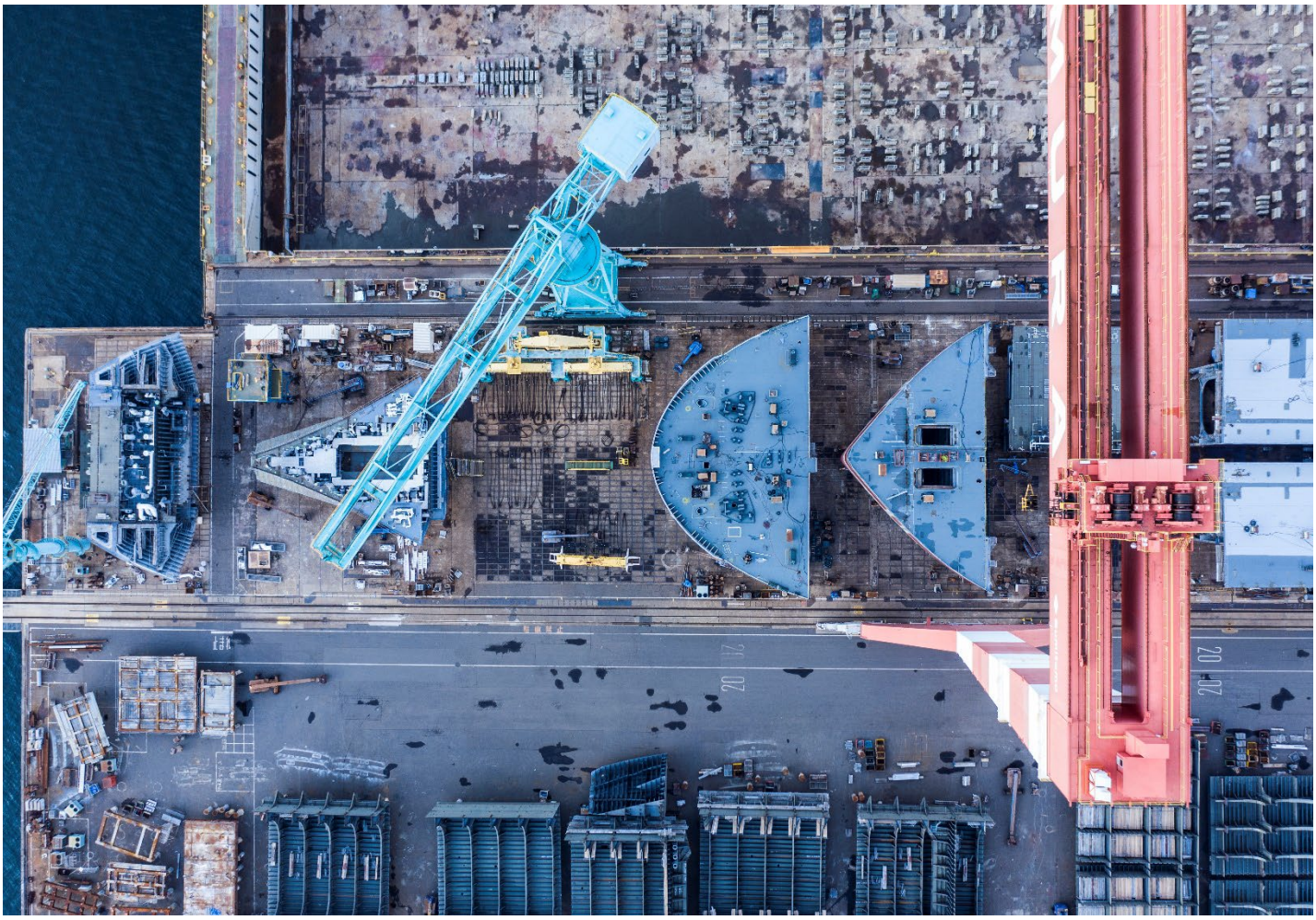
FICCI

Crisil
Intelligence

Forging New Horizons

The Growth of India's Shipbuilding and Repair Industry



by S&P Global

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सर्बानंद सोणोवाल
SARBANANDA SONOWAL

सत्यमेव जयते

पत्तन, पोत परिवहन और जलमार्ग मंत्री
भारत सरकार
Minister of Ports, Shipping and Waterways
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FOREWORD

As India ascends the global stage, its maritime sector emerges as a cornerstone for commerce, connectivity and international cooperation. The sector is undergoing a transformative phase, propelled by forward-looking initiatives and strategic policy interventions. Flagship programs like Sagarmala and Maritime India Vision 2030 are driving unprecedented advancements in port infrastructure, connectivity, and logistics efficiency. With long-term goals under Amritkal Vision 2047 and sustainability-focused initiatives like the Green Tug Transition, the government is modernizing facilities, adopting cutting-edge technologies, and promoting green shipping. These efforts are positioning India as a global maritime leader, fostering economic growth and enhancing international connectivity.

The shipbuilding and repair industries are pivotal in this transformation, with the potential to act as catalysts for growth across ancillary sectors such as steel, engineering, and infrastructure. India's ship repair sector, though nascent, holds immense promise to capture a significant share of the global market with the right fiscal and regulatory support. Simultaneously, the growing emphasis on green technologies and sustainable practices creates unprecedented opportunities for India to emerge as a global hub for green shipbuilding and repair by 2047.

