

ENROUTE[®]

INDIA'S FREIGHT RENAISSANCE
CONNECTING GROWTH, ENABLING PROGRESS



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Editorial

“The movement of freight is more than the movement of goods; it is the force that drives economies, empowers industries and connects aspirations. Every shipment delivered and every corridor connected contributes to the larger narrative of India’s transformation and progress.”

Dear Readers,

Welcome to the latest edition of **Enroute**, where we bring you insights into the dynamic transformation of India’s logistics landscape and the critical role freight plays in powering the nation’s economic journey.

In this edition, “**India’s Freight Renaissance: Connecting Growth, Enabling Progress**,” we delve how India’s freight ecosystem has evolved from a fragmented network into an integrated, technology-driven and strategically connected system. Supported by transformative reforms, large-scale infrastructure development and digital innovation, the logistics sector today stands as a cornerstone of India’s industrial growth, trade competitiveness and economic resilience.

The introduction of landmark initiatives such as GST, PM Gati Shakti, the National Logistics Policy, Dedicated Freight Corridors and multimodal infrastructure has reshaped the way goods move across the country. These developments are enabling faster transit, improved efficiency, enhanced visibility and stronger supply chains that connect industries, businesses and consumers like never before.

This edition highlights the forces driving India’s freight transformation, the emergence of organised logistics, adoption of intelligent technologies such as AI, IoT and real-time tracking systems and the shift towards greener, more sustainable logistics practices. As freight networks become smarter and more interconnected, logistics is no longer merely an operational necessity but a strategic driver of value creation and business growth.

We also take a closer look at the diverse industries that rely on efficient freight movement, including automotive, pharmaceuticals, FMCG, e-commerce, engineering and retail. Through sectoral insights and real-world case studies, we demonstrate how customised logistics solutions ranging from Less-Than-Truck Load (LTL) and Full Truck Load (FTL) services to Project & Heavy Haul (PHH) and storage solutions help businesses overcome complex challenges with greater efficiency, reliability and agility.

As the sector advances, sustainability remains central to the next chapter of India's logistics evolution. Green infrastructure, energy-efficient warehouses, cleaner transportation technologies and multimodal freight solutions are creating a more responsible and future-ready ecosystem.

Do not miss the **Corporate Updates** section, where we showcase TCI's latest milestones that reflect our continued commitment to excellence, reliability and continuous improvement.

India's freight renaissance represents more than an evolution of transportation, it reflects a national movement towards stronger connectivity, greater efficiency and sustainable economic progress. As the country strengthens its position as a global manufacturing and trade powerhouse, resilient and intelligent freight networks will continue to be the arteries that keep India's growth moving forward.

We hope this edition offers valuable insights, inspires fresh perspectives and highlights the transformative role of freight in building a stronger, more connected India.

Happy reading and exploring.



This publication is a part of KNIT, a knowledge dissemination initiative of TCI Group. We believe in sharing insights and knowledge with the industry, to encourage best practice replication.



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Cover Story

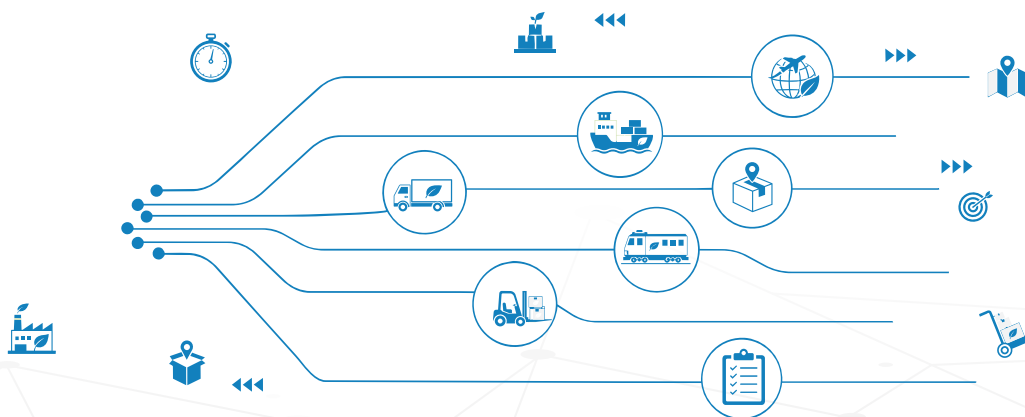
From Fragmented Routes to a Rewired Logistics Landscape

India's logistics narrative is a story of metamorphosis from a fractured, cost-burdened patchwork of regional carriers and antiquated infrastructure to a strategically architected, technology-enabled ecosystem poised to rival the world's most competitive freight markets. This transformation, decades in the making, has accelerated dramatically over the past decade, catalysed by visionary policy intervention, infrastructure investment at unprecedented scale and the inexorable demands of a consumption-driven, digitally empowered economy.

The Pre-Reform Era: A Sector Constrained by Its Own Complexity

For much of post-independence India, logistics was a sector defined by its constraints rather than its capabilities. The absence of a unified tax framework, where different states imposed their own octroi levies, entry taxes and check-posts meant that a consignment traversing the length of India could accumulate compliance obligations at every state boundary.

The result was a sector that was structurally inefficient: transit times were unpredictable, costs were inflated by compliance overhead and the informal economy dominated the freight market. India's logistics cost as a percentage of GDP historically estimated at 13-16% was nearly double the benchmark of advanced economies, representing a silent tax on Indian manufacturing competitiveness.



Infrastructure was the other systemic constraint. India's national highway network, though vast in total extent, lacked the four-lane, high-speed connectivity that modern freight logistics demands. Cold chain capacity was negligible relative to the scale of India's agricultural output. Warehousing was predominantly unorganised, Grade-C facilities that fell short of international standards for inventory management, hygiene and automation.

