

# **Global and India Shipping Industry**

**APPL CONTAINERS LIMITED**

September 2025

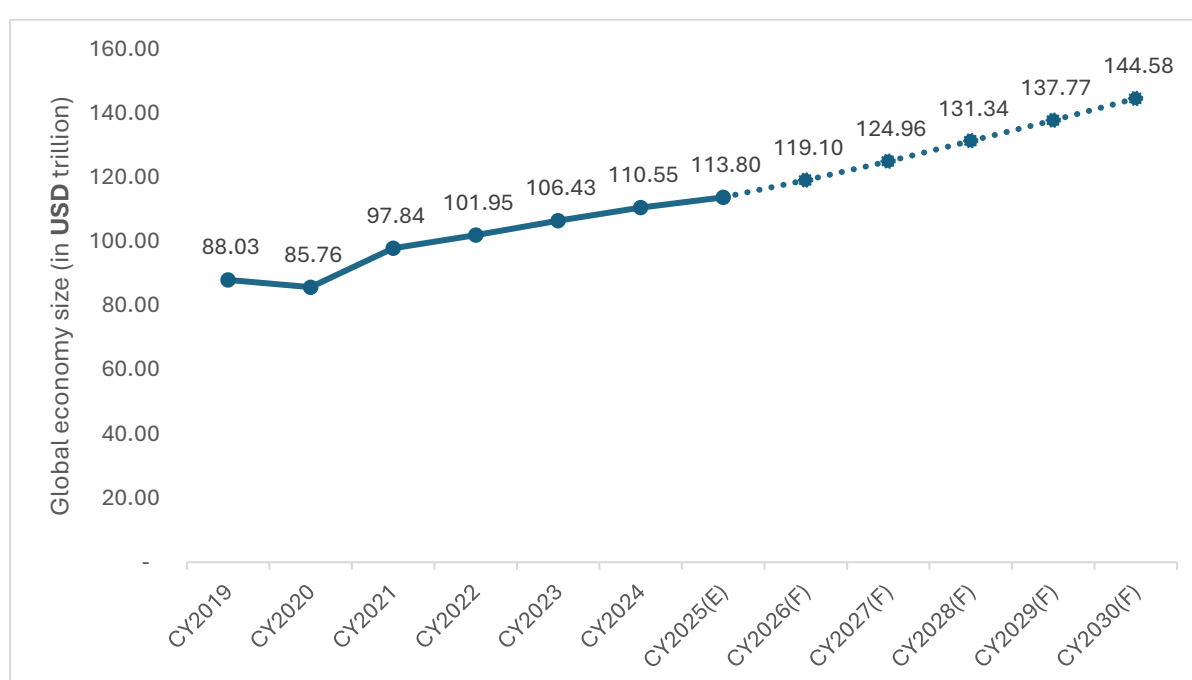
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## 1. Global macroeconomic overview

As per the International Monetary Fund (IMF), the size of global economy is projected to reach USD 113.8 trillion in CY2025 (in nominal terms) and continue to grow to USD 144.6 trillion in CY2030 (in nominal terms) at a CAGR of ~5%. Economic activity at the global level has remained resilient with growth in employment and steady income levels, favourable demand and supply developments, utilization of substantial savings accumulated during the pandemic and healthy household consumption supported major economies to maintain their growth. At present, as the inflation is approaching towards targeted levels of major advance economies, their central banks have begun to pivot towards policy easing.

**Chart 1: Global economy growth and prediction till CY2030 (in USD trillion- nominal terms)**



Source: IMF (WEO April 2025), ICRA Analytics

CY2025 (E)- E is estimated

Note: F- Forecasted; data from CY2026-2030 are forecasted

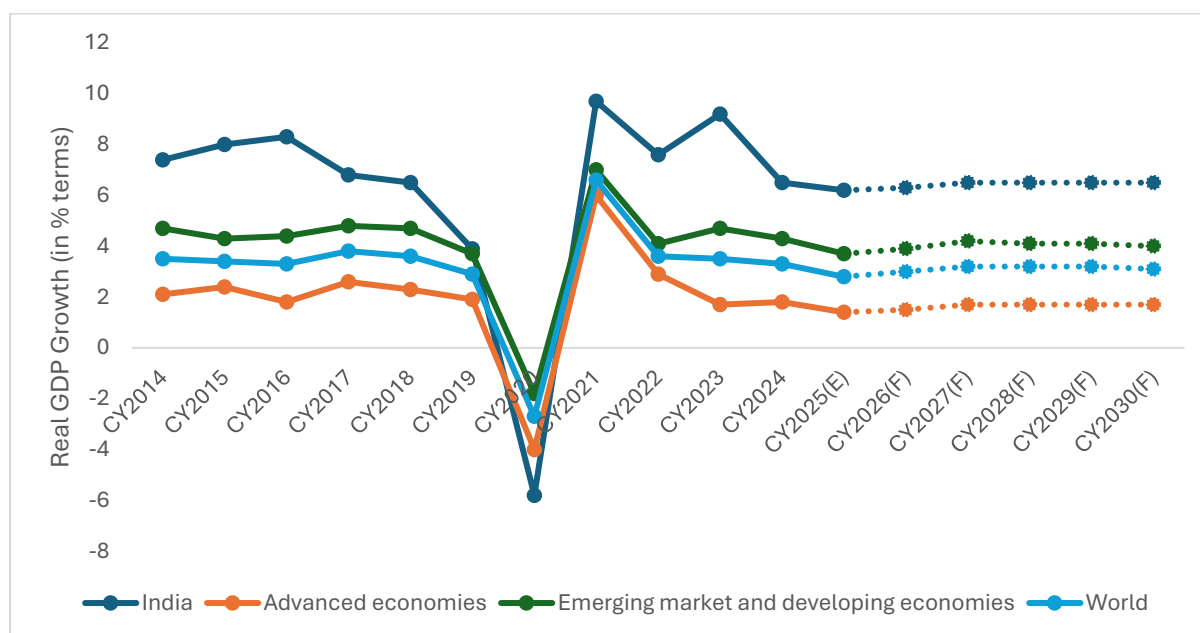
As per the IMF, World Economic Outlook published in April 2025, the Global growth is anticipated to decrease from an estimated 3.3% in CY2024 to 2.8% in CY2025, subsequently rebounding to 3% in CY2026. This figure is below the forecasts presented in World Economic Outlook Update in the January 2025, reflecting a decrease of 0.5% for CY2025 and 0.3% for CY2026, with downward adjustments noted for almost all countries. The reductions are widespread across nations and largely stem from the direct impacts of the recent trade policies, as well as their indirect consequences through trade linkages, increased uncertainty, and declining sentiment. Tariffs' short-term effects on economic growth vary by country, shaped by trade relationships, industry structures, policies, and trade diversification potential. Fiscal support in some cases (for example, China, euro area) offsets some negative growth impacts. This global slowdown has direct implications for the container shipping and container manufacturing industries, as the sector's fortunes are tightly intertwined with global trade volumes. Containerized cargo accounts for a significant portion of seaborne trade, and economic deceleration typically leads to lower

volumes of goods being manufactured, exported, and imported—especially in trade-sensitive sectors like electronics, textiles, machinery, and automotive components. The global inflation rate is predicted to decrease from an annual average of 6.6% in CY2023, 5.7% in CY2024 to 4.3% in CY2025 and further to 3.6% in CY2026. While lower inflation may ease input costs for container manufacturers and shipping companies (e.g., steel, fuel, machinery), the overall sluggishness in demand will impact container traffic across global shipping lanes. For example, trade linkages between Asia and the West are expected to remain soft, affecting container throughput at transshipment and origin ports like Mundra, Nhava Sheva, and Vizhinjam.

Tariff-related disruptions—especially in U.S.–China and EU trade corridors—have caused container flows to shift to alternative routes, reducing predictability and increasing shipping costs due to repositioning. Container manufacturers, too, face reduced capital expenditure from global shipping lines, who are adopting a cautious outlook amid demand uncertainty. However, fiscal support in key regions like the eurozone and China could provide partial demand buffers through export subsidies and infrastructure spending.

## 1.1 Global Economies and Growth Trend:

**Chart 2: Real GDP growth rate (annual % change) of India and other economies**



Source: IMF, ICRA Analytics

Note: E-Estimated, CY2025 is estimated; F-Forecasted; data from CY2026-2030 are forecasted

**Table 1: India v/s Other Economies (Real GDP, Y-o-Y % change)**

Real GDP growth (Annual % change)	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024	CY 2025(E)	CY 2026(F)	CY 2027(F)	CY 2028(F)	CY 2029(F)	CY 2030(F)
India*	6.5	3.9	-5.8	9.7	7.6	9.2	6.5	6.2	6.3	6.5	6.5	6.5	6.5
Advanced economies	2.3	1.9	-4	6	2.9	1.7	1.8	1.4	1.5	1.7	1.7	1.7	1.7
Emerging market and developing economies	4.7	3.7	-1.8	7	4.1	4.7	4.3	3.7	3.9	4.2	4.1	4.1	4.0
World	3.6	2.9	-2.7	6.6	3.6	3.5	3.3	2.8	3.0	3.2	3.2	3.2	3.1

Source: IMF, ICRA Analytics

Note: : E-Estimated, CY2025 is estimated; F- Forecasted; data from CY2026-2030 are forecasted, Advanced Economies includes United States, Germany, France, Japan, United Kingdoms, Canada and other developed countries. Emerging market and developing economies includes India, China, Saudia Arabia, Mexico, Vietnam and other developing economies.

\*India's value in IMF document is given in terms of fiscal year. Eg- CY2018 is FY2019 for India

The global real GDP growth was ~3.3% in CY2024 and is anticipated to decrease to 2.8% in CY2025 and 3% in CY2026. The rapid increase in trade tensions and exceptionally high levels of policy uncertainty is anticipated to considerably affect global economic activity. The growth is projected to remain steady at around ~3.1% from thereon till CY2030, wherein growth would be driven mainly by easing of monetary policy and strong private consumption.

### **Growth trend in Advanced Economies**

Meanwhile, the real GDP growth rate for advanced economies was ~1.8% in CY2024 and is expected at ~1.4% in CY2025. It is further expected to increase to ~1.5% in CY2026, and continue to grow at a stable rate, reaching around 1.7% in CY2030. United States of America's (USA) real GDP was ~2.8% in CY2024 and is expected to decrease at ~1.8% in CY2025 due to increased policy ambiguity, trade conflicts, and weakened demand momentum. It is further expected to decrease to ~1.7% in CY2026, and post that continue to grow at a stable rate, reaching around 2.0% in CY2027 and 2.1% from thereon till CY2030.

The European region recovered from a low GDP growth rate of 0.4% in CY2023 to 0.9% in CY2024 however is expected to grow at a slower pace at 0.8% in CY2025 and further increase to 1.2% in CY2026. Amongst the Euro region- France, Italy and Spain's GDP growth grew at the rate of 1.1%, 0.7% and 3.2% respectively and is expected to grow at ~0.6%, ~0.4% and ~2.5% respectively during CY2025. However, Germany has witnessed a degrowth during CY2024 at -0.2% while the same is expected to remain stable during CY2025.

Among other advanced economies, the United Kingdom witnessed a real GDP growth rate of ~0.4% in CY2023 and increased to ~1.1% in CY2024 and is expected to remain stable at ~1.1% in CY2025.

### **Growth trend in emerging market and developing economies**

Real GDP stood at 4.3% in CY2024 and the growth in real GDP rate is projected to drop to 3.7% in CY2025 and 3.9% in CY2026 with significant downgrades for countries affected most by recent trade measures, such as China. Growth in emerging and developing Asian economies is expected to decline from ~5.3% in CY2024 to ~4.5% by CY2025. Emerging and developing Asia, particularly Association of Southeast Asian Nations (ASEAN) countries, has been among the most affected by the latest tariff changes.

Coming to Sub-Saharan Africa, the GDP grew at a healthy rate of 4% during CY2024 and is projected to grow at a rate of 3.8% during CY2025. Amongst Sub-Saharan African region, South Africa and Nigeria's GDP grew at a rate of 0.6% and 3.4% respectively during CY2024 and is projected to grow at the rate of ~1% and ~3% respectively during CY2025.

On the other hand, growth in emerging and developing European economies was at ~3.4% in CY2024 and projected to decrease to ~2.1% in CY2025. In Latin America and the Caribbean, the real GDP growth rate is expected to decrease from ~2.4% in CY2024 to ~2% in CY2025 before rising again to ~2.4% during in CY2026.

### **Growth trend in India**

India is the fastest growing economy globally, witnessing a rise in real GDP growth rate from ~7.6% in CY2022 to ~9.2% in CY2023 however increased at a comparatively steady rate at 6.5% in CY2024, because pent-up demand accumulated during the pandemic has been exhausted, as the economy reconnects with its potential. The country is projected to grow by ~6.2% in CY2025 and ~6.3% in CY2026 as per IMF, supported by private consumption, particularly in rural areas, but is 0.3% lower on account of higher levels of trade tensions and global uncertainty. This is expected to remain steady with forecasts till CY2030 showing a continued growth of ~6.5%.

## 2. Domestic Economic overview

### 2.1 Trend in GDP growth in India and its Outlook

India's real Gross Domestic Product (GDP) for FY2025 is projected to grow by 6.5%, according to the Second Advance Estimates released by the National Statistical Office (NSO) in February 2025. This represents a slight upward revision from the initial estimate of 6.4% published in January. India's real GDP registered 9.2% growth in FY2024 as against 7.6% in FY2023, making FY2024 the 3<sup>rd</sup> year of real GDP growth of 7% or above. This strong momentum, driven by domestic consumption, public investment, and buoyant capital formation, has created a favourable backdrop for the container shipping and manufacturing industry in India.

While net exports have acted as a mild drag, import resilience and domestic demand have supported container traffic at Indian ports, particularly in sectors such as electronics, consumer durables, chemicals, and industrial machinery. India's port modernization under the Sagarmala and Gati Shakti initiatives, along with policies such as the National Logistics Policy and production-linked incentive schemes, have further enhanced port and hinterland connectivity—thus boosting the container industry's efficiency and capacity utilization.

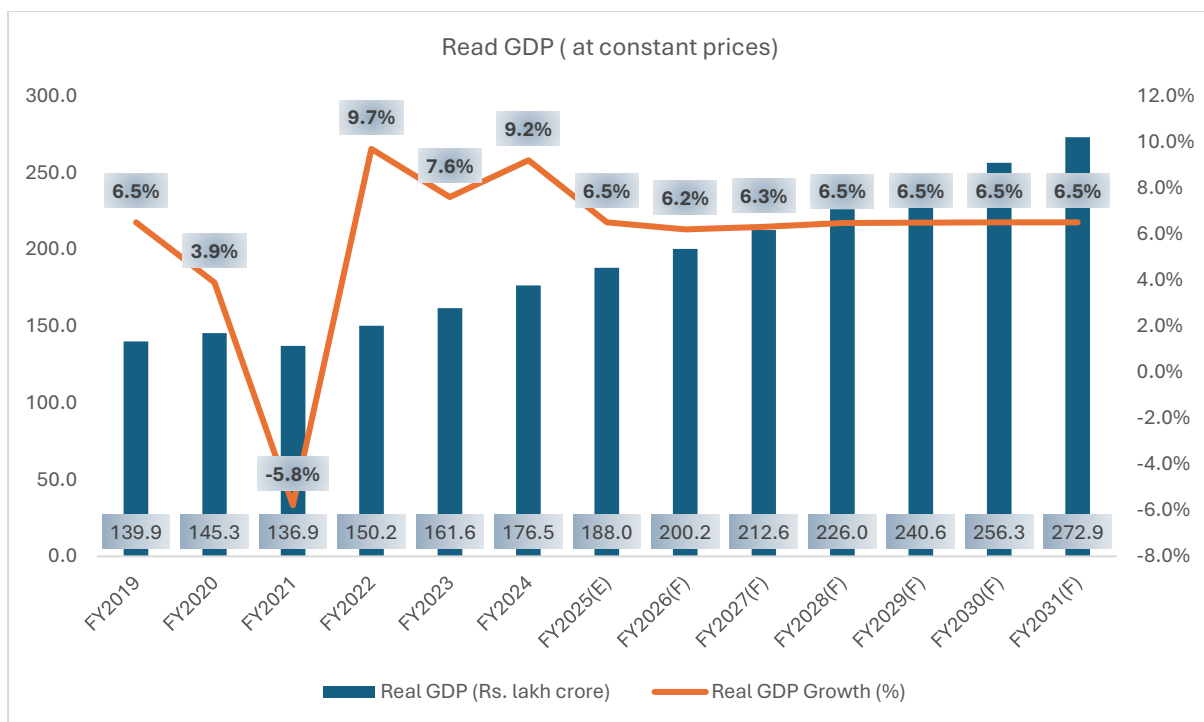
Moreover, India's focus on infrastructure-led growth (roads, ports, logistics parks, DFCs) is spurring higher domestic containerized movement, especially for intra-country supply chains (e.g., FMCG, retail, food processing). India is also emerging as an alternative container manufacturing hub, with increasing attention toward Atmanirbhar Bharat-led policies to localize container production. The trajectory of global container trade is closely correlated with GDP growth patterns—slower global growth leads to a decline in international containerized trade, especially in capital-intensive and discretionary consumption goods. Protectionist policies and weak sentiment reduce order volumes, slow vessel deployment, and dampen demand for new container manufacturing. This also results in overcapacity and pressure on freight rates.

On the other hand, India's relatively strong domestic growth is expected to offset some of the global headwinds, making the country a key demand center for containerized imports and exports. The rise in domestic manufacturing, resilience in consumer demand, and infrastructure upgrades provide a robust base for future container traffic growth.

As India continues to expand its role in global supply chains—particularly through 'China+1' strategies—its container traffic is poised to rise both for export and import flows. However, the pace of growth will still be influenced by external demand conditions, especially from key trading partners in North America, Europe, and ASEAN.

In summary, while India's domestic resilience may support the container industry in the short term, global recovery remains essential for sustained long-term growth in both shipping and container manufacturing sectors. Furthermore, International Monetary Fund (IMF) expects India to continue being the fastest growing economy in the world, whereby it expects India's output to grow by 6.5% from FY2028 to FY2031.

#### **Chart: Projection of Real GDP growth and GDP capita PPP (in USD) of India**



Source: RBI, IMF, ICRA Analytics

Note: F- Forecasted; E- Estimated

Data from FY2026-2031F are forecasted from IMF; \*India's value in IMF document is given in terms of fiscal year. Eg- CY2018 is FY2019 for India

FY2025(E) is the provisional Estimates released by the National Statistical Office (NSO)

The Reserve Bank of India has projected real GDP growth at 6.5% for FY2026 retaining the fastest-growing major economy in the world, maintaining the same rate as estimated for FY2025, following a strong expansion of 9.2% in the preceding year.

Real GDP is estimated to grow by 7.8% in Q1 of FY 2026, compared to the earlier projected growth rate of 6.5% for the same quarter. The estimated quarterly projections for FY2026 stand at 6.7% in Q2, 6.6% in Q3, and 6.3% in Q4. These figures reflect a 20-bps downward revision from the February forecast, attributed to rising global volatility. Agriculture remains on a positive footing, supported by healthy reservoir levels and robust crop production, which is expected to sustain rural demand. Manufacturing is showing early signs of revival amid improved business sentiment, and the services sector continues to demonstrate resilience.

On the investment side, activity is gaining pace on the back of higher capacity utilization, continued government focus on infrastructure, and strong balance sheets of banks and corporates. Easing financial conditions have also aided this recovery. While services exports are likely to remain steady, merchandise exports could face headwinds from global uncertainties and trade disruptions. Looking ahead, the RBI has projected real GDP growth at 6.7% for FY2027, suggesting continued recovery momentum.

**Table: Real GDP growth forecasted by Reserve Bank of India**

Real GDP Growth (at constant 2011-12 prices)	FY2025				FY2025 E	FY2026 F				FY2026 F	FY2027 F
Quarters	Q1	Q2	Q3	Q4	(E)	Q1 (E)	Q2 (F)	Q3 (F)	Q4 (F)	(F)	(F)
GDP at market prices (in %)	6.7	5.6	6.2	7.4	6.5*	7.8*	6.7	6.6	6.3	6.5	6.7

F- Forecasted; E- Estimated

Source: RBI, ICRA Analytics



## 2.2 Gross Value Added growth in India

**Table: Real Growth in Gross Value Added in the past 5 years**

Real GVA Growth (%)	FY 2021	FY 2022	FY 2023	FY 2024 (FRE)	FY 2025 (PE)
<b>Agriculture, Forestry and Fishing</b>	<b>4</b>	<b>4.6</b>	<b>6.3</b>	<b>2.7</b>	<b>4.6</b>
<b>Industry</b>	<b>1.1</b>	<b>9.6</b>	<b>-0.0</b>	<b>11.0</b>	<b>4.5</b>
Mining and Quarrying	-8.2	6.3	3.4	3.2	2.7
Manufacturing	3.1	10.0	-1.7	12.3	4.5
Electricity, Gas, Water Supply and Other Utility Services	-4.2	10.3	10.8	8.6	5.9
<b>Services</b>	<b>-7.9</b>	<b>10.6</b>	<b>10.2</b>	<b>9.2</b>	<b>7.9</b>
Construction	-4.6	19.9	9.1	10.4	9.4
Trade, Hotels, Transport, Communication and Services Related to Broadcasting	-19.9	15.2	12.3	7.5	6.1
Financial, Real Estate and Professional Services	1.9	5.7	10.8	10.3	7.2
Public Administration, Defence and Other Services	-7.6	7.5	6.6	8.8	8.9
<b>GVA at Basic Prices</b>	<b>-4.1</b>	<b>9.4</b>	<b>7.2</b>	<b>8.6</b>	<b>6.4</b>

Source: RBI, ICRA Analytics

FRE-First Revised Estimates

PE- Provisional Estimates

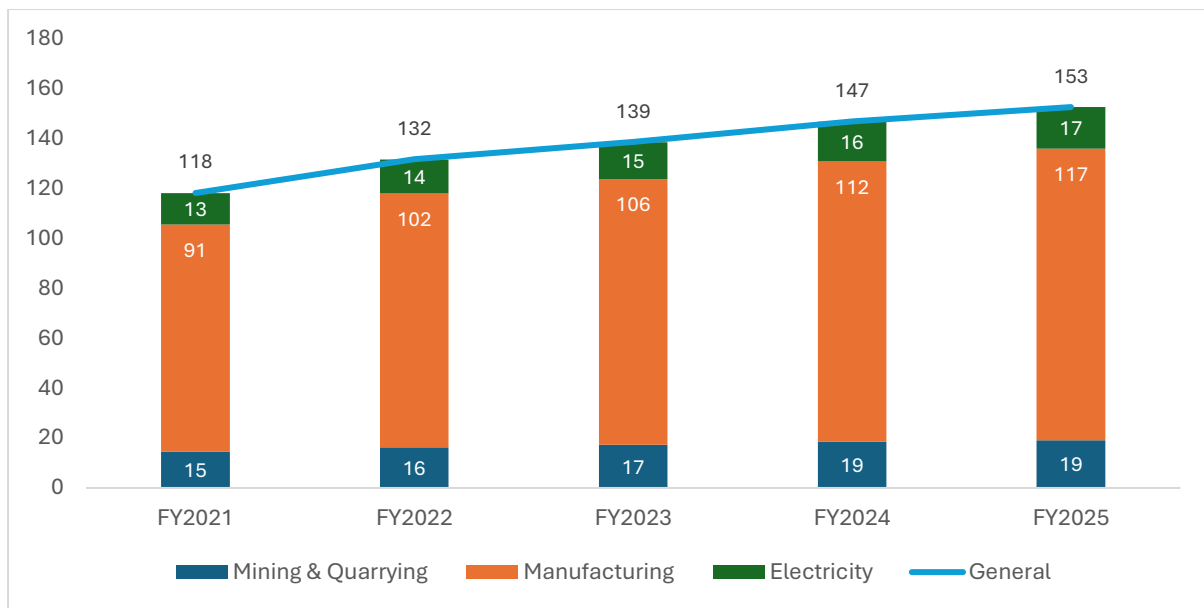
India's real Gross Value Added (GVA) growth for the fiscal year 2024–25 (FY2025) is estimated at 6.4%, according to provisional estimates released by the National Statistical Office (NSO) on 30<sup>th</sup> May, 2025. This marks a moderation from the 8.6% growth recorded in FY2024.

