MIDDLE POWER PACT: DELHI'S SEOUL BRIDGE

India-Korea Strategic Dialogue

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This policy brief draws from the latest India-Korea Strategic Dialogue, where participants developed recommendations for Indian and Korean policymakers to strengthen bilateral ties. These recommendations centre on two key areas: addressing shared geopolitical challenges and harnessing mutually beneficial technologies. The author provides context by outlining India and Korea's current strategies on each issue, supported by empirical evidence from primary and secondary research.

STRATEGIC INFRASTRUCTURE

India and the Republic of Korea (ROK) stand at a pivotal point in their relationship. Bound by a Special Strategic Partnership since 2015 and a Comprehensive Economic Partnership Agreement (CEPA) in force since 2010, the two democracies have deepened ties across trade, technology, and defence. Yet the partnership has consistently operated below its potential. This brief argues that three infrastructure sectors, such as shipbuilding, defence, and automotive & EVs, offer transformative opportunities to elevate the relationship into a genuine co-production and co-development alliance aligned with India's Amrit Kaal Vision 2047 and Korea's Indo-Pacific strategy.

The timing is favourable. India has approved an $8 billion maritime incentives package, is commissioning a warship every 40 days, and has established itself as one of the world's fastest-growing defence manufacturing ecosystems. Korea, the world's second-largest shipbuilder (28% of the global market share) and a top 10 defence exporter, faces domestic capacity constraints and is actively seeking strategic partners. The K9 Vajra-T howitzer programme, with two orders for 200 units at $1.1 billion, manufactured in India, demonstrates what structured technology transfer and co-production can achieve. This model must now be systematically replicated and scaled across sectors.

Shipbuilding: Building a Maritime Manufacturing Alliance

State of the Sector: India's Shipbuilding Moment

India's commercial shipbuilding market stood at approximately $1.1 billion in 2024, representing less than 1% of global output. In contrast, South Korea delivered 20.1 million gross tonnes in 2024, roughly 28% of global tonnage, specialising in high-specification vessels, including LNG carriers, very large crude carriers (VLCCs), and naval platforms. India's current shipyard capacity is approximately 0.072 million gross tonnes annually, against a 2030 target of 0.33 million gross tonnes and an ambitious 2047 goal of 11.31 million gross tonnes. To put the gap in perspective: the world's largest individual Chinese shipyards exceed 10 million gross tonnes of annual capacity each; Korea's leading yards routinely achieve 7-9 million gross tonnes of annual capacity.

INDIA SHIPBUILDING: KEY METRICS AT A GLANCE

Metric	Current Status	2030 / 2047 Target
Shipyard Capacity (GT/yr)	0.072 million GT	0.33M GT (2030) to 11.31M GT (2047)
Global Market Share	0.07% (ranked 20th)	Top 10 (2030) to Top 5 (2047)
Naval Ships Under Construction	54 vessels (Sep 2025)	155-160 warships in fleet by 2030
Warship Commissioning Rate	1 every 40 days (2025-26)	1 every 6 weeks (from 2026)
Annual Naval Deliveries (2025)	10 warships + 1 submarine	19 in 2026, 13 in 2027
Shipbuilding Sector Value	$1.12 billion (2024)	$8 billion (2033)
Government Package Approved	$8 billion (INR 69,725 cr)	Through 2036, extendable to 2047

Metric	Current Status	2030 / 2047 Target
Spend on Foreign Shipping/yr	$70-75 billion	Reduce flag-foreign gap from 95%
Korea's Global Share (2024)	28% / 20.1 million GT	Strategic partner for technology transfer

The Indian government's 2025 maritime incentives package includes a Shipbuilding Financial Assistance Scheme offering 15% to 25% vessel subsidies, a Shipbuilding Development Scheme for greenfield and brownfield yard expansion, and a Rs 25,000 crore Maritime Development Fund. Two greenfield clusters are being established, one at Tuticorin, Tamil Nadu, and one at Mumbai as Special Purpose Vehicles with joint state and central ownership. India's shipbuilding industry grew from $90 million in 2022 to $1.12 billion in 2024, reflecting accelerating momentum.

The Cochin Shipyard-KSOE MoU: A Template for Ports as Technology Hubs

In a landmark development, Cochin Shipyard Limited, India's largest public-sector shipyard and the only one to hold Navratna status, signed a Memorandum of Understanding with Korea's HD Korea Shipbuilding & Offshore Engineering (KSOE), the holding company of Hyundai Heavy Industries, to collaborate on a Block Fabrication Facility. This MoU represents the first structured technology-transfer agreement between India and Korea at the yard level and should be treated as the cornerstone of a broader India-Korea Maritime Technology Alliance.

The block fabrication model is foundational to Korean shipbuilding efficiency. Ships are constructed as modular prefabricated blocks that are then assembled at the yard, dramatically reducing build time and improving quality. Introducing this methodology at Cochin, India's most capable commercial yard, will compress the 5-7 year technology development timeline that India would otherwise face organically.

CSL needs technology support, including training facilities and backward linkages with one or more Indian universities or technical institutions, to develop a stream of qualified personnel, beyond capital. The sequencing of FDI must keep this in mind.

The 51% equity investment by Mazagaon Dock in Colombo Dockyard is a new opportunity to attract fresh strategic partners as competitors to CSL. This is welcome.

Shipyards require large land parcels to be established. Southern Indian states must develop greenfield hinterland towns to house employees and support staff, and to provide corresponding institutional facilities such as schools and hospitals. This requires support from the Ministry of Housing and Urban Affairs to develop both investments in greenfield townships and the tech support needed to make them viable, as was done for Gift City. Otherwise, we would have an infrastructure crisis and a tapering off of interest among investors.

Policy Recommendation: Ports as Technology Hubs
Designate Cochin, Vizag, and a new Tuticorin cluster as 'Maritime Innovation Zones' with special regulatory sandboxes for Indian-Korean joint ventures.

Mandate that each greenfield cluster under the Shipbuilding Development Scheme establish a Korean OEM partnership for design capability transfer within 24 months of groundbreaking.
Establish an India-Korea Maritime Technology Fund with 50:50 co-investment for AI-driven ship design, autonomous systems, and robotic welding.
Embed Korean Technical Advisors within CSL, Mazagaon Dock, and Garden Reach Shipbuilders for a minimum 5-year exchange programme.