The GST Revolution: Demolishing Inter-State Barriers

The introduction of the Goods and Services Tax (GST) in July 2017 was the most consequential single reform in India's logistics history. By replacing a cascade of indirect taxes with a unified national tax architecture, GST effectively created a single, integrated market across India's 1.4 billion consumers. The economic impact on logistics was immediate and structural: check-posts were dismantled, transit times on key corridors compressed by 20-30% and the incentive for hub-and-spoke warehousing networks was unlocked as companies could optimise for logistics efficiency rather than tax arbitrage. Industry estimates suggest GST-driven logistics rationalisation has reduced freight cycle times by 15-20% and enabled meaningful cost savings for supply chain operators across sectors.

Infrastructure Status: Unlocking Long-Term Capital

A watershed policy decision, the granting of infrastructure status to the logistics sector fundamentally altered the capital economics of logistics investment in India. With infrastructure status came access to cheaper, longer-tenor financing instruments comparable to those available for roads, railways and power projects. This enabled logistics companies to invest in Grade-A warehousing, multimodal logistics parks and fleet modernisation at a scale previously economically unviable. The ripple effects of this policy are still being felt: India's warehousing stock, Grade-A capacity in particular, has expanded at a compound rate that would have been unimaginable in the pre-reform era.

The Emergence of Organised Logistics

The convergence of GST, infrastructure status, digital platforms and e-commerce has catalysed the emergence of organised, technology-enabled logistics providers, a phenomenon that has no precedent in India's transport history. Third-party logistics (3PL) providers, digital freight brokerages, AI-powered route optimisation platforms and automated fulfilment networks are reshaping the competitive landscape, compelling incumbents to digitise and innovate at speed.



The Policy Architecture Powering India's Logistics Transformation

No sector transformation of the magnitude underway in Indian logistics occurs without the force of determined public policy behind it. India's government has deployed an interlocking constellation of policy frameworks, infrastructure programmes and digital platforms that collectively constitute the most ambitious logistics reform agenda in the nation's history one that is already yielding measurable dividends in cost reduction, transit time improvement and global competitiveness.

PM Gati Shakti National Master Plan - The Coordination Breakthrough

Launched in October 2021, PM Gati Shakti is the architectural centrepiece of India's logistics reform agenda. By integrating 57 Central Ministries and Departments and all 36 States and Union Territories on a single geospatial digital platform, Gati Shakti has resolved the coordination failures that historically caused logistics infrastructure projects to be built in isolation, without regard for multimodal connectivity.

Under Gati Shakti's execution, 434 infrastructure projects worth ₹11.17 lakh crore have been advanced, delivering 15-20% reductions in transit times on key freight corridors. The Master Plan has, for the first time, given India a unified logistics infrastructure investment framework, one that treats roads, railways, ports, airports and warehousing as components of a single integrated system.

National Logistics Policy 2022 - The Strategic Framework

The National Logistics Policy (NLP), launched in September 2022 after eight years of development, provides the strategic framework within which India's logistics transformation is being orchestrated. Its three cardinal objectives are unambiguous: reduce logistics costs to below 10% of GDP (from the historic 13-16%), elevate India's Logistics Performance Index ranking to the global top 25 by 2030 and establish a data-driven, digitally integrated logistics ecosystem. Three years into its implementation, the NLP has delivered significant structural progress: the Unified Logistics Interface Platform (ULIP) has recorded over 160 crore API transactions across 30+ digital systems, the Logistics Data Bank has tracked 75 million EXIM containers across 101 Inland Container Depots and over 65,000 logistics professionals have been formally trained between 2023 and 2025.

Dedicated Freight Corridors - The Railways Revolution

India's Dedicated Freight Corridors (DFCs) represent the single largest structural intervention in the nation's rail freight history. The Eastern DFC (Ludhiana to Sonnagar, 1,337 km) and Western DFC (JNPT to Dadri, 1,506 km) together span 2,843 km of freight-exclusive rail infrastructure of which 96.4% (2,741 km) was operational as of March 2025. With over 325 freight trains operating daily on these corridors, 60% more capacity than before and each train replacing approximately 72 trucks, the DFCs are delivering a structural compression in per-tonne-kilometre logistics costs that no road-based initiative could replicate. Rail freight's share, currently around 27%, is targeted to reach 45% by 2030, a modal shift that will redraw India's freight economics.



Bharatmala Pariyojana - The Highway Network

Bharatmala Pariyojana, targeting 4-lane connectivity to 550 districts and the development of economic corridors, inter-corridors and feeder routes, is the arterial complement to the DFC spine. With 60% of programme targets achieved by 2024, Bharatmala is systematically closing the last-mile connectivity gaps that have historically prevented industrial clusters, agricultural production centres and tier-2/tier-3 cities from being integrated into efficient freight networks. The programme's focus on economic corridor development connecting manufacturing zones to ports and consumption centres reflects a sophisticated understanding of freight demand generation.



The Sagarmala Programme & Maritime Vision 2047

India's coastal and inland water logistics potential has historically been underutilised. The Sagarmala Programme and Maritime Amrit Kaal Vision 2047 are systematically addressing this gap: port-led industrialisation, capacity expansion, digitalisation of port operations and green hydrogen hub development are transforming India's maritime logistics competitiveness. Inland Waterways Authority of India (IWAI) reported a record cargo movement of 145.5 million tonnes in 2024-25, a landmark that reflects the growing viability of water-based freight as a complement to road and rail.

Multimodal Logistics Parks - The Nodal Infrastructure

The government's approval of 35 Multimodal Logistics Parks (MMLPs) and the development of Gati Shakti Cargo Terminals are creating the nodal infrastructure around which India's integrated freight ecosystem will be organised. These facilities combining warehousing, rail and road connectivity, cold chain capacity, customs clearance and value-added services at single locations are redefining the economics of freight handling in India.