The agriculture and allied sector have become a key contributor to economic growth, with real Gross Value Added (GVA) projected to increase by 4.6% in FY25, up from 2.7% in FY24. At the same time, the construction sector is expected to register a robust 9.4% growth, driven by accelerated infrastructure development. Likewise, the financial, real estate, and professional services sector is projected to grow by 7.9%, reflecting strong momentum in business and real estate activities. These sectoral trends suggest that while overall GVA growth has moderated, agriculture showed strong growth momentum while construction and services continue to exhibit strong performance, contributing positively to the economy's resilience.

## 2.3 Trends in Industrial growth

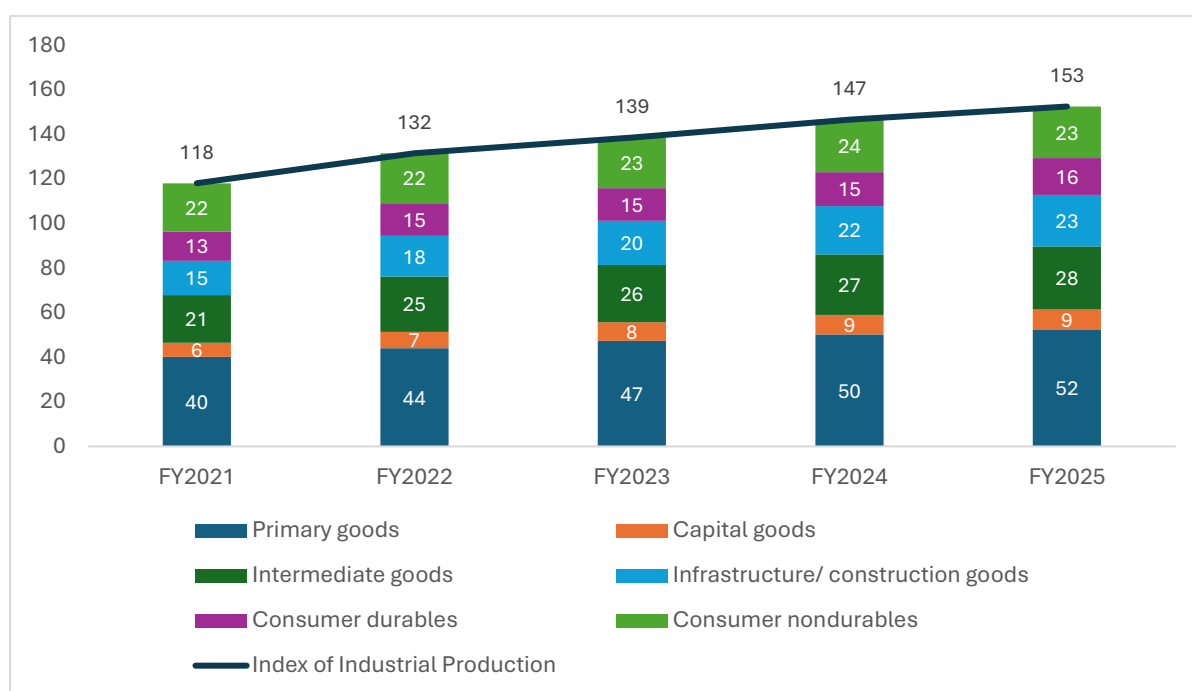
Aided by strong corporate profits on the back of reduced input cost pressures and government support in promotion of manufacturing in India through various schemes such as Make in India, Startup India, Digital India, etc, led to healthy growth in Index of Industrial Production (IIP). Industrial output reported expansion of 4.0% in FY2025 as compared to 5.9% in the preceding year (i.e. FY2024). Led by electrical equipment, transport equipment, furniture and basic metals, 17 of 23 industry groups recorded y-o-y expansion in the manufacturing space. Moreover, while considering user-based classification all categories reported year over year growth. Going forward, India's manufacturing sector is expected to reach USD 1 trillion by FY2025-26, mainly led by investments in automobile, textiles and electronics industries.

**Chart: Movement in Index of Industrial Production and its Components (Base : 2011-12 = 100)**



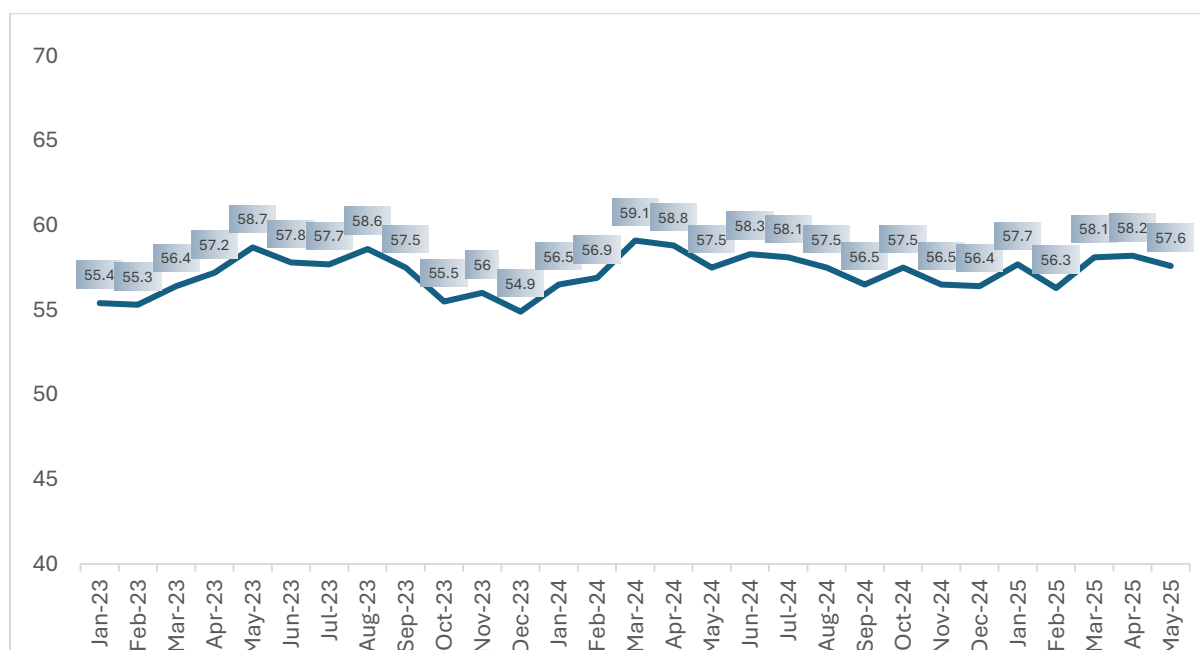
Source: PIB, RBI, ICRA Analytics

**Chart: Index of Industrial Production - Use-Based Classification (Base : 2011-12 = 100)**



Source: RBI, ICRA Analytics

## 2.4 PMI trends across manufacturing sector in India



Source: CMIE, ICRA Analytics

India is keen to expand its manufacturing sector, with a focus on diversifying into newer lines of production, advancing the industrial capacity of traditional sectors like automobiles, and establishing a globally competitive domestic supply chain ecosystem.

The manufacturing sector has gained momentum, driven by new investments and a strategic move by several foreign manufacturing firms to diversify their operations across multiple markets. Manufacturing sector is expected to gain further traction in FY2026 supported by

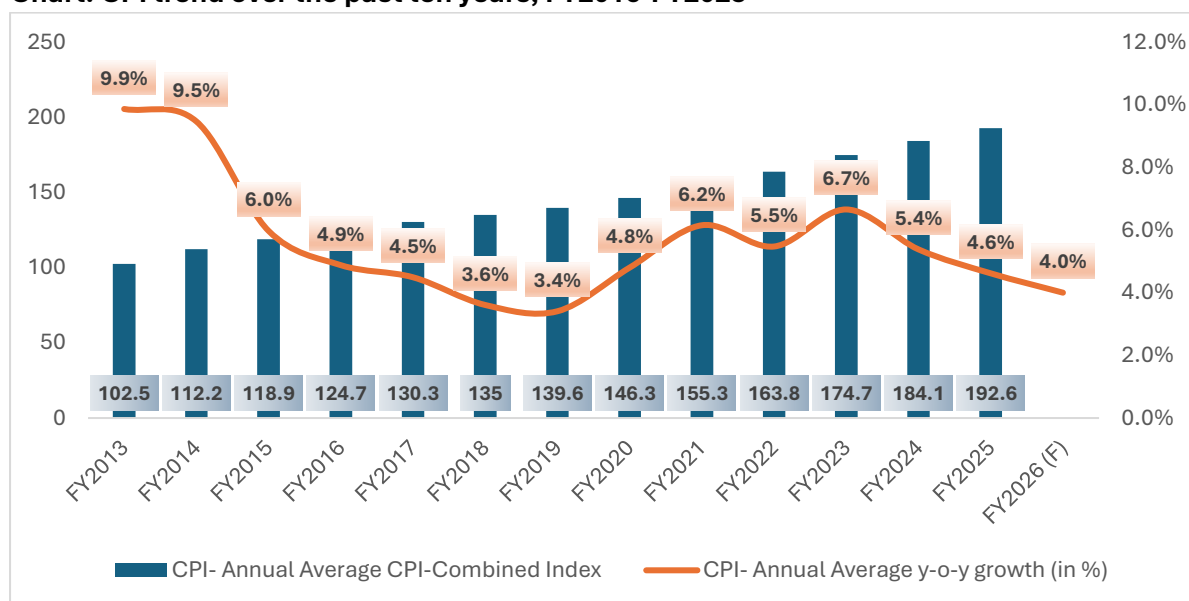
improvement in domestic demand, higher capacity utilization, healthy balance sheets of corporates and banks, and consumer and business optimism. The government's focus on widening the manufacturing base and the policy support through the ongoing PLI scheme and National Manufacturing Mission announced in the Union Budget 2025-26 is expected to further strengthen 'Make in India' initiative, according to the RBI annual report.

The PMI is a key indicator of the health of the manufacturing sector, with values above 50 indicating expansion. India's manufacturing sector has shown resilience, particularly with a strong rebound after the pandemic-induced contraction in 2020. The sector continues to exhibit robust growth into 2025, supported by strong demand and increased production.

During 2024, the peak was achieved during March'24 at 59.1 while a slight slowdown was obtained at 56.4 during Dec'24. Going forward in 2025, the whole year seems to maintain a strong growth momentum owing to continued strong performance indicted by the index numbers till May'25.

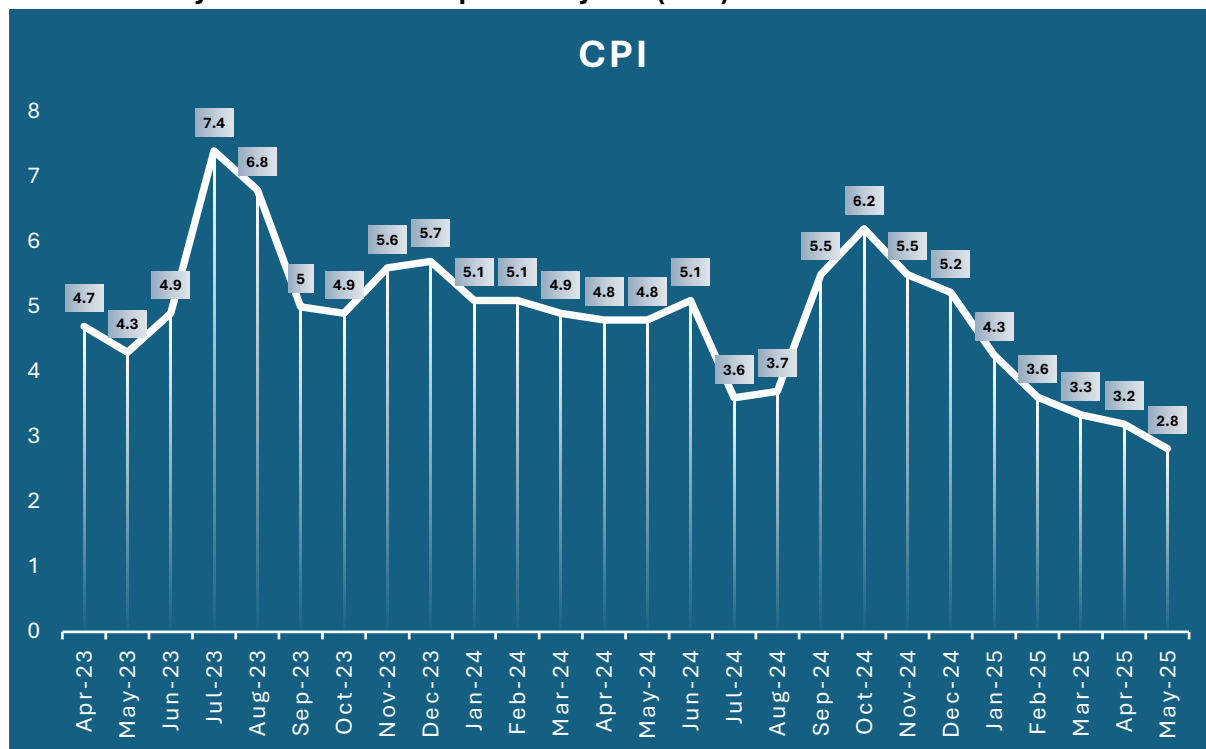
## 2.5 Review of inflation in India

**Chart: CPI trend over the past ten years, FY2016-FY2025**



Source: RBI, MOSPI, ICRA Analytics

**Chart: Monthly CPI trend over the past two years (in %)**



Source: RBI, MOSPI, ICRA Analytics

Retail inflation in India, as indicated by the Consumer Price Index (CPI), which represents the cost of daily goods and services, retail inflation in India has followed a steady downward path over the past three financial years, falling from 6.7% FY2023 to 5.4% during FY2024, and further to 4.6% during FY2025. This consistent moderation highlights the combined impact of the Reserve Bank of India's calibrated monetary policy and the Government of India's focused interventions to ease supply-side constraints and stabilise prices of essential commodities. The declining trend has helped ease cost-of-living pressures and fostered a more stable environment for economic growth.

During May 2025, the CPI inflation ease to 2.8%, lowest level witnessed since Feb 2019, signalling robust economic stability. Food inflation, a significant factor, decreased markedly to 0.99% in May 2025, marking the lowest level since October 2021, a reduction of 79 basis points from April's 1.78%. Rural regions experienced a food inflation rate of 0.95%, whereas urban regions recorded 0.96%. This decrease is ascribed to reduced prices for pulses, vegetables, fruits, cereals, household items, sugar, confectionery, and eggs, bolstered by a favourable base effect.

During April 2025, the CPI inflation ease to 3.2% predominantly led by ease in food and beverage subgroup followed by pan, tobacco, and intoxicants to a mild extent.

Significantly, the year-on-year inflation rate for March 2025 fell to 3.34%, a reduction of 27 basis points from February 2025, marking the lowest monthly inflation rate since August 2019. These statistics reflect a continuous commitment to controlling price increases while promoting economic development.

The strategic interventions implemented by the government have played a crucial role in achieving this result. Among the key measures are the enhancement of buffer stocks for essential

food items and their periodic release into open markets, in addition to subsidized retail sales of staples such as rice, wheat flour, pulses, and onions.

Moreover, the simplification of import duties on vital food items, the enforcement of stricter stock limits to deter hoarding, and the reduction of GST rates on essentials have contributed to alleviating price pressures. Targeted subsidies, including LPG support through the Pradhan Mantri Ujjwala Yojana and the Pradhan Mantri Garib Kalyan Anna Yojana, have shielded vulnerable households from the escalating costs of food grains, ensuring that the advantages of reduced inflation are accessible to those who require it the most.

**Table: CPI inflation forecasted by Reserve Bank of India**

CPI Inflation	FY2026				FY2026
	Q1	Q2	Q3	Q4	
% change	2.9	3.4	3.9	4.4	3.7

Source: MPC, ICRA Analytics

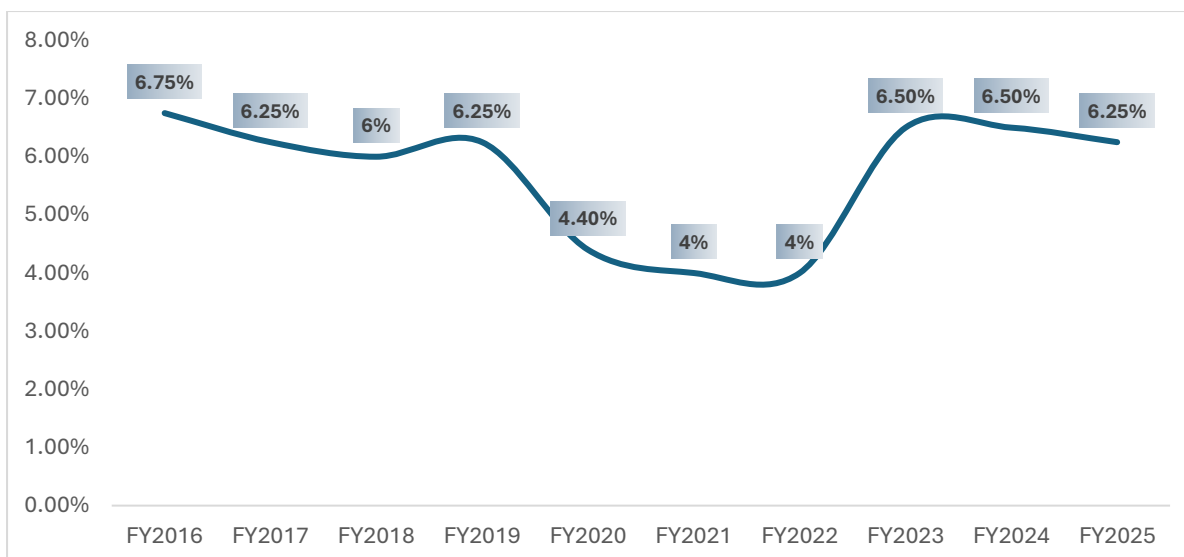
As of July 2025, the Reserve Bank of India (RBI) has revised its Consumer Price Index (CPI) inflation forecast for the fiscal year 2025–26 (FY26) downward to 3.7%, from an earlier projection of 4.0%. This adjustment reflects a sustained decline in food inflation, robust agricultural output, and favourable monsoon conditions.

Notably, it has pared the CPI inflation projection for Q1 FY2026 (+2.9% in June 2025 vs. +3.6% in April 2025) and Q2 FY2026 (+3.4% vs. +3.9%) by a sizeable 50-70 bps. While the projection for Q3 FY2026 (+3.9% vs. +3.8%) was revised upwards slightly, that for Q4 FY2026 was kept unchanged at 4.4%. This implies a linear upward trajectory in inflation through the fiscal.

ICRA projects Consumer Price Index (CPI) inflation to moderate to 3.5% in FY2026, down from 4.6% in FY2025, which is below the Monetary Policy Committee's (MPC) updated estimate of 3.7%. While the inflation readings for the first half of the fiscal are largely in line with their expectations, it is anticipated that those for the latter half may fall slightly below the MPC's projections. In their assessment, the return to a neutral policy stance sends a clear indication of a pause, particularly when viewed alongside the unanticipated Cash Reserve Ratio (CRR) reduction. At this point, there are no changes in the policy rate foreseen during the upcoming review in August 2025.

## 2.6 Interest rate movement in India

**Chart: Repo rate movement in India (on year, in percentage)**



Source: CMIE, ICRA Analytics

**Table: Recent Repo Rate Maintained by the Reserve Bank of India**

Date	Repo Rate
RBI Repo Rate on 6-Jun-2025	5.50%
RBI Repo Rate on 9-Apr-2025	6.00%
RBI Repo Rate on 7-Feb-2025	6.25%
RBI Repo Rate on 6-Dec-2024	6.50%
RBI Repo Rate on 9-Oct-2024	6.50%
RBI Repo Rate on 8-Aug-2024	6.50%
RBI Repo Rate on 7-Jun-2024	6.50%
RBI Repo Rate on 5-Apr-2024	6.50%
RBI Repo Rate on 7-Feb-2024	6.25%
RBI Repo Rate on 9-April-2024	6.00%

Source: RBI, ICRA Analytics

The Monetary Policy Report for April 2025, published in conjunction with the 54th session of the Monetary Policy Committee, demonstrates a balanced strategy by the Reserve Bank of India (RBI) aimed at fostering growth while ensuring price stability. The choice to reduce the policy repo rate by 25 basis points to 6% is supported by a decline in inflation, especially concerning food prices, and a gradual rebound in economic activity. With GDP growth anticipated at 6.5% for FY2026 and inflation projected to remain within the 4% target range, the report conveys a sense of cautious optimism in light of global uncertainties.

On the international front, strong services exports and significant remittance inflows have provided a buffer against the merchandise trade deficit, maintaining the current account deficit at manageable levels. Additionally, enhanced system liquidity, reduced short-term borrowing costs, and stable foreign exchange reserves highlight the robustness of India's financial system. The RBI has reiterated its dedication to closely observe changing conditions and implement timely, measured actions to uphold macroeconomic and financial stability.

- India's monetary policy over the last decade was characterized by gradual rate cuts prior to the pandemic, to support economic growth while managing inflation. The Reserve Bank of India (RBI) then cut rates significantly during the COVID-19 pandemic to stimulate the economy.
- However, the RBI then hiked rates in 2022 to tame price pressures and support the rupee. Rates were kept around 2022 levels in 2023 and 2024.
- The RBI repurchase rate ended 2024 at 6.25%, compared to the end-2023 value of 6.50% and the figure a decade earlier of 7.50%. It averaged 5.85% over the last decade

As of April 9, 2025, the Reserve Bank of India (RBI) has lowered the repo rate by 25 basis points (bps), reducing it to 6.00%. The reverse repo rate remains steady at 3.35%. This action represents the second-rate reduction of the year, following the previous cut in February 2025.

In light of increasing global economic uncertainties, the new US tariffs have affected international trade flows. The members of the Monetary Policy Committee (MPC) have unanimously agreed to decrease the repo rate to 6%, as this is anticipated to promote lending and investment, boost demand, and enhance overall economic activity.

On June 6, 2025, the Reserve Bank of India's Monetary Policy Committee, chaired by Governor Sanjay Malhotra, announced a substantial repo rate reduction of 50 basis points, lowering the rate from 6.0% to 5.5%. This move was accompanied by a shift in policy stance from "accommodative" to "neutral", signalling that this may be the final cut in the current easing phase.

**Conclusion:** Despite the improving inflation outlook, the RBI remains cautious. It flags downside risks to growth from uncertainty about global trade post-protectionist measures, protracted geopolitical tensions and global financial market volatility. These very factors also pose upside risks to inflation, reinforcing the need for a balanced, watchful approach.

It said that it will continue to undertake liquidity management operations to ensure adequate liquidity in the financial system, especially for the productive sectors of the economy.

The central bank will align its liquidity operations with the monetary policy stance, the report said. This approach aims to maintain sufficient liquidity in the system to support key sectors that drive economic growth.

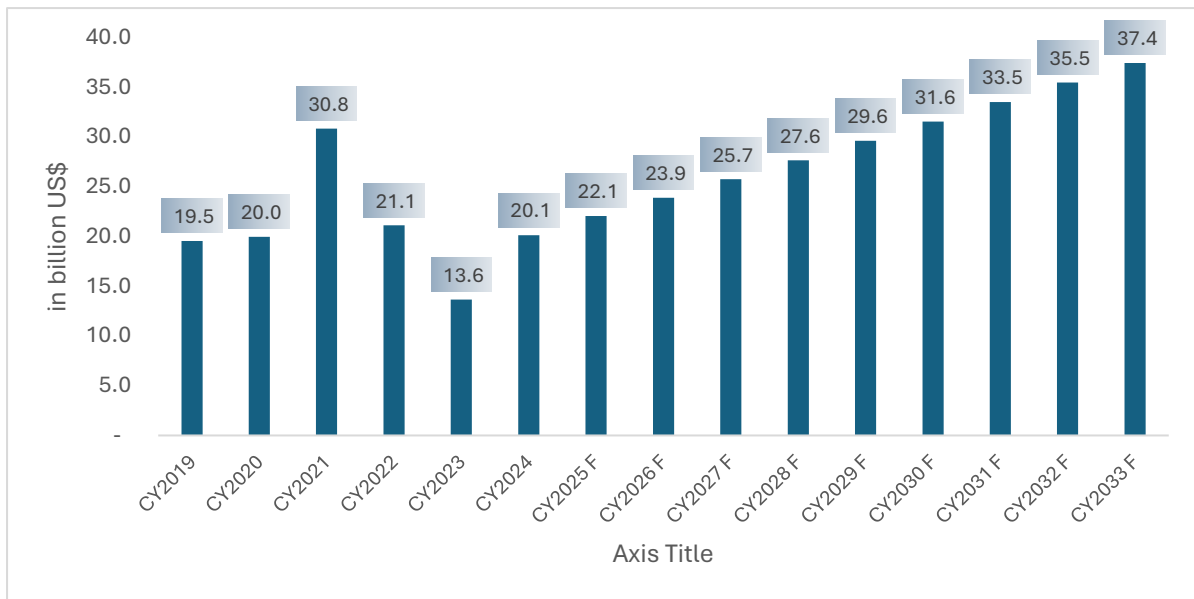
As per RBI, Reserve Bank will undertake liquidity management operations in sync with the monetary policy stance and keep system liquidity adequate to meet the needs of the productive sectors of the economy.

