

THE BUS INSIDER

VOLUME 1 | NUMBER 5 | AUGUST 2025 | ₹50

BY COACH BUILDERS INDIA

AIS 153 EXPLAINED

What Builders Need to Know and Do



Passenger Vehicle Expo 2025
5 Buses That Stole the Spotlight

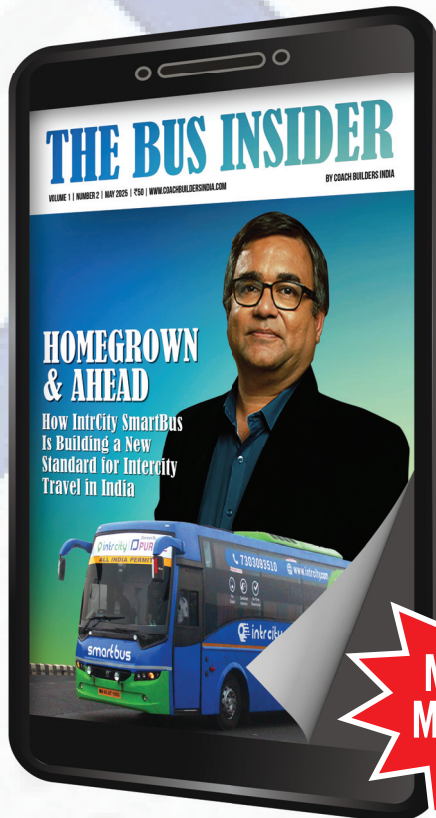
LeafyBus
Bets Big on Long-Haul Electric Travel

Ashok Leyland's
6-Cylinder Garud Eyes Intercity Dominance

Your story deserves the front seat

*Advertise with The Bus Insider.
Reach the decision-makers who matter.*

Advertising with The Bus Insider means more than just visibility — it's about credibility. With a readership that includes decision-makers, fleet operators, OEM leaders, and policymakers, your brand doesn't just get seen, it gets trusted. Every issue of The Bus Insider is crafted to spark dialogue and shape the future of passenger mobility in India. By placing your story here, you're not just buying space; you're claiming your seat at the table where industry conversations happen.



Monthly
Magazine



Please Contact: Editorial & Advertising

Violina Pegu +91 8448229959 | violina@coachbuildereindia.com

Editor's Note

EDITORIAL

Editor:

Shivam Gautom
shivam@coachbuildersindia.com

Associate Editors:

Zainab Azhar
zainab.a@coachbuildersindia.com

Violina Pegu

violina@coachbuildersindia.com

CREATIVES

Pramesh Kumar

MARKETING

Kumar Shantanu
shantanu@coachbuildersindia.com
+91 98711 22871

CONSUMER CONNECT

Violina Pegu
violina@coachbuildersindia.com

Hello everyone,

Some milestones don't just mark time - they mark a shift. For us in the bus industry, September 2025 will be one of those moments. With AIS 153 coming into force, every new bus body in India will have to meet a new rulebook - one that puts safety, design, and uniformity at the center.

On paper, it's just a regulation. In practice, it's a reset. A chance to rebuild trust in how buses are made, to raise the bar for passenger experience, and to give this industry the recognition it deserves.

But here's the thing: in my conversations over the past weeks, many body builders admitted they're still in the dark. Some are confused about the structural requirements, others about fire safety or certification. That honesty struck me. Because behind every shiny bus on the road are MSMES, family-run businesses, and decades of craft that have kept India moving. For them, change is never just policy. It's survival.

That's why in this issue, we've chosen to break it down. Not jargon laden, not in lofty words, but in plain language. We spoke with builders who've already secured their certification, listened to their struggles, and mapped the real pathway to compliance. Because this is not just about following a rule. It's about preparing for the future.

Also, it was a pleasure meeting you all at the Passenger Vehicle Expo 2.0 in Chennai. To be honest, I was impressed by the journey the event has covered in the last year - the energy was unmistakable!

As we enter this new chapter, I carry with me equal measures of optimism and responsibility, the two forces that keep the wheels moving forward in our industry. Regulations will change, technologies will advance, but what will always matter are the people - the builders, operators, and dreamers who carry this industry forward every single day.

I wish you all a very happy Ganesh Chaturthi. May this festive season bring clarity, resilience, and inspiration to everything you build.

Till next time!

