and achievements that have defined its journey and share your vision for the future of maritime safety and innovation?

Indian Register of Shipping (IRS) has been a beacon of progress and excellence in the maritime industry since its inception in 1975. Over the past five decades,

IRS has expanded its international presence, earning recognition from 52 leading maritime administrations across the globe. As a member of the International Association of Classification Societies (IACS), IRS has built a strong reputation for excellence, gaining the trust of maritime stakeholders worldwide. With a growing global fleet under its classification, IRS continues to be a preferred partner, supporting the maritime industry with high-quality services and expertise. IRS has also been at the forefront of driving innovation, from adopting digital tools for surveys to fostering sustainability

initiatives. As we celebrate our 50th anniversary, our vision is to lead the charge in enhancing maritime safety and innovation by embracing cutting-edge technologies like AI, digital twins, and autonomous systems, while remaining steadfast in our commitment to quality and reliability.

As a nation where are we at are decarbonisation initiatives and how is IRS helping the Indian ship owners to navigate these challenges?

India has made steady progress in its decarbonisation journey, aligning with global initiatives like the IMO's climate strategy. Indian


shipowners face challenges such as adopting alternative fuels, improving energy efficiency, and adhering to stricter emission norms. IRS supports shipowners by providing guidance on energy transition strategies, conducting feasibility studies for alternative fuels like LNG, methanol, and hydrogen, and developing compliance roadmaps for upcoming regulations like CII (Carbon Intensity Indicator). We are working on Government of India initiatives like Harit Nauka (Green Ship) which are geared towards making decarbonisation both practical and economically viable for Indian stakeholders.

maritime transport. A landmark collaboration with Mazagon Dock Shipbuilders saw the successful demonstration of an Autonomous Navigation System with dual navigation capabilities, signalling a step forward in maritime innovation. Additionally, IRS partnered with IIT Bombay to develop a ship trajectory prediction tool aimed at improving navigational safety. In another significant move, IRS joined forces with Cochin Shipyard Limited on the ambitious “Swayat” project, towards the development of India’s first indigenously designed autonomous vessel. The year 2024 has been transformative for IRS, marking a significant rise in classification and allied technical services for Indian Defence and Paramilitary forces. Key milestones include the launch of

four shallow-water Anti-Submarine Warfare Corvettes, a Semi-Submersible Pontoon, two Pollution Control Vessels, and the delivery of a Survey Vessel (Large).

IRS has expanded its scope to complex projects, including six New Generation Missile Vessels at Cochin Shipyard, five Fleet Support Ships at Hindustan Shipyard, and 11 New Generation Offshore Patrol Vessels at GRSE and GSL. Additionally, six Next Generation Offshore Patrol Vessels, a Cadet Training Ship, and 14 Fast Patrol Vessels will be built at Mazagon Dock, Mumbai. Notably, IRS provided third-party inspection services for a submarine undergoing refit at HSL, a first for any classification society in India. IRS continues to enhance its technical capabilities, notably in underwater radiated noise prediction

and autonomous vessel certification. It is also supporting the indigenization of defence equipment, aligning with India’s Swavlambit Bharat (Self-Reliant India) mission.

There has been significant progress in its partnership with Dassault Systèmes to implement the 3DEXPERIENCE platform. The project is currently undergoing trials and validations, with promising outcomes. The platform is expected to go live by Q2 2025, marking a major step forward in digital transformation and operational efficiency. IRS’ focus on industry partnerships was evident through a series of strategic MOUs. Collaborations with SeaTech, Singapore, and Garden Reach Shipbuilders & Engineers focused on the development of autonomous and green energy vessels. 

How are the impactful emerging technologies like Digital Twins, Artificial Intelligence, Autonomous Vehicles will be influencing the future of ship classification?

Emerging technologies like digital twins, AI, and autonomous systems are transforming the ship classification landscape. Digital twins enable real-time monitoring and predictive maintenance, enhancing vessel performance and safety. AI aids in processing vast amounts of data for risk assessment and operational efficiency, while autonomous technologies are driving innovation in unmanned vessels and smarter navigation. IRS is actively researching and adopting these technologies, ensuring that classification services remain relevant, efficient, and future-ready in this evolving environment.

How is technology being used for classification like using drones for survey, paperless 3-D models to approve designs data analytics, digitalisation etc.? Any of them are used in Indian context?