### 3. Global: Shipping Container Market

The global shipping container market reached a value of US\$ 20.1 Billion in CY2024, growing at a CAGR of 0.6% during CY2019–CY2024. Looking forward, it is expected the global shipping container market to grow at a CAGR of around 6.8% during CY2025–CY2033, to reach a value of US\$ 37.4 Billion by CY2033.

#### Chart: Global Shipping Container: Market Trend and forecast





Source: IMARC, ICRA Analytics

The market has been witnessing steady growth, driven by factors such as globalization and international trade, the expansion of the e-commerce sector, increasing adoption of alternative fuels and energy-efficient technologies in shipping and transport systems, and the ongoing development of global infrastructure.

In CY2022–CY2023, the container shipping market experienced a return of freight rates to pre-pandemic levels on most trade routes. The initial sharp decline in rates at the beginning of the year has transitioned into a gradual but persistent decline. A slowdown in demand, compounded by still-elevated but gradually decreasing inflation in Western economies, led to a shift in the supply-demand balance. Shipping firms with significant exposure to east-west trade routes were most heavily impacted by this market shift.

Looking ahead, the global shipping container market is projected to grow at a CAGR of approximately 6.8% during CY2025–CY2033, reaching an estimated value of US\$ 37.4 billion by CY2033.

Standard 40-foot containers continue to dominate the market, being the most used due to their spacious capacity, which makes them suitable for transporting a wide range of goods. This makes them the preferred option across numerous industries. Although the market encounters challenges—including overcapacity, environmental sustainability concerns, and the need for harmonized regulations—there are also significant opportunities. These include advancements in container customization, the use of eco-friendly materials, and the adoption of automation technologies.

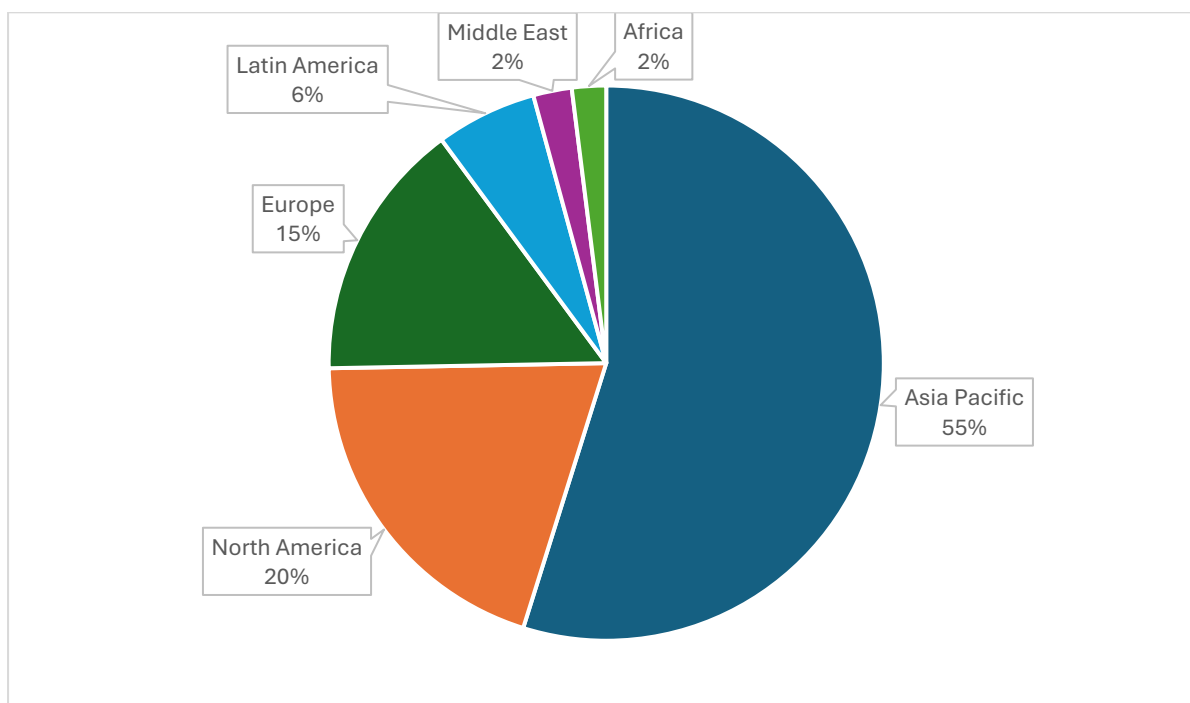
The outlook for the shipping container industry remains positive, supported by the ongoing growth of global trade. Future developments will be shaped by an emphasis on sustainability and digital innovation, contributing to a more resilient and efficient sector. Additionally, several Asian nations are easing trade barriers to promote inter-Asian trade, which is helping bridge the gap between Far East–Europe and Far East–North America trade lanes. As a result, global demand for containers is expected to grow across diverse end-user segments.

### 3.1 Market Breakup by Region - Global Shipping Container (in billion USD)

Region	CY20 25 F	CY20 26 F	CY20 27 F	CY20 28 F	CY20 29 F	CY20 30 F	CY20 31 F	CY20 32 F	CY20 33 F	CAGR (CY2024- CY2033F)
Asia Pacific	12.1	12.9	13.8	14.7	15.6	16.5	17.3	18.1	19.0	5.8%
North America	4.5	5.0	5.5	6.0	6.5	7.1	7.7	8.3	8.9	8.9%
Europe	3.4	3.7	4.0	4.4	4.7	5.1	5.4	5.8	6.2	7.7%
Latin America	1.3	1.4	1.5	1.6	1.7	1.7	1.8	1.9	2.0	5.6%
Middle East	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.8	0.8	6.5%
Africa	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	8.2%
<b>Total</b>	<b>22.1</b>	<b>23.9</b>	<b>25.7</b>	<b>27.6</b>	<b>29.6</b>	<b>31.6</b>	<b>33.5</b>	<b>35.5</b>	<b>37.4</b>	<b>6.8%</b>

Source: IMARC, ICRA Analytics

**Chart: Global Shipping Container Market: Breakup by Region (%), CY2025**

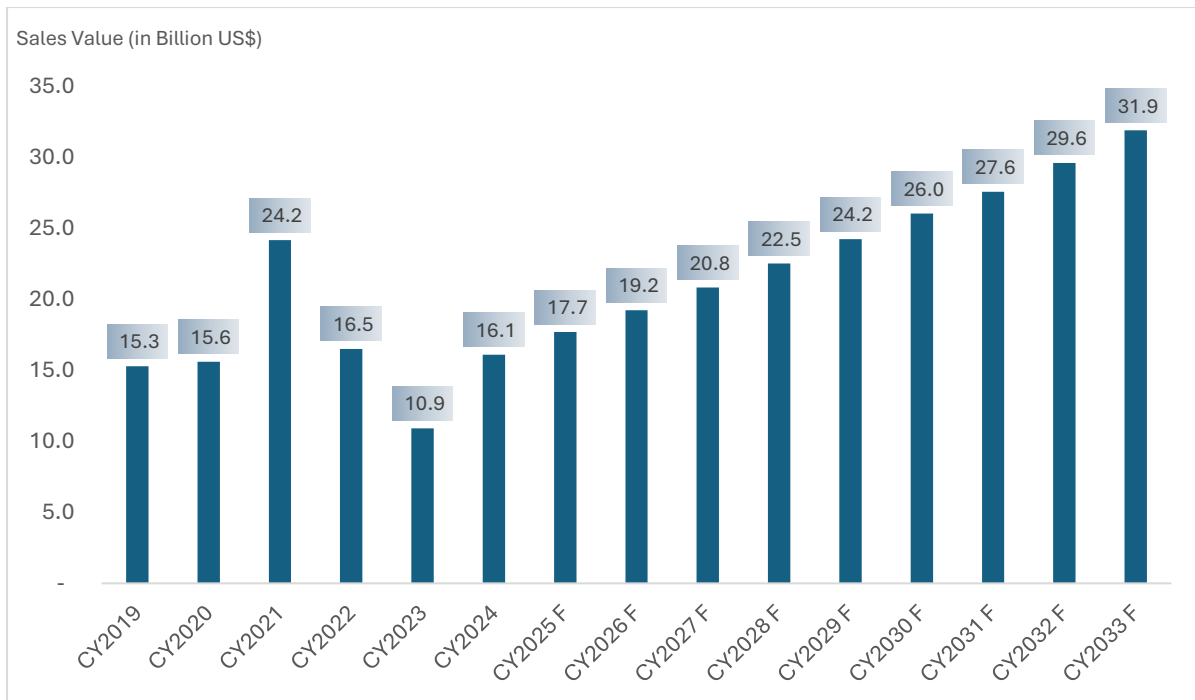


Source: IMARC, ICRA Analytics

During CY2024, APAC represented the most popular region, accounting for a share of 55% of the total market. APAC was followed by North America at ~20%, Europe at ~15%, Latin America at ~6%, Middle East at ~2%, and Africa at ~2%.

### 3.2 Global: Market Breakup by Type

#### 3.2.1 ISO Shipping Container



Source: IMARC, ICRA Analytics

The global ISO shipping container market reached a valuation of USD 16.1 billion in CY2024, registering a compound annual growth rate (CAGR) of 1.0% over the period CY2019–CY2024.

ISO containers are standardized freight containers constructed from corrugated steel, designed to meet durability standards for intermodal transport across ships, railways, and trucks. A typical ISO container measures 8 feet in width, 8.5 feet in height, and comes in 20-foot or 40-foot lengths.

Asia-Pacific (APAC) currently holds the largest share of the global ISO container market, followed by North America and Europe. Presently, there are more than 20 million ISO-standard containers in circulation, accounting for the movement of 80% of global trade via road, rail, and air. ISO container capacity is typically measured in twenty-foot equivalent units (TEUs).

ISO containers have also been effectively used during natural disasters, offering a practical solution for delivering medical services in areas lacking conventional hospital infrastructure. During the Covid-19 pandemic, freight containers served as facilities for testing, sample collection, and vaccinations.

Looking ahead, the ISO shipping container market is projected to grow at a CAGR of approximately 7.6% during CY2025–CY2033, reaching a market size of USD 31.9 billion by CY2033.

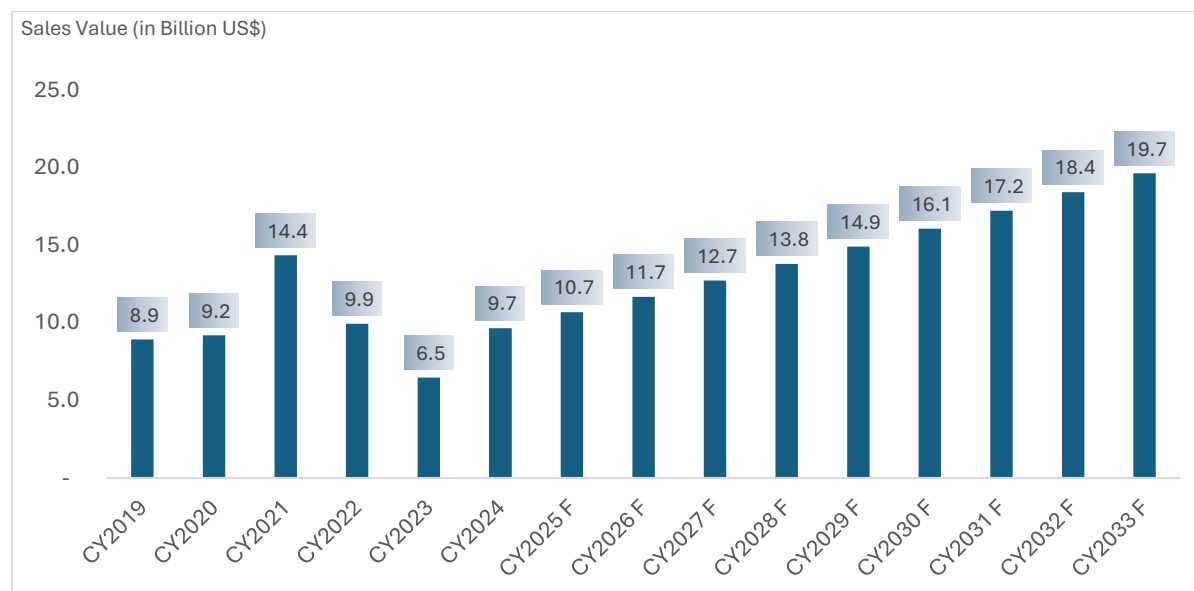
ISO containers are increasingly being repurposed to create stylish and compact dining venues, such as restaurants, bistros, and cafes, especially in space-constrained areas. They are also used as cost-effective alternatives to brick-and-mortar schools in underdeveloped or remote regions.

A 20-foot container is well-suited for smaller shipments, such as the contents of a one to two-bedroom apartment or a small to mid-sized vehicle.

A 40-foot container is ideal for larger shipments, including the contents of a three to four-bedroom home, larger vehicles, or high-volume commercial goods.

Additionally, the adoption of digital technologies and Internet of Things (IoT) solutions is reshaping the market landscape. The emergence of smart containers, equipped with sensors for monitoring location, temperature, humidity, and other variables, is expected to further accelerate market growth in the coming years.

### 3.2.2 High Cube Shipping Container Market



Source: IMARC, ICRA Analytics

The global high cube container market reached a valuation of USD 9.7 billion in CY2024, registering a compound annual growth rate (CAGR) of 1.6% between CY2019 and CY2024.

Structurally, high cube containers are 30 cm taller than standard containers, providing additional vertical space ideal for transporting larger or high-volume cargo. These containers are well-suited for hauling bulky items such as heavy machinery, furniture, and oil. Common sizes include 20 ft, 30 ft, and 45 ft, with the 20 ft dry high cube container seeing the highest demand.

Cargo handling within these containers requires that loads be mounted using multiple lashing rings, both from the top ends and bottom cross sides. To accommodate 40 ft high cube containers on a gooseneck chassis, manufacturers incorporate a recessed or indented floor design that enables proper container placement.

Technological progress in the production of high cube containers has become a significant contributor to market expansion. Contemporary high cube containers are increasingly built using advanced materials and are equipped with innovative features that enhance their strength, security, and operational efficiency, thereby boosting their demand and accelerating market growth.

Looking ahead, the global high cube container market is projected to grow at a CAGR of approximately 7.9% during CY2025–CY2033, reaching an estimated value of USD 19.7 billion by CY2033.

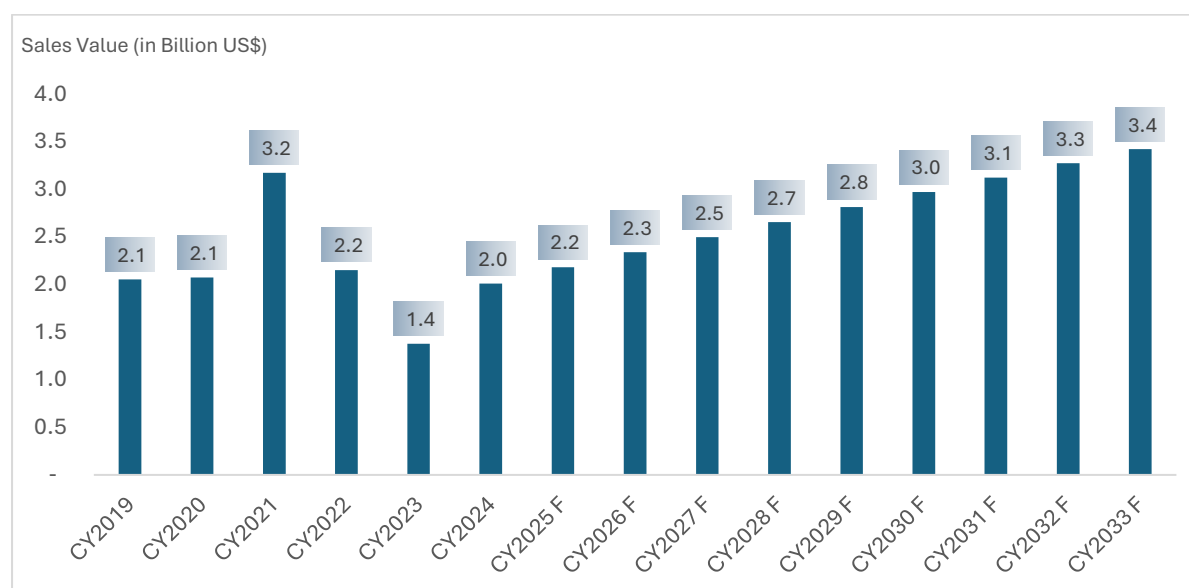
With the continued expansion and evolution of global trade, there is a growing need for efficient shipping solutions, which has led to an increased adoption of high cube containers in international logistics.

These containers can transport large-volume cargo from point of origin to final destination. Designed with numerous lashing rings, high cube containers can support loads of up to 1,000 kg, helping maintain balance and center of gravity, thereby facilitating safer and more efficient loading/unloading in freight ships and trains.

The extra interior space of high cube containers allows the transport of greater quantities of goods in a single shipment, making them particularly advantageous for e-commerce businesses that need to fulfill tight delivery schedules and handle substantial inventories.

Moreover, the versatility of high cube containers, which can be easily repurposed into storage units, adds to their value, especially in the expanding e-commerce sector, further propelling market growth in the coming years.

### 3.2.3 Open Top Shipping Container Market



Source: IMARC, ICRA Analytics

The global open top container market reached a value of USD 2.0 billion in CY2024, reflecting a decline in compound annual growth rate (CAGR) at -0.4% during the period CY2019–CY2024.

An open top container is available in 20-foot and 40-foot sizes, with its distinguishing feature being the open roof, which is typically covered with a tarpaulin when needed.

These containers generally incur higher shipping costs compared to standard containers, due to their limited availability and the challenges associated with repositioning them once they reach their destination ports (often returned empty).

A 20-foot open top container can carry loads of approximately 28 tons, while a 40-foot version can handle around 30 tons.

Automobile manufacturers use open top containers to ship oversized vehicle components that cannot fit into conventional containers. They are also widely used in transporting construction equipment, steel structures, and other large or heavy materials. In addition, open top containers provide the flexibility needed for handling specialized items, such as industrial machinery, which require unique loading and unloading processes.

Looking ahead, the global open top container market is projected to grow at a CAGR of approximately 5.8% during 2025–2033, reaching an estimated value of USD 3.42 billion by 2033.

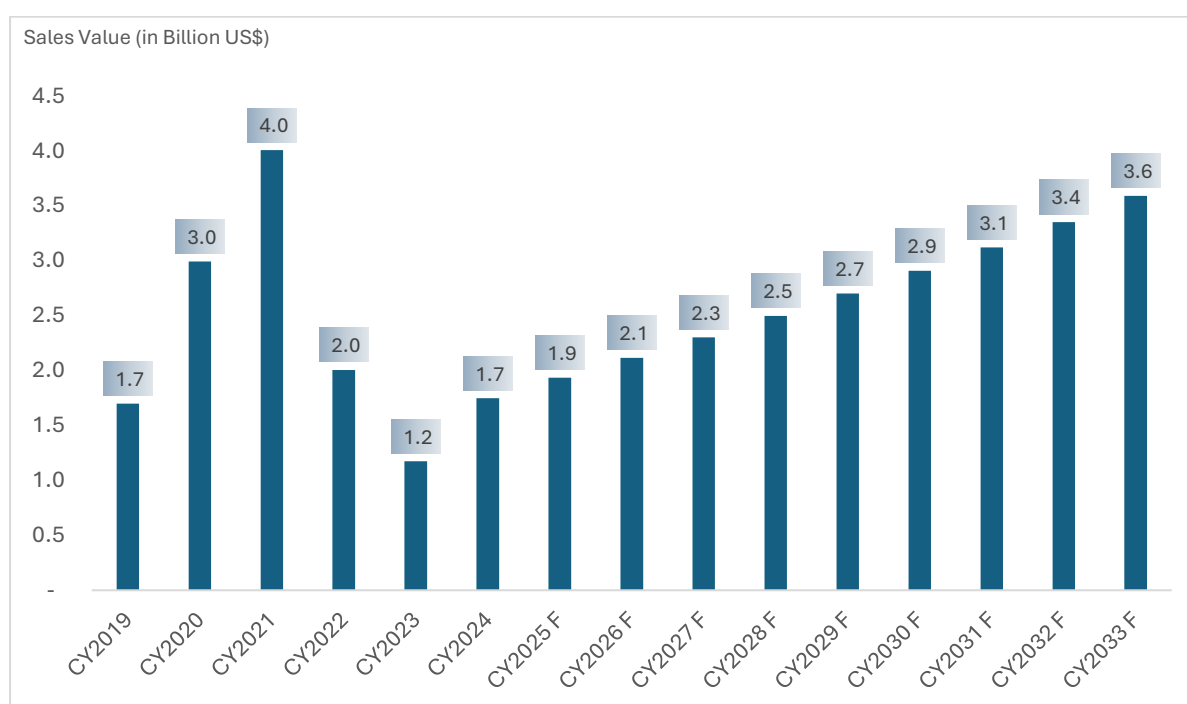
Open-top containers are among the most used shipping methods in processing industries and for transporting large volumes of scrap metal, wood, or paper. Their open structure allows easy access for loading and unloading irregularly shaped or loose materials.

These containers are also highly suitable for transporting a variety of agricultural products, including grain and hay bales.

The open top container market is expected to continue progressing, with innovations aimed at enhancing cargo security and resistance to weather conditions. Manufacturers are focusing on the development of stronger and more durable tarpaulins and protective coverings to safeguard goods during transport.

In addition, advances in tracking technologies are improving cargo monitoring, helping reduce theft risks and allowing for more efficient route optimization. With the continued expansion of global trade, demand for offshore open top containers as a critical component of sea freight transport is anticipated to rise steadily.

### 3.2.4 Special Shipping Container Market



Source: IMARC, ICRA Analytics

The global special container market reached a value of USD 1.75 billion in CY2024, recording a compound annual growth rate (CAGR) of 0.6% from CY2019 to CY2024.

This segment includes various container types such as truck containers, flat rack containers, BESS containers, cement tank containers, among others. Among these, the flat rack container holds the largest market share, followed by cement tank containers and BESS containers.

Flat rack containers are designed with bulkheads at each end and no side walls, allowing cargo to extend beyond the container's width during transport. These are typically available in two sizes: 20 feet and 40 feet, with the selection based on the dimensions of the cargo.

BESS (Battery Energy Storage System) containers are modular, compact, and portable units, engineered to house all components of a battery storage system within a standardized container format.

A cement tank container is built with an ISO 20-foot frame, generally offering a bulk capacity of 22,500 litres. These are purpose-designed for the safe transport of dry bulk goods such as cement, limestone, and fly ash powder across rail, road, and maritime routes.

Looking ahead, the global special container market is projected to grow at a CAGR of approximately 8.0% during CY2025–CY2033, reaching an estimated value of USD 3.6 billion by CY2033.

BESS containers offer the advantage of rapid relocation and deployment according to demand, making them highly effective for temporary energy requirements or emergency situations, such as post-disaster recovery. Their flexibility positions them as a reliable solution for backup power supply.

Multiple BESS units can be connected and operated together, enabling increased storage capacity and greater operational flexibility. This scalability allows these systems to be customized and expanded as needed, making them well-suited for large-scale energy storage and management applications.