Partnership Matrix: Frigates, Greenships and Submarines

The India-Korea shipbuilding partnership should be structured across three vessel categories, each with distinct co-production and technology transfer modalities:

Vessel Type	India's Need	Korea's Capability & Role
Naval Frigates	10+ frigates planned under Project 17 Bravo and subsequent programs	Hyundai Heavy, DSME design expertise; sensor-weapons integration; joint module fabrication
Green / LNG Cargo Ships*	95% of EXIM cargo on foreign vessels; $75B annual shipping bill	Korea builds 70%+ of world LNG carriers; CSL-KSOE joint LNG vessel design and production
Very Large Crude Carriers (VLCCs)	Deendayal Port: target 50 VLCCs/yr at Kutch cluster (3.2 lakh DWT each)	Korea makes world's largest oil tankers; VLCC co-design and technology transfer critical for India's energy independence
Offshore Patrol Vessels	Coast Guard fleet expansion; Blue Economy patrol	Hyundai-built OPV designs proven in Indian Ocean Region deployments

*Need to develop repair facilities first. Those will act as incubators to develop the ship building capacity. This will also create large employment programs which will create a supporting environment which is for instance not available in port led programs.

The nature of technology is important in this context. Green shipping is possible for India to take a leap, the advantage of being a late comer in the business. The Niti Aayog or other institutions need to develop a green shipping map starting from the use of methane at the initial stage to finally adequate capacity build up in Green Hydrogen.

Alignment with Amrit Kaal Vision 2047 and Make in India

India's Amrit Kaal Vision 2047 envisions India as a developed economy by its centenary of independence. The maritime sector is central to this vision: India aims to rank in the top five of global shipbuilders, carry 20% of global cargo on India-flagged ships, and build a Blue Economy worth 5% of GDP. The Korea partnership is not incidental to this vision, it is the strategic accelerator.

Under Make in India, the Shipbuilding Financial Assistance Policy already requires an escalation in indigenous content. The Korea model, exemplified by the K9 Vajra-T in defence, shows that starting with 50% local content and escalating to 60% and beyond is achievable within a single contract cycle.

Policy Recommendation 1.5: VLCC Ambition
India's Deendayal Port has set a target of building 50 VLCCs per year at the Kutch cluster. Each VLCC is 3.2 lakh DWT which is the largest class of cargo vessel in existence.
South Korea is the world's dominant VLCC builder. A dedicated India-Korea VLCC Joint Venture, with KSOE, Samsung Heavy or Hanwha Ocean as technology partners would be the single most impactful action in India's maritime sector.
Recommended structure: Korean partner holds JV equity, provides design IP and project management; Indian yard (CSL or new Kutch SPV) holds majority stakes; Government of India also retains a percentage through port authority.
First VLCC produced in India target: 2031.

Defence: From Procurement to Co-development Ecosystem

Case Study: The K9 Vajra-T Programme

The K9 Vajra-T programme is the defining template for India-Korea defence cooperation. It began as a straightforward procurement with 100 units under a 2017 contract worth approximately $650 million and has evolved into a co-production partnership that may become a co-development and export platform. The lessons from this programme must now be systematically applied across the bilateral defence relationship.

K9 Vajra-T: Programme Timeline & Key Milestones
2012: Hanwha Aerospace and L&T begin strategic dialogue; MoU for joint artillery development.
2015: India signs initial agreement for technology transfer of K9 Thunder platform.
2017: First contract signed for 100 units (K9 Vajra-T) via global competitive bid.
2019: L&T Armoured Systems Complex (ASC) inaugurated at Hazira, Gujarat by PM Modi.
2021: All 100 units delivered ahead of schedule. 50%+ indigenous content achieved.
2020 (Ladakh): K9 Vajra-T deployed along LAC during India-China border standoff which offers operational validation.
Dec 2024: Second order confirmed for 100 additional units; INR 7,628 crore contract with L&T.
Apr 2025: Hanwha signs $253M component supply agreement with L&T in New Delhi; 60% indigenisation target set.

Future: Third order discussed; potential export to Southeast Asia and Middle East from Indian production lines.

What makes the Vajra-T programme exceptional is the progression it embodies: from pure procurement to licensed production, to indigenised co-production, to potential co-development and third-country exports. Hanwha CEO Jae-il Son explicitly stated the ambition to expand to Asian defence markets from the India base. This positions India not merely as a consumer of Korean defence technology but as a co-manufacturer and potential regional exporter, which represents a fundamental shift that aligns with India's $5 billion defence export target by 2025.

Roadmap: From Conventional Systems to Frontier Technology

India-Korea defence cooperation currently operates primarily in the conventional land systems domain. A structured roadmap over the next decade should progressively move the partnership toward frontier technologies where both nations have strategic interests and where China's capabilities represent the common threat:

Phase	Timeline	Key Domains & Actions
Phase 1: Consolidate & expand	2026-2028	Complete K9 Vajra-T Batch 2; establish India-Korea Defence Innovation Fund; sign joint IP framework for co-produced platforms
Phase 2: Frontier Technology Entry	2028-2031	Dual-use satellite co-development (maritime/ISR); AI-driven autonomous systems; quantum-secure communications; joint cyber operations doctrine
Phase 3: Full Co-development Ecosystem	2031-2035	Joint advanced frigate programme; next-generation submarine (AIP-equipped); space-based maritime domain awareness constellation; joint export via third-country India-Korea defence JVs

Upgrading CEPA to Cover Defence and Cross-Border Venture Capital

The India-Korea CEPA, signed in 2009 and currently in its 11th round of upgrade negotiations (in Seoul in July 2024), was designed for a pre-QUAD, pre-iCET era. The strategic environment has fundamentally changed. The following new chapters should be incorporated into the CEPA upgrade:

Proposed New CEPA Chapter	Core Provisions
Chapter A: Defence Industrial Cooperation	Mutual recognition of 'strategic partner' status; fast-track export licenses for co-produced systems; joint IP ownership framework for bilateral R&D outcomes; co-export rights to agreed third countries
Chapter B: Critical Technology Investment	Removal of FDI caps in defence manufacturing (currently 74% automatic, 100% government route) for Korean strategic partners;

Proposed New CEPA Chapter	Core Provisions
	reciprocal access for Indian defence startups in Korea's defence incubators
Chapter C: Cross-Border Venture Capital	Mutual recognition of SEBI-registered and FSS-registered VC funds; bilateral investment treaty protections for defence-tech and deep-tech startups; joint India-Korea Defence Innovation Fund
Chapter D: Green Technology Trade	Zero-duty regime on bilateral trade in green shipping components, EV batteries, and hydrogen fuel cells by 2028; joint green procurement preferences in government contracts
Chapter E: Supply Chain Resilience	Critical minerals supply agreement (India's lithium, cobalt access from Korean-controlled African assets); semiconductor supply chain coordination; pharma active ingredient reciprocity

Automotive & EVs

Case Study: Hyundai and Kia in India

The Korean automotive footprint in India is not merely significant; it is foundational. Hyundai Motor India (HMIL) and Kia India together constitute one of the most consequential examples of Korean FDI in any emerging market globally. Their presence in India demonstrates that large-scale Korean manufacturing investment is not only possible but deeply profitable and strategically embedded.