In the Indian context, the use of technology in classification services is gaining momentum as the maritime industry modernizes. IRS and other stakeholders are leveraging advancements like IoT, AI, and data analytics for predictive maintenance, real-time monitoring, and condition-based surveys, reducing downtime and costs. Remote inspection technologies, such as drones and AR, are being adopted to streamline surveys. India’s focus on sustainability is driving the use of digital tools to monitor emissions and optimize fuel efficiency. Additionally, cybersecurity

measures are being strengthened to protect connected systems. These technologies enhance safety, efficiency, and compliance, positioning India as a competitive player in the global maritime sector.

Can you provide insights into how the IRS is contributing to the growth of Indian tonnage over the years and what future plans are in place to further enhance this growth?

IRS has played a pivotal role in enhancing Indian tonnage by supporting shipowners through quality assurance, certification, and regulatory compliance. Our robust technical expertise has enabled Indian shipowners to navigate global challenges and maintain competitiveness. Future plans include strengthening our outreach to domestic shipowners, facilitating fleet modernisation,

and expanding services to niche segments like offshore wind and green shipping corridors, thereby contributing further to the growth of Indian tonnage.

What policy measures can we expect from the government to support Indian flagship owners?

To foster the growth of Indian shipping, policy measures such as incentives, support for green retrofitting, and enhanced access to global markets would be instrumental. Additionally, greater participation in international maritime forums and strengthening of industry partnerships could further encourage the expansion of Indian shipping. IRS remains committed to engaging with policymakers to advocate for initiatives that ensure a competitive and sustainable future for the Indian maritime sector. 



Navigating the future of container leasing

With a strong presence in key markets and a reputation for reliability, VS&B has continuously adapted to industry shifts, from evolving trade patterns to sustainability initiatives. In this exclusive interview, we speak with the team at VS&B Containers to gain insights into the latest trends in container leasing, market challenges, and the company's vision for the future of containerized trade.

S K Pradhan

The global shipping container leasing market plays a pivotal role in facilitating international trade. As the backbone of global logistics, shipping containers are indispensable for the efficient and cost-effective movement of goods across continents. The global market size is substantial, estimated to be around \$5.8 billion in 2022, and is projected to grow at a CAGR of approximately 14 per cent from 2023 to 2029, driven by factors like increasing global trade volumes, e-commerce growth and the need for flexible

transportation solutions.

India, with its burgeoning economy and increasing reliance on global trade, presents a significant market for container leasing. The Indian market has witnessed robust growth in recent years, with an estimated CAGR of around 8-10 per cent in the past few years. This growth is fuelled by factors such as increasing exports, growing imports, and the rise of e-commerce.

When it comes to the containerized cargo shipping trade, few companies in the global market exemplify resilience

and adaptability as much as VS&B Containers Group. Established in 1996, the family-run business has grown into a pivotal player in the leasing and trading of shipping containers, operating from 13 offices across nine countries. At the helm is Vinay Paulose, the company's dynamic Director and CEO, who has steered VS&B through significant transformations during his 12-year tenure.

➤ A family legacy and a global vision

VS&B Containers Group's journey began as a family venture spearheaded by Bijoy and Sujata Paulose. The foundation laid by them has evolved into a globally recognized brand in container leasing and trading. Vinay Paulose, an MBA graduate from IE Business School and a logistics expert with a master's degree from MIT-Zaragoza, brought fresh perspectives to the business when he joined in 2011.

"I started my journey in the cold chain industry before transitioning to VS&B," Vinay recalls. "Over the past 11 years, I've worked across various regions, starting with our offices in Singapore and Indonesia, later managing operations in Mumbai, and now leading the company from Dubai."

Under his leadership, VS&B has cemented its reputation as a leader in container leasing and trading. The

company boasts a fleet of nearly 30,000 containers, spanning both international and domestic lease markets. On average, VS&B sells between 15,000 to 20,000 containers annually, covering a spectrum of new and used units across geographies.

➤ **The state of the industry: 2024 and beyond**

Reflecting on 2024, Vinay describes it as a “good year” for the container leasing business. “Shipping thrives on uncertainty,” he explains. “Supply chain disruptions—be it due to geopolitical crises or route changes—create a surge in demand for containers. As a nimble company, we’ve always kept our ears to the ground, adapting strategies to capitalize on such market dynamics.”