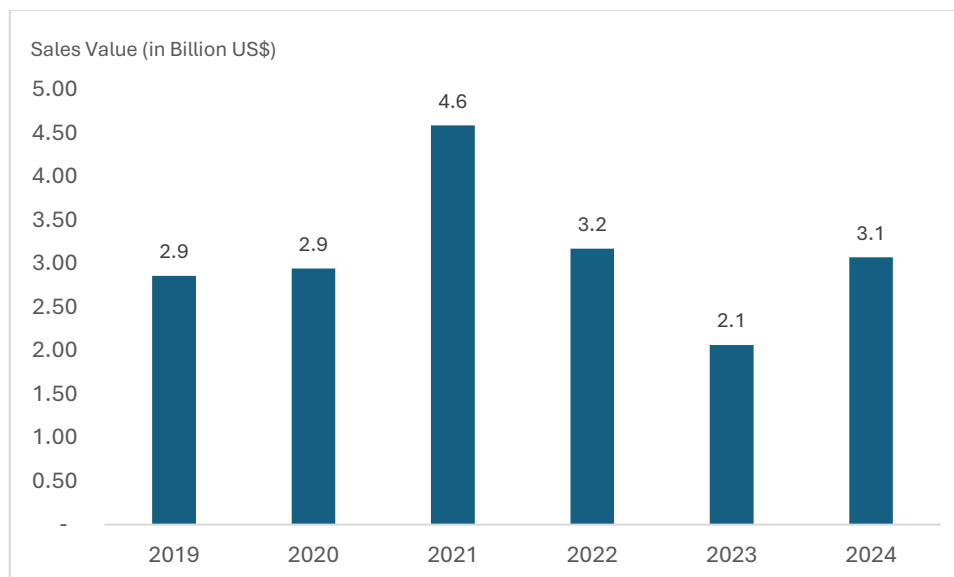
As infrastructure projects and resource exploration continue to expand, particularly in developing economies, the demand for flat rack containers is expected to rise. The performance of these sectors is often tied to economic growth cycles, and their ongoing upward momentum creates a strong foundation for the growth of the flat rack container market.

### 3.3 Market Breakup by Region and Country (Europe and Africa)

#### 3.3.1 Europe

##### 3.3.1.1 Europe Shipping Container - Market Trend and Forecast

**Chart: Europe: Shipping Container Market: Sales Value (in Billion US\$), CY2019-CY2024**

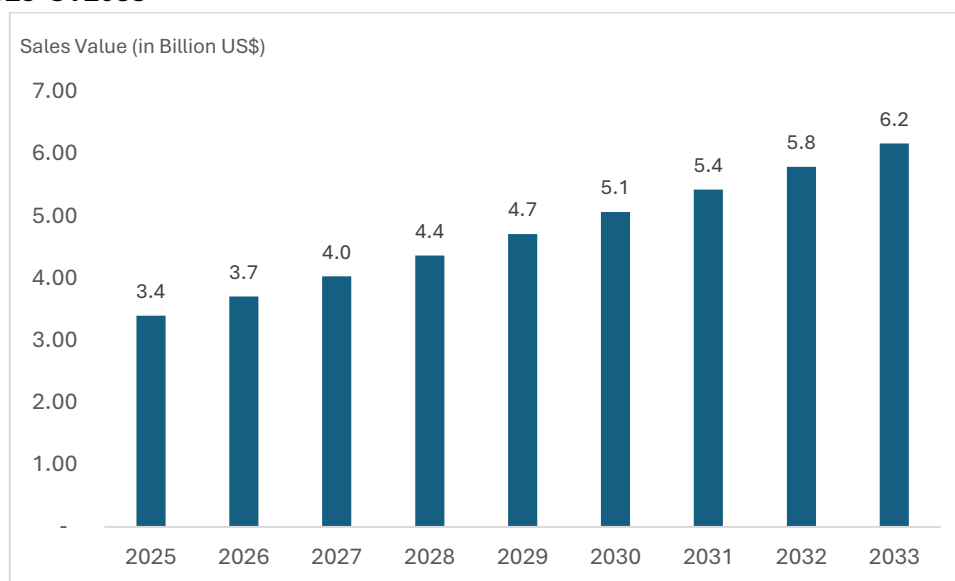


Source: IMARC, ICRA Analytics

- In CY2024, the Europe shipping container market attained a valuation of US\$ 3.07 Billion, experiencing a compound annual growth rate (CAGR) of 1.4% from CY2019 to CY2024.
- The Europe shipping container market is being propelled by rapid globalization and economic expansion, an increasing demand for goods, improvements in transportation infrastructure, and heightened trade activities.
- In CY2023, the total gross weight of goods processed by EU ports was estimated at 3.4 billion tonnes, reflecting a decrease compared to CY2022 (-3.9%). This reduction in goods handled can primarily be linked to the restrictions imposed on goods transport with Russia following its military actions against Ukraine. Although there was a recovery following the significant decline noted in CY2020, likely due to the COVID-19 pandemic and the ensuing restrictions implemented in the EU and globally, the levels recorded in CY2022 were still marginally lower than those seen in CY2018.
- In CY2023, the Netherlands continued to be the leading country for maritime freight transport in Europe. Rotterdam, Antwerp-Bruges, and Hamburg retained their status as the top three ports in Europe for that year.



**Chart: Europe: Shipping Container Market Forecast: Sales Value (in Billion US\$), CY2025-CY2033**

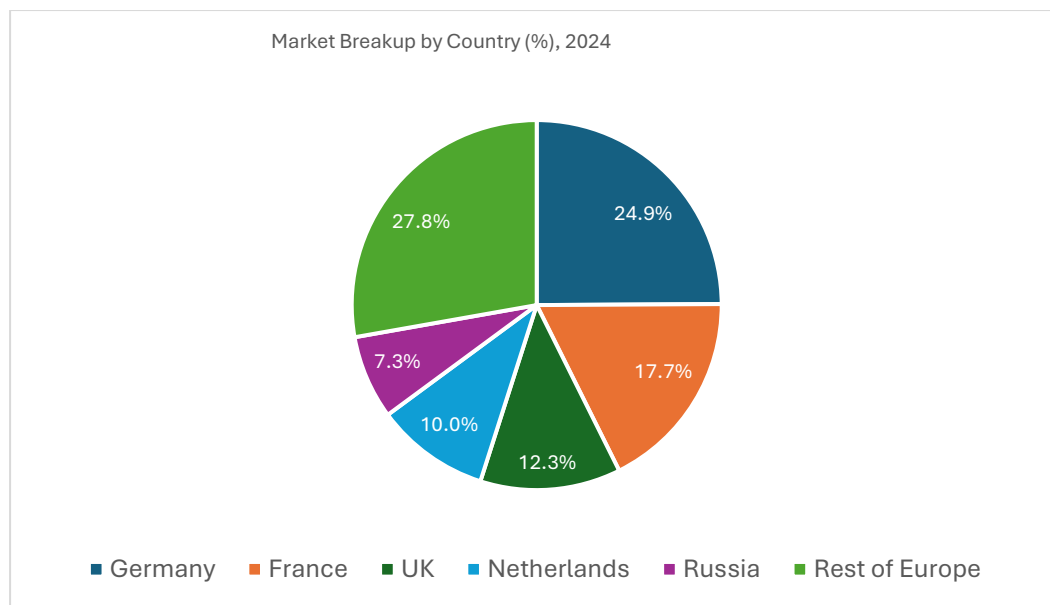


Source: IMARC, ICRA Analytics

- Looking ahead, it is anticipated that the shipping container market in Europe will experience a compound annual growth rate (CAGR) of approximately 7.7% from CY2025 to CY2033, ultimately reaching a valuation of US\$ 6.17 Billion by the year CY2033.
- Given that Europe is a significant hub for both exporting and importing goods, the demand for shipping containers remains robust, fuelled by sectors such as automotive, machinery, and consumer electronics.
- Furthermore, the growing inclination towards containerization, owing to its cost-effectiveness and efficiency, plays a crucial role in driving market expansion. In addition, the surge in e-commerce further intensifies demand, as companies seek dependable and scalable logistics solutions to cater to the increasing requirements of online shoppers, thereby advancing the shipping container market in Europe.
- The extensive utilization of shipping containers for transporting industrial raw materials and manufactured products, including metals, minerals, oil and gas, chemicals, machinery, automobiles, aircraft components, and more, is expected to significantly boost the demand for shipping containers.

### 3.3.1.2 Europe Shipping Container - Market Breakup by Country

**Chart: Europe: Shipping Container Market: Breakup by Country (%), CY2024**



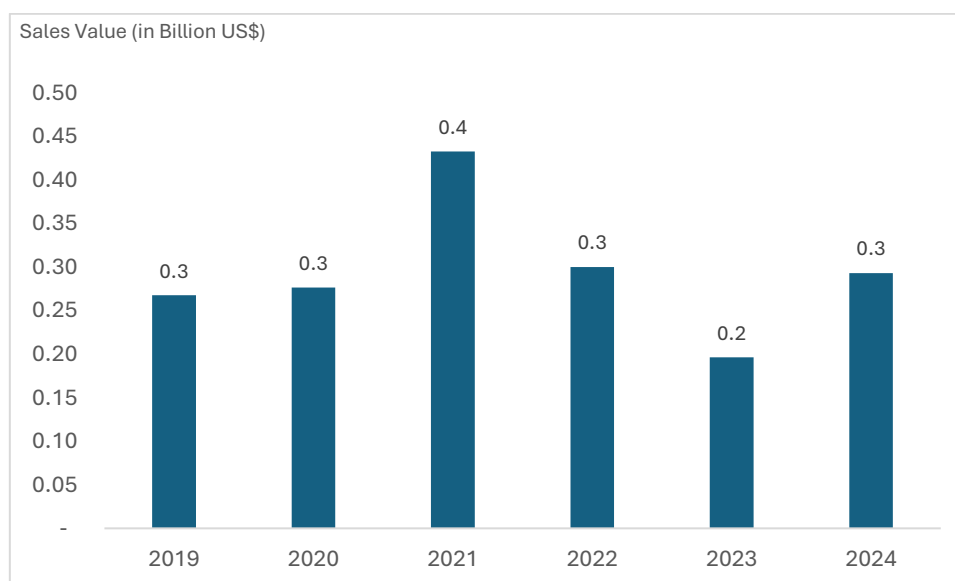
Source: IMARC, ICRA Analytics

- In 2024, Germany represented the most popular country, accounting for a share of 24.9% of the total market. Germany was followed by France (17.7%), U.K (12.3%), Netherlands (10.0%), and Russia (7.3%).
- Rest of European countries accounted for 27.8%.

### 3.3.2 Africa

#### 3.3.2.1 Africa Shipping Container - Market Trend and Forecast

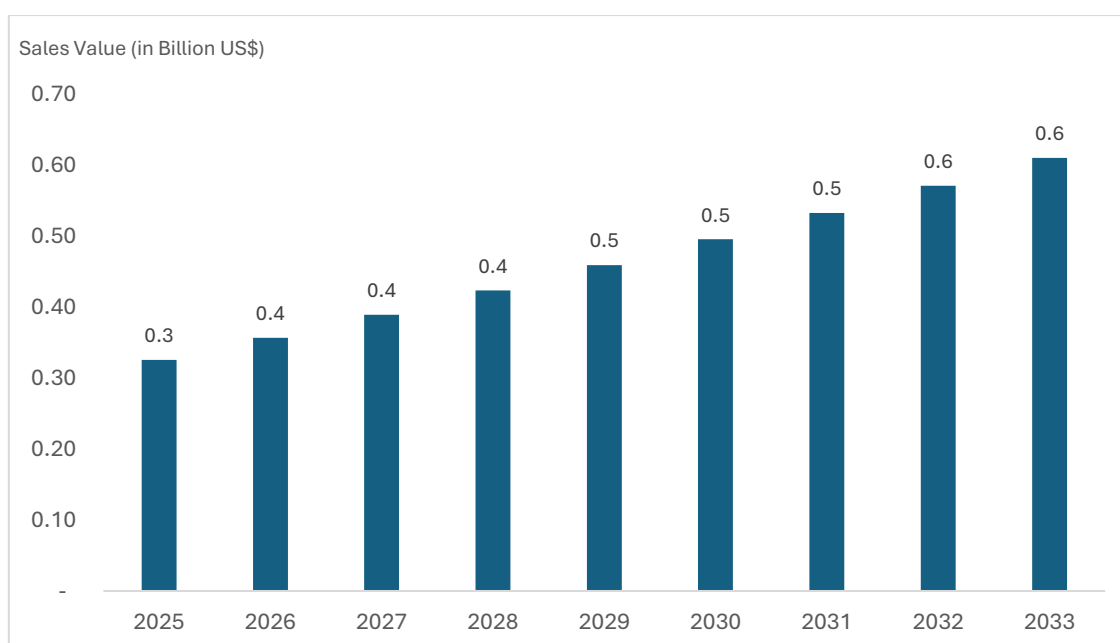
**Chart: Africa: Shipping Container Market: Sales Value (in Billion US\$), CY2019-CY2024**



Source: IMARC, ICRA Analytics

- The Africa shipping container market attained a valuation of US\$ 0.29 Billion in CY2024, experiencing a compound annual growth rate (CAGR) of 1.8% from CY2019 to CY2024.
- Over the last decade, the African continent has undergone a significant transformation in its logistics and transportation sector, with container shipping serving a crucial role in this changing narrative. As global trade dynamics evolve and the world becomes more interconnected, Africa has positioned itself as a strategic centre for container shipping, opening up new pathways for economic development and integration.
- As per the most recent statistics from the African Development Bank, the volume of container units transiting through African ports surged by nearly 50%, increasing from 24.5 million to 35.8 million between CY2011 and CY2021.
- Furthermore, according to the latest figures from UN Trade and Development (UNCTAD), the number of port calls made by container vessels in Africa grew by 20% between the first half of CY2018 and the first half of CY2023, representing a record increase for the continent.

**Chart: Africa: Shipping Container Market Forecast: Sales Value (in Billion US\$), CY2025-CY2033**



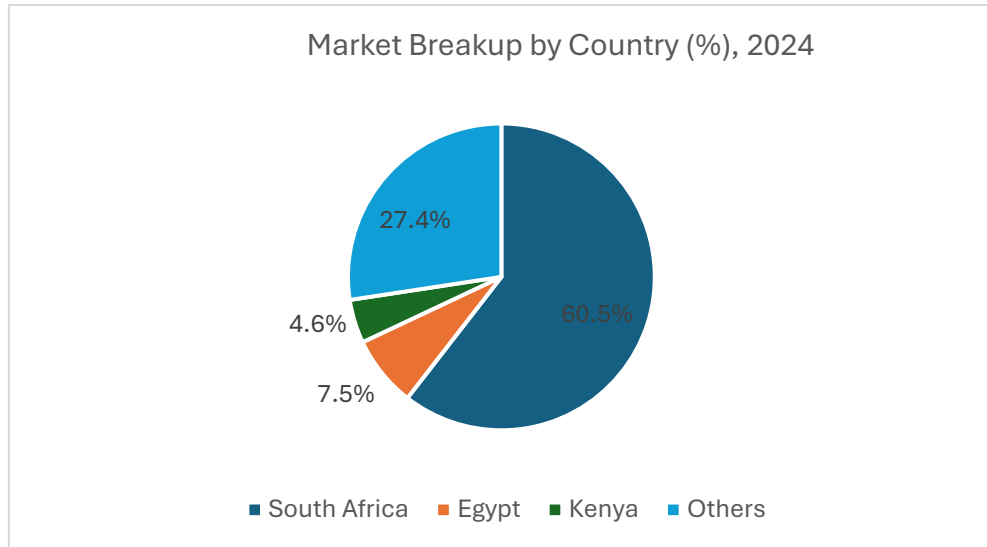
Source: IMARC, ICRA Analytics

- Looking ahead, it is anticipated that the Africa shipping container market will experience a compound annual growth rate (CAGR) of approximately 8.2% from CY2025 to CY2033, ultimately reaching a valuation of US\$ 0.61 Billion by the year CY2033.
- The current state of container shipping in Africa reveals a multifaceted scenario characterized by both obstacles and opportunities. Most African ports are presently functioning beyond their intended capacity, resulting in significant congestion problems that afflict the industry. Operational irregularities, primarily stemming from increasing cargo volumes, insufficient resources, inefficiencies, and corruption, are prevalent in numerous facilities. This situation is particularly evident in West African ports, where the rapid increase in cargo flow exerts pressure on facilities that require substantial enhancements, such as deeper draughts, expanded wharf space, modernized equipment, and larger container storage capacities.

- As reported by Sinay, African ports such as the Lagos Port Complex (Apapa Port Complex) in Nigeria, recognized as one of the busiest in West Africa, encounter difficulties due to outdated infrastructure and limited capacity, which contribute to considerable congestion and prolonged waiting periods for vessels. Likewise, the Port of Mombasa in Kenya, an essential hub for East African trade, faces challenges related to aging infrastructure and sluggish expansion initiatives, leading to delays in cargo processing and heightened congestion.

### 3.3.2.2 Africa Shipping Container - Market Breakup by Country

**Chart: Africa: Shipping Container Market: Breakup by Country (%), CY2024**



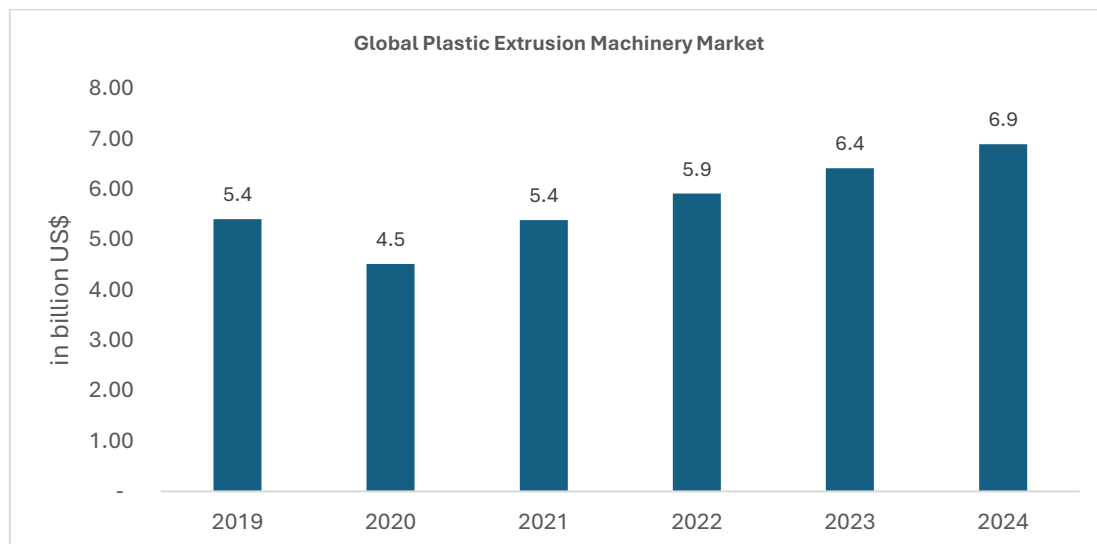
Source: IMARC, ICRA Analytics

- In 2024, South Africa represented the most popular country, accounting for a share of 60.5% of the total market. South Africa was followed by Egypt (7.5%), and Kenya (4.6%).
- Rest of the countries accounted for 27.4%

### 3.4 Global Plastic Extrusion Plant & Rope Making Machineries Industry

#### 3.4.1 Global Plastic Extrusion Plant & Rope Making Machineries Industry: Market Trend and Forecast

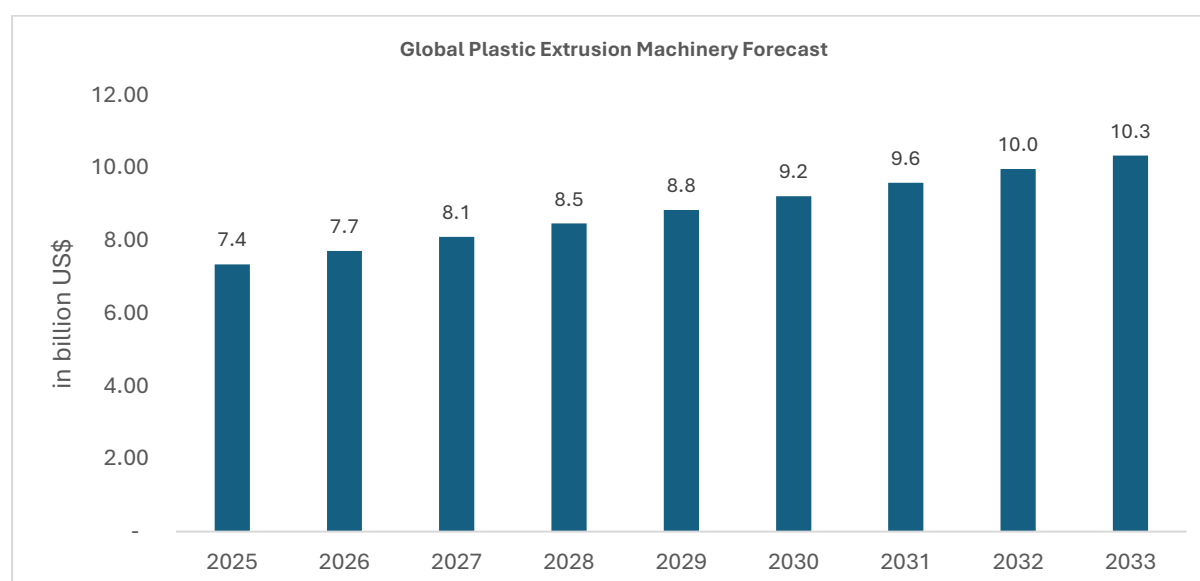
**Chart: Global: Plastic Extrusion Machineries Market: Sales Value (in Billion US\$), CY2019-CY2024**



Source: IMARC, ICRA Analytics

- The worldwide market for plastic extrusion machinery attained a valuation of US\$ 6.90 Billion in CY2024, experiencing a compound annual growth rate (CAGR) of 5.0% from CY2019 to CY2024.
- In recent years, there has been an increase in the adoption of plastic extrusion machines across multiple sectors, attributed to their efficiency, ease of use, enhanced flexibility, and superior production quality.
- The demand for plastic extrusion plants is on the rise as global awareness of energy conservation grows. To support market growth, manufacturers of twin-screw plastic extrusion machines are focusing more on developing efficient and reliable equipment.
- Advances in sustainable materials and the integration of artificial intelligence are transforming production processes, with companies such as Jwell Machinery and Cowin Extrusion leading the way.
- The plastics manufacturing sector is a global enterprise, and the over US\$ 1.5 trillion trade volume among nations in CY2023, as noted in the Global Trends report, clearly illustrates the industry's ability to satisfy global consumer demand across various end markets, including healthcare, transportation, construction, and consumer goods.