The Sectoral Engines Driving India's Freight Demand

India's surface freight ecosystem derives its dynamism from the extraordinary diversity of the industries it serves. Each sector presents distinct logistics requirements in cargo type, service frequency, regulatory complexity, temperature sensitivity and geographic reach and the collective freight demand generated by India's industrial base is growing at a pace that makes the logistics sector one of the nation's most consequential economic arteries.



Automotive - Precision at Industrial Scale

India's automotive sector, the third-largest in the world by volume, targeting annual production of 30 million units is among the most logistics-intensive industries in the country. The just-in-time assembly model that characterises modern automotive manufacturing requires a constant, precisely timed flow of components from a geographically dispersed supplier base to assembly lines operating to schedule tolerances measured in hours, not days. Finished vehicle distribution compounds the complexity: India's dealership network spans metropolitan showrooms, tier-2 cities and rural markets, requiring logistics solutions that can navigate the full spectrum of India's road infrastructure. The PLI scheme for Advance Chemistry Cell batteries and the rise of EV manufacturing are adding new cold-chain and specialised logistics requirements to an already demanding sector.



Pharmaceuticals - The World's Pharmacy Demands World-Class Logistics

India, as the world's largest exporter of generic medicines supplying 60% of global vaccine demand and fulfilling 20% of global generics requirements depends on a logistics ecosystem that can deliver pharmaceutical-grade integrity across the entire supply chain. Temperature-controlled transport, cold chain warehousing, documentation compliance with Central Drugs Standard Control Organisation (CDSCO) regulations and export-readiness for 200+ destination markets are non-negotiable requirements. The pharmaceutical sector's logistics demand is growing at double-digit rates, driven by expanding domestic healthcare access and deepening global export relationships. India's USD 50 billion pharmaceutical industry is a direct beneficiary of and demanding stimulus for logistics sector excellence.



FMCG - Speed, Scale and Shelf Availability

India's FMCG market valued at over USD 167 billion and growing at 7-9% annually is the defining use case for high-frequency, distribution-intensive surface logistics. The competitive dynamics of FMCG demand that products move from factory to retailer in the shortest possible time, with the broadest possible geographic reach and at the lowest possible cost. India's FMCG distribution imperative reaches into 650,000+ villages and millions of kiranas, urban supermarkets and organised retail outlets making India's FMCG logistics requirement one of the most geographically challenging distribution mandates in the world.



E-Commerce - The Velocity Economy

No sector has transformed India's logistics landscape more profoundly than e-commerce. The sector's GMV reached USD 125 billion in 2024 and is projected to reach USD 345 billion by 2030, a trajectory that has made last-mile delivery, reverse logistics and fulfilment centre operations among the fastest-growing freight sub-segments in the country. The velocity economy of e-commerce, same-day and next-day delivery expectations, return rate management, hyperlocal fulfilment is driving logistics innovation at a pace that legacy surface freight networks are being challenged to match.



Engineering and Industrial Goods

India's infrastructure boom driven by the National Infrastructure Pipeline, the National Industrial Corridor Programme and private sector capital expenditure is generating unprecedented demand for specialised heavy-freight logistics. Turbines, transformers, reactors, fabricated steel structures, construction equipment and mining machinery require ODC (Over-Dimensional Cargo) and PHH (Project Heavy Haul) logistics capabilities: route surveys, special permits, heavy-lift vehicles and specialist project management. As India's manufacturing ambitions in defence, semiconductors, renewable energy and capital goods intensify, the complexity and volume of engineering freight requirements will grow commensurately.



Chemicals and FMCG Industrial

India's chemicals industry, one of the most diverse in Asia encompasses agrochemicals, specialty chemicals, petrochemicals, industrial gases and dyes and pigments. Chemical logistics requires deep regulatory expertise, hazardous goods handling protocols, vehicle specification compliance and documentation management. As India's specialty chemicals exports targeting USD 300 billion by 2025 grow, the logistics requirements of this sector will become increasingly sophisticated.



Retail and Consumer Durables

India's organised retail sector, growing at 20% CAGR with e-commerce leading the charge, requires logistics solutions that handle the full gamut of consumer durables - white goods, electronics, home appliances and fashion with the care that high-value merchandise demands. Containerised transport, careful handling protocols and reliable delivery scheduling to retail distribution centres and direct-to-consumer destinations are defining requirements for retail logistics partners.





Intelligent Freight: How Digital Transformation is Reshaping Indian Logistics

Technology is no longer a peripheral concern in Indian logistics, it is its central nervous system. From the AI algorithms that route millions of daily shipments to the IoT sensors that monitor cargo integrity in real time, from the blockchain platforms that secure trade documentation to the digital twins that allow supply chain managers to simulate disruptions before they occur, the technological transformation of India's freight ecosystem is comprehensive, accelerating and irreversible.

Artificial Intelligence: From Reactive to Predictive

Artificial intelligence is reshaping every layer of logistics operations. In route optimisation, AI analyses real-time traffic data, weather conditions, vehicle availability and delivery windows to generate routing decisions that reduce transit times and fuel consumption simultaneously. In demand forecasting, machine learning models enable logistics companies to anticipate freight volumes weeks in advance, enabling proactive capacity planning. In return-to-origin (RTO) prediction for e-commerce, AI models trained on 2.5+ billion shipments are reducing return rates by up to 20% for clients, a direct logistics cost saving of significant magnitude.