I congratulate **FICCI** and **CRISIL** for preparing a White Paper **" Forging New Horizons: *The Growth of India's Shipbuilding and Repair Industry*".** This comprehensive paper provides an in-depth overview of the sector, explores strategies to unlock its growth potential, and outlines a visionary blueprint for the future. It underscores the critical role of shipbuilding and repair in advancing India's economic ambitions and strengthening its strategic maritime capabilities. It also highlights how India can leverage its strategic location and increasing demand for sustainable solutions to emerge as a global hub for green shipbuilding and repair by 2047.

The **FICCI Maritime Conference & Expo 2025** is being held at an opportune time to facilitate in-depth discussions on key aspects of Maritime governance. I am sure, the deliberations and exchange of views during the conference would propel India's Maritime sector in achieving a global presence across maritime landscape.

I wish the event all the success.

(Sarbananda Sonowal)

Place: New Delhi
Date: 15th January, 2025

SAGARMALA

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Foreword by FICCI



Mr Dhruv Kotak

Chairman – Ports & Shipping, FICCI Committee on Transport Infrastructure and
Managing Director, JM Baxi Group

I am pleased to share with you the **FICCI-Crisil** report on ***'The growth of India's shipbuilding and ship repair industry'*** to be released at the **3rd Edition of the Maritime India Conference & Expo (MICE 2025)** organised by Federation of Indian Chambers of Commerce and Industry.

India's maritime sector plays a pivotal role in driving the nation's economic growth, handling over 90% of trade by volume and serving as a vital link to the markets. Within this ecosystem, the shipbuilding industry stands as a cornerstone, contributing significantly to technological advancement, employment generation, and national security. India with its strategic maritime advantage, a rich shipbuilding heritage, and an extensive coastline is well-positioned to become a global leader in ship manufacturing. Government initiatives like the "Make in India" and financial support through the Shipbuilding Financial Assistance Policy are fostering investments, strengthening domestic capabilities, and enabling Indian shipyards to produce world-class vessels, including cargo carriers and specialized ships for defence and offshore applications.

India's vision for the shipbuilding industry also emphasizes sustainability and innovation. The sector is focusing on adopting cutting-edge technologies such as automation, digital twin systems, and eco-friendly propulsion solutions to enhance operational efficiency and minimize environmental impact. Efforts toward green shipbuilding, including the use of low-emission materials and renewable energy sources, align the industry with global sustainability goals. By modernizing shipyards, developing state-of-the-art infrastructure, and encouraging research and development, India aims to lead the global shipbuilding industry, contributing to both economic and environmental progress.

The FICCI-Crisil Knowledge Report provides a comprehensive analysis of India's shipbuilding sector, highlighting its economic contributions, global positioning, and potential for green shipbuilding. It underscores the importance of technological advancements, a skilled workforce, and robust government support, including measures aligned with the National Action Plan for Green Shipping. The report also benchmarks India with global leaders like China, South Korea, and Japan, while addressing challenges such as high infrastructure costs. Case studies on Korea's LNG and LPG carriers and India's ship repair industry provide valuable insights into best practices and strategies for enhancing India's competitiveness

I hope you will find this report useful. We welcome your suggestions and feedback.

Foreword by Crisil



Mr Jagannarayan Padmanabhan

Senior Director and Global Head
Transport, Logistics & Mobility

As India sharpens focus on manufacturing as part of efforts to become the world's third-largest economy, shipbuilding and repair attains a critical, strategically significant position. While discussions tend to centre on port logistics and efficiency, it is equally important to recognise the critical role ships play in trade and logistics.

In the last few decades, the global shipbuilding industry has shifted from Europe to East Asia. East Asian nations dominate the sector due to their advanced infrastructure, high productivity and government support. These nations have solidified their leadership by making a complete ecosystem for shipbuilding – capacity, technology, research and development and financial and regulatory backing.

In India, however, the shipbuilding industry is evolving. There are challenges such as low demand from the commercial shipping sector, limited access to low-interest capital, outdated manufacturing technologies and shortage of skilled labour. But the Government and industry is focussed to change the course.

To realise its goal of becoming a developed nation by 2047, with a $30 trillion economy, India needs a substantial increase in maritime trade. Yet, the country also needs to replace over 70% of its fleet due to global green initiatives and the fact that many of its ships are aged more than the prescribed norms.

Thus, there is a pressing need for more ships to be manufactured.

That said, the shipbuilding industry is known for its long gestation timelines, high capital cost, and need for continuous technological advancements. Issues such as ownership, leasing and flagging need to be addressed to stimulate demand for shipbuilding. Capital remains a significant concern, too, particularly due to the absence of a development fund. The challenges are complex and require a multifaceted approach.

This report examines the current state and prospects of India's shipbuilding and repair industry in the context of global trends, green shipping initiatives, market dynamics, government initiatives and industry efforts. Green initiatives are a significant step toward making India a global leader, powered by increased usage of renewable energy, reduction in carbon emissions and adherence to sustainable practices. The report also highlights the importance of collaborations and partnerships in achieving India's goals.

We believe this report will provide valuable insights for policymakers, port authorities and stakeholders and help spur investments and development of the sector so it can meet the demands in a rapidly evolving global milieu.

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The industry as it stands today

Shipbuilding involves engineering and fabrication of ships at specialised facilities known as shipyards. This process includes the conceptual design, structural assembly and installation of propulsion and navigation systems, and safety equipment.