Company	India Presence & Key Facts
Hyundai Motor India (HMIL)	Manufacturing since 1996 at Chennai (Sriperumbudur); 2nd in Indian PV market; Creta EV launched Q1 2025: first locally produced EV; India IPO in 2024 raised $3.3 billion (largest in Indian history at the time)
Kia India	Established 2019 at Anantapur, Andhra Pradesh; capacity 300,000 units/yr; sold 133,777 units in just 7 months of 2022; EV6 oversubscribed 3.5x upon launch; planning India-centric EV by 2025-26
R&D Investment	Hyundai India Tech Centre in Hyderabad; focus on India-specific vehicle tuning, software localisation, and EV battery thermal management for Indian climate conditions

EVs, Green Exports, and Advanced Technology

The global EV transition presents both an opportunity and a stress test for Korea's Indian automotive presence. Hyundai and Kia face significant headwinds from US tariffs (25%, recently reduced to 15% under the 2025 US-Korea trade deal), which have disrupted global EV investment timelines and forced model delays. India's market, however, remains an insulated growth story. India's EV market is projected to grow at a rapid CAGR through 2030, with the government's FAME and PLI schemes providing demand-side and supply-side support.

For Hyundai and Kia, India offers a triple benefit: a large and growing domestic EV market, a cost-competitive manufacturing base for green-vehicle exports to the Middle East and Southeast Asia, and access to India's battery-material supply chain.

Tariff Reductions to Encourage FDI and Technology Deepening

India's import tariff regime remains a structural barrier to deeper Korean automotive investment. Current import duties on fully built-up vehicles range from 100% to 125%. While this protects domestic manufacturers, it also limits Korean OEMs' ability to introduce new models for market testing before committing to full local production. The net effect is that high-value, high-technology EV models (such as the Kia EV9, Hyundai Ioniq 9, and future solid-state-battery vehicles) are either not introduced or introduced at commercially unviable price points.

Current Barrier	Recommended Policy Action
100-125% CBU import duty on vehicles	Introduce an 'EV Innovation Window': 10% duty for 3 years on EVs from CEPA partners for models with a committed local production timeline within 4 years
Limited battery cell manufacturing	Allow Korean battery makers (Samsung SDI, LG Energy Solution, SK On) 100% FDI in India's battery cell segment with PLI linkages
CEPA automotive utilisation rate	Simplify Rules of Origin for Korea-India automotive trade; establish fast-track CEPA certification for EV and advanced auto components

Strategic Framework

The Overarching Vision: From Special Strategic Partnership to Production Alliance

The India-Korea bilateral relationship has been labelled a 'Special Strategic Partnership' since 2015. Bilateral trade stood at $25.1 billion in 2024, against a $27.8 billion peak in 2022. Yet the institutional architecture has not kept pace with the label's ambition. The three sectors analysed in this brief, shipbuilding, defence, and automotive, are not isolated opportunities. They constitute an integrated industrial ecosystem in which Korean technology and capital combine with Indian scale, cost advantage, and market access to create a production alliance that benefits both nations.

INDIA-KOREA FINANCIAL MARKETS

As two of Asia's most dynamic economies, one a capital-rich, export-oriented industrial powerhouse, the other the world's fastest-growing large economy, India and Korea remain structurally underdeveloped in their financial relationship relative to their latent potential.

This brief identifies a critical missing pillar in the bilateral relationship: the absence of a coherent capital markets framework to channel Korean institutional savings and technological expertise into India's vast growth opportunities.

THE MISSING STRATEGIC PILLAR

Despite strong diplomatic ties and a bilateral trade relationship exceeding $26 billion, financial market integration between India and Korea remains shallow. The Korea-India CEPA has not yet established a corresponding capital markets architecture. This gap represents a missed strategic opportunity for both nations.

Complementary Strengths That Demand Integration

The case for deeper financial integration rests on a powerful structural complementarity across four dimensions:

Dimension	Korea Brings	India Brings
Capital	Accumulated pension fund reserves; institutional savings seeking global yield	Vast, underfinanced growth pipeline; high-return infrastructure & digital assets
Growth	Mature domestic market seeking expansion; consumption-to-investment transformation	Scale, demographic dividend, and a decade-long trajectory as a top-3 global economy
Technology	World-class semiconductor, EV battery, display & manufacturing capabilities	Deep engineering talent, digital infrastructure, and a USD 1T+ startup ecosystem
Regulatory	Sophisticated capital markets regulation; experience with ESG mandates	Rapidly reforming FPI, GIFT City, and SEBI frameworks welcoming global capital

Korea's Pension Capital: Seeking a New Home

Korea's National Pension Service (NPS), the world's third-largest pension fund, along with the Korea Investment Corporation (KIC) and the treasury arms of major chaebols (family-owned conglomerates), manages combined assets exceeding $1.5 trillion. These pools face a structural challenge: Korea's ageing population compresses domestic returns, pushing managers to seek higher-yield, long-duration assets abroad. India, with its infrastructure deficit, digital transformation imperative, and green energy transition,

offers precisely the asset classes of greenfield infrastructure, growth equity, and climate funds that align with Korean institutional mandates.

India as Korea's Growth Anchor

Korean conglomerates such as Samsung, LG, Hyundai, and POSCO have long recognised India's manufacturing and consumer potential, but corporate FDI alone is insufficient. Korea's capital markets ecosystem, including its asset managers, securities firms, and insurance companies, has yet to systematically redirect savings flows toward India. The shift in Korea's economic gravity from export dependence toward consumption and investment creates an opportunity: Korean savings, rather than fuelling only domestic consumption or saturating developed markets, can be productively deployed in India's capital formation.