However, Vinay warns of potential challenges ahead. The resolution of global conflicts like the Russia-Ukraine war and Red Sea crisis may lead to an oversupply of containers. “For shipping lines, this could spell trouble. But as traders, an influx of containers entering the sale market can be an opportunity for us to offer competitive rates to our customers,” he notes.

In India, the picture is more optimistic. “With robust growth in manufacturing, exports, and infrastructure development, India’s demand for containers is set to rise,” Vinay predicts. Yet, he emphasizes the importance of government policies, such as cabotage regulations and container manufacturing incentives, in shaping the future of domestic container trade.

➤ **Challenges and opportunities in container leasing**

The global container leasing industry is dominated by a few major players, with Indian companies holding less than 0.5 per cent of the market share. According to Vinay, this is largely due to funding challenges. “Indian financial institutions often fail to grasp the leasing model. They demand fixed-asset collateral for funding because containers are considered movable assets. As a result, we rely heavily on international funding from hubs like Singapore and Hamburg,” he explains.

Despite these hurdles, VS&B has carved out a niche, catering to diverse customers, including shipping lines,

non-vessel owning common carriers (NVOCCs), rail operators, transporters, and multinational corporations. The company has also ventured into specialized markets such as reefer containers for perishables and tank containers for liquids, albeit with an eye on addressing infrastructure gaps.

“Providing a reefer container isn’t enough,” Vinay points out. “It requires an ecosystem—plug points, generators, technicians, and reefer yards—to ensure seamless operations. We’re working holistically to develop such ecosystems.”

➤ **Innovation in bulk cargo handling**

In a bid to revolutionize bulk cargo handling, VS&B has introduced containers specifically designed for this purpose. “It’s not just about the container,” Vinay emphasizes. “The system includes specialized spreaders for cranes, enabling efficient loading and unloading. This method is faster, less labour-intensive, and environmentally friendly compared to traditional bulk handling.”

However, the success of such innovations hinges on collaboration across the supply chain. Ports need infrastructure upgrades, and rail operators must align with these advancements. “We’re partnering with major port operators to invest in these systems, making ports more competitive and reducing pollution,” Vinay says.

➤ **The push for domestic growth**

The domestic container leasing market in India is witnessing steady growth, driven by government initiatives promoting rail and coastal movements. Projects like Sagarmala, which explores riverine logistics, could further boost demand. Yet, Vinay remains cautious. “India’s balanced trade flow—where imports nearly match exports—reduces the need for local manufacturing of containers. For manufacturing to achieve economies of scale, exports need to significantly outpace imports,” he explains.

The government’s push for container manufacturing is a step in the right direction, but sustained momentum is needed. “Incentives and policy support are crucial for manufacturers to thrive and compete on a global scale,” Vinay asserts.


“Indian financial institutions often fail to grasp the leasing model. They demand fixed-asset collateral for funding because containers are considered movable assets. As a result, we rely heavily on international funding from hubs like Singapore and Hamburg”



VINAY PAULOSE
DIRECTOR & CEO, VS&B

➤ **Geographic and strategic expansion**

VS&B continues to explore growth opportunities across regions and product lines. “Our geographical expansion and diversification into new products are paying dividends,” Vinay says. “For 2025, we aim to stay agile, navigating market dynamics and adapting to geopolitical shifts, such as potential policy changes under the new U.S. administration.”

India remains a key focus area, with immense potential for domestic growth. However, easing cabotage regulations could impact the domestic leasing business and Indian manufacturing competitiveness. “We’re closely monitoring these developments to align our strategies accordingly,” Vinay adds. 



Charting a course for sustained success

S K Pradhan

Founded in 2006, Emirates Shipping Line (ESL) has cemented its reputation as a boutique carrier serving niche markets with unparalleled service. With a strong presence in 30 countries and over 70 offices worldwide, ESL focuses on delivering tailor-made solutions across the dynamic markets of Asia, the Indian Subcontinent, the Middle East, the Red Sea, and Africa. At the helm of this innovative company is Till Ole Barrelet, Chief Executive Officer, whose 18 years of industry experience have been instrumental in steering the company towards sustained growth and profitability.