**Chart: Global: Plastic Extrusion Machineries Market Forecast: Sales Value (in Billion US\$), CY2025-CY2033**



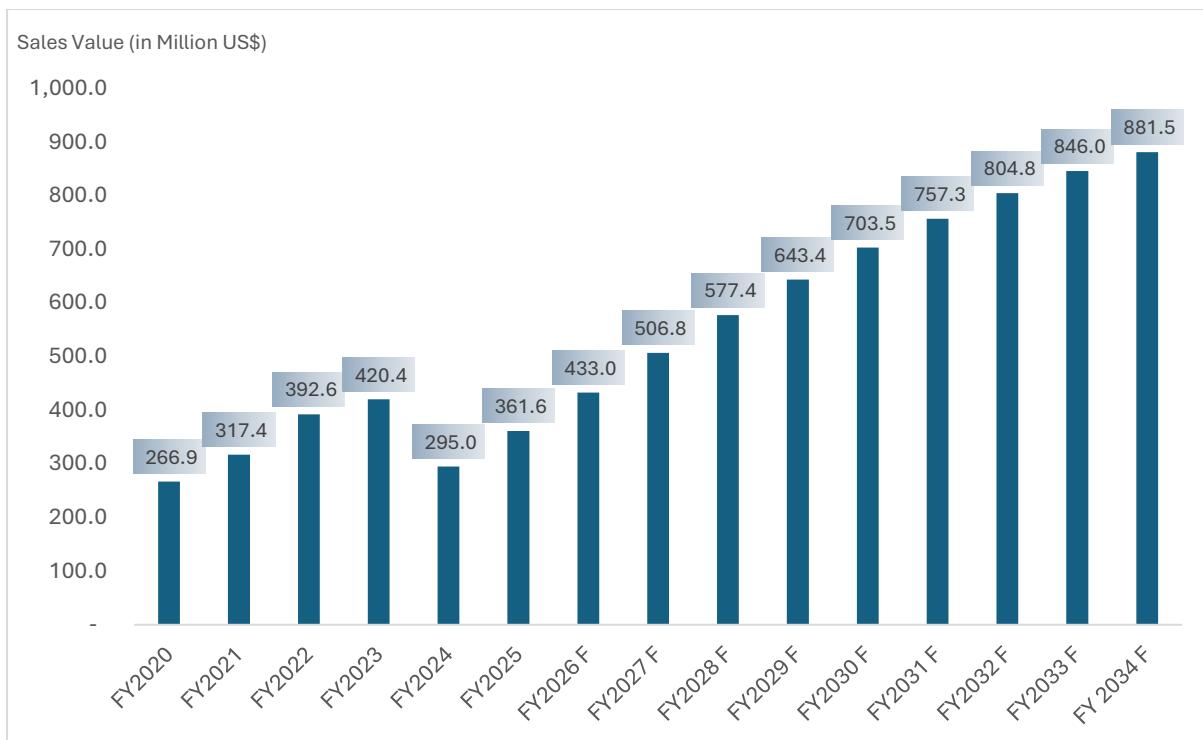
Source: IMARC, ICRA Analytics

- Looking ahead, it is anticipated that the global plastic extrusion machinery market will experience a compound annual growth rate (CAGR) of approximately 4.4% from CY2025 to 2033, ultimately reaching a valuation of US\$ 10.34 Billion by the year CY2033.
- The expansion of the global rope manufacturing machinery market is primarily fuelled by the increasing demand for ropes utilized in both residential and commercial applications for load bearing and material handling. As the population continues to grow, the need for residential housing units is projected to rise significantly. As a result, the demand for wire and synthetic ropes is expected to surge, thereby driving the demand for related machinery.
- Technological advancements are revolutionizing the global plastic extrusion sector. Automated systems enhance the efficiency of material handling, quality control, and packaging processes, leading to improved productivity and reduced labour expenses. Artificial intelligence (AI) contributes to production efficiency by forecasting maintenance requirements, minimizing operational downtime, and decreasing waste through real-time optimization of processes.
- Additionally, manufacturers are increasingly implementing energy-efficient technologies, including optimized extrusion methods and the use of renewable energy sources, which will further propel market growth.

#### 4. India: Shipping Container Industry

India shipping container market reached a value of US\$ 361.6 Million in FY2024, growing at a CAGR of 6.3% during FY2020–FY2025. Looking forward, we expect India shipping container market to grow at a CAGR of around 9.3% during FY2026-FY2034, reaching a value of US\$ 881.5 Million by FY2034.

**Chart: Indian Shipping Container: Market Trend and forecast**



Source: IMARC, ICRA Analytics

According to data from the Ministry of Shipping, container traffic in India has shown steady growth over the past eight years, rising from 8.20 ('000 TEU) in FY2016 to 12.28 ('000 TEU) in FY2024. This upward trend in containerization—the transition from bulk cargo to containerized shipping—highlights India's increasing integration into global trade networks.

India's major container ports, such as Jawaharlal Nehru Port Trust (JNPT), Mundra, and Chennai, play a vital role as key trade gateways. Among them, JNPT, often regarded as the crown jewel of India's port ecosystem, is the largest container port, handling nearly 50% of the nation's container traffic.

Located near Mumbai, JNPT benefits from its strategic positioning, modern infrastructure, robust logistics connectivity, and ongoing capacity upgrades—factors that have made it the preferred hub for exporters and importers alike.

In December 2024, Ocean Network Express (ONE) introduced the Indian Ocean Express service (IOX). This newly launched service links India, Sri Lanka, and Pakistan with the North Europe region, providing customers with enhanced service coverage across these geographies. Additionally, the service includes a transshipment route via Colombo, designed to meet the shipping requirements of clients in East India and Bangladesh.

As part of its efforts to bolster maritime trade infrastructure, India announced the establishment of Bharat Container Line, a new shipping division under the aegis of the Shipping Corporation of India (SCI).

In a recent update, it has been disclosed that this key vertical is expected to operate a fleet of approximately 100 vessels, including chartered ships, which will support a substantial share of India's export logistics. While the exact launch timeline has not yet been confirmed, the venture will be structured as a public-private joint initiative.

## Threats and Challenges of the Indian Shipping Container Market

- **Exports Face Container Crisis:** India's export sector is facing mounting pressure as soaring freight costs, and a severe shortage of shipping containers threaten to undermine its trade ambitions. Recent disruptions in key maritime routes, such as the Red Sea, along with port congestion and logistical inefficiencies, have driven up shipping costs and stretched container availability to breaking point. Small and medium enterprises, which rely on affordable and efficient logistics, are bearing the brunt of these challenges. With rising container prices and shipping delays, exporters are struggling to stay competitive in global markets, jeopardizing India's broader economic goals. To safeguard its export momentum, India must urgently scale up domestic container production and reduce its dependence on foreign shipping lines.
- **Freight Costs on the Rise:** Freight costs for Indian exporters have more than doubled in recent times. For instance, shipping goods to key markets such as Europe and the United States has become significantly more expensive, with rates for a 40-foot container reaching around US\$ 4,775 in 2024, compared with just US\$ 1,420 in 2019. This is a staggering increase, driven by a combination of global supply chain disruptions and logistical inefficiencies. The recent delays at Indian ports, largely caused by congestion at major transshipment hubs like Singapore, have only exacerbated the problem. One major factor contributing to the rise in freight costs is the disruption in the Red Sea region, a critical maritime route for global trade. With ongoing geopolitical tensions in this area, the costs of shipping goods have spiraled, putting further pressure on exporters. Compounding these issues is the US-China trade war, which could escalate in the coming months, triggering further instability in global trade routes and inflating freight rates.
- **Container Crisis Snowballs:** The global shortage of shipping containers, first triggered by the COVID-19 pandemic, remains a significant challenge for India. As the world grapples with recovering from the supply chain shocks of the pandemic, containers remain in short supply. While there are rumors of China hoarding containers to maximize its exports, the issue seems to be driven more by broader logistical inefficiencies than deliberate stockpiling. Nevertheless, India's over-reliance on Chinese-made containers has made the country particularly vulnerable to these shortages.

India produces between 10,000 and 30,000 containers annually; a meager output compared to China's production of around 2.5 to 3 million containers per year. This leaves India with less than 1% of the global market share for containers, making it reliant on imports to meet demand. Furthermore, the cost of manufacturing a 40-foot container in India, at around US\$ 3,500 to US\$ 4,000, is significantly higher than China's cost of US\$ 2,500 to US\$ 3,000. This price disparity further discourages local production and perpetuates India's dependence on foreign suppliers.

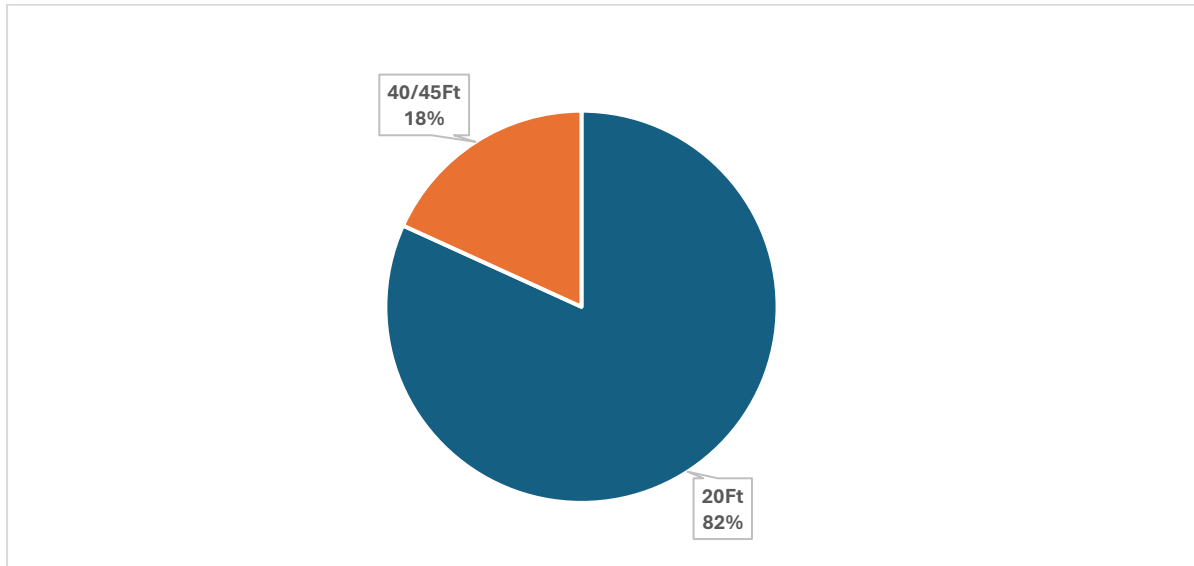
- **Port Congestion and Disruption:** Vessel delays have been easing at key gateways in North and Southeast Asia, including Singapore, Ningbo, Qingdao and Klang in Malaysia and equipment availability is improving, but congestion is spreading to India. India's largest container gateway, Mundra, is hugely congested, which is affecting quay operations and the movement of containers between CFSs and terminals, with some carriers skipping the port to enable vessels to return to Asia faster. About 50% of Mundra's traffic moves by rail, but backlogs for railed freight have increased from the normal 7 to 9 days to 15 to 20 days, while a new process of issuing port entry permits appears to be a major source of frustration, with



truckers facing longer waits to move containers in and out terminals due to their inability to secure entry permits promptly.

#### 4.1 Market Breakup by Size

##### Indian: Shipping Container Market: Breakup by Size (%), FY2025



Source: IMARC, ICRA Analytics

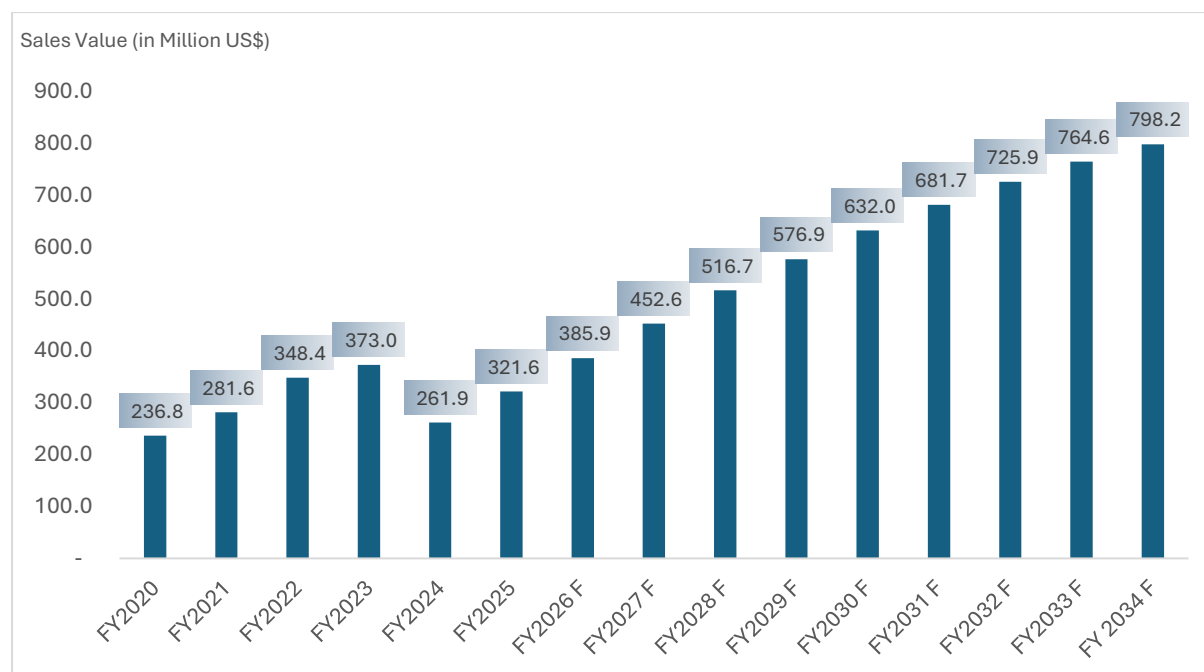
In FY2025, 20-foot containers emerged as the most widely used type, accounting for 82% of the total market share. It plays a significant role in facilitating modern trade, offering increased storage capacity and adaptability across various sectors. Their versatility makes them particularly suitable for small and medium enterprises (SMEs) venturing into global markets and in need of scalable logistics solutions. Companies such as Rivigo and Delhivery utilize these compact containers to manage frequent international shipments for SME clients.

40-foot and 45-foot containers followed, collectively holding a market share of 18%. With their larger capacity, 40-foot containers provide economies of scale, making them a cost-effective option for businesses heavily involved in global trade operations.

Both 20-foot and 40-foot cargo containers are typically constructed from either aluminium or steel and are well-suited for transporting all types of cargo. While aluminium containers offer a slightly higher payload capacity, steel dry containers provide a marginally larger internal volume.

## 4.2 Market Breakup by Type

### 4.2.1 ISO Shipping Container



Source: IMARC, ICRA Analytics

The India ISO shipping container market reached a valuation of USD 321.6 million in FY2025, registering a compound annual growth rate (CAGR) of 6.3% between FY2020 and FY2025.

Standard dry ISO containers serve as the backbone of India's shipping sector, being highly adaptable and capable of transporting a wide range of goods—from textiles to electronics—across domestic and international markets.

The 20-foot container enjoys strong popularity among Indian SMEs due to its compact size and cost-efficiency for smaller shipments. It is commonly used to move goods from manufacturing hubs like Pune, Coimbatore, and Ludhiana to major ports for export purposes.

The 40-foot container is widely employed in India's export-driven industries, such as textile production in Tirupur and automotive component exports from Chennai. Its larger volume makes it a preferred option for consolidating shipments, leading to lower per-unit transport costs.

Looking ahead, the India ISO container market is projected to grow at a CAGR of around 9.5% during FY2026–FY2034, reaching an estimated value of USD 798.2 million by FY2034.

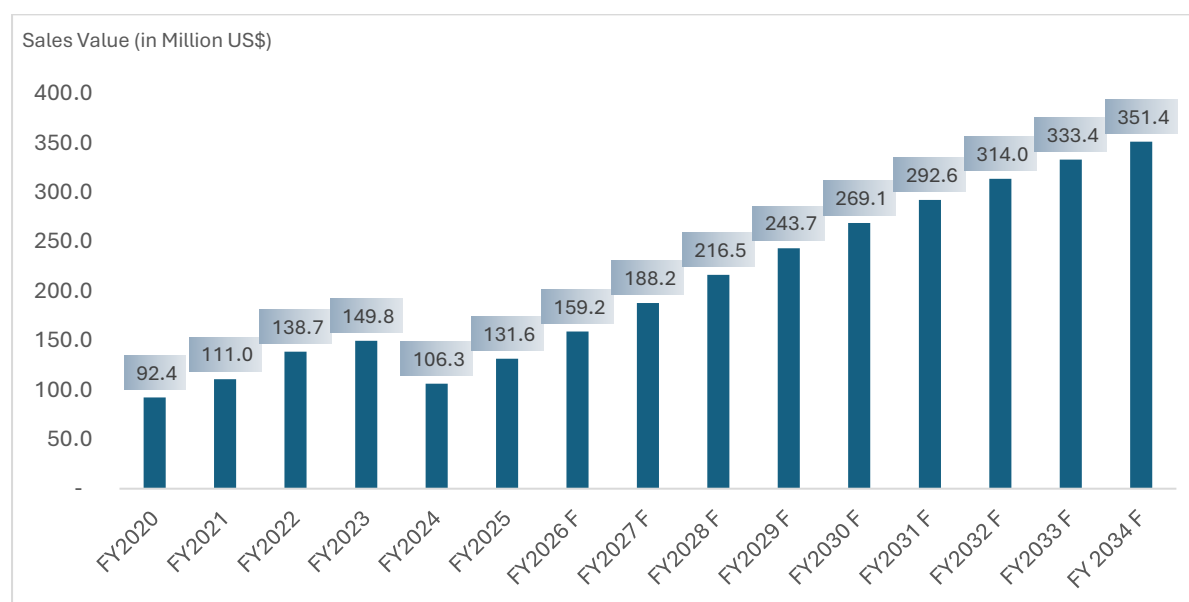
Under the “Make in India” initiative, the government aims to promote domestic container manufacturing, with a dedicated production cluster established in Bhavnagar, Gujarat.

According to the Global Trade Research Initiative (GTRI), India currently produces between 10,000 and 30,000 containers annually, largely for the domestic market.

However, India faces a significant cost disadvantage—manufacturing a 40-foot container in India costs roughly USD 1,000 more than in China, resulting in Indian-made containers being around 25% more expensive.

To address this disparity, GTRI has proposed introducing financial incentives, subsidies, and infrastructure investments to improve cost competitiveness in India's container manufacturing industry.

#### 4.2.2 High Cube Container



Source: IMARC, ICRA Analytics

The India high cube container market reached a value of USD 131.6 million in FY2025, registering a compound annual growth rate (CAGR) of 7.3% during FY2020–FY2025.

The 40-foot-high cube container is widely utilized for transporting cargo that requires additional volume capacity, offering 10 cubic meters more space compared to a standard 40-foot container. These containers are commonly used for shipping a variety of general or dry cargo, and their size makes them ideal for storing or moving bulky or high-volume goods that may not fit into smaller containers.

In a landmark event, Kerala welcomed MSC IRINA, the largest container ship to dock at any South Asian port. With dimensions of 399.9 meters in length and 61.3 meters in width, and a capacity of 24,346 TEUs, its arrival at Vizhinjam Port signifies a milestone for India's maritime landscape and reinforces the country's status as an emerging global transshipment hub.

Looking ahead, the India high cube container market is projected to grow at a CAGR of around 10.4% during FY2026–FY2034, reaching an estimated value of USD 351.4 million by FY2034.

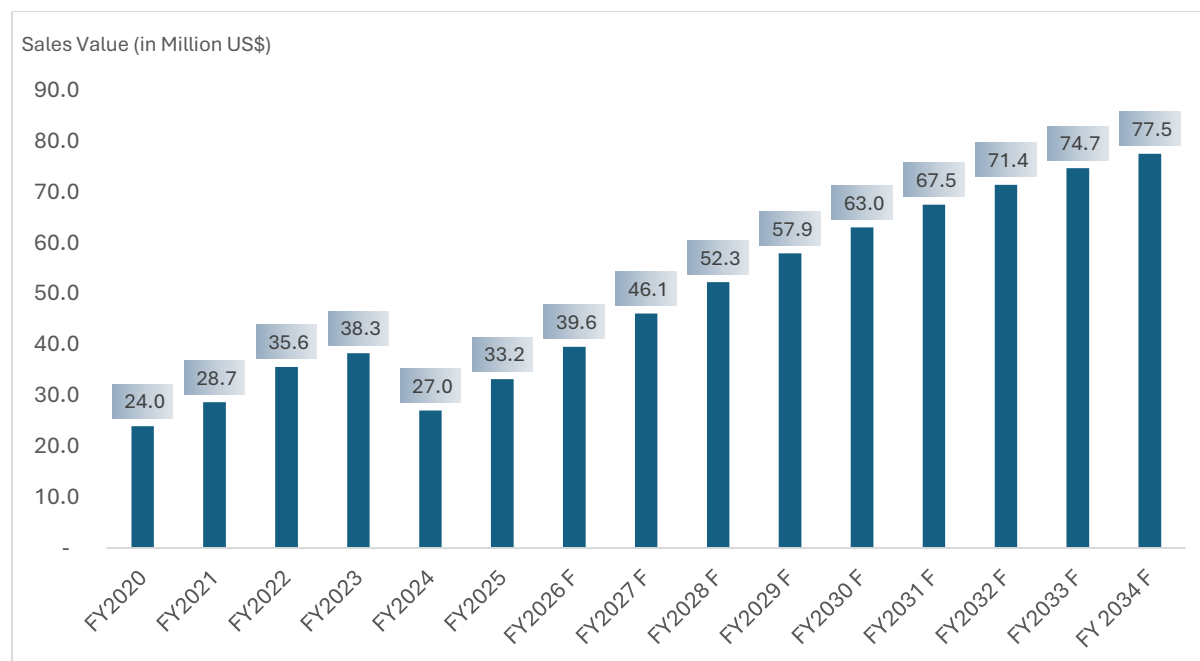
The growing popularity of high cube containers in India's e-commerce sector is driven by the need for efficient transport of large quantities of consumer goods from centralized warehouses to distribution centers across the country.

Additionally, India's expanding economy and rising levels of international trade have contributed to increased containerized cargo movement.

Major ports such as Jawaharlal Nehru Port Trust (JNPT) near Mumbai, Mundra Port in Gujarat, and Chennai Port in Tamil Nadu handle a substantial share of the country's container traffic.

According to the Indian Ports Association, container volumes at major ports have demonstrated consistent growth, underscoring India's increasing prominence in global trade. This progress is further supported by initiatives like the Sagarmala project, which aims to modernize port infrastructure and boost overall capacity.

### 4.2.3 Open Top Container



Source: IMARC, ICRA Analytics

The India open top container market reached a value of USD 27.0 million in FY2025, registering a compound annual growth rate (CAGR) of 6.7% between FY2020 and FY2025.

Open top containers play a vital role in India's stone export sector, facilitating the easy loading of heavy marble and granite blocks sourced from quarries in Rajasthan and Karnataka. These containers are compatible with multiple transport modes, including rail and road.

A 20-foot open top container is best suited for tall or irregularly shaped cargo that cannot be easily loaded through side doors. They are commonly used to transport marble from Rajasthan or granite from Karnataka. In contrast, a 40-foot open top container is ideal for large machinery or oversized equipment, making it valuable in construction projects for moving long structural materials.

Leading market players have established a strong presence through the development of robust logistics networks and the adoption of advanced technologies such as IoT and real-time tracking solutions, which are driving further demand for open top containers across India.

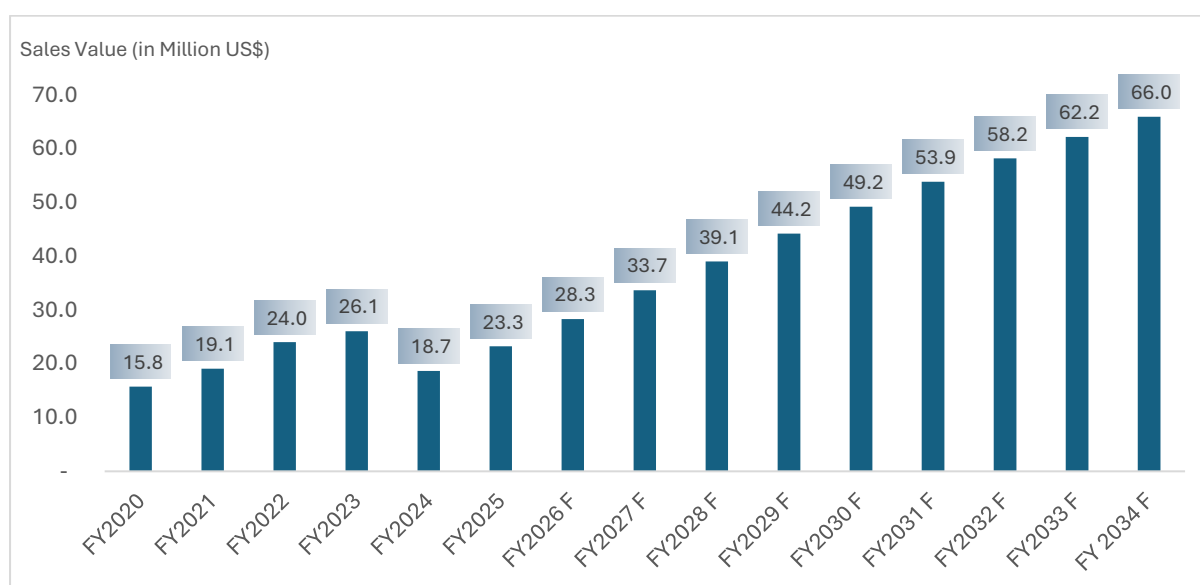
Looking ahead, the India open top container market is projected to grow at a CAGR of around 8.8% during FY2026–FY2034, reaching a value of USD 77.5 million by FY2034.

The rising popularity of container leasing companies in India aligns with the rapid growth of the logistics industry, fueling increased utilization of open top containers. Firms such as Triton and APPL Containers Ltd. offer flexible leasing options, including short- and long-term agreements tailored to meet diverse client needs.