With gratitude,



Shivam Gautom

COACH BUILDERS INDIA

A86, Pocket 8, Kalkaji Extension,

New Delhi 110019

Ph: +91-8448229959

Email: coachbuildersindia@gmail.com

www.coachbuildersindia.com

C O N T E N T S

News | National

Page 5-7

PM E-Drive Scheme Extended Till 2028 for Electric Buses, Trucks, and Ambulances

NueGo Completes 3 Years in India, Sets Benchmark in Electric Intercity Travel

Switch Mobility Exports Electric Buses to Mauritius, Strengthening India's Global EV Footprint

Chartered Speed and EKA Mobility extend partnership to 1,135 e-buses under PM e-Bus Sewa Scheme

Tata Motors and DIMO Launch 10 New Commercial Vehicles in Sri Lanka, Marking 65 Years of Partnership

Tata Motors Enters Dominican Republic with New Line-Up of Commercial Vehicles

Business

8 MARKET INSIGHTS ELECTRIC BUS SALES VOLUME IN INDIA IN JULY 2025

An overview of how major electric bus makers performed in July 2025.

10 COVER STORY AIS 153 EXPLAINED: EVERYTHING BUILDERS NEED TO KNOW AND DO NOW

We break down the AIS 153 norms in plain terms, explaining what the regulation covers, why it matters, and how body builders can gear up to get certified.

17 ELECTRIC MOBILITY CAN ELECTRIC BUSES GO THE DISTANCE? LEAFYBUS IS BETTING ON IT

Rohan Dewan on the challenge of launching an electric fleet in a diesel-driven market, policy gaps slowing adoption, and why fast-charging is LeafyBus's edge.

23 RESEARCH NEIGHBORHOOD PUBLIC TRANSIT SERVICES: SITUATIONAL ANALYSIS OF BUS-BASED PUBLIC TRANSPORT SUPPLY IN DELHI

A recent study by the International Council on Clean Transportation (ICCT) identifies the mismatch between mobility patterns and service design, offering a compelling, data-backed case for restructuring Delhi's bus network to include short-distance, neighborhood level electric buses.

Passenger Vehicle Expo 2025

27 PASSENGER VEHICLE EXPO 2.0 WRAPS UP WITH BIG LAUNCHES, POLICY PUSH, AND INDUSTRY COLLABORATION

30 ASHOK LEYLAND AIMS TO RECLAIM INTERCITY MARKET WITH NEW 6-CYLINDER GARUD

31 GEMS SIGNS LANDMARK MOU TO ACCELERATE INTERCITY ELECTRIC BUS DEPLOYMENT IN SOUTH INDIA

33 PASSENGER VEHICLE EXPO 2025: 5 BUSES THAT STOLE THE SPOTLIGHT

News | International

Page 36-38

BasiGo Marks 100 Electric Buses Across Kenya and Rwanda

Daimler Buses Supplies 10 eCitaro Electric Buses to Bonn

MTR Corporation Deploys First Alexander Dennis Enviro500EV Buses with Voith Drive Technology in Hong Kong

Alexander Dennis Partners with KleanDrive for Electric Repowering Solution

Karsan Autonomous e-ATAK to Launch Passenger Service in Switzerland

Alexander Dennis Launches Las Vegas Facility, Rolls Out Enviro500 Buses to RTC



PM E-Drive Scheme Extended Till 2028 for Electric Buses, Trucks, and Ambulances

The Government of India has extended the ₹10,900-crore PM E-Drive Scheme, officially known as the *PM Electric Drive Revolution in Innovative Vehicle Enhancement*, till March 2028, but only for select categories of electric vehicles.

As per the latest gazette notification, the extension applies specifically to electric buses, e-trucks, and e-ambulances. The scheme's earlier deadline was March 2026. However, the terminal date remains unchanged for registered electric two-wheelers, e-rickshaws, e-carts, and e-three-wheelers (L5 category), which will still conclude on 31 March 2026.

The scheme remains a fund-limited programme with a fixed outlay of ₹10,900 crore. It will operate on a first-come, first-served basis, meaning if funds are exhausted before the deadline, the scheme, or its sub-components, will close early with no further claims entertained.



Industry observers view this extension as a strategic shift to prioritize large-format EVs, which have a more substantial impact on urban air quality and heavy-duty transport decarbonization. While electric two- and three-wheelers are seeing widespread adoption, categories like buses and trucks require greater

support due to higher upfront costs and infrastructure demands. With the extension in place, stakeholders in public transport, logistics, and emergency services have a wider window, until 2028, to scale adoption of eligible EVs under the scheme. However, with funding finite, manufacturers and operators are expected to accelerate deployment to secure incentives before funds run dry.