➤ A Resilient 2024: Achievements and growth

The year 2024 marked a significant milestone for ESL, with the company recording growth in profitability and volume. “Last year was very good, not quite at pre-Covid levels, but close,” Allwyn Dsouza, Managing Director, Emirates Shipping Agencies India remarked. While global economic challenges persisted, ESL introduced six new services in the Indian Subcontinent, highlighting its commitment to expansion and adapting to market demands.

➤ Strengthening Indian operations

India represents a cornerstone of ESL's strategy, with immense potential for growth. Historically, ESL managed its operations in India through its own offices, unlike the agency model employed in many other countries. This approach underscores

the importance of the Indian market, where ESL has established a robust presence on the West Coast at major ports like Mundra, Hazira, and Nhava Sheva.

The company's services on the East Coast, including Chennai and Visakhapatnam, are facilitated through partnerships like space swaps with other carriers.

On top of serving key ports across India's extensive coastline, ESL's connectivity in the Indian market is further enhanced by their Inland and Intermodal solutions which connect said vital seaports with inland depots.

ESL is optimistic about continuing to expand its footprint in this region. As Dsouza noted, "There is a lot of cargo moving out of India, and we see 98 per cent of the market still untapped. The potential is enormous."

➤ **Expanding horizons: New markets and services**

ESL's growth trajectory is not confined to India. In 2024, the company ventured into markets like Jakarta, Indonesia, and crossed the Suez Canal for the first time, to serve the growing Turkish market, further diversifying its portfolio.

Apart from that, ESL launched new flagship services – Cosmos (CMX) and Sirius (SMX) – expanding coverage in their 'Far East-Middle East Universe'.

Dsouza highlighted the role of organic growth driven by the deployment of larger vessels in achieving these ambitious targets. ESL's continual enhancement of existing services, as well as introduction of new services underscores the liner's commitment

"India contributes about 200,000 TEUs to our throughput. There is a lot of cargo moving out of India, and we see 98 per cent of the market still untapped. The potential is enormous."



ALLWYN DSOUZA
MANAGING DIRECTOR
EMIRATES SHIPPING AGENCIES INDIA

to being a carrier of choice in their markets, new and old.

➤ **Navigating challenges and embracing opportunities**


An active player in the market, ESL is no stranger to the industry's challenges. Nevertheless, the company's focus on reliability, efficiency, and precision has enabled it to adapt effectively amid the ever-changing global trade landscape. "Our focus on driving trade growth while delivering personalised customer service guides us in everything we do, from operations to customer service," Dsouza emphasized.

In India, the company is particularly attuned to the diverse needs of exporters and importers. By prioritising service quality and leveraging advanced technology, ESL simplifies shipping complexities for its customers by prioritising seamless cargo movement. The company's strategic collaborations with other shipping lines and stakeholders further enhance its operational efficiency.

➤ **Looking ahead: A bright future**

With a clear vision and a strong foundation, ESL is poised for sustained growth. For India, ESL plans to introduce more services and explore untapped opportunities on both coasts.

"India is a growing market with immense possibilities. By optimising our services and expanding our reach, we aim to capture a larger share of the market," Dsouza stated. This commitment to innovation and customer-centricity underscores ESL's role as a trusted partner in the maritime industry.

ESL's journey from a niche boutique carrier to a global-local liner is a testament to its resilience and strategic vision. Under the leadership of Till Ole Barrelet, ESL continues to navigate the complexities of the shipping industry with precision and reliability. For customers, stakeholders, and industry observers, ESL's story offers valuable insights into the evolving dynamics of global trade and maritime logistics. With its eyes set firmly on the future, ESL is charting a course for sustained success in the years to come. 

ESL revamps Southeast Asia service

ESL announced the launch of the Southeast Asia Gulf India (SGI) service, revamped from the previous VGI service. The new butterfly service provides direct connectivity between Southeast Asia, India, and the Middle East. The first loop of the butterfly service covers Laem Chabang – Singapore – Port Klang – Nhava Sheva – Jebel Ali – Dammam – Nhava Sheva – Port Klang. The second rotation covers Port Klang – Cai Mep – Jakarta – Port Klang – Mundra – Jebel Ali – Dammam – Mundra – Port Klang – Laem Chabang.

The maiden voyages departed from Laem Chabang and from Cai Mep. Coverage within Southeast Asia and the India has increased with the addition of Singapore, Jakarta and Mundra to the service rotation. Most notably, the call at Jakarta marks ESL's expansion into the Indonesian market. The country presents immense potential, with a positive macroeconomic outlook, and a strong domestic market.