Still, India receives less than 2% of Korea's outbound institutional investment, despite being the world's fifth-largest economy. This presents a stark strategic gap.

BILATERAL COOPERATION

Correcting the structural underinvestment requires deliberate architecture, not organic market evolution alone. The Dialogue recommends a three-layer cooperation framework that links government commitment, regulatory alignment, and private-sector co-investment vehicles.

A Dedicated India-Korea Capital Markets Framework

The two governments should establish a formal India-Korea Capital Markets Cooperation Framework (IKCMF), modelled on analogous structures with Japan (the Japan-India Investment Forum) and the EU (the India-EU Trade and Technology Council). The IKCMF could:

- Create a standing Joint Working Group (JWG) co-chaired by India's Ministry of Finance and Korea's Ministry of Economy and Finance, meeting biannually.
- Mandate SEBI-FSC (Financial Services Commission) regulatory dialogue, including mutual recognition pathways for investment products.
- Establish a fast-track investment facilitation desk within IFSCA (International Financial Services Centres Authority, GIFT City) for Korean institutional investors.

Co-Investment Platforms and Joint Funds

Private-sector co-investment mechanisms should complement the intergovernmental framework. Specific instruments to be prioritised:

Instrument	Description
India-Korea Infrastructure Co-Investment Fund	Sovereign-backed blended finance vehicle, with NPS/KIC as anchor LPs alongside Indian DFIs (NaBFID, NIIF). Target: $5B in infrastructure assets.

Instrument	Description
Korea-India Technology Growth Fund	Mid-market private equity vehicle focused on deep-tech, EV supply chains, and semiconductor fabrication in India. Managed jointly by Korean and Indian GPs.
Bilateral REIT/InvIT Bridge	Regulatory pathway for Korean REITs to co-invest in Indian InvITs: providing Korean retail and institutional investors yield-generating exposure to India's infrastructure.
India ETF on Korea Exchange (KRX)	An India-focused ETF listed on KRX, providing Korean retail investors with a transparent, liquid vehicle to access Indian equities: comparable to the Tata-KRX collaboration model.

The Tata-Korea Exchange ETF model is instructive. Listing an India-focused product on KRX demonstrates that Korean retail appetite for Indian equities is substantial when accessible, regulated, and well-understood vehicles are offered. This model should be replicated and expanded, not treated as a one-off exception.

Shifting Korea's Asian Capital Allocation Toward India

Korean institutional investors are currently overweight China, Japan, and developed Southeast Asian markets within their Asian allocations. A deliberate rebalancing anchored by the IKCMF, supported by co-investment vehicles, and de-risked by regulatory reform, should position India as the primary Asian growth destination for Korean capital over the next decade.

This shift is not merely beneficial for India; it serves Korea's own capital management objectives. India's equity markets have delivered superior risk-adjusted returns versus regional peers over the past decade, and its growth premium is expected to persist through 2035, given demographics, urbanisation, and digital adoption.

Institutional Architecture for 2026-2035

India can provide a robust banking network that captures the need for easy financing for Korean capital. As of now, India-Korean financial tie ups are limited. So Korean companies raise capital in the EU or USA and then deploy those in India. This has to change to make Korean companies use India as their preferred financial market.

1. Joint Ventures in banking or NBFC
2. INR-Won Pair to be traded in Gift City
3. Seek Korean investment in Indian banks and vice versa
4. Simultaneous listing in both markets of companies
5. Making corporate governance norms similar in both countries

Proposed Institution	Mandate & Membership
India-Korea Maritime Technology Alliance (MTA)	Annual ministerial meeting; CSL, KSOE, MDL, and Korean shipbuilders as core; oversee block fabrication MoU implementation, VLCC JV, and green shipping corridor
India-Korea Defence Production Partnership (DPP)	Upgrade of 2019 Roadmap; MoD + DAPA co-chair; K9 Vajra next phase, K30 Biho, satellite co-development; IP framework secretariat
India-Korea Critical Technology Investment Fund	Cross-border VC: corpus fund; SIDBI + Korean Development Bank co-management; invest in defence-tech, EV, green shipping, and quantum computing startups
India-Korea Green Shipping Corridor Authority	MoPSW + Korea Maritime and Ocean Ministry; govern Cochin-Busan green corridor; green vessel incentives, LNG bunkering infrastructure, carbon credit framework

The strategic logic of a deep India-Korea partnership has never been stronger. China's military expansion in the Indo-Pacific, its dominance of global supply chains, and its growing pressure on both nations' strategic interests create a powerful structural incentive for alignment. The bilateral relationship has a proven foundation with 30+ years of trade, the K9 Vajra-T programme, Hyundai and Kia's manufacturing presence, and a nascent trilateral dialogue with the United States.

What is missing is ambition matched by architecture. A CEPA upgraded for the strategic age, a shipbuilding alliance that could make India a global maritime manufacturing power, a defence partnership that graduates from technology recipient to technology co-developer, and an automotive ecosystem that positions both nations as leaders of the green mobility transition.

India's Amrit Kaal Vision 2047 and Korea's Indo-Pacific strategy share a common destination: a free, prosperous, and secure Indo-Pacific in which both nations are sovereign actors, not dependent on any single power's supply chains, technologies, or military protection.

LONG TERM: STRUCTURAL REFORMS

Short-term instruments and bilateral frameworks cannot substitute for the structural reforms that institutional investors require before committing long-duration capital. Three priorities are critical.

Tax Certainty and Regulatory Transparency

Tax uncertainty remains the single most cited barrier for Korean institutional investors in India. The retrospective tax disputes of the 2010s left a lasting institutional memory that dampens risk appetite even among managers who recognise India's upside. The following reforms are essential:

- India-Korea DTAA Enhancement: Negotiate an updated, investment-grade Double Taxation Avoidance Agreement with explicit provisions for capital gains treatment, dividend repatriation, and withholding tax on interest from infrastructure bonds.

- Advance Ruling Mechanism: Expand the Authority for Advance Rulings (AAR) to provide binding, time-bound tax rulings for Korean institutional investors, eliminating ex-post liability uncertainty.
- FPI Simplification: Streamline SEBI's Foreign Portfolio Investor registration for Korean pension funds and sovereign vehicles, including KYC reciprocity with Korea's FSC.
- GIFT City Incentives: Offer Korean FPIs and fund managers operating from GIFT IFSC enhanced tax exemptions, including capital gains parity with Mauritius-routed structures.