Ship repair, on its part involves maintenance, repair, overhaul and modification of ships to ensure their operational efficiency and compliance with safety regulations.

Over the past few decades, the global shipbuilding industry has shifted from European countries to Asia, primarily South Korea, Japan and China, on the back of lower labour costs. Besides the labour cost advantage, immense government support has helped the Asian countries establish their dominance in the industry.

India is a nascent player in this industry. While it has emerged as an important supplier, the country accounts for less than 2% of the global share today. In the next few decades, however, India is set to emerge as a key player in both shipbuilding and ship repair, powered by cost-competitiveness, availability of skilled manpower, locational advantage and government support.[1]



[1] *Source: Clarksons Research*

India in the global shipbuilding market

In 2024, shipbuilding demand surged, with the industry clocking its largest order intake in 17 years. Shipbuilding contracts totalling $204 billion were placed during the year in various vessel categories, including container ships, gas carriers, cruise ships, bulkers and small vessels.

Three Asian nations build the world's ships

China built more than half of all the world's merchant ships by gross tonnage (GT)[2] in 2023. At 36 million GT, it accounted for 150 of the world's largest container ships. South Korea (18 million GT) and Japan (10 million GT) were the other major players. China trailed Japan and South Korea as recently as 2007 but had leapfrogged ahead of both by 2010.

Together, these three countries account for the bulk of the industry, followed by European countries.

The Asia-Pacific was the largest region in the global shipbuilding market in 2024, followed by Western Europe.

How the leading shipbuilding countries stack up

	 China	 South Korea	 Japan
	• Unmatched in scale and capacity. • Approximately 53% of the global market share. • Industry leader: China State Shipbuilding Corporation, a massive state-owned enterprise. • Largest number of shipyards in the world.	• Excellence in engineering and technology. • Approximately 28% market share • Industry leader: Hyundai Heavy industries in Ulsan, South Korea, the world's largest shipbuilder. • High-value, complex vessels.	• Pioneer in eco-friendly shipbuilding. • Approximate market share of 12%. • Industry leader: Mitsubishi Heavy Industries (Japan), with a diverse portfolio including LNG carriers. • Energy-efficient ship designs.

				Total
Share in 2024	53%	28%	12%	93%
Annual growth in shipbuilding capacity (FY24)	18%	22%	-3%	

Source: Clarksons Research

[2] *Gross tonnage measures the internal volume of a ship and is not related to the ship's weight, but rather its overall size and capacity. A very large container ship with a capacity of around 20,250 TEUs (twenty-foot equivalent units) would be of 220,000 GT. (as per data sourced from UN Trade and Development (UNCTAD) and excluding military vessels, yachts, fishing vessels, offshore platforms and barges).*

Asia-Pacific leads the industry[3]

Asia-Pacific	The Asia-Pacific shipbuilding market is expected to clock a compound annual growth rate (CAGR) during 4.93% from 2025-33. East Asia dominates the industry, producing a sizable share of all ships built. The shipyards in China, South Korea and Japan are known for their size, competitiveness, and capacity to produce a wide variety of ships. Shipbuilding yards in Asia are fully booked till 2028, while demand for green maritime assets is surging ahead of the phase-based elimination of greenhouse gas emissions by 2050. Asia-Pacific is expected to maintain its dominance in the global market, owing to distinct advantages, such as cheaper wages, strong government backing in the form of subsidies and promotion of ancillary industries. China holds a significant share of the global market in terms of delivery orders and order books. China is retiring older, single-mission warships in favour of larger, multi-mission ships outfitted with cutting-edge anti-ship, and anti-submarine capabilities, anti-air, sensors, and command-and-control networks as part of its military modernisation plans. These factors are anticipated to drive growth in the shipbuilding market over the next 8-10 years. Chinese shipbuilders have a leading position in bulk carriers, oil tankers, and container ships. Moreover, the country's shipbuilding industry is highly modernised and geographically expanded. More than 60% of South Korean orders are for ships with dual fuel engines. Such ships can run on liquefied natural gas (LNG) or traditional liquid marine fuels, such as light fuel oil (LFO) and heavy fuel oil (HFO), or liquid biofuel. Utilising LNG can significantly lower emissions of CO_2, NO_x, SO_x and particulate matter.
Europe	In Europe, the shipbuilding market is projected to grow at a 4.8% CAGR during 2025-2033, as global competition threatens revenue prospects. Approximately 75% of European trade occurs via cargo ships, built increasingly in Asia. However, the bulk of European shipbuilding revenue comes from the manufacture passenger ships/cruise ships, catering to millions of passengers using the Baltic, Channel and Mediterranean ferries every year. Germany dominates the European shipbuilding market and is expected to continue to do so. The German government places a significant emphasis on international trade and around 2,800 businesses are engaged in the shipbuilding and ocean sectors. Nine shipyards assist the German naval shipbuilding industry. Europe is currently witnessing high demand for autonomous cruises and ships. Apart from Germany, Italy, Russia and France are leading shipbuilding countries in the European region and among the major consumers of marine electronic equipment.
North America	The North American shipbuilding market is projected to grow at a steady growth rate of 2-3% CAGR during 2025-33. The growth is driven by investments in naval vessel construction, rising demand for commercial cargo vessels, and increasing activity in offshore oil and gas exploration. The shipbuilding industry in the region primarily focuses on the construction of naval and commercial vessels. Increasing global conflicts and rising tensions are driving up defence budgets, directly benefiting the shipbuilding industry. Also, shipyards are adopting digital twin technology and automation to enhance efficiency. Sustainability initiatives such as use of LNG-powered ships and hybrid propulsion systems is gaining traction. The shipbuilding market is set to thrive over the next decade, driven by technological advancements, a robust defence sector and growing commercial opportunities. The focus will likely shift to eco-friendly vessels and digital shipbuilding practices. In the US, the government is currently the domestic shipbuilding industry's largest client. Canada, driven by its National Shipbuilding Strategy, is witnessing growth in shipbuilding activities, while Mexico is emerging as a hub for small and medium vessel construction.