From L to R: **Manab Majumdar**, Senior Adviser, FICCI, **Jagannarayan Padmanabhan**, Sr. Director, CRISIL Limited, **Nabil Taouati**, Dutch Consul General in India, **Shyam Jagannathan**, Director General of Shipping, **Sarbananda Sonowal**, Union Minister of Ports, Shipping, and Waterways, **T K Ramachandran**, Secretary, MoPSW, **Subba Rao**, President, Indian National Shipowners' Association, **Neeraj Singh**, Assistant Secretary General, FICCI.

Maritime India Conference & Expo 2025: Expanding horizons, enhancing sustainability & connectivity

The 3rd International Maritime India Conference & Expo 2025 was held at Bombay Exhibition Centre, Goregaon East, Mumbai between 22 and 24 January 2025. The event with central agenda focusing on the transformation of ports through smart technologies and sustainable practices, complemented by initiatives to accelerate the maritime sector's decarbonisation, was attended by more than 4,000 delegates.

The 3-day event was inaugurated by Sarbananda Sonowal, Union Minister of Ports, Shipping, and Waterways (MoPSW), Government of India. It was organised by the Federation of Indian Chambers of Commerce & Industry (FICCI) in association with Indian Ports association (IPA). Along with Union Minister for Ports, Shipping

& Waterways T K Ramachandran, Secretary, MoPSW. Shyam Jagannathan, Director General of Directorate of Shipping (DG-Shipping) and Nabil Taouati, Dutch Consul General attended the inaugural session.

In his key note address Sarbananda Sonowal said that India is expanding its port capacity more than six-fold to reach 10,000 million tonnes per annum by 2047, marking the country's largest-ever maritime infrastructure drive as it positions itself as a global shipping hub. The minister said that major ports are already handling 820 MMT of cargo annually, representing a 47 per cent increase since 2014, while overall port capacity has doubled to 1,630 MMT during the same period. He opined that India's maritime sector has become a

cornerstone of the country's economic resurgence. T K Ramachandran discussed multiple issues, opportunities and initiatives in India.

During the event FICCI-CRISIL Knowledge Report titled, "Forging New Horizons: The Growth of India's Shipbuilding and Repair Industry" was released.

The event saw participation from more than 100 exhibitors representing major organisations including J M Baxi, DP World, JSW Infrastructure, Essar Ports, Deendayal Port Authority, Andhra Pradesh Maritime Board, Maharashtra Maritime Board, New Mangalore Port Authority, Jawaharlal Nehru Port Authority, Cochin Shipyard, Indian Oil, and Bharat Petroleum.

It was slightly disappointing to see that the exhibition fell short of expectations, primarily due to poor organization and low attendance and last-minute disruptions. Despite the promising agenda and industry relevance, the event struggled to attract a substantial number of participants. One of the major setbacks was the sudden change in schedules caused by the unexpected schedule of the Union Home Minister at the venue next to the exhibition.

During the inaugural session Shipping Secretary announced that the Ministry will be organizing a Global Maritime Summit in October 2025 on a bigger scale. 

SMART PORT 5.0 DIGITALIZATION



- » HMI-Proximity Warning and Alert System
- » Remote Crane Management System, RCMS
- » Traffic and Parking Management
- » Fuel Management System
- » Locationing Solution
- » Object identification and counting
- » Crowd Management,
- » IT Infrastructure and Data Centre
- » Design and Implementation
- » Assets and Inventory Management
- » Bespoke Solutions
- » Mobility Solution
- » Video Surveillance & Entrance Management
- » Visitor Management System
- » AI & IoT Platform
- » Smart Ports 5.0 System
- » Terminal Automation System
- » Digital Twin
- » Gate Operating System
- » Truck OCR
- » Rail OCR,
- » Crane OCR
- » WMS
- » YMS
- » Unmanned Weighbridges



Contact Us

91-22-40309800

info@surajinformatics.com
www.surajinformatics.com

facebook.com/surajinformatics
twitter.com/surajinfo001

E 203, Tower No 7 CBD Belapur,
Navi Mumbai 400614.

Same Route, Different Price

Are you paying smart or paying twice?

Check real time market rates across global trade routes.