Strengthening Regulatory Dialogue: SEBI-FSC-FSS Trilateral

Deep capital market integration requires regulators who understand each other's frameworks. A formal SEBI-FSC-FSS (Financial Supervisory Service) trilateral dialogue should be institutionalised, covering:

- Harmonised ESG reporting standards for cross-listed or co-invested vehicles.
- Mutual recognition of credit rating methodologies for Indian corporate bonds offered to Korean institutional buyers.
- Cybersecurity and market surveillance information-sharing protocols, given the cross-border digital infrastructure exposure of co-invested assets.
- A bilateral sandbox framework for fintech and digital asset cross-border pilots.

Priority Sectors for Capital Deployment

To maximise the developmental and financial return on bilateral capital flows, both governments should designate the following as priority sectors for facilitated cross-border investment:

Sector	Rationale	Korean Advantage
Infrastructure	India's NIP targets $1.4T in infrastructure spend by 2030; NaBFID and NIIF provide institutional co-investment structures	Long-duration capital matching; engineering expertise
Digital Transformation	Digital India, UPI, ONDC and data centre buildout create scalable asset opportunities	Semiconductor, display & connectivity supply chains
Green Energy & ESG	India's 500 GW renewable target by 2030; growing green bond market; ESG regulatory push	Battery technology, EV infrastructure, green financing mandates
Healthcare & Biotech	Post-COVID expansion; generic pharma + biosimilars growth; hospital infrastructure deficit	Biotech R&D; advanced medical device manufacturing

A useful initiative in this context could be the proposed "Asia Impact Highway, linked through Korea, Singapore, Thailand, Japan, and India, paving ways for innovators and entrepreneurs to create greater and lasting impact". The idea as articulated was to build the infrastructure to bring Asian outcomes to a global market without losing local specificity. It is ambitious but quite possible when countries speak with each other intensively.

CONCLUSION

The India-Korea financial relationship is underbuilt relative to the depth of both countries' strategic ambition and economic complementarity. Korea has the capital, the institutional infrastructure, and the technological capabilities that India's growth trajectory demands. India has the scale, the returns, and the reform momentum that Korean pension funds and asset managers need.

The window for establishing India as Korea's primary growth market in Asia is open, but not indefinitely. China's market access uncertainties, Southeast Asia's absorption limits, and the competitive pressure of alternative capital-destination narratives (Vietnam, Indonesia, the Middle East) mean that deliberate policy action is required now.

The recommendations in this brief are calibrated to be actionable within existing bilateral diplomatic frameworks, require no major legislative overhaul to initiate, and deliver measurable outcomes within 36 months. The India-Korea capital partnership is not merely possible, it is strategically necessary.

DIGITAL PUBLIC INFRASTRUCTURE

India's world-leading digital stack, anchored by UPI and the broader India Stack, offers Korean technology firms an unmatched evaluation platform for fintech, health, and energy applications at scale. Korean SMEs, on the other hand, remain systematically under-represented in India's market due to information asymmetries, regulatory complexity, and capital gaps.

At the same time, Korea's semiconductor industry faces acute supply-chain stress as the Middle East conflict has disrupted Qatar's helium output, exposing a structural vulnerability that bilateral cooperation with India can help address over the medium term. Korea and India must move from aspiration to architecture: institutionalising information channels, building co-investment platforms, aligning regulatory frameworks, and anchoring a bilateral semiconductor supply-chain partnership before geopolitical pressures further narrow the window for action.

Digital Public Infrastructure

UPI and India Stack: A Platform for Korean Firms

India's Digital Public Infrastructure (DPI), collectively known as India Stack, is among the most sophisticated government-built digital architectures in the world. The Unified Payments Interface (UPI) processed over 170 billion transactions in FY 24-25, making it the largest real-time payment system globally. Beyond payments, the stack encompasses Aadhaar (biometric identity for 1.3 billion citizens), DigiLocker (document verification), ONDC (open commerce), and Account Aggregator (consent-driven financial data sharing). These layers collectively reduce the cost of digital service delivery to near-zero marginal cost and, in effect, function as a ready-made platform on which Korean fintech, health-tech, and energy-tech companies can deploy at a national scale without building foundational infrastructure from scratch.

India Stack: Key Layers Relevant to Korean SMEs
UPI: real-time payment interoperability across 300+ banks; open API access for third-party apps
Aadhaar: biometric KYC enabling instant digital onboarding at near-zero cost
Account Aggregator: consented financial data sharing for credit, insurance and wealth products
ONDC: open-protocol commerce network reducing marketplace lock-in for sellers
Health Stack (ABHA): national health ID, claims and electronic records interoperability
Energy Stack (emerging): smart meter data layer and distributed energy transaction infrastructure

Korean Fintech and the AFINIT Precedent

Korean fintech firm AFINIT represents an early and successful instance of a Korean startup leveraging India Stack to deliver financial services at scale. Its experience demonstrates that the UPI and Aadhaar

layers can dramatically compress market-entry timelines for firms with the technical capability to integrate effectively. Korean cosmetics brands are similarly gaining consumer traction through digital commerce platforms, validating the broader appetite for Korean products in India.

However, the current composition of Korean investment in India remains skewed toward consumer goods and clothing rather than high-value technology sectors. Indian counterparts at the Dialogue explicitly signalled a preference for deeper engagement in semiconductors, 5G and 6G networks, AI platforms, and health technology; areas where Korean firms hold comparative advantages but remain largely absent from the Indian market.

Information Gaps as a Structural Barrier

The most consistently cited obstacle to Korean SME entry into India is not regulatory hostility or capital scarcity; it is information asymmetry. Korean firms systematically underestimate India's market complexity: 22 official languages, 28 state-level regulatory environments, and pronounced regional variation in consumer behaviour create a navigational challenge that brief market visits cannot resolve. India is a price-conscious, competitive volume market; products and services priced or positioned for Korean or European consumers will typically fail without significant localisation.