NueGo Completes 3 Years, Leads India's Electric Intercity Bus Segment

NueGo, India's leading intercity electric bus brand by GreenCell Mobility, has completed three years of operations, reinforcing its leadership in sustainable travel. With a fleet of 300+ electric buses operating across 120+ cities and over 600 daily departures, NueGo has transformed intercity mobility with a focus on comfort, safety, and inclusivity.

In this span, NueGo's buses have covered 2,765 million kilometers, avoiding 261 million kilograms of CO2 emissions—equivalent to planting 3.53 million trees. The company also plays a vital role in employment generation, with a workforce of 5,000+, including over 150 women and 10+ transgender

individuals, reflecting its commitment to diversity.

NueGo has established 100+ superchargers (180–240 kW), enabling full charging in just two hours, ensuring efficiency and minimal downtime.

The company has also made significant strides in promoting women's safety. Initiatives include a 24x7 women's helpline, high-definition CCTV, real-time GPS tracking, AI-enabled driver monitoring, and designated Pink Seats for female passengers. NueGo also launched India's first all-women intercity bus service, staffed entirely by women.



Commenting on the milestone, **Devendra Chawla**, MD & CEO of GreenCell Mobility & NueGo, said, "Every kilometre we drive without emissions is a kilometre toward a greener India. Our next chapter is about scaling this vision so that sustainable and safe travel becomes the norm across every city and town."

Switch Mobility Exports Electric Buses to Mauritius, Strengthening India's Global EV Footprint



Switch Mobility, a leader in electric bus manufacturing, has exported its first batch of 10 electric buses to Mauritius. This marks a major milestone in India's electric vehicle (EV) export journey and supports Mauritius in its transition toward a cleaner, more efficient public transport system.

The exported buses are part of a government-to-government collaboration between India and Mauritius. Facilitated by Convergence Energy Services Limited (CESL), the deal involves a total order of **100 electric buses**, with the first 10 now delivered.

Notably, these buses are a gift from the Government of India to the Government of Mauritius, symbolizing not only technological cooperation but also diplomatic goodwill.

SWITCH EiV12: Built for Smart Urban Transit

The buses delivered are **SWITCH EiV12** models - 12-meter electric buses purpose-built for urban transport. Each bus can carry up to 45 passengers and is equipped with Lithium Iron Phosphate (LFP) batteries, known for high efficiency and long service life.

Safety is a core feature of the EiV12. Each unit includes a Fire Detection and Suppression System (FDSS), enhancing passenger safety. The buses are also fitted with SWITCH iON, a proprietary telematics system that enables real-time fleet monitoring, predictive maintenance, and route optimization—boosting overall operational efficiency.

India's Growing Role in Global EV Exports

This successful export is a testament to the strength of the **Make in India** initiative. As a domestically manufactured product, the EiV12 showcases India's ability to produce world-class electric vehicles ready for international markets. The initiative not only supports EV adoption globally but also contributes to job creation and industrial growth within India.

Chartered Speed and EKA Mobility extend partnership to 1,135 e-buses under PM e-Bus Sewa Scheme

EKa Mobility and Chartered Speed have joined forces to roll out 1,135 electric buses across India under the Pradhan Mantri e-Bus Sewa Scheme. The companies recently received a Letter of Confirmation of Quantity (LOCQ) for 235 buses, in addition to the earlier confirmation of 900 units.

With this massive deployment, the partnership is set to serve over 3.6 lakh passengers every day while generating more than 2,500 jobs.

State-Wise Deployment of Electric Buses

Under the latest allocation of 235 buses, Chartered Speed will procure, operate, and maintain fleets in:

- Madhya Pradesh: 110 buses
- Odisha: 60 buses
- Chhattisgarh: 35 buses
- Meghalaya: 30 buses

Together with EKA Mobility's advanced EV platforms, these buses will deliver safe, efficient, and eco-friendly commuting solutions.

"Through the PM e-Bus Sewa Scheme and our collaboration with Chartered Speed, we are proud to deploy 1,135 electric buses that will serve lakhs of citizens every day. Every bus we put on the road is a step towards reimagining India's cities, making them smarter, greener, and more people-centric," said Rohit Srivastava, Business Head & Chief Growth Officer, EKA Mobility.

The EKA Mobility and Chartered Speed partnership combines EKA's EV manufacturing expertise with Chartered Speed's operational excellence. Together, they are shaping the future of green, reliable, and inclusive public transport in India.