IoT and Real-Time Visibility - The Connected Cargo Era

Internet of Things (IoT) technology has fundamentally altered the information economics of freight logistics. GPS-enabled tracking provides real-time consignment location to shippers and recipients. Temperature sensors in cold chain vehicles alert operators to deviations that could compromise pharmaceutical or food cargo integrity. Tyre pressure monitoring and engine diagnostics reduce vehicle breakdowns on highway corridors. The cumulative effect is a dramatic compression of information asymmetry, the gap between what logistics operators know and what their customers need to know that was historically the source of much supply chain anxiety and inefficiency.



ULIP - India's Digital Logistics Backbone

The Unified Logistics Interface Platform (ULIP), a cornerstone of the National Logistics Policy's digital agenda, represents India's most ambitious attempt to create a seamless digital logistics infrastructure. By aggregating APIs from 30+ logistics-related digital systems across government ministries - railways, highways, customs, ports, ULIP provides industry participants with a single interface for real-time data access across the entire freight chain. The platform crossed the 100 crore API transaction milestone in March 2025 and has reached over 160 crore transactions by August 2025. ULIP's shipment ETA functionality enables manufacturers to manage inventories with precision, reducing working capital locked in transit uncertainty.

Digital Freight Platforms and Asset-Light Innovation

The rise of digital freight brokerages and asset-light logistics platforms has democratised access to trucking capacity for small and medium enterprises that previously lacked the market power to command reliable, cost-effective freight services. Dynamic pricing platforms aggregate fragmented truck capacity, reduce empty miles and provide SME shippers with real-time rate discovery and booking confirmation. This layer of digital intermediation is improving overall fleet utilisation across India's estimated 12 million+ trucks, a systemic efficiency improvement with national-scale economic implications.

Automation and Robotics in Warehousing

The warehousing layer of India's logistics ecosystem is undergoing a parallel technological revolution. Companies are deploying AI and robotics to automate warehouse operations, autonomous guided vehicles (AGVs), robotic picking systems, automated sorting conveyors and AI-driven inventory management platforms are transforming Grade-A warehouse economics. Major ports including Mundra and JNPT are deploying AI-enabled planning systems, robotics and IoT at scale. Warehouse absorption in India's industrial and logistics segment witnessed 25% year-on-year growth in 2024, a reflection of both demand expansion and the quality upgrade that technology-enabled facilities represent.



Blockchain and Document Digitalisation

Cross-border and EXIM logistics have historically been hampered by paper-intensive documentation processes susceptible to errors, delays and fraud. Blockchain-based trade documentation platforms are eliminating these vulnerabilities by creating immutable, instantly verifiable digital records of Bills of Lading, Certificates of Origin, inspection certificates and customs declarations. The Logistics Data Bank's tracking of 75+ million EXIM containers across 101 ICDs demonstrates the scale at which digital documentation is already operating in India's trade logistics ecosystem.



Green Logistics: Decarbonising the Arteries of Indian Commerce

India's logistics sector faces a dual mandate of extraordinary consequence: sustain and indeed accelerate, the freight throughput necessary to support a USD 5 trillion economy in motion, while simultaneously engineering a fundamental decarbonisation of the transport infrastructure that delivers it. These objectives are not contradictory. The most rigorous analyses of logistics sustainability confirm that the interventions that reduce carbon emissions, route optimisation, modal shift to rail and waterways, fleet electrification, solar-powered warehousing are the same interventions that reduce operating costs. Green logistics is not a constraint on growth; it is a structural efficiency driver.

The Emissions Imperative

India's logistics sector accounts for approximately 5% of the nation's total greenhouse gas emissions, a disproportionate contribution relative to its share of economic activity that reflects the carbon intensity of diesel-dependent road freight. Trucks contribute 38% of total transport CO₂ emissions while representing just 3% of vehicle fleet numbers. With India committed to Net Zero by 2070 and NDC targets requiring a 45% emissions intensity reduction by 2030, logistics decarbonisation is not a future aspiration, it is a present operational imperative for every logistics operator with ESG obligations or export market relationships.

The PM e-DRIVE Scheme - Electric Trucks Enter the Policy Arena

In a landmark policy development, India's Ministry of Heavy Industries released guidelines for electric trucks under the PM e-DRIVE scheme in July 2025. This marks the formal entry of electric trucking into India's national clean transport policy framework. Coupled with the Delhi-Jaipur Electric Corridor pilot introducing overhead electrified truck lanes on a key freight highway and broader initiatives to develop EV freight infrastructure, India is building the enabling ecosystem for large-scale commercial vehicle electrification.

Solar Warehousing and Green Infrastructure

The decarbonisation of India's logistics sector extends beyond vehicle fleets to encompass the warehousing and material handling infrastructure that accounts for a substantial portion of the sector's energy consumption. Solar-powered warehouses, energy-efficient cold chain facilities, green building certification for logistics parks and AI-driven energy management systems are transforming the environmental footprint of logistics real estate. Industries including pharmaceuticals, automotive and FMCG are increasingly mandating green logistics



credentials from their supply chain partners elevating sustainability from a corporate communications exercise to a vendor qualification criterion.

Modal Shift - The Rail and Waterways Opportunity

The structural decarbonisation of India's freight system requires a fundamental shift in modal mix. Road currently handles approximately 70% of India's freight; rail, which is inherently 5-7x more energy-efficient per tonne-kilometre, handles approximately 27%. The national target raising rail's freight share to 45% by 2030 represents a modal shift of historic proportions. The DFCs, which are fully electrified, are the physical infrastructure of this modal transition. Each DFC train that replaces 72 road trucks is not merely a logistics efficiency gain; it is a carbon reduction of quantifiable and significant magnitude.

Confronting the Friction Points: What Stands Between India and Logistics Excellence

India's logistics transformation narrative is one of genuine and accelerating progress but intellectual honesty demands a candid reckoning with the structural frictions that continue to constrain the sector's full potential. These challenges are not insurmountable; indeed, their resolution is precisely what the NLP, Gati Shakti and allied reforms are designed to engineer. Understanding them with clarity is the prerequisite for overcoming them with purpose.