[3]*Source: Straits Research report on Shipbuilding, market size, statistics and demand forecast 2023-24*

Incentives and subsidies have powered the leaders

	China	South Korea	Japan	EU
Type of subsidy	Tax concessions/ soft loans/ debt restructuring/ ship financing	Advance payment guarantees/ debt restructuring/ special tax concession/ soft loans	Special tax concessions/ soft loans	Cash subsidy

Source: Straits Research

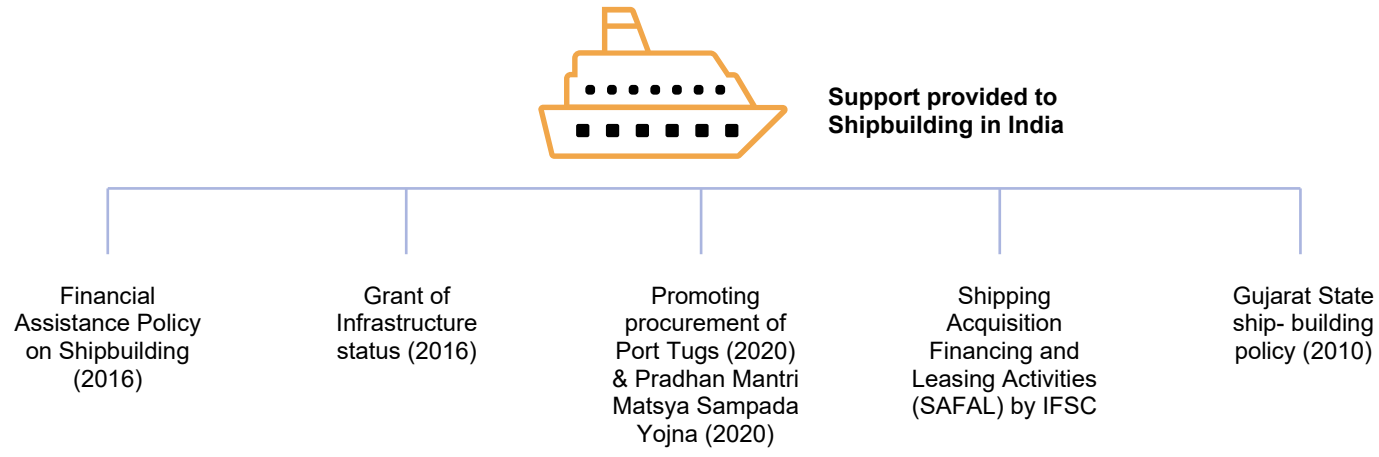
The industry has ample headroom for growth

India accounts for about 2% of the world's total tonnage but spends substantial sums annually on leasing ships from outside. In terms of carrying capacity of ships, India's share in ship ownership is 1.2%, compared with 17.8% of Greece, 12.8% of China and 10.8% of Japan[4].

Additionally, only 0.77% of ships across the world are registered under the Indian flag. Liberia, Panama, Marshall Islands, Hong Kong, and Singapore are the top five flags of registration as they offer significant financial advantages, such as tax exemptions or lower tax rates for shipping companies.

As a result, about 95% of India's international cargo is transported on foreign ships, which resulted in significant forex outflow of $75 billion on sea freight charges paid to foreign companies alone in fiscal 2023. This figure is expected to exceed $100 billion soon.

The government is trying to grow India's shipbuilding industry, with the Ministry of Ports keen to ensure that global demand for shipbuilding is adequately targeted by Indian shipyards. The Government of India came up with Shipbuilding Financial Assistance Policy (SBFAP) in 2016 which aims to provide Indian shipyards level playing field vs foreign shipyards for domestic and international shipbuilding orders. Around 313 vessel orders covering domestic and export orders have been taken by 39 shipyards since the starting of the scheme, with a total value of approx. Rs. 10,500 crore. They have received financial assistance of Rs. 337 crore under the scheme. The present policy is applicable till 2026.[5]