However, due to intensifying competition, companies continuously seek innovative ways to differentiate themselves in the market.

For instance, some container leasing providers have begun utilizing blockchain technology to manage and monitor container logistics, which helps reduce operational costs and enhances transparency. Additionally, many have developed digital platforms enabling customers to book containers, track shipments, and receive real-time updates on container movements.

#### 4.2.4 Special Container



Source: IMARC, ICRA Analytics

The India special container market reached a value of USD 23.3 million in FY2025, recording a compound annual growth rate (CAGR) of 8.1% during FY2020–FY2025.

While standard containers are designed to handle a broad spectrum of cargo, special containers serve more specific needs, such as transporting temperature-sensitive goods or oversized equipment. These containers are essential to supporting India's diverse export landscape.

Among the most prominent types are flat rack containers, which are increasingly important in India's expanding renewable energy industry, especially for transporting large components used in wind and solar projects. These are typically available in 20-foot and 40-foot configurations.

Additionally, tank containers are critical to the chemical and edible oil sectors, offering safe and efficient solutions for transporting liquid cargo from manufacturing hubs to domestic and export markets.

Looking ahead, the India special container market is projected to grow at a CAGR of approximately 11.1% during FY2026–FY2034, reaching an estimated value of USD 66.0 million by FY2034.

A 40-foot flat rack container is built to handle payloads of up to 40,000 kg, making it ideal for heavier and bulkier cargo, while the 20-foot version supports a payload capacity of 30,140 kg.

For companies reliant on road-based logistics, truck containers provide a tailored solution for efficiently moving goods over long distances. These containers are widely used in industries such

as food distribution, automotive transport, and specialized freight, ensuring secure and reliable cargo delivery across diverse routes.

As India continues to enhance its standing in international trade, the need for specialized container types is expected to grow. Businesses that stay updated on container innovations and choose wisely based on cargo requirements will be better equipped to compete in both domestic and global markets.

#### **4.3 Technological Advancements**

##### **➤ Port Modernization and Expansion:**

- Automation and equipment upgrades: Major Indian ports such as JNPT and Mundra have integrated automated ship-to-shore cranes, rubber-tired gantry cranes (RTGCs), and other advanced cargo handling technologies to enhance operational efficiency. These systems facilitate faster container loading and unloading, significantly reducing vessel turnaround times.
- Deeper berths and handling of larger vessels: In alignment with the Sagarmala initiative, ports across India are undergoing berth deepening to accommodate the next generation of larger container vessels, which are becoming standard in global shipping due to economies of scale. Mundra Port, for example, has developed a world-class infrastructure to effectively manage mega container ships.
- Development of inland waterways: As part of Sagarmala, efforts are being made to integrate ports with India's inland waterway systems, supporting multimodal logistics and easing the burden on the traditional road and rail networks.

##### **➤ Deployment of Digital Solutions:**

- Port Community System (PCS) 1x: This comprehensive digital interface serves as a unified communication platform for all maritime stakeholders, including shipping companies, port authorities, customs, and freight forwarders. PCS 1x enables real-time cargo tracking, e-invoicing, and automated document processing, leading to fewer manual errors and faster clearance procedures.
- RFID and geofencing technologies: Radio Frequency Identification (RFID) tags are used to ensure accurate and real-time monitoring of cargo movements, while geofencing systems track the entry and exit of cargo and vehicles within port boundaries. These innovations help reduce congestion and improve cargo flow efficiency.
- AI and predictive analytics: Indian ports are gradually incorporating artificial intelligence tools for predictive maintenance, equipment monitoring, and demand forecasting. These technologies support better resource management, lower operational costs, and minimized equipment downtime.
- Blockchain for supply chain transparency: Several pilot programs are exploring the use of blockchain technology to establish secure and tamper-proof digital records of cargo transactions. This is expected to boost trust, enhance visibility, and reduce fraud in international trade activities.

➤ **Intermodal Connectivity:**

- **Dedicated Freight Corridors (DFCs):** The Western Dedicated Freight Corridor (WDFC) links the ports of Gujarat and Maharashtra to northern industrial zones, offering a high-capacity, electrified rail network capable of transporting double-stacked containers. These corridors contribute to a 40–50% reduction in transit times, enhancing overall cargo movement efficiency.
- **Inland Container Depots (ICDs) and Multimodal Logistics Parks (MMLPs):** The strategic placement of ICDs near key industrial clusters enables direct port connectivity, cutting down last-mile delivery costs. Under the Sagarmala initiative, MMLPs are being developed to integrate road, rail, and inland water transport, thereby streamlining logistics operations and reducing turnaround times.
- **Integrated rail-road systems:** Strengthened Road infrastructure and railway electrification near major ports ensure smooth container movement. These improvements have led to the deployment of dedicated container trains, offering cost-effective and eco-friendly solutions for cargo transport.

➤ **Private Investments and Public-Private Partnerships (PPPs):**

- The Indian government's push for private sector participation has significantly advanced port infrastructure development through PPP frameworks. Major industry players such as Adani Ports and DP World have invested in container terminals, cutting-edge technologies, and logistics facilities, contributing to the rise of Mundra Port as a key container-handling hub.
- Public-Private Partnership models, including Build-Operate-Transfer (BOT) arrangements, have enabled the creation of greenfield projects like Krishnapatnam and Dhamra, as well as the modernization of brownfield ports such as Ennore and Kandla, enhancing their capacity and operational efficiency.
- In addition, private stakeholders are adopting sustainable practices, including the use of solar energy systems and energy-efficient technologies, aligning with global environmental standards and promoting eco-friendly port operations.

#### **4.4 Impact of Macroeconomic Factors on the Container Industry**

The container industry in India is a vital component of the country's logistics and maritime ecosystem, serving as a strong indicator of international trade trends. Various macroeconomic factors significantly influence the sector, both directly, by shaping trade volumes, and indirectly, through their impact on cost structures, regulatory policies, and infrastructure development. Below is a detailed overview of key macroeconomic drivers and their effects:

- **GDP Growth and Industrial Output:** Container movement is closely aligned with the pace of economic growth. Increases in India's GDP, particularly in industrial and manufacturing sectors, lead to higher volumes of both exports and imports, thus driving

container traffic growth. Initiatives such as “Make in India” and Production Linked Incentive (PLI) schemes have significantly bolstered production in industries like electronics, pharmaceuticals, and textiles, spurring demand for outbound containers—especially from industrial regions like Gujarat, Maharashtra, and Tamil Nadu.

- **Global Trade Dynamics and Exchange Rates:** India’s container trade is deeply linked to international trade demand and currency fluctuations. A strong rupee reduces import costs, resulting in higher inbound container volumes, whereas a weaker rupee supports exports but also increases costs for fuel, imported logistics equipment, and container-handling machinery, affecting operational efficiency. External factors like the Russia-Ukraine conflict, China’s economic slowdown, and U.S. interest rate decisions have created global trade instability, leading to container congestion or underutilization at Indian ports.
- **Inflation and Interest Rates:** Elevated inflation levels raise input costs—including fuel, labor, and maintenance—which compress profit margins for shipping companies and terminal operators. At the same time, higher interest rates increase capital costs, deterring investments in fleet expansion and infrastructure. During recent inflationary periods in India, many Container Freight Stations (CFSs) and Inland Container Depots (ICDs) faced margin pressures, and private sector investment in cold chain and container infrastructure upgrades slowed considerably due to costlier financing.
- **Crude Oil Prices and Bunker Fuel Costs:** The container logistics sector is highly energy-dependent, making it vulnerable to oil price volatility. Since India is a net oil importer, any surge in crude oil prices directly affects shipping line costs. Following the COVID-19 pandemic, instability in global crude prices led to multiple General Rate Increases (GRIs) by shipping carriers, contributing to freight rate hikes and reduced supply chain reliability. These shifts particularly impacted SME exporters, whose competitive positioning weakened due to unpredictable and elevated freight charges.
- **Government Policies and Trade Agreements:** Trade facilitation initiatives, streamlined customs procedures, advancements in port digitization, and the establishment of free trade agreements (FTAs) significantly impact the efficiency of the container logistics sector. Programs like the Sagarmala Project, PM Gati Shakti, and the National Logistics Policy are geared toward improving multimodal integration and reducing logistics costs. Concurrently, FTAs with countries like the UAE and Australia, along with ongoing negotiations with the European Union, are expected to boost containerized trade volumes, particularly for finished products and high-value exports.
- **Infrastructure Development and Urbanization:** Effective port connectivity, warehousing solutions, and last-mile logistics are fundamental for smooth container operations. Large-scale macroeconomic investments in these areas have a lasting, positive impact on the container supply chain ecosystem. Privately operated ports such as Mundra and Krishnapatnam, known for superior hinterland access and reduced turnaround times, are increasingly gaining an edge over traditional government-operated ports like JNPT. This trend demonstrates how modern infrastructure, backed by strategic economic planning, can alter container traffic flows across regions.



The Indian container industry remains highly sensitive to macroeconomic factors. While global trade uncertainties present challenges, domestic structural reforms, targeted infrastructure investments, and evolving trade partnerships offer substantial growth opportunities. Going forward, aligning logistics policies with broader economic objectives will be critical to improving the resilience, efficiency, and global competitiveness of this pivotal segment of India's supply chain and maritime economy.

#### **4.5 Analysis of Key Regulatory Policies/Programs**

**Sagarmala Programme:** The Sagarmala Programme, introduced in March 2015, is the premier initiative of the Ministry of Ports, Shipping, and Waterways, aimed at transforming India's maritime landscape. It stands as a core component of the Maritime Amrit Kaal Vision 2047 (MAKV), which supports India's goal of becoming a global maritime powerhouse. Building upon the Maritime India Vision 2030, MAKV outlines bold aspirations, including the creation of 4 million GRT of shipbuilding capacity and the handling of 10 billion metric tons of port cargo annually, with the objective of positioning India among the top five shipbuilding nations by 2047. Under the Sagarmala framework, approximately 839 projects have been identified, with an estimated total cost of ₹5.79 lakh crore. These projects are being implemented by central ministries, IWAI, Indian Railways, NHAI, state governments, major ports, and other associated bodies. As of March 19, 2025, 272 projects have been completed, representing investments of around ₹1.41 lakh crore.

The Sagarmala Programme has significantly improved port efficiency, strengthened the coastal economy, revitalized inland water transport, and elevated India's global logistics performance. Over the past decade, coastal shipping has increased by 118%, Ro-Pax ferries have carried over 40 lakh passengers, and cargo movement on inland waterways has expanded by 700%. Nine Indian ports now feature in the world's top 100, with Vizag ranking among the top 20 container ports globally. On several performance benchmarks, Indian ports are now surpassing ports in many developed maritime nations.

To continue this momentum, the Government of India has launched Sagarmala 2.0, which emphasizes shipbuilding, repair, recycling, and port modernization to strengthen India's maritime competitiveness. With ₹40,000 crore in budgetary support, the program aims to attract a total investment of ₹12 lakh crore over the coming decade, facilitating infrastructure enhancement, coastal economic progress, and employment generation. In line with the vision for a Viksit Bharat and Atmanirbhar Bharat by 2047, Sagarmala 2.0 will further drive port-led development and reinforce India's place as a maritime leader on the global stage.

Additionally, the Sagarmala Startup Innovation Initiative (S2I2), launched on March 19, 2025, is a path-breaking effort to encourage entrepreneurship and innovation in India's maritime sector. S2I2 provides financial support, mentorship, and industry collaboration opportunities to startups engaged in areas such as green shipping, smart port solutions, maritime logistics, shipbuilding technologies, and sustainable coastal development.

**PM Gati Shakti – National Master Plan for Multi-modal Connectivity:** The PM Gati Shakti National Master Plan (PMGS-NMP) was officially launched on 13th October 2021 to build a comprehensive multi-modal connectivity infrastructure for various economic zones across the country. The Cabinet Committee on Economic Affairs (CCEA) granted approval for its implementation on 21st October 2021, reinforcing the initiative's role in transforming India's logistics landscape.

- **National Logistics Policy (NLP) 2022: Progress and Key Initiatives:** The National Logistics Policy (NLP) was introduced on 17th September 2022 with the aim of accelerating India's economic growth through the creation of an integrated, efficient, and cost-effective logistics network. The policy targets a reduction in logistics costs, enhancement of India's Logistics Performance Index (LPI) ranking into the top 25 globally by 2030, and the promotion of data-centric policy-making. Implementation is spearheaded by the Comprehensive Logistics Action Plan (CLAP), which emphasizes areas including digital logistics infrastructure, asset standardization, skill development, collaboration with states, and EXIM logistics enhancement.

The policy also focuses on capacity building and training initiatives in partnership with the Capacity Building Commission (CBC). Training programs are being deployed through webinars, workshops, and digital platforms, integrated into the Central and Administrative Training Institutes.

- **State Logistics Plans (SLPs):** A total of 26 States and Union Territories have adopted the NLP framework by formulating and notifying their own State Logistics Policies, thus reinforcing the importance of logistics within regional public planning.
- **LEADS Survey:** The Logistics Ease Across Different States (LEADS) survey continues to benchmark performance across states. The fifth edition was released in December 2023, followed by the sixth edition in January 2024, assessing infrastructure quality and service delivery at the state and UT levels.
- **Unified Logistics Interface Platform (ULIP):** ULIP serves as a digital integration framework, combining 33 logistics-related IT systems across 10 central ministries to foster logistics innovation. Currently, over 930 private companies are registered on ULIP, with 95 live applications and 185 signed NDAs. The platform also incorporates GST data to enable end-to-end cargo visibility.
- **Logistics Data Bank (LDB):** To ensure 100% tracking of containerized EXIM cargo, the Logistics Data Bank (LDB) was established. Leveraging RFID, IoT, Big Data, and Cloud-based technologies, LDB delivers real-time tracking from ports to inland destinations such as ICDs, CFSs, and key logistics touchpoints like parking plazas, toll booths, and railway networks. It offers a single-window, cloud-based visualization system, enabling users to track cargo using only the container number.

**Direct Port Delivery (DPD) and Direct Port Entry (DPE) Reforms:** Direct Port Delivery (DPD) is a transformative initiative introduced initially at the Jawaharlal Nehru Custom House (JNCH) and subsequently extended to other CFS-based ports across India by the Central Board of Indirect Taxes and Customs (CBIC) in September 2019. This scheme revolutionized the cargo clearance process by allowing facilitated consignments to receive 'out of charge' status directly at the terminal, removing the need for containers to be transferred to Container Freight Stations (CFSs) for completing customs formalities.

DPD has significantly contributed to enhancing the ease of doing business, trade facilitation, and cargo release time, by eliminating redundant transport and handling at CFSs, thereby yielding notable cost savings in clearance procedures. Effective 15.07.2021, a further advancement was implemented, shifting from an entity-based DPD model to a Bill of Entry-based DPD, enabled by higher levels of risk-based facilitation. This transition is expected to broaden eligibility criteria and further reduce cargo dwell times.

The Direct Port Entry (DPE) initiative is a state-of-the-art solution facilitating the direct movement of factory-stuffed containers to port terminals, bypassing intermediate CFS handling. It enables exporters to Gate-In export cargo directly to the container terminal on a 24x7 basis. The facility is located over an area of 18,357 sqm inside the Truck Parking Terminal, developed under the Sagarmala programme, and is designed to handle 18,000 TEUs per month.

The DPE infrastructure, operated by Indian Customs in collaboration with the Central Warehousing Corporation (CWC), provides seamless issuance of the Let Export Order (LEO) under one roof. A dedicated team of CWC and Customs officials, working with VOC Port, offers services to Tier-II and Tier-III (AEO-certified) EXIM clients.

Both DPD and DPE reforms allow direct container movement between factories and ports, reducing the need for intermediary handling, thereby achieving significant savings in time and logistics costs.

#### Impact Summary:

DPD for import containers rose from 3% in November 2016 to 40.62% in July 2018, delivering cost savings of up to ₹15,000 per container and reducing average delivery time by 5 days.

DPE for export containers increased from 60% in April 2017 to 82.66% in July 2018, reflecting the growing adoption of this efficient logistics reform.

**Trade Facilitation Measures by CBIC and ICEGATE:** The Government of India has introduced several significant measures in recent years to enhance trade facilitation, both domestically and across borders, benefitting all stakeholders, including exporters and importers. The core of these reforms revolves around the simplification, modernization, harmonization, and automation of trade-related procedures. The implementation of the Trade Facilitation Agreement (TFA) since February 2017 has played a vital role in this transformation. These initiatives focus on speeding up the movement, clearance, and release of goods, as well as fostering cooperation between customs authorities of trading nations.

Major reforms include the rollout of the online Single Window Interface for Facilitating Trade (SWIFT), the revamped Authorized Economic Operator (AEO) scheme, the Integrated Risk Management System (RMS), and the Direct Port Delivery (DPD) mechanism, among other initiatives. These reforms are already delivering results at the ground level. Exporters and importers now experience reduced time, costs, and documentation requirements across various ports and customs stations.

With DPD, importers can now take delivery directly from the terminal as soon as goods are offloaded. Recognized AEOs enjoy a range of benefits, including paperless filing, deferred payment of duties, and 24x7 cargo clearance. The enhanced clearance through RMS has significantly eased the burden for importers, while exporters benefit from faster clearance using the Direct Port Entry (DPE) facility. The National Logistics Portal (Marine), recently launched, is helping reduce information asymmetry by integrating stakeholders across the logistics value chain.

India's performance in Trading Across Borders (TAB) has been recognized by multiple global reports. According to the World Bank's Doing Business Report 2020, India improved its ranking from 146th in 2018 to 68th, showing substantial progress. In the UNESCAP Global Survey on Digital and Sustainable Trade Facilitation (2021), India's score rose from 78.5% in 2019 to 90.3%,

making it the top performer in both the South and Southwest Asia region (63.12%) and the Asia-Pacific region (65.85%).

On the logistics front, India also made strides in the World Bank's Logistics Performance Index (LPI 2023), rising six positions to rank 38 out of 139 countries. The average container dwell time in India dropped to 3 days, outperforming countries like the UAE and South Africa (4 days), USA (7 days), and Germany (10 days). In terms of port turnaround time, Indian ports achieved 0.9 days, which is superior to global benchmarks such as Singapore (1.0 day), UAE (1.1 days), Germany (1.3 days), USA (1.5 days), Australia (1.7 days), and South Africa (2.8 days).

The Confederation of Indian Industry (CII) has played a proactive role in collaborating with the government to implement these reforms and regularly channelling stakeholder feedback to policymakers. In line with this ongoing initiative, the present report highlights the latest policy developments led by the Government of India in the area of trade facilitation, while also identifying opportunities for further enhancement. Key focus areas include customs processes, infrastructure upgrades, regulatory simplification, digitization, and capacity building.

The Central Board of Indirect Taxes and Customs (CBIC), through its digital platform ICEGATE, has introduced numerous measures aimed at enhancing the ease of doing trade. The digitization of customs processes has been a game changer—boosting transparency and predictability at Indian container ports, which are essential factors in attracting global shipping lines.

**Inland Waterways Development (via IWAI):** The Inland Waterways Authority of India (IWAI) has been spearheading the development of National Waterways to promote cargo movement through riverine systems, including container traffic. Established on 27 October 1986, the IWAI operates under the Ministry of Ports, Shipping and Waterways and serves as the nodal agency responsible for the regulation, maintenance, and development of inland waterways across the country. The Authority plays a pivotal role in policy formulation, infrastructure creation, and ensuring ecological sustainability of water transport corridors.

India possesses a rich network of rivers, creeks, canals, and backwaters, with an estimated navigable length of 14,500 km, of which approximately 5,200 km is viable for cargo transportation. Despite this natural advantage, the share of Inland Water Transport (IWT) in India's overall modal transport mix continues to remain relatively low.

The IWAI recorded an all-time high in cargo movement, reporting 145.5 million tonnes in FY 2024–25, marking a major milestone for IWT. According to the Ministry of Ports, Shipping and Waterways, the number of National Waterways has increased from 5 to 111, and the operational length has expanded from 2,716 km to 4,894 km.

To further incentivize waterborne logistics, the government introduced the Jalvahak Scheme, offering 35% operational cost incentives for cargo transportation along key inland routes such as NW-1, NW-2, and NW-16. IWAI has set an ambitious goal of raising the modal share of waterways in freight transport from 2% to 5%, aiming to handle over 200 million metric tonnes by 2030, and reaching 500 million metric tonnes by 2047, in alignment with the Maritime India Vision 2030 and Amrit Kaal Vision 2047.

Utilizing waterways plays a critical role in reducing logistics costs, thereby enhancing the global competitiveness of Indian exports. Studies indicate that increasing the share of IWT can lead to up to 20% savings in overall supply chain costs, offering a major boost to trade. Additionally,

diverting cargo from roadways to waterways helps decongest highways and urban traffic zones, improves infrastructure lifespan, and reduces travel times.

From an environmental perspective, inland shipping generates far fewer greenhouse gas emissions per ton-km than road or rail, making it a greener mode of transport. Raising IWT's modal share from 2% to 5% could yield a significant reduction in annual carbon emissions. Furthermore, inland routes through Bangladesh, utilizing rivers like the Brahmaputra and Meghna, provide economical access to the Northeast, thereby enhancing both strategic connectivity and trade integration with border states.

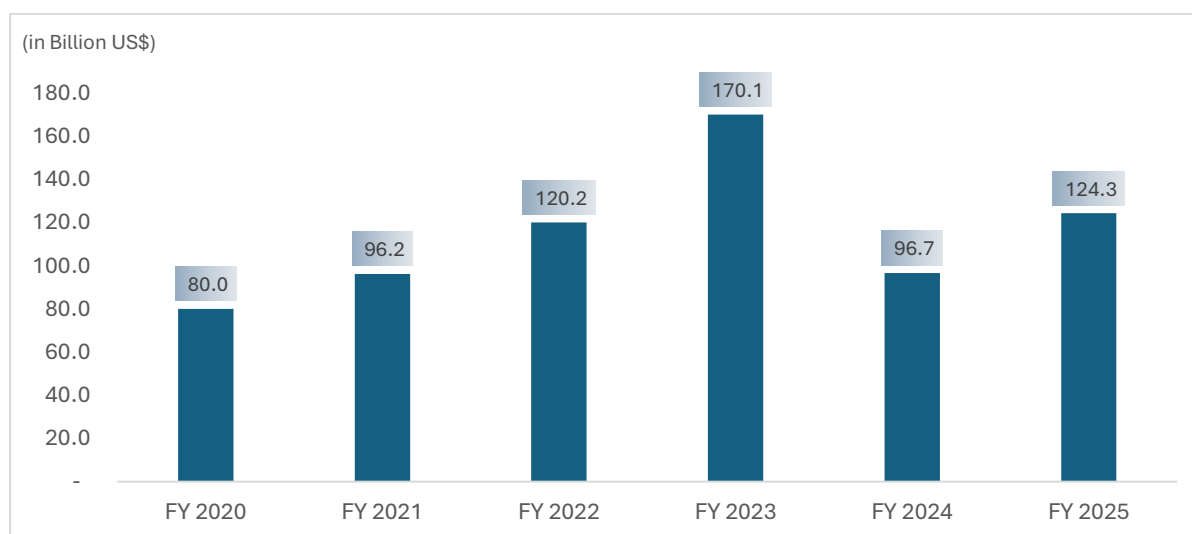
#### Policy Support:

- On July 26, 2024, the Government of India announced a revision to the Shipbuilding Financial Assistance Policy (SBFAP). Under this initiative, financial assistance amounting to ₹337 crore (US\$ 40.40 million) has been disbursed to bolster India's competitiveness against foreign shipyards and to rejuvenate the domestic shipbuilding sector. Since its launch, the policy has helped secure 313 vessel orders, with a cumulative value of approximately ₹10,500 crore (US\$ 1.26 billion).
- The Union Budget for 2025–26 further strengthens this effort through the introduction of SBFAP 2.0, with a total allocation of ₹18,090 crore (US\$ 2.08 billion). This extended policy provides subsidies to Indian shipyards, aiming to offset production costs and stimulate growth in domestic shipbuilding.

India has established a strong policy framework to develop its container logistics industry, through synchronized efforts in logistics reform, infrastructure development, and trade facilitation. While challenges in implementation persist in certain areas, the overall trajectory remains decidedly growth oriented. The continued alignment of port, customs, rail, and industrial policies will be essential to position India as a global hub for container logistics.