The Infrastructure Quality and Coverage Gap

Despite the transformative investments of the past decade, India's logistics infrastructure gap remains significant. Only 35-40% of India's warehousing sector meets Grade A international standards. The Northeast region, India's gateway to Southeast Asia through the Act East Policy faces particularly acute infrastructure connectivity challenges. Rural cold chain capacity is severely inadequate relative to the scale of India's agricultural production: post-harvest losses estimated at ₹90,000 crore annually represent both a humanitarian failure and a logistics system failure. Last-mile delivery infrastructure adequate for metro areas, strained in tier-2 cities and largely absent in rural geographies continues to define the outer boundary of logistics service reach.



The Skill Deficit - A 4.7% Formalisation Rate

India's logistics sector employs over 22 million people yet only 4.7% of that workforce is formally skilled. This astonishing statistic captures the depth of the human capital challenge facing the industry. The sector faces a 20% deficit in trained truck drivers, with 80,000 available against a need for 100,000. Warehouse automation, supply chain analytics, cold chain management and cross-border logistics all require specialised competencies that India's education and training ecosystem is only beginning to develop at scale.

Modal Imbalance - Road's Overwhelming Dominance

India's freight modal mix approximately 70% road, 27% rail and 3% inland waterways is dramatically skewed relative to global best-practice benchmarks. The United States moves nearly 50% of freight by rail; China has invested heavily in high-speed freight corridors that carry substantial cargo volumes efficiently and cleanly. Road dominance in India imposes multiple costs simultaneously: higher per-tonne-kilometre freight costs, greater carbon emissions intensity, accelerated road infrastructure wear and vulnerability to fuel price volatility. The DFCs and the NLP's modal shift targets address this structural imbalance but the transition from road-dependent to multimodal logistics requires a decade-scale commitment of investment and policy.

Regulatory Fragmentation- The State-Level Patchwork

Despite the transformative impact of GST on inter-state commerce, India's logistics regulatory environment retains significant state-level complexity. Variations in state-level enforcement of vehicle overloading regulations, permit requirements and road tax frameworks create operational complications for carriers operating across multiple states. The asymmetric implementation of digital platforms and e-way bill systems across states compounds this friction. Achieving true regulatory harmonisation, the logical completion of the GST reform project remains a work in progress.

Cold Chain Infrastructure Deficit

India's cold chain logistics capacity is critically inadequate for the demands of a modern agri-food and pharmaceutical supply chain. With only approximately 8,186 cold storage facilities nationally and penetration rates in processed food that lag global benchmarks by significant margins, the cold chain gap represents both a food security failure and a missed economic opportunity. The pharmaceutical sector's export ambitions, the FMCG industry's perishable goods distribution and the agricultural sector's post-harvest value preservation all depend on a cold chain infrastructure expansion that requires both public investment and private sector participation.



Technology Adoption Asymmetry

The technology transformation of Indian logistics is real, but it is uneven. Large, organised logistics operators have the capital and management bandwidth to invest in AI route optimisation, IoT fleet monitoring and digital platforms. But India's logistics economy is dominated by small fleet operators, millions of truck owners with 1-5 vehicles, operating on thin margins with limited access to digital tools. The challenge for India's logistics ecosystem is to ensure that the productivity benefits of digital transformation are accessible to the fragmented small-fleet economy that carries the majority of India's freight not merely to organised sector incumbents.

The USD 357 Billion Horizon: India's Logistics Destiny



India's logistics sector stands at the threshold of its most consequential decade. The confluence of infrastructure investment reaching maturity, digital platforms achieving critical mass, policy frameworks delivering structural reforms and a domestic economy generating freight demand at sustained velocity creates the conditions for a logistics renaissance of historic proportions. The question is no longer whether India will build a world-class logistics ecosystem, it is how fast and who will lead its construction.

The Market Opportunity - USD 357 Billion by 2030

India's logistics market is projected to reach USD 357.3 billion by 2030, growing at a CAGR of 7.7% from 2025. Mordor Intelligence places the current market at USD 349 billion in 2025, with some projections reaching USD 545 billion by 2030. The 3PL market alone, the organised, outsourced logistics services segment is projected to reach USD 48-73 billion by 2030, growing at 6-14% CAGR. These numbers represent one of the largest concentrated investment opportunities in the Indian economy.

The IMEC - India's Gateway to Global Trade Corridors

The India-Middle East-Europe Economic Corridor (IMEC), launched at the G20 Summit in 2023, is one of the most consequential logistics geopolitical developments of the decade. By linking India to Europe through the UAE, Saudi Arabia, Jordan and Israel via a multimodal rail-and-shipping corridor, IMEC creates a new east-west trade artery that positions India as the eastern anchor of a revitalised global supply chain. For Indian logistics operators with cross-border and international freight capabilities, IMEC represents a category-defining growth opportunity.



Tier-2 and Tier-3 India - The Next Frontier

India's logistics growth story of the next decade will be written not in Mumbai and Delhi, but in Patna, Coimbatore, Lucknow, Visakhapatnam and hundreds of other tier-2 and tier-3 cities that are emerging as manufacturing and consumption centres in their own right. The expansion of fulfilment centres in tier-3 cities, the emergence of cold storage in tier-2 cities and the increasing dedicated freight connectivity to secondary industrial clusters all point to a geographic broadening of logistics demand that will require network expansion at unprecedented scale.