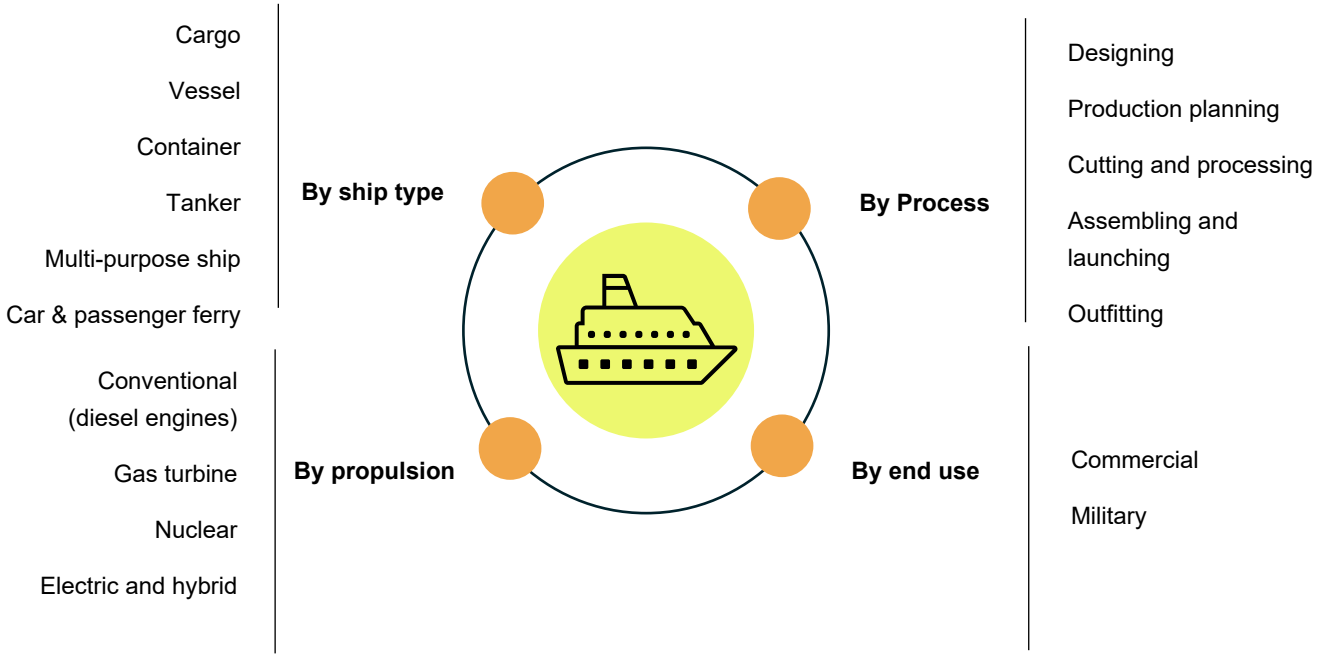
[4] *Source: Hellenic Shipping publication*
[5] *Source: Directorate of Shipping, GOI; Press Information Bureau, Industry reports, Crisil analysis*

Factors driving growth of India's shipbuilding industry

Key global factors driving growth in India's shipbuilding sector include trade price volatility, increasing global trade, the Asia-Pacific region's dominance in the market, India's strategic location, labour cost advantages, environmental pressures, shifting energy mix, ageing assets, increased demand for various category ships (cruise ships, oil tanks, container ships) and a rise in digital and cyber risks. In addition to these, government support can really boost the growth potential in the years to come.

The Indian shipyards also need to take cognizance of the transformational changes in technology and industry trends which are driving the shipbuilding market into a new era such as artificial intelligence, machine learning, and the Internet of Things to optimise their operations, reduce costs and improve efficiency.

Market segmentation



Indian shipyards short on multiple counts

S. No.	Parameters	Indian shipyards	Shipyards in leading countries
1	Layout	Process-oriented	Product-oriented
2	Variety vs volume	High variety, low volume	Few varieties, large volume
3	Production volume	Small	Large
4	Capacity of facilities	Insufficient for demand	Expands as demanded
5	Design and engineering	Outsourced and late start	Early start and in-house

S. No.	Parameters	Indian shipyards	Shipyards in leading countries
6	Scheduling & monitoring	Manual and thumb rule	Exact algorithm and heuristics
7	Automation level	Minimal	High
8	Pre-outfitting	Minimal	80% +
9	Inventory policy	Large and project-based	Just in time
10	Vendor integration	Low	Very high
11	Skilled workforce	Insufficient	Sufficient
12	Outsourcing manufacture	Simple Blocks	Complex blocks

Shipbuilding is a complex, multi-layered industry that operates within an extensive ecosystem comprising design, planning, procurement, construction, fabrication, outfitting, commissioning, delivery, and maintenance. For India's shipbuilding industry to flourish, it is crucial to thoughtfully plan and develop the entire ecosystem ensuring seamless growth and integration.



Momentum building for India's ship repair industry

The global ship repair market is approximately worth $12 billion. However, India's ship repair industry holds immense potential with significant room for growth as it currently accounts for less than 1% of the global market. The sector is expected to reach a market value $40 billion by 2030 supported by developments in the markets in Southeast Asia and India.

Only 725 ships were repaired in private shipyards and 448 in state-owned/PSU shipyards, between 2019-20 and 2021-22. During 2022-24, very limited ship repair activity has taken place in the dry docks at major ports such as Mumbai, Vishakhapatnam, Paradip, and Deendayal Port.[6]

The factors contributing to the growth of the ship repair industry in leading countries are the availability of skilled workforce and the use of latest technology, which allows these shipyards to attract demand from other low-cost locations like Malaysia and Indonesia.

Currently, repair cost in India is on average 1.4 times of that in Dubai or Southeast Asian countries, primarily because of higher procurement costs and limited efficiency in working processes. Also, turnaround time for repairs in Indian yards on average is 1.4 to 1.6 times of that in global repair yards.