Information Gap Category	What Korean SMEs Need
Language & cultural depth	Multi-language UI/UX, regional consumer behaviour research, local partnership brokerage
Regulatory navigation	State-level compliance mapping, GST/FDI structuring, data localisation and cross-border data flow guidance
Distribution & logistics	Last-mile logistics networks, ONDC integration support, cold-chain specifics for health and food sectors
Financial structuring	India-compatible pricing, rupee hedging, working capital via Indian banking partners
Government liaison	PLI scheme eligibility, MeitY startup certifications, sectoral ministry engagement support

Government-Private Collaboration to Support Market Entry

The Dialogue identified a government-anchored fund-of-funds, structured in partnership with the Korean private sector, as the primary capital mechanism to support Korean startups and SMEs' entry into India. This model is analogous to successful outbound investment vehicles such as Israel's BIRD Foundation and Enterprise Singapore, and would complement India's existing Startup India and Production-Linked Incentive (PLI) programmes. On the Indian side, the framework would benefit from dedicated SME facilitation windows within DPIIT, fast-track regulatory clearances for Korean-invested SMEs, and bilateral incubator programming in Bengaluru, Hyderabad, and Pune.

Proposed Government-Private Collaboration Architecture
Korea: Government-anchored fund-of-funds (Korea Development Bank / KOTRA structure) co-invested with private Venture Capital
India: DPIIT fast-track window for Korean-invested SMEs; bilateral regulatory sandbox under RBI and SEBI
Joint: Korea-India Innovation Hub (physical + virtual) in Bengaluru and Seoul
Joint: Annual Korea-India SME Marketplace to enable matchmaking platform with live regulatory intelligence
Joint: Bilateral trade credit facility via Korea Eximbank and EXIM Bank of India
Shift objective: from current dominance of Korean clothing/consumer investment to technology-sector depth

Collaboration Frameworks

Regulatory Trust-Building and Financial Inclusion

The bilateral relationship currently lacks a structured mechanism for dialogue at the operational level. High-level MoUs and summit-level declarations exist, but the absence of working-level channels means that market-entry barriers such as inconsistent enforcement of FDI norms, data localisation requirements, and GST treatment of digital services accumulate without resolution. The Dialogue recommended establishing an institutional mechanism explicitly designed for regulatory information sharing and trust-building between startup and SME communities of both countries.

Financial inclusion presents a specific opportunity. India's Account Aggregator framework, combined with UPI credit rails, is enabling a new class of embedded finance products for unbanked and underbanked populations. Korean firms with expertise in credit scoring, insurance technology, and digital lending are well-positioned for this market but require regulatory clarity on cross-border data flows and joint-venture structures with Indian financial institutions.

AI-Driven Demand Growth in Energy and Health

Two sectors are projected to generate the most significant near-term demand for bilateral digital cooperation: energy and health. Both are undergoing AI-driven transformation at scale, and both represent areas where Korea's technological strengths and India's market scale create a compelling joint opportunity.

Energy: India has committed to 500 GW of renewable energy capacity by 2030 and net-zero by 2070. The transition requires a digital energy infrastructure of smart grids, Battery Energy Storage Systems (BESS), demand-response platforms, and distributed energy resource management that does not yet exist at scale. Korea is a global leader in BESS technology, battery management systems, and smart grid software. The emerging India Energy Stack provides an API-accessible data layer that Korean firms can integrate into grid optimisation and demand-side management products.

Health: India's Ayushman Bharat Digital Mission (ABDM) is building a national health data infrastructure linking patient identities (ABHA IDs), provider registries, and clinical records. AI-powered diagnostics, telemedicine, and remote patient monitoring are rapidly scaling in Tier 2 and Tier 3 cities. Korea's strengths in medical devices, diagnostic imaging, hospital information systems, and health data analytics position Korean firms as natural partners, particularly in AI-assisted radiology and preventive care platforms.

Joint Opportunity Area	Complementarity
BESS & Smart Grid	Korea: LG Energy Solution, Samsung SDI battery tech; India: grid integration, demand aggregation at scale
EV Battery Recycling	Korea: cathode material recovery, BMS expertise; India: scale processing volumes, competitive cost base
AI in Healthcare	Korea: imaging AI, hospital information systems; India: ABHA integration, rural deployment reach
Precision Agriculture	Korea: IoT sensors, data analytics; India: scale farmland, diverse crop datasets for model training

From Bilateral to Regional: Global South Orientation

The Dialogue's most forward-looking recommendation was that Korea and India should reframe their digital cooperation not as a bilateral project but as a platform for Global South digital transformation. Both countries have demonstrated at scale what a DPI-led development model can achieve. India's India Stack and Korea's e-government architecture have generated significant interest across Africa, Southeast Asia, and the Middle East as affordable alternatives to proprietary Chinese platforms or expensive Western technology stacks.

A joint Korea-India Digital Development Initiative, targeting five to seven Global South economies, would enable both countries to export not just technology but an interoperable digital governance model while simultaneously opening third-country markets for their respective startup ecosystems.

Global South Digital Development Initiative — Proposed Elements
Joint Korea-India funding window within KOICA and ITEC frameworks; 5-7 priority economies as initial targets
UPI-compatible payment interoperability pilots
Korea-India Digital Trade Corridor: joint e-commerce and logistics infrastructure for Southeast Asia
Startup acceleration co-funded by both governments: Korean technology expertise plus Indian market knowledge
Knowledge transfer partnerships: Korea's KISA e-government programme plus India's DPI team to build local governance capacity

Broader market horizons for Korean SMEs: co-entry into Global South markets reduces risk versus solo entry

Semiconductor Cooperation

Korea's Position as a Global Semiconductor Leader

South Korea is the world's dominant manufacturer of memory semiconductors. Samsung Electronics and SK Hynix together account for approximately 70 per cent of global DRAM production and roughly 80 per cent of the High-Bandwidth Memory (HBM) market, the critical component enabling large-scale AI model training and inference. South Korea accounts for 18 per cent of global semiconductor manufacturing capacity, on par with Taiwan. Korea's semiconductor ecosystem is vertically integrated: it encompasses chip design, advanced packaging, memory fabrication at leading nodes, and a mature domestic supply chain for speciality gases, photolithography chemicals, and precision equipment.

Samsung and SK Hynix together control 70% of global DRAM and 80% of HBM production, making Korea's semiconductor supply-chain resilience a matter of global strategic consequence, not merely bilateral economic interest. Any sustained disruption to Korean fabs would directly constrain AI infrastructure deployment worldwide.