Tata Motors and DIMO Launch 10 New Commercial Vehicles in Sri Lanka, Marking 65 Years of Partnership

Tata Motors, India's leading commercial vehicle manufacturer, in collaboration with DIMO, its authorised distributor in Sri Lanka, has launched 10 new trucks and buses, reinforcing its commitment to transforming the country's mobility landscape. This milestone also celebrates a 65-year partnership built on shared growth, reliability, and customer-centric innovation.

The new range includes cargo and passenger vehicles designed for diverse operational needs — from agile intra-city logistics to long-haul freight and inter-city passenger travel. Models such as the Ultra T.7 to T.14, and 1918.T, are built for high-efficiency, last-mile delivery, while the Prima 5530.S and Signa 5530.S offer advanced solutions for heavy-duty logistics. For passenger mobility, the LPO 1622 Magna ensures safe and comfortable long-distance travel, while Ultra Prime LPO 8.6 and 11.6 provide efficient staff transport options.

Mr. Girish Wagh, Executive Director, Tata Motors, noted that these vehicles are engineered for Sri Lanka's evolving infrastructure and logistics needs, offering superior performance, safety, and total cost of ownership. Mr. Ranjith Pandithage, Chairman, DIMO, reaffirmed their commitment to delivering world-class vehicles supported by unmatched after-sales service.

DIMO supports customers with 15 service centers across the country, extended warranties up to 3 years/300,000 km, and tailored Annual Maintenance Contracts (AMC).

With operations in over 40 countries, Tata Motors continues to drive global mobility through innovation, durability, and value all backed by over seven decades of commercial vehicle expertise.



Tata Motors Enters Dominican Republic with New Line-Up of Commercial Vehicles



Tata Motors has officially entered the Dominican Republic through a strategic partnership with Equimax, marking a key milestone in its global expansion. The launch introduces a versatile range of vehicles tailored to the region's diverse logistics, construction, and last-mile delivery needs. The product portfolio includes:

- Tata Super Ace
- Tata Xenon
- Tata Ultra range (T.6, T.7, T.9)
- Tata LPT 613 tipper

These vehicles are known for performance, durability, and low total cost of ownership.

Mr. Asif Shamim, Head – International Business, Tata Motors Commercial Vehicles, stated, "The Dominican Republic is a high-potential market aligned with our global growth strategy. Our advanced commercial vehicle solutions, supported by Equimax's strong network, will empower local businesses and infrastructure development."

Mr. Gabriel Tellerias, President of Equimax, added, "This partnership brings proven Tata Motors products to our market, addressing real operational needs. Equimax is committed to delivering excellent service, spare parts availability, and long-term value to our customers."

Equimax will provide nationwide support through its established network, ensuring customers benefit from reliable after-sales service.

Tata Motors now operates in over 40 countries, offering commercial vehicles ranging from mini-trucks to heavy-duty trucks and passenger solutions, built on a legacy of innovation, efficiency, and trusted global performance.

Indian Electric Bus Sales in July 2025

A Detailed Market Analysis



By Violina Pegu

The overall electric bus sales in July saw a majority of OEMs experience a dip in sales compared to previous months. Despite the overall slowdown, JBM Group and Olectra Greentech emerged as clear growth leaders, steadily increasing their monthly volumes.

The contrasting performances of PMI, Pinnacle, Tata, and Switch underline the growing volatility in India's electric bus market.

Electric Bus Sales In July 2025: Key Highlights

- JBM Group have been steadily growing in terms of monthly sales, and July's numbers have pushed them to the top of the charts
- The same goes for Olectra Greentech as well, which has been riding a steady growth wave since May 2025
- PMI Electro Mobility haven't been able to replicate their April 2025 sales performance (their highest of the year so far), and July 2025's sales figures are their lowest in the last 4 months



Manufacturer	Units Sold	Market Share
JBM Group	145	41.6%
Olectra Greentech	89	25.57%
PMI Electro Mobility	49	14.08%
Pinnacle Mobility	24	6.89%
Tata Motors	21	6.03%
Switch Mobility	20	5.74%
Total	348	100

Comparison With April and May 2025

Manufacturer	January 2025	February 2025	March 2025	April 2025	May 2025	June 2025	July 2025	MoM Change (June-July)	MoM% Change
JBM Group	48	36	4	46	65	123	145	22	17.88
Olectra Greentech	59	66	76	25	60	80	89	9	11.25
PMI Electro Mobility	68	57	25	188	147	57	49	-8	-14.03
Pinnacle Mobility	1	2	1	3	12	108	24	-84	-77.7
Tata Motors	23	42	24	6	3	34	21	-13	-38.23
Switch Mobility	125	88	113	21	51	126	20	-106	-84.12
Veera (Combined)	13		4	4	3	-	-	-	-
Aeroeagle Automobiles	23		12	28	-	-	-	-	-
Total Units Sold	360	12	275	292	338	528	348	-180	-34.09