Besides, the Indian ship repair market faces constraints, including competition from international yards on key trade routes and limited capabilities for certain vessel types. Additionally, factors like high financing cost, limited availability of ship spares and technology gaps contribute to longer repair timelines.

However, these challenges also highlight areas where targeted investments and advancements could significantly boost the India's ship repair industry's competitiveness.

Unlocking India's full potential: The need for strategic measures

The ship repair industry needs key interventions such as channelling domestic demand for shipbuilding and repairs, leveraging provisions for public-private partnerships under Atmanirbhar Bharat, adhering to Right of First Refusal (RoFR) rules (2016), and developing ship repair clusters.

Increasing ship repair yard capacity through clusters, simplifying free trade depot norms and establishing floating drydocks are also crucial steps.

For contracts exceeding Rs. 200 crore, strict adherence to existing RoFR rules is necessary, ensuring Indian shipyards receive priority for vessel repair, upgrades and conversions. This should cover all types of vessels, including rigs, specialised ships, and offshore marine units. Declaring ship repair clusters or parts of them as free trade zones would help reduce import and operational costs, thereby enhancing international competitiveness.

Additional measures include lowering goods and services tax (GST) on spare parts and machinery for repairs, promoting participation from ancillary industries, and providing slab-based customs exemptions for original equipment manufacturers (OEMs) stocking spares in India. Dedicated warehouses within free trade zones are needed to manage OEM inventory efficiently. The industry also requires adoption of digital technologies, robotics and automation.[7]

[6] *Source: PIB*
[7] *Source: Maritime India Vision 2030, Press Information Bureau (PIB), Industry Reports, Crisil analysis*

India’s green shipping future

Overview



The maritime sector emits 940 million tonne of CO_2 and contributes **2.5%** of all greenhouse gas emissions, according to the European Commission.

All ships must switch to an alternative fuel oil that emits less than **0.5%** sulphur into the atmosphere from January 1, 2020.

This can result in a **77%** decrease in the ships’ SOx emissions, lowering air pollution.

Green shipping initiatives[8]

India plans to become a global green shipbuilding hub by 2030 and aims to reduce emissions and move towards sustainable development. The government plans to do so through the following initiatives:

National Centre of Excellence in Green Port & Shipping

The centre is key to managing and protecting marine and coastal ecosystems from pollution, along with the conservation and sustainable use of ocean-based resources, in line with the United Nations (UN) Sustainable Development Goal 14. The centre will develop the regulatory framework and a roadmap for alternative technology adoption for green shipping in India, meeting the obligations under the Paris Agreement. The National Centre of Excellence in Green Port & Shipping will act as the technological arm of the Ministry of Ports, Shipping and Waterways to provide the support needed on policy, research and cooperation on green shipping.

The Green Tug Transition Programme: The programme will start with 'green hybrid tugs' powered by green hybrid propulsion systems and subsequently adopting non-fossil fuel solutions such as methanol, ammonia, and hydrogen. The target is to have the initial green tugs working in all major ports by 2025, and 50% of all tugs converted into green tugs by 2030.

PM Gati Shakti: The development of green logistics supply chains in the country has been propelled by the PM Gati Shakti - National Master Plan for Multi-Modal Connectivity and the Green Ports initiative. As per the targets in MIV 2030, the ports aim to reduce carbon emissions per tonne of cargo handled by 30% by 2030.

The GreenVoyage2050 project: India has been recognised as the pioneer lead country for the International Maritime Organization (IMO) GreenVoyage2050, a significant stride toward mitigating greenhouse gas (GHG) emissions from ships. This is a partnership project between the government of Norway and the IMO launched in May 2019. It aims to transform the shipping industry to a lower carbon future.

[8] *Source: PIB, MIV 2030, Crisil analysis*

Shift to building 'green ships': Cochin Shipyard Ltd has orders to make naval and coastal ships for European clients including from Germany, Norway, Cyprus and the Netherlands. The company is focused on building green ships and is already fulfilling orders from abroad for hydrogen fuel cells and methanol ships. The move comes in alignment with Government of India's vision to become a net zero emissions nation by 2070 along with a global shift to building 'green ships' and vessels that run on less-polluting fuels such as methanol, electricity, green hydrogen and hybrid batteries.

LNG as an alternative fuel: Using liquefied natural gas (LNG) as a fuel will reduce CO2 emissions by 20%, along with a considerable reduction in SOx and NOx. Green methanol is the forgotten green fuel in case of marine and aviation transportation sectors.

Harit Nauka guidelines: The government has launched the Harit Nauka guidelines which aim to promote the adoption of greener technologies in inland waterway vessels.

Green initiatives at ports

India has been selected as the first country under the IMO's GreenVoyage2050 to conduct a pilot project related to green shipping.	Paradip Port, Deendayal Port, and V.O. Chidambaram Port are to be developed as hydrogen hubs – capable of handling, storing, and generating green hydrogen – by 2030.	Harit Shrey, the port's incentive programme, launched in October 2023, offers discounts on port charges based on Environmental Ship Index (ESI) scores, rewarding ships with higher environmental performance.	Mormugao is India's first port to introduce green ship incentives through the ESI, aligning with global efforts to reduce air emissions in shipping.

Best practices: South Korea's green shipping initiatives[9]

The European Union (EU) has introduced the Carbon Emission Trading System (EU ETS) for ships over 5,000 GT operating in EU ports. Under the EU ETS, companies must buy credits for 70% in 2025, and 100% after 2026. As a result, 137 South Korean-owned ships operating in EU waters will face environmental costs exceeding $500 million from the year 2024 to 2030.