The Helium Crisis: Korea's Acute Geopolitical Vulnerability

In March 2026, Iranian drone strikes forced QatarEnergy to halt operations at its Ras Laffan Industrial City complex, the world's largest single helium production facility. Qatar accounts for approximately 38 per cent of the global helium supply. The simultaneous effective closure of the Strait of Hormuz has compounded the disruption by blocking the primary maritime route for regional helium exports. Spot helium prices doubled in the weeks following the crisis, with some market segments recording weekly increases of 35 to 50 per cent.

South Korea is among the most exposed nations globally. According to the Korea International Trade Association, South Korea sourced 64.7 per cent of its helium imports from Qatar in 2025. Helium is a non-substitutable input in semiconductor fabrication: it cools silicon wafers during etching (preventing thermal warping), serves as an inert carrier gas in lithography, and enables leak detection in ultra-clean environments. There is currently no viable engineering substitute for these applications at the production scale.

India-Korea Semiconductor Technology Collaboration

India's semiconductor ambition is accelerating rapidly. The government's chip incentive programme is targeting all three ecosystem segments: design (where India has significant strength in embedded systems and fabless engineering), assembly and testing (where capacity is emerging through Tata Electronics and CG Power partnerships), and fabrication (where PSMC and other partnerships mark the beginning of a domestic fab base). India's national AI mission has further elevated semiconductor policy: compute

availability is now a stated national security and economic development priority, creating structural demand for Korean HBM and advanced semiconductor products.

Design Collaboration: India has a large and rapidly growing pool of semiconductor design engineers, clustered in Bengaluru, Hyderabad, Pune, and Noida. Samsung's existing R&D centre in Bengaluru reflects early recognition of this talent base. The Dialogue noted that Korean companies view India's R&D potential as significant and comparable in quality to Eastern European engineering hubs, but with greater scale and a more competitive cost position. A bilateral semiconductor design collaboration programme, co-funded by DPIIT and Korea's Ministry of Science and ICT, could accelerate the development of joint intellectual property.

Supply Chain Diversification: The helium crisis has dramatically strengthened the strategic case for Korea to diversify its semiconductor material supply chains away from Middle Eastern and Chinese sources. India can assist with supply chain resilience in other critical inputs: rare earths (where India holds substantial reserves), lithium (with emerging domestic deposits), and gallium, for which China has imposed export controls that directly constrain Korean chipmakers. An India-Korea Critical Minerals Partnership, embedded within the broader supply chain security dialogue, would directly address Korea's most pressing raw material vulnerabilities.

Open-Source AI and Sovereign LLMs: Both India and South Korea occupy a strategically similar position in the global AI landscape: dependent on US-controlled foundational model infrastructure for large language models while facing the alternative of Chinese open-source models that carry different dependency and security risks. The Dialogue surfaced a substantive proposal for a bilateral initiative to collaborate on open-source Large Language Models for both commercial and defence applications, aimed at reducing strategic dependence on either superpower's AI ecosystem and developing models specifically attuned to Korean and Indian linguistic and cultural contexts.

Cooperation Area	**Recommended Action**
Semiconductor Design	Establish India-Korea Semiconductor Design Centre; joint IP development programme; co-funded graduate research fellowships
HBM & AI Chip Supply	Priority supply agreements for India's AI compute buildout; Samsung/SK Hynix investment in Indian packaging facilities
Critical Minerals	India-Korea Critical Minerals Partnership covering rare earths, lithium, gallium alternatives to Chinese supply
Helium Diversification	Joint feasibility study on KG Basin helium extraction potential; interim helium swap arrangements via third-party suppliers
Open-Source AI	Co-develop multilingual, culturally-specific LLMs for enterprise and public-sector use; joint compute investment
Trilateral Semiconductor Task Force	Formalise under US-India-Korea technology framework; coordinate CHIPS Act equivalents and fab investment

AI AND SEMICONDUCTORS

A convergence of technological, geopolitical, and economic forces is reshaping the global technology order. The US-China rivalry has bifurcated AI and semiconductor supply chains, creating new strategic imperatives for mid-tier technology powers that refuse to be subordinated to either bloc. India and the Republic of Korea (ROK) occupy a unique position in this new landscape: both are democracies with advanced technology industries, both face Chinese dominance across critical supply chains, and both have emerged as preferred partners of the United States in its efforts to build resilient technology ecosystems outside of China.

This brief presents that India and Korea should urgently elevate their technology partnership across four interconnected pillars: (1) co-positioning in the emerging open-source AI ecosystem that is challenging US-Chinese dominance; (2) building a bilateral clean energy and battery storage industrial base through an India-Korea Energy Forum; (3) co-developing AI and semiconductor capabilities for both commercial and military/dual-use applications; and (4) establishing a Bilateral Semiconductor Framework that anchors Korean fab investment in India's rapidly maturing chip manufacturing ecosystem.

Open AI Ecosystems: Beyond the US-China Duopoly

The Geopolitical Structure of Global AI

The global AI landscape in 2026 is characterised by a bifurcating technological order. On one side, US hyperscalers (OpenAI/Microsoft, Google DeepMind, Anthropic, Meta) have established dominance in frontier closed-source models. On the other hand, Chinese state-backed and private firms (Baidu, DeepSeek, Alibaba) are deploying AI at a national scale with strong government integration. Both blocs are using AI as a geopolitical instrument. The United States, through export controls on AI chips to China, and China, through its Military-Civil Fusion strategy that systematically converts civilian AI advances into defence applications.

For India and Korea, this binary presents both a threat and an opportunity. The threat is dependency: Korea's leading AI firms (NAVER, SK Telecom, LG AI Research, Samsung) currently rely overwhelmingly on NVIDIA GPUs and US-origin software infrastructure. India's AI ecosystem faces similar exposure. The opportunity is that the global rise of open-source AI, exemplified by Meta's LLaMA, Mistral, and a growing ecosystem of open-weight models, offers a genuine third path: sovereign AI development built on openly available model weights, customised with national data, and deployed on indigenous or allied hardware.

The Open-Source AI Strategic Opportunity for India and Korea
Open-weight large language models (LLMs): models where the trained weights are publicly released allow any nation with sufficient compute and data to build sovereign AI capabilities without licensing closed-source models from US firms.
Korea is already pursuing this path: SK Telecom's consortium released an open-source foundation model in mid-2025; MSIT (Ministry of Science and ICT) selected five national AI champion consortia in 2025, competing for $381M in government funding, to develop home-grown LLMs.