PLI Schemes - Manufacturing as a Logistics Catalyst

The Production Linked Incentive schemes, approved at a total outlay of ₹1.97 lakh crore (~USD 26 billion) across 14 sectors, are in the process of generating a new generation of domestic manufacturing capacity in electronics, semiconductors, pharmaceuticals, defence, solar modules and advanced chemistry cells. Each new manufacturing facility created under PLI is a node of freight demand generation: inbound components, outbound finished goods and inter-facility transfers all require reliable surface logistics partners. The PLI-driven manufacturing renaissance is creating a structural demand tailwind for India's logistics sector that will sustain growth through the 2030s.



The future competitive architecture of Indian logistics will be defined by digital ecosystems rather than individual companies. Logistics platforms that aggregate freight demand, optimise vehicle utilisation, provide end-to-end supply chain visibility and integrate seamlessly with customers ERP systems are creating a new category of logistics intermediary, one that captures value through intelligence rather than exclusively through assets. ULIP's open API architecture is the governmental foundation of this ecosystem. Private sector platforms, venture-backed startups and established logistics companies' digital investments are building the superstructure. The Indian logistics platform economy will be one of the defining technology narratives of the 2030s.

Green Logistics as a Competitive Differentiator

As India's largest corporate buyers of logistics services implement Scope 3 emission reduction commitments, the ability to provide verifiable, measurement-quality sustainability credentials will transition from a differentiator to a qualification requirement. Logistics operators who have invested in emission measurement infrastructure, fleet electrification and green warehousing will command premium positioning in an ESG-conscious procurement environment. India's green logistics market, valued at USD 48.85 billion in FY2025 and projected to grow to USD 88.55 billion by FY2033, reflects the commercial scale of this sustainability transition.

Cross-Border Trade - The SAARC and Beyond

India's trade relationships with Bangladesh, Nepal, Bhutan and Sri Lanka are deepening across every dimension: merchandise trade, people movement, energy connectivity and digital commerce. Cross-border logistics which requires specialised expertise in customs documentation, bilateral protocol compliance and border infrastructure navigation is a high-value growth segment that will benefit from India's intensifying trade diplomacy. Beyond SAARC, IMEC and India's expanding Free Trade Agreement network are creating new logistics corridors with Southeast Asia, the Middle East and Europe.





Conclusion

India's Logistics Renaissance: A Civilisational Infrastructure Moment

India's logistics sector is in the midst of a transformation that transcends economics. The construction of an efficient, technology-enabled, sustainable freight infrastructure is not merely a commercial proposition, it is a civilisational infrastructure investment that will determine whether India's economic ambitions materialise at the scale and pace its billion-and-a-half citizens deserve.

The evidence of transformation is compelling and multi-dimensional. Logistics costs have fallen below 10% of GDP for the first time, a structural milestone that reflects years of policy discipline and infrastructure investment. The Dedicated Freight Corridors, 96.4% operational, are already compressing per-tonne costs on India's most congested freight corridors. ULIP's 160 crore API transactions represent the digital nervous system of a logistics ecosystem transitioning from paper to platform. The challenges are real but tractable. The skill deficit is being addressed through unprecedented public investment and industry collaboration. Infrastructure gaps in the Northeast, in cold chain and in last-mile connectivity are being systematically narrowed through targeted policy and private capital. The technology adoption asymmetry between large and small logistics operators is being bridged by digital platforms that democratise access to AI, IoT and data analytics. None of these transitions will be instantaneous but all are directionally correct and gathering velocity.

What lies ahead is a USD 357 billion market by 2030, a top-25 global logistics ranking, a modal mix transformed by electrified freight corridors and an Indian logistics ecosystem that is not merely competitive domestically but globally consequential, a logistics superpower whose efficiency, sustainability and digital sophistication drive the nation's manufacturing export ambitions and connect its billion-plus consumers to the world economy.

India's freight renaissance is underway. The infrastructure is being built. The policies are working. The technologies are being deployed. The opportunities are vast. The moment is now.



Case Studies

Case Study 1:

Delivering Healthcare beyond Boundaries



Client:
Pharmaceutical Company



Vertical:
Pharmaceuticals & Healthcare



Service:
LTL / Small Shipments



Location:
Pan-India, 200+ Districts



Background

A leading pharmaceutical company headquartered in Mumbai needed to supply medicines, diagnostic kits and OTC products to hospitals, clinics and retail pharmacies spread across Tier 2 and Tier 3 cities in India. Their shipment sizes ranged from 150 kg to 200 kg far too small to economically justify full truck bookings, but too valuable and time-sensitive to trust to unorganized carriers.

Challenges

- Frequent small-volume shipments to dispersed locations made individual trucking cost-prohibitive.
- Fragile and sensitive cargo required specialized handling but no dedicated infrastructure existed.
- Lack of real-time tracking led to delayed delivery confirmations and compliance gaps with pharma regulators.
- Multiple carrier handoffs for delivery caused damage, loss and invoice discrepancies.
- Seasonal demand spikes during flu season and festive periods overwhelmed the client's existing dispatch capability.