As a result of this, South Korea is embarking on an ambitious project to establish the world's first green shipping route, part of its larger goal to achieve net-zero GHG emissions by 2050. HMM, an integrated logistics and shipping company, is spearheading this initiative, and is currently developing 9,000 twenty-foot equivalent unit (TEU) methanol-fuelled container ships. This green shipping route will connect South Korea's Busan and Ulsan ports with Seattle and Tacoma in the United States.

The Busan New Port Pier 7, a fully automated terminal within Busan port, would be the start and end point of a green shipping route that aims to achieve zero carbon emissions in the entire maritime transportation process by utilising carbon-free fuel and technology. Ports that are on this route will be equipped to with carbon-free fuelled ships. The government of South Korea has decided to develop the Busan-Seattle-Tacoma route as a green corridor for methanol-fuelled container ships, and the Ulsan-Masan-Seattle-Tacoma route for ethanol-fuelled car carriers, as per the preliminary feasibility study.

[9] *Source: Publication by International Maritime Organisation (IMO)*

Challenges and their implications for shipbuilding and repair in India

Issues	Implications
Financial constraint and high interest rates	Shipbuilding requires high working capital which amounts to 35-40% of the cost of the ship during the period the ship is built. This is due to management of inventory of spare parts which are typically imported. In India, interest rates for such loans are 10–10.5% which are far higher as compared to major shipbuilding countries. Planning innovative financing solutions can benefit the sector. Difficulty in securing soft loans, Bank Guarantee assurances, insurance are some of the other related aspects which need attention.
Equipment supplies and lack of ancillary industries	Equipment / spares for shipbuilding are mostly imported right now. Domestic shipyards have to maintain inventories due to uncertainty in spare parts delivery on time. This problem is even more evident in taking ship repair work orders. Development of ancillary industries is critical for the cost competitiveness of the shipbuilding industry. Setting up ancillary clusters in and around key yard clusters would help in attracting key players. Private equity can be used for development of ancillary equipment start-up companies.
Technological gaps and import dependence	Limited technological intervention and outdated production methods hinder global competitiveness of India's shipbuilding sector. Reliance on imports for critical components such as propellers, high-capacity diesel generators and control systems also poses a challenge. Industry-specific production-linked incentive schemes could help bridge this gap.
Limited financing options	Shipbuilders need access to long-term loans at competitive interest rates as the industry is capital intensive. Such access to financing is not readily available. Further, Section 31(d) of the SARFAESI Act excludes the classification of ships as assets that can be mortgaged and used as collateral, which discourages banks from providing loans.
Ships not included under the SARFAESI Act	Ships are not classified as assets for mortgage, making them ineligible for collateral loans.
Ships are not included in the infrastructure list	Ships are not classified as infrastructure due to their exclusion from the harmonised list of infrastructure. As a result, shipbuilders can't access long-term financing from domestic or foreign sources. Non-banking financial companies can raise funds via external commercial borrowings for infrastructure but cannot do that for ships. Even funding from institutions like the National Bank for Financing Infrastructure and Development (NABFID), India Infrastructure Finance Co Ltd (IIFCL), and National Investment and Infrastructure Fund (NIIF) is unavailable. Shipyards received infrastructure status as recently as 2016, but ships were explicitly not included.

Solutions and opportunities: Mechanisms that can support growth

Supportive government policies

The Ship building Financial Assistance Policy (SBFAP) lapses in 2026 and is expected to be replaced by SBFAP 2.0. It will have expanded incentives and aid the development of the sector. The SBFAP guidelines were recently amended to include wind farm installation vessels and construction of sophisticated dredgers as specialised vessels eligible for higher financial assistance.

Add ships to infrastructure list

The harmonised list of infrastructure must evolve to include ships, enabling shipbuilders to access the long-term funding needed for growth, as recommended by the Rangarajan Commission.



Amend the SARFAESI Act

Ships should be eligible for securitisation under the SARFAESI Act to make them mortgageable assets, allowing access to better financing options.

Drive standardisation and improvement

Create a common database of standard vessels basic designs with pre-approval from Indian Register of Shipping to drive standardisation, improve design process and leverage cost economies

Infrastructure creation	Collaboration	R&D
• Setup dedicated shipping SEZ / Shipbuilding clusters with shipyards, ancillary industries, certification and testing centres in vicinity • More and more shipyards for large, medium and small ships are needed in the country	• Standardisation of designs and part in ship industry would benefit as it would lead to minimising range of equipment, parts, interfaces and documentation • Collaborate with Korean and Japanese ship manufacturers for knowledge transfer and investment in mega shipbuilding parks to be developed in coastal states in India • Association with Auto ancillary industry players can be encouraged to manufacture ship-related parts	• Develop strong ship design ecosystem by setting up Centre of Excellence for Ship design; incentivising for "Design in India" • Incentives for breakthrough innovations • Develop common platform for ancillaries to showcase the products available for Indian shipbuilding

Many initiatives are being planned to support financing in shipbuilding. National Bank for Infrastructure Development (DFI) is proposed by the government. The infrastructure status accorded to shipbuilding opens financing opportunities through DFI (access to financing at preferential rates, tax incentives). Maritime Development Fund has also been proposed for financing shipbuilding sector.