## 4.6 Export-Import Analysis

### 4.6.1 Import Analysis



Source: IMARC Group, ICRA Analytics

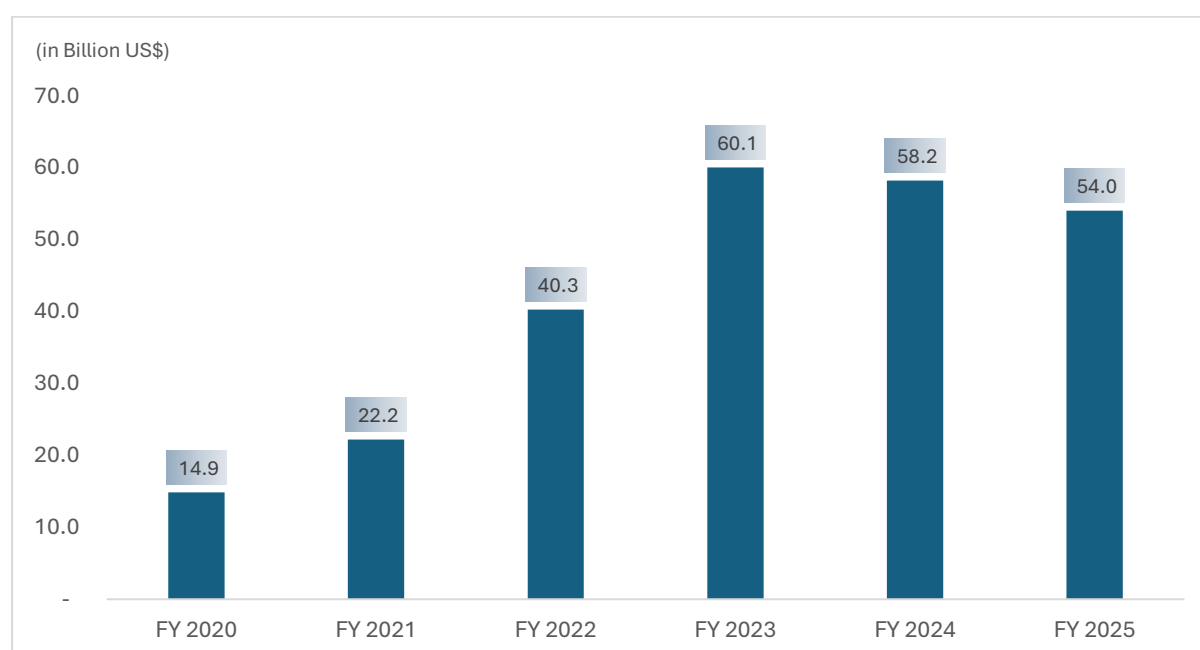
As India's integration into global supply chains deepens, the volume of imports is increasing, creating a greater need for efficient logistics solutions like containerized shipping.

India's container production costs remain relatively high, ranging between US\$ 3,500 and US\$ 4,800 per unit, compared to US\$ 2,500 to US\$ 3,500 in China. This cost disparity compels India to lease containers, primarily from Chinese manufacturers, thereby elevating logistics costs and restricting optimal port utilization.

As reported by the Ministry of Commerce and Industry, India's total goods imports for 2023–24 declined by 5.7%, amounting to US\$ 675.4 billion. This contraction had a corresponding impact on the volume of container imports during the same year.

India's reliance on imports for essential components—including electronics and machinery—continues to drive inbound container traffic. This trend is evident in the rising value of imports, which climbed from US\$ 80.0 billion in FY2020 to US\$ 124.3 billion in FY2024.

#### 4.6.1 Export Analysis



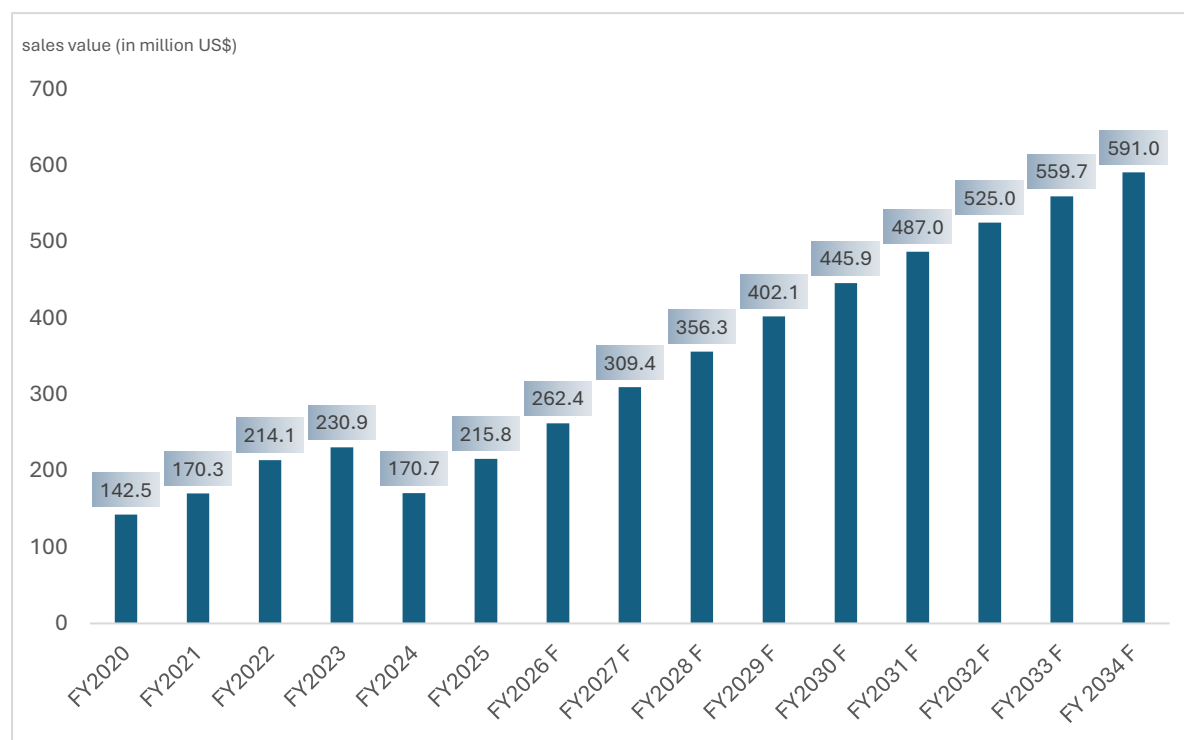
Source: IMARC Group, ICRA Analytics

India's container exports have witnessed consistent growth, increasing from US\$ 14.9 Billion in FY2020 to US\$ 54.0 Billion in FY2025. This upward trend is primarily fueled by industries such as automotive, electronics, textiles, and pharmaceuticals, which extensively rely on containerised shipping. The surge in international demand for these products has played a pivotal role in boosting container traffic.

Freight rates for Indian exporters have witnessed a substantial increase. For example, the cost of shipping goods to major destinations like Europe and the United States has escalated sharply, with the rate for a 40-foot container climbing to approximately US\$ 4,775 in 2024, up from US\$ 1,420 in 2019. This dramatic rise is attributed to global supply chain disruptions and persistent logistics bottlenecks. Recent port delays in India—largely resulting from congestion at critical transshipment hubs like Singapore—have further worsened the situation.

A significant contributor to rising freight expenses is the instability in the Red Sea region, an essential artery for global maritime trade. Geopolitical tensions in this area have severely impacted shipping routes, leading to inflated transportation costs and added stress for Indian exporters.

## 4.7 India Shipping Container Leasing Industry



Source: IMARC Group, ICRA Analytics

Container leasing companies in India have grown in tandem with the country's rapid economic expansion. With rising trade volumes, the increasing importance of intermodal transport, and the surge in e-commerce, the demand for reliable and cost-efficient container logistics solutions has accelerated. This growth has made leasing an attractive option compared to ownership, especially for businesses navigating fluctuating freight rates and global supply chain disruptions. Consequently, container leasing has become a vital part of India's logistics ecosystem.

To remain competitive in this fast-paced market, many leasing companies are adopting advanced technologies and digital tools. Blockchain, for example, is being used to track and manage container movements, enhancing transparency while lowering operational costs. At the same time, user-friendly online platforms now allow customers to book containers, track shipments, and receive real-time updates, providing greater flexibility and convenience. These innovations are helping firms differentiate themselves in a crowded industry.

Infrastructure development has also played a crucial role in driving growth. The establishment of inland container depots (ICDs) and logistics parks has enabled smoother container movement across regions, creating a favourable environment for leasing companies. Port infrastructure upgrades have attracted international players and encouraged diverse leasing models, from short-term rentals to long-term contracts. Between FY2020 and FY2025, the market reached a value of US\$ 215.8 million, growing at a CAGR of 8.7%. Looking ahead, it is projected to reach US\$ 591.0 million by FY2034, with an even higher CAGR of 10.7%.

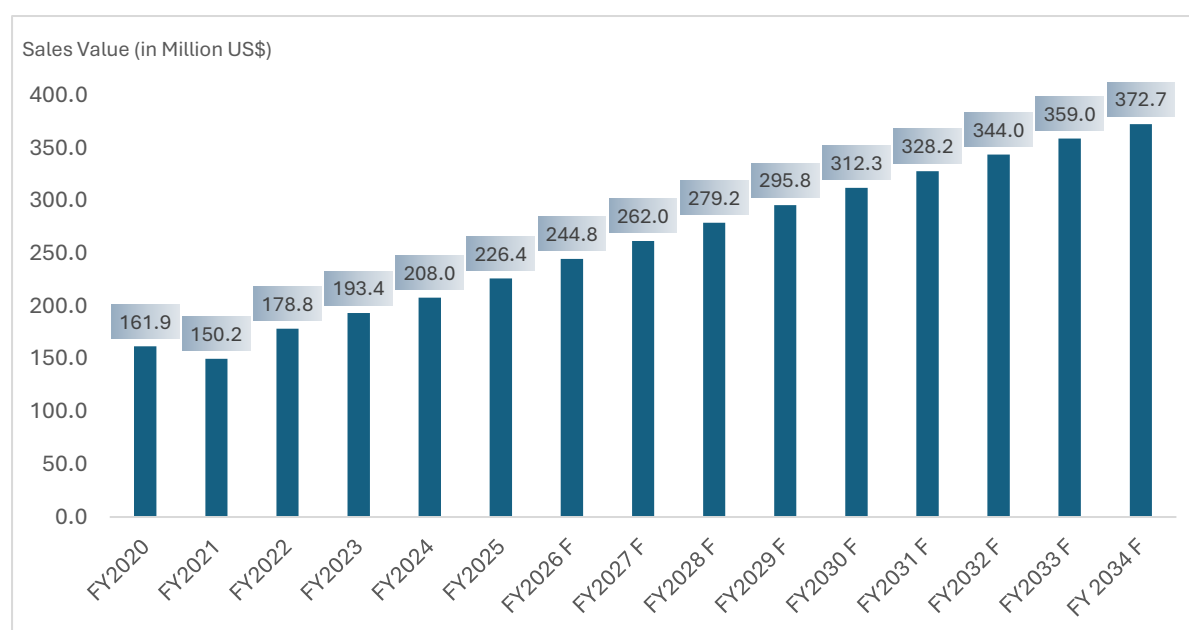
India's ports are witnessing significant activity, further boosting leasing demand. In February 2023, cargo traffic at major ports rose by 11.79%, with the Jawaharlal Nehru Port Authority and Mumbai Port showing particularly strong increases. Data from Container xChange also indicates higher inbound box volumes at Nhava Sheva, Mundra, and Chennai ports in 2023 compared to the previous year, pushing up the container availability index. Meanwhile, new projects like the

Vizhinjam International Transshipment Deepwater Multipurpose Seaport in Kerala developed under a public-private partnership and inaugurated in May 2025 highlight the government's commitment to strengthening logistics capacity.

India is steadily positioning itself as a key player in the global container leasing market. Alongside government policies promoting exports and regulating imports for balanced trade, leading companies are shaping the competitive landscape. With strong infrastructure, digital adoption, and growing global trade integration, India's container leasing industry is poised for sustained expansion and innovation in the coming decade.

## 5. India Plastic Extrusion Machineries & Synthetic Rope Industry

### 5.1 India Plastic Machineries Market



Source: IMARC Group, ICRA Analytics

India's plastic extrusion machinery market was valued at US\$ 226.4 Million in FY2025, registering a CAGR of 6.9% during the period FY2020-FY2025. The surge in demand for plastic extrusion machines is being driven by increasing requirements for extruded plastic products across diverse end-use industries such as packaging, consumer goods, construction, and automotive.

These machines are instrumental in producing various types of plastic materials widely used in packaging, owing to their hygienic properties and non-toxic characteristics. The automotive industry is witnessing heightened demand for innovative plastic components that support the development of fuel-efficient vehicles.

Likewise, the construction sector significantly depends on plastic extrusion technologies, while the transportation industry is also contributing to market growth. Overall, the outlook for the market is positive, with new plastic product innovations and technological progress propelling its continued expansion.

Looking ahead, the India plastic extrusion machinery market is projected to expand at a CAGR of approximately 5.4% during FY2026–FY2034, reaching a market value of US\$ 372.7 Million by FY2034. The plastic processing sector in India remains strong and holds the potential to evolve

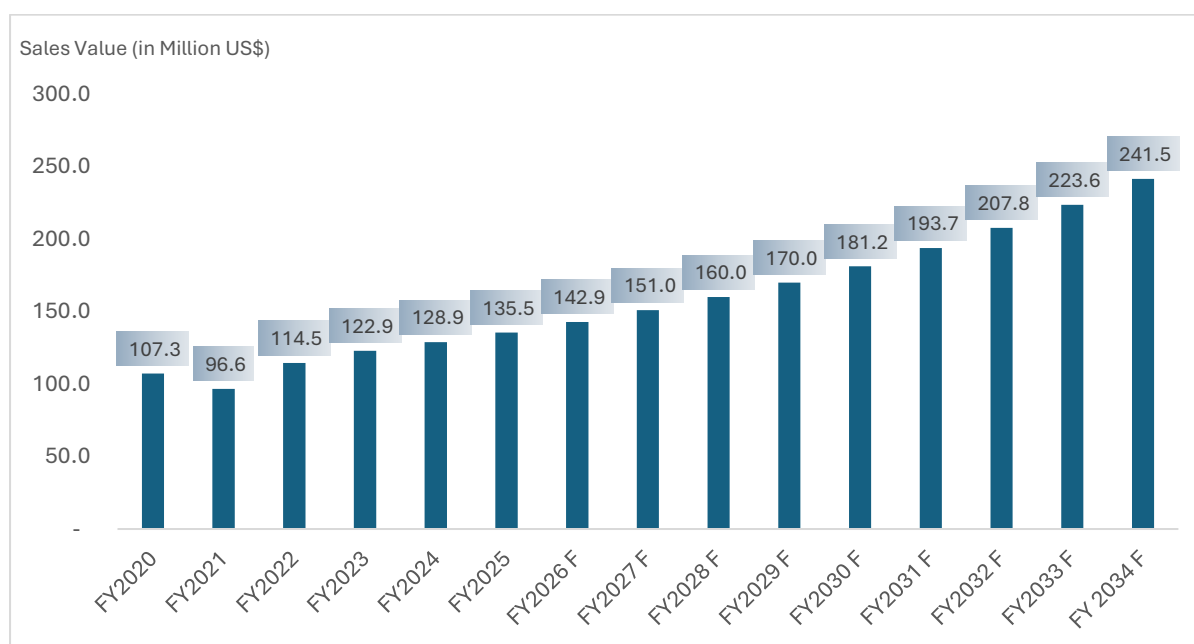


into a vital component of the country's manufacturing ecosystem, akin to its role in developed economies such as Germany, Italy, France, USA, Canada, Japan, China, Taiwan, and South Korea.

The growing emphasis on energy conservation is expected to fuel the nationwide demand for plastic extrusion machinery. The packaging industry continues to be a leading consumer of plastics. Beyond serving as a replacement for conventional materials, plastic packaging is witnessing increased adoption in segments like healthcare, personal care products, and packaged food and beverages.

The progress in packaging material technologies and rising demand for product protection, extended shelf life, and security/stability are further propelling the need for plastic packaging, thereby supporting growth in the extrusion machinery market.

## 5.2 India Synthetic Rope Market



Source: IMARC Group, ICRA Analytics

India synthetic rope market reached a value of US\$ 135.5 Million in FY2025, registering a CAGR of 4.8% during FY2020–FY2025. The notable growth in the market can be attributed to the superior characteristics of synthetic ropes for industrial applications. Their enhanced capacity to handle heavy materials has driven their adoption across various sectors.

India's coastline has been re-evaluated and now measures 11,098.81 km, an increase of 3,537.21 km (nearly 50%) from the previous 7,561.60 km, encompassing 9 coastal states, the Bay of Bengal to the east, the Indian Ocean to the south, and the Arabian Sea to the west. These geographical features are fuelling the demand for synthetic ropes, which are vital in marine and fishing activities.

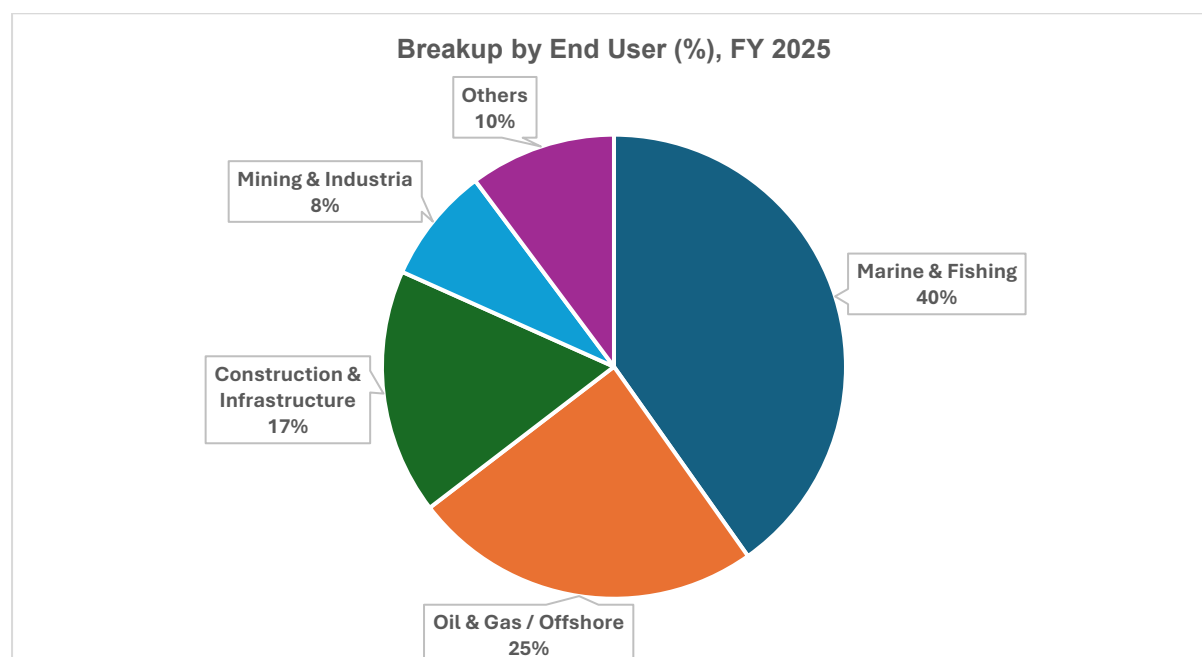
Responsive Industries Ltd (RiL), through its subsidiary Axiom, commands the largest domestic market share in meeting the demand for shipping ropes. The rise in sea-based transportation and the mandatory replacement of ropes under International Maritime Laws offer significant growth prospects for Axiom.

Looking ahead, the India synthetic rope market is projected to expand at a CAGR of around 6.8% during FY2026–FY2034, reaching a value of US\$ 241.5 Million by FY2034. The growth in maritime trade, coupled with the expansion of ports and shipping activities, has heightened the dependence on synthetic ropes for essential tasks such as mooring, towing, and anchoring vessels.

The Indian synthetic rope market is anticipated to experience robust growth over the forecast period due to accelerating urbanization and infrastructural developments, including the construction of roads, buildings, bridges, and industrial facilities. The oil and gas industry in India is also contributing to rising demand. With plans to expand exploration acreage to 1 million square kilometres by 2030 and an expected 16% increase in 2025, the sector will require high-performance ropes capable of enduring extreme conditions.

Additionally, the implementation of smart cities, commercial hubs, and urban redevelopment programs is expected to boost construction activity, further propelling the need for synthetic ropes across the country.

### 5.3 Market Breakup by End User



Source: IMARC Group, ICRA Analytics

During FY2025, marine & fishing represented the most popular end user, accounting for a share of 40% of the total market. Marine & fishing was followed by oil & gas/offshore at 25%, construction & infrastructure at 17% and mining and industrial at 8.1%. Others accounted for 10%. Others include agriculture, sports and adventure, defense & aerospace sectors.

## 5.4 Import-Export Trend Analysis

Particulars	Trade	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
HS CODE: 84772000 (Extruders including both plastic and rubber)	Export (US\$ Million)	64.8	61.6	73.1	80.2	80	84.9
	Import (US\$ Million)	144.2	97.3	171.3	149.8	151.2	187.2
Particulars	Trade	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Product: 847940 Rope or cable-making machines (excl. twisting machines of the type used in spinning mills)	Export (US\$ Million)	11,023	7,064	14,625	14,475	29,778	14,570
	Import (US\$ Million)	39,222	19,907	20,049	39,797	35,399	75,547
Particulars	Trade	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Product: 560750 Twine, cordage, ropes and cables, of synthetic fibres	Export (US\$ Million)	12,353	10,362	14,893	17,662	14,364	19,008
	Import (US\$ Million)	14,436	10,370	15,466	16,778	19,711	22,014

Source: IMARC Group, ICRA Analytics

## 5.5 Technological Advancements & Key Innovation

The plastic extrusion machinery supplier industry is undergoing a significant transformation, propelled by advancements in technology, sustainability goals, and evolving consumer demands. Plastic extrusion innovations have revolutionized manufacturing, facilitating the production of diverse products with improved accuracy and operational efficiency.

**Integration of IoT for Real-Time Monitoring:** The incorporation of Internet of Things (IoT) technology is empowering manufacturers to observe extrusion operations in real-time, enabling prompt interventions and reducing production errors. By embedding sensors along the extrusion line, it becomes possible to monitor key variables such as temperature, pressure, and other critical indicators throughout each phase of manufacturing. This constant stream of real-time data enhances product quality and minimizes production downtime, resulting in cost savings. It also allows manufacturers to proactively address changes in material behavior or environmental factors. Consequently, production systems are becoming more intelligent and adaptive, driving smarter decision-making processes. The adoption of IoT signifies a substantial evolution in how extrusion workflows are managed and optimized, offering manufacturers a strategic advantage in a dynamic market landscape.

**Automation in Extrusion Operations:** Automation is redefining extrusion workflows by boosting output and cutting down on labor expenses. Robotic technologies are being integrated for functions such as material transport, quality inspection, and on-the-fly system adjustments, reshaping the manufacturing environment. These automated solutions reduce the risk of human error while ensuring greater accuracy and uniformity across operations. Additionally, automated systems can function continuously, providing a notable uplift in production efficiency. Predictive maintenance, powered by performance analytics, allows companies to anticipate equipment failures and reduce downtime, further enhancing productivity. By adopting automation, manufacturers are not only optimizing cost structures but are also strengthening their competitive position in the global market.

**Energy-Efficient Extrusion Processes:** Advancements in technology are making extrusion processes more energy-efficient, resulting in cost reduction and less environmental impact. Since energy use represents a major component of operational expenses in extrusion, improving efficiency has become a key objective for manufacturers. Environmentally friendly extrusion innovations—such as hybrid systems that integrate electric and hydraulic power—are proving to be practical alternatives. In addition, using variable frequency drives allows for accurate regulation of motor speed and torque, matching energy use to the real-time demands of the production line. This enables more precise forecasting of energy requirements and helps cut back on unnecessary power consumption without reducing output. Increasing the energy efficiency of extrusion operations not only supports cost management but also plays a significant role in lowering carbon emissions.