Solutions

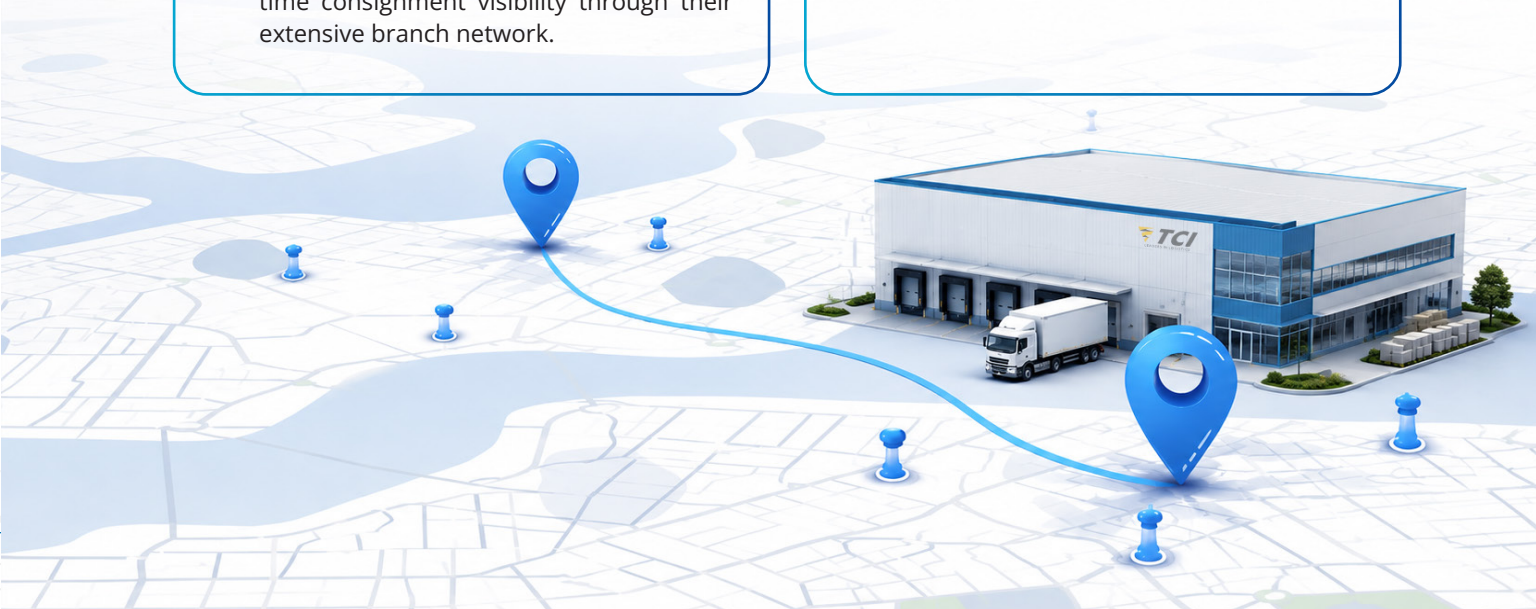
TCI Freight onboarded the client onto its nationwide LTL consolidation network, leveraging its hub-and-spoke model to aggregate shipments from multiple consignors moving to the same region, reducing per-unit freight costs significantly.

Key interventions included:

- Modernized hub facilities in Mumbai, Delhi, Hyderabad and Chennai consolidating LTL loads into containerized movement for secure, high-value cargo transport.
- Multiple deliveries from a single origin hub enabling the client to dispatch to 8-12 destinations per consignment cycle.
- Standardized billing and transparent rate structures under a single-window agreement, eliminating billing disputes.
- Integration with TCI Freight's computerized track-and-trace platform, providing real-time consignment visibility through their extensive branch network.

Benefits

- Freight cost per kilogram reduced by approximately 30% through LTL consolidation versus standalone truck hiring.
- On-time delivery rate improved to over 95%, enhancing trust and repeat business.
- Pan-India reach expanded to every district in the country through TCI's branch network without any new carrier relationships.
- Cargo damage incidents dropped significantly due to containerized movement and professional handling at hubs.
- Compliance documentation improved, with automated delivery confirmations satisfying pharmaceutical regulatory audit requirements.



Case Study 2:

Enabling Automotive Excellence in Motion



Client:
Auto Parts Manufacturer



Vertical:
Automotive



Service:
Full Truck Load



Location:
Gujarat, Chennai, Delhi, Pune



Background

A major automotive components manufacturing company based in Sanand, Gujarat supplies engine parts, transmission components and body panels to Original Equipment Manufacturers (OEMs) across Chennai, Pune and Delhi NCR. With JIT (Just-In-Time) production mandates from OEM clients, the company needed a reliable, high-frequency FTL partner capable of moving bulk loads of 10-22 tonnes on dedicated routes with guaranteed transit times.

Challenges

- OEM assembly lines required components within a rigid 36-48 hour delivery window; any delay halted production, triggering penalty clauses.
- Inter-state movement across Gujarat, Maharashtra and Tamil Nadu involved multiple toll corridors and regulatory checkpoints, causing unpredictable transit delays.
- Seasonal rains and road conditions in the Western Ghats increased the risk of transit damage to metal components.
- Managing a fleet of third-party vendors led to inconsistent vehicle quality, driver reliability and documentation compliance.
- Lack of a centralized logistics command meant the client had no real-time view of in-transit inventory, creating supply chain blind spots.

Solutions

TCI Freight deployed a dedicated FTL solution leveraging its fully equipped bulk/FTL movement infrastructure across India.

The approach included:

- Dedicated vehicle allocation on fixed Gujarat-Chennai and Gujarat-Delhi-Pune lanes, ensuring pre-booked capacity availability for daily dispatch schedules.
- Deployment of containerized and closed-body trucks for metal components, protecting cargo from monsoon exposure and road vibration.
- Pre-cleared documentation packages coordinated by TCI branches at origin and destination, minimizing checkpoint delays.
- GPS-enabled fleet tracking integrated with the client's ERP, providing live location updates and estimated arrival times to OEM plant logistics teams.
- Dedicated Key Account Manager providing 24/7 escalation support and proactive delay notifications.

Benefits

- On-time delivery compliance to OEM plants exceeded 98%, eliminating production stoppages and associated penalty deductions.
- Transit time on the Gujarat-Chennai corridor reduced by 8 hours on average due to optimized routing and pre-cleared documentation.
- Vehicle reliability improved with TCI's vetted fleet replacing ad-hoc vendor arrangements.
- Complete supply chain visibility enabled the client to reduce safety stock by 15%, freeing working capital.
- Centralized billing through a single freight partner reduced the client's vendor management overhead and monthly reconciliation time.