India's approach: IndiaAI Mission (2024), budgeted at INR 10,000 crore, targets sovereign AI infrastructure, indigenous AI dataset curation, and Indian language model development for 22 scheduled languages.
A formal India-Korea Open AI Research Consortium, modelled on the CERN or CERN-adjacent model would pool Korean compute leadership (260,000 NVIDIA GPUs now deployed) with India's language and domain dataset scale, creating multilingual, culturally grounded AI models for the Indo-Pacific.

Korea's AI Infrastructure Moment

Korea's sovereign AI initiative is one of the most ambitious technology programmes in the world. The Korean government, Samsung, SK Group, Hyundai, and NAVER have committed over $534 billion in aggregate, encompassing AI model development, data centre infrastructure, semiconductor manufacturing, and physical AI applications in robotics and autonomous systems. As of October 2025, Korea had deployed over 260,000 NVIDIA GPUs across sovereign clouds, AI factories, and research institutions, with a $3 billion physical AI initiative at the APEC Summit in Gyeongju.

Korean AI Actor	Key Initiative	Relevance to India Partnership
Samsung Electronics	AI factory: 50,000+ NVIDIA Blackwell GPUs; semiconductor digital twins; AI-driven fab yield improvement	AI-optimised chip design + digital twin methodology transferable to India's Tata-PSMC Dholera fab
SK Group	50,000+ GPU AI factory; Asia's first industrial AI cloud; KAIST quantum computing partnership	Open-source LLM base for India-Korea joint model; telecom AI for India's 5G infrastructure
LG AI Research	EXAONE multilingual model; generative AI for manufacturing; selected as national AI champion (MSIT 2025)	Multilingual model framework for Indian languages; manufacturing AI for India's PLI factories
Rebellions (AI chipmaker)	ATOM AI inference chip; full-stack ecosystem: chip, software and model; MIT collaboration on battery/semiconductor AI	Korean AI chip as alternative to NVIDIA for India's data centres; joint AI chip design collaboration
KAIST (Korea Advanced Inst.)	Centre of Excellence for quantum computing (NVIDIA partnership); AI for science programme	India-Korea joint quantum-AI research lab; connect to India's National Quantum Mission

Cross-Investment Framework

The current investment relationship between India and Korea in technology is limited and largely one-dimensional (Korean manufacturing FDI into India). A bilateral cross-investment framework in frontier technology would represent a qualitative shift in the character of the relationship. Three domains warrant priority:

Artificial Intelligence: India and Korea should establish a bilateral AI Co-Investment Fund on: Indian-language and multilingual model development using Korean open-source LLM architectures; AI applications for India's priority sectors (agriculture, healthcare, smart manufacturing); and AI-driven

semiconductor yield optimisation and electronic design automation (EDA) which is an area where both nations need to reduce reliance on US EDA software (Synopsys, Cadence).

Cyber-Defence: Both India and Korea operate in threat environments dominated by state-sponsored cyber actors, China and North Korea, respectively. Their adversary profiles overlap significantly in the domain of advanced persistent threats (APTs), critical infrastructure targeting, and supply chain compromise. A formal India-Korea Cyber Defence Cooperation Agreement should establish: joint threat intelligence-sharing protocols; bilateral incident-response teams; co-development of AI-powered intrusion-detection systems tailored to each nation's critical infrastructure; and joint post-quantum cryptography (PQC) transition roadmaps aligned with NIST's 2024 PQC standards. Korea has invested heavily in PQC research through its Electronics and Telecommunications Research Institute (ETRI), and India's Department of Science and Technology has active quantum communication programmes; the two should be explicitly linked.

Policy Recommendation 1.3: India-Korea Quantum-AI Research Compact
Establish the India-Korea Quantum-AI Research Compact as a joint programme between KAIST, IISc Bangalore, and CDAC, focused on: (a) quantum error correction algorithms applicable to AI training acceleration; (b) quantum key distribution (QKD) for bilateral military communications; (c) post-quantum cryptographic standards for bilateral financial and defence networks.
Institutional home: A dedicated India-Korea Technology Institute, modelled on the Indo-US Science and Technology Forum.
Deliverable by 2028: Operational quantum-secure communication link between New Delhi and Seoul for classified bilateral communications.

INDIA KOREA ENERGY FORUM

The Strategic Case for a Bilateral Energy Forum

Energy and technology are inseparable in the AI era. Training large AI models requires enormous and sustained electrical power; a single frontier model training run consumes as much energy as a small town uses in a month. Semiconductor fabs are among the world's most energy-intensive industrial facilities. Korea's drive to AI dominance and India's semiconductor ambitions both have energy access as a binding constraint. At the same time, both nations are pursuing aggressive decarbonisation targets, such as India's 500 GW renewable energy target by 2030 and Korea's 14.3 GW offshore wind target, which require advanced battery storage at scales not yet achieved anywhere.

An India-Korea Energy Forum (IKEF) would formalise the bilateral clean energy partnership and create the institutional architecture for co-investment, technology transfer, and joint deployment across three priority domains: Battery Energy Storage Systems (BESS), green hydrogen, and LFP battery manufacturing. This is not merely an energy partnership; it is the infrastructure layer on which the AI-semiconductor partnership rests.

Green Hydrogen: Korea as Importer, India as Producer

The India-Korea hydrogen relationship has a natural and complementary structure: India, with vast renewable energy potential, is positioned as a green hydrogen producer; Korea, as a major industrial economy with limited renewable land, is one of the world's largest prospective hydrogen importers. Korea's Clean Hydrogen Portfolio Standard and the government's clean hydrogen certification scheme already contemplate long-term import relationships with producing nations. India's National Green Hydrogen Mission targets 5 million tonnes of green hydrogen production annually by 2030, approximately 10% of projected global capacity, with an implied $200-250 billion clean energy investment opportunity.

The IEA's 2025 Korea review explicitly identified India as a priority clean hydrogen supplier partner. An India-Korea Green Hydrogen Supply Agreement, formalised under the proposed IKEF, should commit to the following: a long-term offtake agreement (10+ years) for green hydrogen and ammonia from Indian production hubs (Rajasthan solar-to-hydrogen, Andhra Pradesh coastal ammonia export); Korea's investment in India's green hydrogen infrastructure (electrolysers, storage, port facilities for ammonia export at Vishakhapatnam or Kandla); mutual certification recognition under CEPA's new Green Technology chapter; and joint development of hydrogen fuel cell technology with dual use in industrial processes and fuel cell vehicles.