Way forward

India can position itself as a leading player in the global shipbuilding industry by leveraging its strategic geographic location, enhancing technological capabilities, and fostering global collaborations.

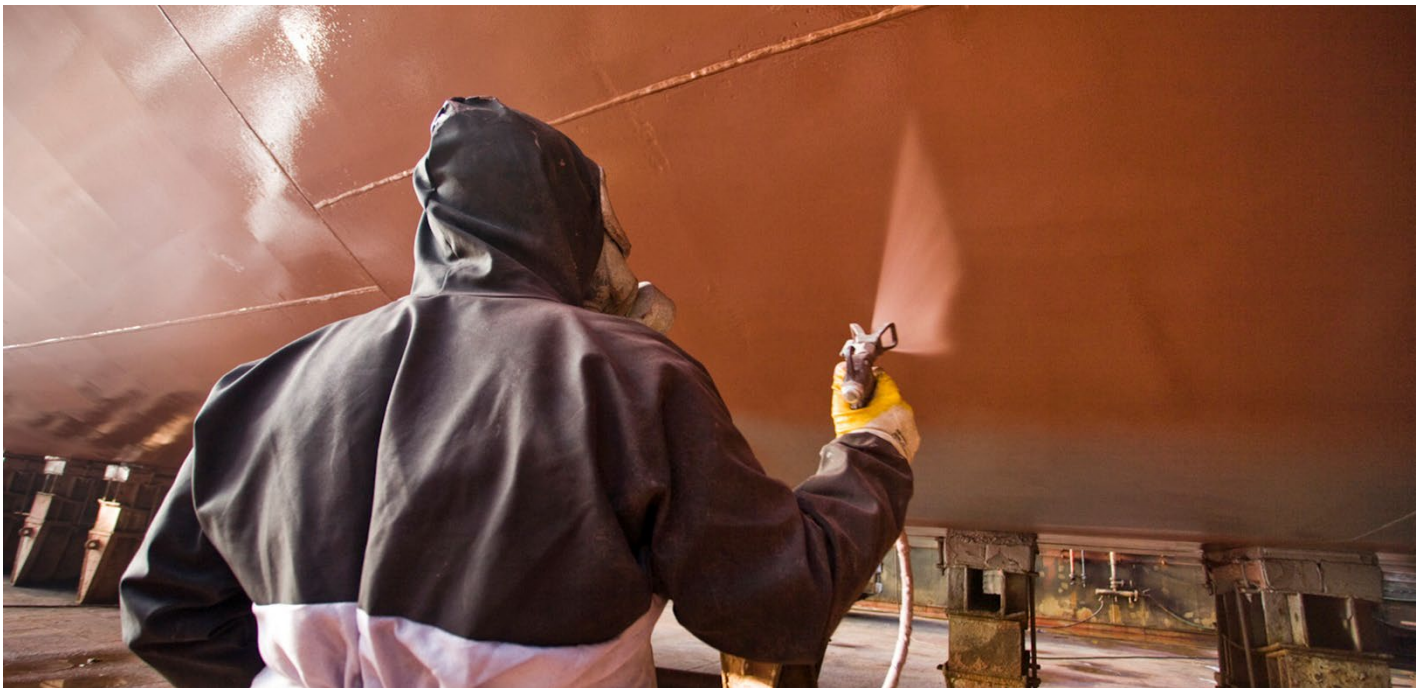
Global best practices show that the top shipbuilding nations have promoted domestic markets through interventions such as cabotage only for domestic flagged vessels, restrictions on imported ships, financing options for new ships and subsidies for scrapping old vessels.

The shipbuilding industry in India is poised to witness significant growth with the support from government and initiatives such as the Maritime India Vision 2030 and a sharper focus on green technologies. Among other measures, India needs to channel domestic demand for Indian shipbuilding by leveraging Atmanirbhar public-private partnership (PPP) provisions and RoFR rules efficiently.

A concerted effort from all stakeholders would be necessary to realise the potential and propel India's shipbuilding and repair industry to new heights.

Shipbuilding ancillaries in India could also form a virtual cluster to leverage the scale and create opportunities for collaboration across ancillaries. They could also leverage GeM platform for building the supplier market intelligence and development of virtual clusters. It is envisioned to onboard over 500 domestic and international marine equipment suppliers on GeM and achieve a target of over 70% by value marine equipment procurement from indigenous sources by 2025[10].

The future of India's shipbuilding and repair industry holds immense promise, driven by the potential to overcome challenges through strategic interventions, innovative solutions, and strong policy support, positioning it for global competitiveness and sustainable growth.



[10] Source: Maritime India Vision 2030

About FICCI

Established in 1927, FICCI is the largest and the oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialisation, and its emergence as one of the most rapidly growing global economies.

A non-government, not-for-profit organisation, FICCI is the voice of India's business and industry. From influencing policy to encouraging debate, engaging with policymakers and civil society, FICCI articulates the views and concerns of industry. The organisation serves its members from the Indian private and public corporate sectors and multinational companies, drawing its strength from diverse regional chambers of commerce and industry across states, reaching out to more than 2,50,000 companies. FICCI provides a platform for networking and consensus building within and across sectors and is the first port of call for Indian industry, policymakers, and the international business community

About Crisil Intelligence (formerly Market Intelligence & Analytics)

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