Case Study 3:

Engineering the Journey of Energy Infrastructure



Client:
An EPC Company



Vertical:
Power & Energy Infrastructure



Service:
Project & Heavy Haul



Location:
Rajasthan & Himachal Pradesh



Background:

A major EPC (Engineering, Procurement & Construction) Company was executing two simultaneous projects - a 500 MW solar park in Rajasthan and a 120 MW run-of-river hydropower plant in Himachal Pradesh. Both projects required the transportation of transformer units, turbine blades, pre-fabricated steel structures and heavy electrical panels, many of which exceeded standard road width and height clearances and weighed upwards of 80 tonnes per consignment.

Challenges

- Transformer units and turbine components required special permits, escort vehicles and route surveys across multiple state highway authorities.
- The Himachal Pradesh site involved mountain roads with hairpin bends, low-clearance bridges and altitude restrictions - conditions that rule out standard transport solutions.
- Rajasthan's desert terrain presented challenges of sandy roads, extreme summer temperatures exceeding 48°C and limited road infrastructure in the interior.
- Strict project commissioning deadlines linked to government PPAs (Power Purchase Agreements) meant any transport delay had direct revenue implications.

Solutions

TCI Freight deployed its specialized Project & Heavy Haul capability, which is designed specifically for such consignments in difficult terrains and over long distances.

The solution encompassed:

- Dedicated route surveys and pre-movement assessments to identify bridge load limits, overhead power line conflicts and road width constraints on both corridors.
- Deployment of multi-axle hydraulic platform trailers, modular transporters and lowbed flatbeds with self-loading capability for equipment varying from 40 to 120 tonnes.
- On-site rigging and placement support for transformer and turbine installations at the project site perimeter.
- Real-time convoy tracking and a dedicated account manager embedded with the client's site team for the duration of both projects.

Benefits

- All consignments across both projects were delivered within the contracted schedule, enabling on-time commissioning and safeguarding the client's PPA revenue timelines.
- Zero damage incidents across all heavy lift and over-dimensional loads, credited to TCI's pre-movement engineering assessments and specialized equipment deployment.
- The client saved an estimated 20% on project logistics costs compared to sourcing individual specialized transporters for each consignment.



Case Study 4:

Strengthening Distribution through Secure Storage



Client:

National FMCG Brand



Vertical:

FMCG & Consumer Packaged Goods



Service:

Storage Solutions



Location:

Delhi NCR, Kolkata, Bengaluru



Background:

A fast-growing national FMCG brand selling personal care, home cleaning and packaged foods products was scaling its distribution into Tier 2 markets. The company's distribution model required buffer stock at key regional distribution hubs to bridge the gap between production cycles and market demand. However, frequent delays in retailer order acceptance, seasonal demand variability and monsoon-driven supply chain disruptions meant that cargo routinely needed secure short-term storage at transit hubs before last-mile delivery could be executed.

Challenges

- Delays in retailer acceptance of shipments particularly during festive season order rushes and monsoon-related road closures left cargo stranded at transit hubs with no secure holding facility.
- Temporary open-yard storage at third-party yards led to product damage from moisture, pest infestation and pilferage, resulting in insurance claims and product write-offs.
- The absence of a professionally managed storage solution added hidden costs: demurrage on delayed vehicles, re-handling charges and product replacement costs.
- The client had no inventory visibility during the storage period, making demand planning and order management difficult for their regional sales teams.
- FMCG products require dry, clean storage environments with fire suppression, a standard most informal storage yards could not meet.

Solutions

TCI Freight offered the client access to its network of safe and secure storage facilities strategically located at key freight hubs in Delhi NCR, Kolkata and Bengaluru designed to save cargo handling cost in cases of delays in accepting shipments.

The solution included:

- Dedicated dry storage bays within TCI's hub infrastructure at all three locations, providing immediate in-transit holding without vehicle detention charges.
- Professionally managed facilities with fire suppression systems, CCTV surveillance and pest control protocols meeting storage standards.
- Flexible storage tenures from 24 hours to 30 days with transparent, standardized billing aligned to actual storage duration.
- Inventory management integration allowing the client's regional sales team to query stored stock levels in real time and trigger delivery instructions remotely.

Benefits

- Product damage and write-off costs fell by over 80% within switching to TCI's secure storage hubs.
- Vehicle detention and demurrage charges were eliminated, as drivers could offload directly at TCI hubs without delays.
- Regional inventory visibility improved, enabling the client's sales team to commit to retailer orders with greater accuracy and faster response times.
- Storage-to-delivery turnaround time improved to within 4 hours of receiving retailer acceptance, supporting same-day and next-day replenishment commitments.
- The integrated storage-and-distribution model reduced the client's overall secondary freight costs by 18%.



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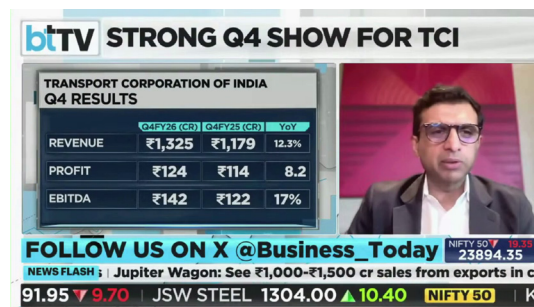
TCI Seaways Tops Coastal TEU Handling and Ranks Among Top 3 at Kandla in FY 2025-26



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TCI EXPRESS at Bharat Electricity Summit & Ride Asia-EV 2026



GRI Warehousing, Logistics & Industrial Forum 2026



CII Multimodal Transportation and Logistics Summit 2026



Indo-Sri Lanka Economic Conference

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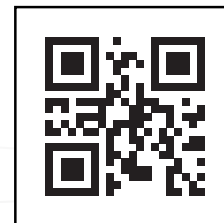


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