**Innovations in Cooling Techniques:** State-of-the-art cooling technologies are raising the standard of product quality by ensuring consistent cooling, which helps minimize stress and distortion in extruded materials. Managing temperature precisely as the plastic leaves the die is essential to maintaining its shape and functionality. Recent developments include advanced cooling systems that use air, water, or even cryogenics to deliver the ideal cooling rate suited to each type of polymer. Additionally, energy-efficient cooling tunnels that enhance airflow and retain temperature have proven effective in reducing energy waste while improving overall cooling performance. By controlling cooling rates with high precision, manufacturers can ensure uniform product quality and minimize defects linked to uneven cooling. These advancements in cooling are essential to expanding the technical capabilities of plastic extrusion.

**Smart Extrusion Die Designs:** Modern die technologies feature embedded smart systems that allow for fine-tuned control of the extrusion process, ensuring consistent product sizing and performance. By integrating sensors within the die, manufacturers gain real-time insights into temperature, flow, and pressure, which enable live process adjustments. This real-time control not only improves product precision but also cuts down on material wastage, as issues can be corrected during production rather than after. Additionally, modular die configurations are facilitating quicker transitions between product profiles, significantly reducing downtime. This adaptability is especially useful for businesses that serve a variety of markets. The efficiency improvements offered by smart die technology empower manufacturers to uphold stringent quality standards while remaining responsive to market needs.

**Additives for Enhanced Properties:** Cutting-edge additives are being engineered to improve the strength, flexibility, and thermal resistance of extruded plastics. These innovations allow manufacturers to customize materials for specific end uses, whether higher durability, elasticity, or resistance to heat is needed. Additives such as flame retardants, performance boosters, and colorants significantly broaden the application scope of basic plastic formulations. Moreover, ongoing research into biodegradable and compostable additives is gaining traction, enabling plastics to decompose more effectively in the environment. This evolution underscores a changing perception of plastics, focusing more on their life cycle and ecological footprint than just longevity. The future of extrusion technology lies not only in what it can create but also in how sustainably those products integrate into the broader ecosystem.

**Enhanced Process Simulation Software:** Sophisticated simulation tools are transforming how extrusion processes are developed and refined before actual production starts. These tools allow engineers to virtually model a variety of extrusion conditions and test different parameters, eliminating the need for repeated physical trials. This digital approach is reshaping process development by blending theoretical modeling with practical execution. Programs that simulate

heat flow, material dynamics, and potential faults provide teams with opportunities to optimize operations pre-emptively. As a result, the development cycle is shortened significantly, promoting innovation and agility in a competitive environment. By embracing these digital solutions, manufacturers are embedding efficiency into their workflow while improving the final product's performance and quality.

## 5.6 Analysis of Key Regulatory Policies/Programs

The plastic processing sector in India functions within a robustly regulated environment, influenced by evolving environmental, industrial, and economic frameworks. These regulations and government programs impact the sector both directly and indirectly—affecting raw material accessibility, processing technologies, environmental compliance obligations, and demand patterns.

- **Plastic Waste Management Rules, 2016 (Amended in 2018, 2021) – Ministry of Environment, Forest and Climate Change:** A pivotal regulation influencing the plastic processing landscape is the Plastic Waste Management (PWM) Rules, which established a structured compliance model emphasizing Extended Producer Responsibility (EPR). Under this regime, plastic producers, importers, and brand owners are obligated to manage the collection and appropriate disposal of post-consumer plastic waste.

### Key Implications:

- **Transformation in Product Design:** These rules promote the use of recyclable, compostable, or biodegradable materials. Consequently, processors are enhancing their R&D efforts to develop alternative packaging materials.
  - **Cost Burden on Small Enterprises:** Smaller firms face challenges in funding collection infrastructure or meeting EPR obligations, prompting a wave of consolidation in the industry.
  - **Boost to Recycling Ecosystem:** The regulation has indirectly encouraged formalization and growth of recycling businesses, facilitating potential vertical integration for primary plastic processors.
- 
- **Ban on Single-Use Plastics (SUP) – From 2022:** The phased ban on items like plastic straws, stirrers, cutlery, and films below certain thickness thresholds (<75 microns initially, then <120 microns) has disrupted key application areas in food packaging, FMCG sachets, and disposable goods.

### Key Implications:

- **Shift in Product Portfolio:** Companies affected by the banned categories pivoted toward multilayered or recyclable alternatives to remain operational.
- **Technology Upgradation:** Packaging technologies such as blow molding, injection molding, and biodegradable solutions gained traction.
- **Substitution of Raw Materials:** Greater emphasis is being placed on alternative materials like biodegradable resins (PLA, PHA), paper composites, and cellulose-based packaging solutions.

- **BIS Quality Control Orders (QCOs) for Polymer Resins – Department of Chemicals and Petrochemicals:** To ensure uniformity in material quality, the Bureau of Indian Standards (BIS) introduced QCOs for essential polymers like PE, PP, PS, PVC, and PET, requiring certification for both domestic and imported materials.

**Key Implications:**

- **Compliance-Related Cost Increase:** Processors must now procure BIS-certified materials, potentially escalating procurement expenses, especially for imported goods.
- **Limitation on Imports:** Non-certified imports are curtailed, impacting sectors sensitive to price fluctuations such as textiles and packaging.
- **Support for Domestic Manufacturing:** This move aligns with the Atmanirbhar Bharat vision by motivating local producers to meet national standards and reduce reliance on imports.

- **Production-Linked Incentive (PLI) Scheme for Petrochemicals (Proposed):** As of 2025, the proposed PLI scheme aims to stimulate domestic manufacturing of polymers and specialty plastics, encouraging value-added production and reducing import dependency.

**Key Implications:**

- **Expansion of Manufacturing Capacities:** It could lead to greater backward integration, with processors venturing into areas like polymer compounding or masterbatch production.
- **Growth in Specialty Plastics:** Investment interest is expected to rise in advanced materials such as engineering polymers (PA, PC, PBT), medical-grade plastics, and biodegradable compounds.
- **Attracting Foreign Investment:** This initiative is likely to draw FDI in high-value plastic segments, particularly in automotive, electronics, and medical industries.

- **Customs Duties and Import-Export Regulations:** Tariff changes on polymer resins, intermediates, and machinery significantly impact the economic viability of plastic processing units.

**Key Implications:**

- **Domestic Industry Protection:** Raised tariffs on imports like PVC and LDPE offer support to local producers, although they challenge the cost structures of downstream processors.
- **Relief for Capital Equipment Imports:** Concessional duty rates under schemes such as EPCG and Make in India benefit processors investing in advanced machinery.
- **Export Viability Affected:** While duty drawback benefits are extended to plastic exporters, surging raw material costs hinder global price competitiveness.

India's plastic processing sector is undergoing a major evolution, where policy-driven shifts are redefining operations across the value chain. Although traditional areas such as low-value packaging and disposable plastics are under pressure, opportunities are emerging in biodegradable polymers, engineering-grade materials, and recycling-oriented business models. To thrive, stakeholders must proactively align with regulations, adopt compliant technologies, and prioritize sustainable innovation. These policies are not just regulatory constraints—they represent the foundation for a more responsible, advanced, and globally integrated plastic processing ecosystem in India.

## 6. Competitive Landscape

### 6.1 Company profiling and benchmarking for Shipping container companies

**1. APPL Container Ltd (APPL):** APPL was established in 2021, is a manufacturer of ISO shipping containers located at Navagam, Bhavnagar, Gujarat. The company operates a facility with an installed capacity exceeding 15,000 containers annually. It is supported by Aawadkrupa Plastomech Pvt. Ltd., an engineering firm, APPL has expanded its global reach, exporting to over 75 countries. Its product portfolio includes include Standard ISO Containers, High Cube Containers, Open Top Containers, Specialized Containers, and various size formats such as 10 ft, 20 ft, 40 ft, and 45 ft ISO containers. The manufacturing facility for shipping containers was inaugurated by Prime Minister Narendra Modi in September 2022 under the Make in India initiative.

**2. DCM Containers & Engineering Pvt. Ltd (DCMEPL):** DCMEPL was established in 1993 as a joint venture between DCM Shriram Industries Ltd., India, and Hyundai Mobis, Korea. The company operates a manufacturing facility located in the industrial hub of Faridabad, Haryana. DCM offers containers for specialized industrial applications, and its products include DNV-approved offshore cargo carrying units, shipping containers, customized containers, bunk houses, insulated genset/power pack containers, trailers, tank containers, car carriers, and other fabricated products. DCM's processes align with global ISO standards.

**3. Diamondblue Shipping solutions Pvt. Ltd (DSSPL):** DSSPL, was founded in 2013 and headquartered at Gurugram, is a manufacturer and logistics provider specializing in industrial containers and prefabricated structures. It offers a diverse product line that includes ISO tank containers, mild steel shipping containers, prefabricated buildings, portable cabins, porta cabins, container homes, office containers, and creative prefabricated structures.

**4. SYMCON Industries Pvt. Ltd (SIPL):** SIPL, was founded in July 2021 and is headquartered at Ahmedabad, Gujarat, is a manufacturer of ISO-certified shipping and freight containers. It's product portfolio includes a wide range of container types such as 10FT, 20FT, 30FT, 40FT, and 45FT containers, including High Cube variants. Specialized offerings include Open Top Containers, Flat Racks, Dry Bulk Containers, Platforms, Steel Coil Transport Containers, and Dwarf Containers. For energy and industrial applications, SYMCON manufactures BESS (Battery Energy Storage System) containers, insulated containers, power packs, E-Houses, and gantry crane containers with full access side and rear doors. The company also produces DNV-approved offshore containers for marine and diving systems.

**5. Jupiter Wagons Ltd (JWL):** JWL was established in 1979 and is headquartered in Kolkata, West Bengal, is a leading manufacturer in India's railway infrastructure and heavy engineering sector. JWL operates several manufacturing units in Madhya Pradesh, Jharkhand, Maharashtra, and West Bengal. Key facilities include units in Jabalpur, Mandla, Dhar, Adityapur (Jamshedpur), and Aurangabad, with a combined installed capacity exceeding 6,500 wagons annually. JWL's product portfolio spans a wide range of railway and industrial solutions, including freight wagons, passenger coaches, wagon components, castings, tipper and tanker bodies, light recovery vehicle bodies, ISO and CSC-certified containers, BESS containers, and marine containers. The company also manufactures brake discs, wheels, axles, couplers, bogies, draft gears, CRF sections, and cold chain transport containers. JWL continues to be a key player in India's rail and transport manufacturing ecosystem

**6. Kalyani Cast Tech Ltd (KCTL):** KCTL was established in 2012 and headquartered in New Delhi, is a diversified manufacturer specializing in steel and SG iron castings, railway components, and a wide range of cargo and specialized containers. It has container production capacity of 10,000 units annually and manufacturing unit capable of producing 7,500–8,000 wagons per year. Its product portfolio includes dwarf containers, double stack containers, cuboid containers, parcel cargo containers, two- and three-wheeler containers, LTL cargo containers, refrigerated containers, BESS containers, electrified rail



containers, and customized industrial containers. The company also manufactures bogies, couplers, wheel sets, and other railway castings.

## 6.2 Financial benchmarking of key peers in the sector

**Table: Financial benchmarking of key peer companies for the Financial Year 2025**

### Comparison with Shipping container industry peers

For the period ending March 31, 2025						
Particulars	APPL	DCM Containers & Engineering Pvt. Ltd.	Diamond Blue Shipping Solutions Private Limited	Symcon Industries Private Limited	Jupiter Wagons Limited	Kalyani Cast-Tech Limited
Revenue from Operations <sup>(1)</sup> (₹ in Lakhs)	6,902.56	NA*	NA	NA	3,96,327.95	13,922.29
Growth in Revenue from Operations <sup>(2)</sup> (%)	70.88%	NA	NA	NA	8.77%	47.36%
Gross Profit <sup>(3)</sup> (₹ in Lakhs)	5,897.84	NA	NA	NA	98,743.77	2,891.24
Gross Profit Margin <sup>(4)</sup> (%)	85.44%	NA	NA	NA	24.91%	20.77%
EBITDA <sup>(5)</sup> (₹ in Lakhs)	4,474.15	NA	NA	NA	56,561.09	1,971.58
EBITDA Margin <sup>(6)</sup> (%)	64.82%	NA	NA	NA	14.27%	14.16%
Profit After Tax <sup>(7)</sup> (₹ in Lakhs)	3,282.54	NA	NA	NA	38,027.06	1,425.50
PAT Margin <sup>(8)</sup> (%)	46.57%	NA	NA	NA	9.49%	10.19%
RoE <sup>(9)</sup> (%)	85.45%	NA	NA	NA	17.49%	24.82%
RoCE <sup>(10)</sup> (%)	55.66%	NA	NA	NA	17.11%	27.42%
Net Fixed Asset Turnover <sup>(11)</sup> (In Times)	1.97	NA	NA	NA	4.78	17.80
Net Working Capital Days <sup>(12)</sup>	170.46	NA	NA	NA	128.68	141.72
Operating Cash Flows <sup>(13)</sup> (₹ in Lakhs)	3,373.46	NA	NA	NA	10,419.48	828.29
Debt/Equity <sup>(14)</sup>	0.36	NA	NA	NA	0.17	0.08
Earnings per Share (Basic & Diluted)						
Basic <sup>(15)</sup>	26.26	NA	NA	NA	9.08	19.85
Diluted <sup>(16)</sup>	26.26	NA	NA	NA	9.08	19.85
Operating Cash Flows before Working Capital Changes <sup>(17)</sup> (₹ in Lakhs)	4,553.21	NA	NA	NA	58,290.82	1,979.89
Current Ratio <sup>(18)</sup>	4.05	NA	NA	NA	2.20	6.62
NAV per Equity Share <sup>(19)</sup>	43.87	NA	NA	NA	65.41	89.97
Net Worth <sup>(20)</sup> (₹ in Lakhs)	5,483.54	NA	NA	NA	2,76,758.34	6,509.30
Return on Net Worth <sup>(21)</sup> (%)	59.86%	NA	NA	NA	13.81%	21.92%
Net Debt/Equity <sup>(22)</sup>	0.34	NA	NA	NA	0.02	-0.10

Source: Company Financial Statements, ICRA Analytics

NA: Not Available

**Table: Financial benchmarking of key peer companies for the Financial Year 2024**

**Comparison with Shipping container industry peers**

For the period ending March 31, 2024						
Particulars	APPL	DCM Containers & Engineering Pvt. Ltd.	Diamond Blue Shipping Solutions Private Limited	Symcon Industries Private Limited	Jupiter Wagons Limited	Kalyani Cast-Tech Limited
Revenue from Operations <sup>(1)</sup> (₹ in Lakhs)	4,039.44	7,301.98	5,035.88	1,510.74	3,64,373.33	9,447.71
Growth in Revenue from Operations <sup>(2)</sup> (%)	792.02%	-26.31%	8.29%	170.30%	76.17%	49.32%
Gross Profit <sup>(3)</sup> (₹ in Lakhs)	3,782.13	2,691.78	1,278.27	445.22	81,473.62	1,947.09
Gross Profit Margin <sup>(4)</sup> (%)	93.63%	36.86%	25.38%	29.47%	22.36%	20.61%
EBITDA <sup>(5)</sup> (₹ in Lakhs)	2,533.39	749.30	318.80	99.77	48,652.22	1,349.47
EBITDA Margin <sup>(6)</sup> (%)	62.72%	10.26%	6.33%	6.60%	13.35%	14.28%
Profit After Tax <sup>(7)</sup> (₹ in Lakhs)	1,738.77	446.18	74.24	17.64	33,101.74	959.38
PAT Margin <sup>(8)</sup> (%)	42.74%	6.03%	1.47%	1.17%	9.02%	10.09%
RoE <sup>(9)</sup> (%)	130.88%	26.51%	14.93%	17.89%	27.41%	29.66%
RoCE <sup>(10)</sup> (%)	52.08%	14.90%	10.85%	10.68%	24.52%	22.77%
Net Fixed Asset Turnover <sup>(11)</sup> (In Times)	1.18	2.90	3.60	11.31	5.16	13.48
Net Working Capital Days <sup>(12)</sup>	58.46	-18.06	17.30	-7.77	70.97	167.10
Operating Cash Flows <sup>(13)</sup> (₹ in Lakhs)	2,309.86	-140.06	-219.99	NA	-1,910.22	-949.63
Debt/Equity <sup>(14)</sup>	0.92	1.60	2.98	5.43	0.21	0.15
Earnings per Share (Basic & Diluted)						
Basic <sup>(15)</sup>	13.91	122.04	3.09	1.76	8.24	16.41
Diluted <sup>(16)</sup>	13.91	122.04	3.09	1.76	8.24	16.41
Operating Cash Flows before Working Capital Changes <sup>(17)</sup> (₹ in Lakhs)	2,551.14	801.52	325.18	NA	49,935.69	1,382.18
Current Ratio <sup>(18)</sup>	1.81	0.92	1.28	0.97	1.56	4.17
NAV per Equity Share <sup>(19)</sup>	17.59	521.31	22.94	9.86	39.20	86.16
Net Worth <sup>(20)</sup> (₹ in Lakhs)	2,199.12	1,905.96	550.50	98.59	1,63,157.90	5,082.75
Return on Net Worth <sup>(21)</sup> (%)	79.07%	23.41%	13.49%	17.89%	20.32%	18.86%
Net Debt/Equity <sup>(22)</sup>	0.88	1.60	2.97	5.30	0.13	-0.04

Source: Company Financial Statements, ICRA Analytics

**Table: Financial benchmarking of key peer companies for the Financial Year 2023**

**Comparison with Shipping container industry peers**

For the period ending March 31, 2023						
Particulars	APPL	DCM Containers & Engineering Pvt. Ltd.	Diamond Blue Shipping Solutions Private Limited	Symcon Industries Private Limited	Jupiter Wagons Limited	Kalyani Cast-Tech Limited
Revenue from Operations <sup>(1)</sup> (₹ in Lakhs)	452.84	9,909.64	4,650.45	558.91	2,06,824.74	6,327.01
Growth in Revenue from Operations <sup>(2)</sup> (%)	-	-	-	-	-	-
Gross Profit <sup>(3)</sup> (₹ in Lakhs)	434.13	4,067.80	1,443.16	303.01	49,377.70	1,627.27
Gross Profit Margin <sup>(4)</sup> (%)	95.87%	41.05%	31.03%	54.21%	23.87%	25.72%
EBITDA <sup>(5)</sup> (₹ in Lakhs)	288.29	1,297.69	238.50	73.46	24,926.50	1,156.32
EBITDA Margin <sup>(6)</sup> (%)	63.66%	13.10%	5.13%	13.14%	12.05%	18.28%
Profit After Tax <sup>(7)</sup> (₹ in Lakhs)	208.34	868.22	56.16	11.49	12,067.51	805.08
PAT Margin <sup>(8)</sup> (%)	45.84%	8.68%	1.21%	2.05%	5.82%	12.71%
RoE <sup>(9)</sup> (%)	88.19%	84.61%	17.22%	36.53%	16.26%	78.40%
RoCE <sup>(10)</sup> (%)	26.30%	31.64%	10.61%	8.19%	21.02%	61.80%
Net Fixed Asset Turnover <sup>(11)</sup> (In Times)	0.62	4.09	4.05	3.62	4.48	11.40
Net Working Capital Days <sup>(12)</sup>	125.95	25.85	-21.50	-22.97	54.16	59.21
Operating Cash Flows <sup>(13)</sup> (₹ in Lakhs)	2.62	1,627.74	7.10	NA	7,765.09	425.45
Debt/Equity <sup>(14)</sup>	1.15	1.62	2.46	5.43	0.36	0.24
Earnings per Share (Basic & Diluted)						
Basic <sup>(15)</sup>	3.30	237.47	2.74	1.15	3.12	16.06
Diluted <sup>(16)</sup>	3.30	237.47	2.74	1.15	3.12	16.06
Operating Cash Flows before Working Capital Changes <sup>(17)</sup> (₹ in Lakhs)	293.40	1,563.10	237.96	NA	25,479.31	1,166.95
Current Ratio <sup>(18)</sup>	1.98	1.35	0.72	0.94	1.40	2.30
NAV per Equity Share <sup>(19)</sup>	7.25	399.42	21.65	8.10	20.74	28.50
Net Worth <sup>(20)</sup> (₹ in Lakhs)	457.92	1,460.31	443.89	80.95	80,344.80	1,429.37
Return on Net Worth <sup>(21)</sup> (%)	45.50%	59.45%	12.65%	14.19%	15.03%	56.32%
Net Debt/Equity <sup>(22)</sup>	1.14	1.61	2.43	5.22	0.21	-0.14

Source: Company Financial Statements, ICRA Analytics

**Table: List of Formulas used for the key peer comparison**

SR. No.	Formula	
1	Revenue from Operations <sup>(1)</sup> (₹ in Lakhs)	Revenue from Operations means the Revenue from Operations as appearing in the Restated Financial Statements.
2	Growth in Revenue from Operations <sup>(2)</sup> (%)	Growth in Revenue from Operations (%) is calculated as a percentage of Revenue from Operations of the relevant period minus Revenue from Operations of the preceding period, divided by Revenue from Operations of the preceding period.
3	Gross Profit <sup>(3)</sup> (₹ in Lakhs)	Gross Profit is calculated as Revenue from Operations less Cost of Services, Changes in inventories of finished goods, work-in-progress and stock-in-trade and Purchases of stock-in-trade.
4	Gross Profit Margin <sup>(4)</sup> (%)	Gross Profit Margin (%) is calculated as Gross Profit divided by revenue from operations as appearing in restated financial statements.
5	EBITDA <sup>(5)</sup> (₹ in Lakhs)	EBITDA is calculated as restated profit for the period / year plus tax expenses (consisting of current tax and deferred tax), finance costs and depreciation and amortisation expenses, less other income.
6	EBITDA Margin <sup>(6)</sup> (%)	EBITDA Margin (%) is calculated as EBITDA divided by Revenue from Operations.
7	Profit After Tax <sup>(7)</sup> (₹ in Lakhs)	Profit After Tax Means restated profit for the period/year as appearing in the Restated Financial Statements.
8	PAT Margin <sup>(8)</sup> (%)	PAT Margin (%) is calculated as Profit for the year/period as a percentage of total income as appearing in Restated Financial Statements.
9	RoE <sup>(9)</sup> (%)	RoE (Return on Equity) (%) is calculated as restated profit for the period/year attributable to the parent divided by Average Shareholder Equity attributable to the parent.
10	RoCE <sup>(10)</sup> (%)	RoCE (Return on Capital Employed) (%) is calculated as earnings before interest and taxes divided by capital employed.
11	Net Fixed Asset Turnover <sup>(11)</sup> (In Times)	Net Fixed Asset Turnover is calculated as revenue from operations divided by Total Fixed Assets which consists of property, plant and equipment, capital work-in-progress and right-of-use asset.
12	Net Working Capital Days <sup>(12)</sup>	Net Working Capital Days is calculated by dividing revenue from operations by working capital i.e. (Current Assets less Current Liabilities) multiplied by 365 days.
13	Operating Cash Flows <sup>(13)</sup> (₹ in Lakhs)	Operating cash flows means net cash generated from operating activities as mentioned in the Restated Consolidated Financial Statements.
14	Debt/Equity <sup>(14)</sup>	Debt/Equity is calculated as total debt divided by total equity.
	Earnings per Share (Basic & Diluted)	
15	Basic <sup>(15)</sup>	Basic EPS as per Restated Financial Statements/ Financial Statements.
16	Diluted <sup>(16)</sup>	Diluted EPS as per Restated Financial Statements/Financial Statements.
17	Operating Cash Flows before Working Capital Changes <sup>(17)</sup> (₹ in Lakhs)	Operating cash flows before working capital changes as per Restated Financial Statements/Financial Statements.
18	Current Ratio <sup>(18)</sup>	Current Ratio is a liquidity ratio that measures our ability to pay off its short-term obligations (those which are due within one year) using its current assets (those which are convertible to cash within one year) and is calculated by dividing the current assets by current liabilities.
19	NAV per Equity Share <sup>(19)</sup>	NAV per Equity Share is calculated as Equity attributable to equity holders of the parent divided by weighted average number of shares outstanding at the end of period/year.
20	Net Worth <sup>(20)</sup> (₹ in Lakhs)	Net Worth means Equity attributable to equity holders of the parent as mentioned in the Restated Consolidated Financial Statements.
21	Return on Net Worth <sup>(21)</sup> (%)	Return on Net Worth is calculated as Restated Profit/(loss) attributable to owners of the holding company divided by net worth at the end of the year.
22	Net Debt/Equity <sup>(22)</sup>	Net Debt-to-Equity ratio is calculated as total Debt less cash and cash equivalent divided by total equity.

Source: Company Financial Statements, ICRA Analytics

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