Key Observations:

- The top 3 OEMs - JBM Group, Olectra Greentech and PMI Electro Mobility accounted for nearly 81.25% of the electric bus market share in July 2025
- JBM Group topped the monthly sales chart for the first time this year, building on its steady but positive momentum from June 2025
- Switch Mobility recorded one of the most drastic falls in sales in July 2025, mirroring their inconsistent Month-to-Month sales performance in 2025



AIS 153 COMPLIANCE

Everything Builders Need to Know and Do Now

By Shivam Gautam

With AIS 153 coming into effect this September, the regulatory framework for bus body building is undergoing a significant shift. Here's a breakdown of the mandate - what it requires and the steps bus body builders must take to achieve compliance and certification.



Credit: Guru Ram Dass Body Builders

From September 2025, a new rulebook will define how buses in India are built. AIS 153, the latest set of bus body building standards, will become mandatory, and every new bus will have to adhere to these amended mandates.

It marks a decisive shift toward higher safety, better design, and uniformity in bus construction.

Yet, as it often happens, many body builders still don't know the full picture of what AIS 153 actually requires. In my conversations, some admitted they were confused about structural changes, fire safety norms, and even the certification process.

That's why we decided to get to the bottom of it. We spoke with body builders who have already acquired the certification to understand exactly what changes the new norms demand — and how the process really works.

In this feature, I break down the AIS 153 mandates in plain terms, explaining what the regulation covers and how body builders can gear up to get certified.

Please note, I won't go into every detail of AIS 153. Instead, I'm focusing on the latest, key changes that are essential for certification now — basically, the major updates that bus body builders need to understand and comply with. Also, the article specifically focuses on the certification criteria for intercity buses, primarily those 12 metres and above in length, to maintain context and relevance for our readership.

For complete clarity and compliance, I strongly recommend referring to the official amendments of AIS-052: Code of Practice for Bus Body Design and Approval, published by the Automotive Research Association of India (ARAI). It contains the full set of guidelines and technical instructions in detail.



“AIS 153 marks a pivotal shift in India's bus manufacturing landscape, ushering in a new era of safety, standardization, and global alignment. It strengthens regulatory compliance, elevates passenger protection, and drives long-overdue modernization across the industry.”

-Shivakumar V

President – Strategy & Sales and Group
Chief Strategy Officer, MG Group

Also, I'm particularly thankful to **Shivakumar V**, President – Strategy & Sales and Group Chief Strategy Officer at MG Group, and **Yash Sharma**, Director at Damodar Group, for their invaluable support in helping bring this article to life.

What Are the Amended AIS 153 Rules?

The amended AIS 153 is the Automotive Industry Standard formulated by the Ministry of Road Transport & Highways (MoRTH), Government of India, to bring uniformity and safety to bus and coach body fabrication.

Framed under the Central Motor Vehicle Rules (CMVR), it defines how buses in India should be designed and built, ensuring that every vehicle meets consistent standards for safety, quality, and passenger comfort, regardless of who fabricates it.

“AIS 153 marks a pivotal shift in India's bus manufacturing landscape—ushering in a new era of safety, standardization, and global alignment. It strengthens regulatory compliance, elevates passenger protection, and drives long-overdue modernization across the industry,” says **Shivakumar V**.



Credit: MG Group

Since April 1, 2019, all OEMs (Original Equipment Manufacturers) in India have been required to follow AIS 153 for fully built buses with seating capacity above 22 passengers. Now, with the next phase kicking in from September 2025, these requirements will also extend to non-OEM body builders.

Key Focus Areas of the Amended AIS 153

The amended AIS 153 rules prescribe detailed guidelines for critical areas of bus design and construction. These include:

1. Noise, Vibration, and Harshness (NVH)
2. Intelligent Transport System (ITS)
3. Fire Safety System
4. Emergency Exit
5. Interior Lighting
6. Engine Power to Gross Vehicle Weight

1. Noise, Vibration, and Harshness (NVH)

Passenger comfort is at the core of these regulations. AIS 153 lays down specific limits on how much noise, vibration, and sudden jolts passengers and drivers should be exposed to during a bus journey. In simple terms, the idea is to make buses quieter, smoother, and less tiring for long trips.

A. Noise Limits (Interior)

- **Front-engine buses:** Max. 85 dB(A)
- **Rear-engine buses:** Max. 80 dB(A)

For context, this is about the sound of city traffic. Any louder can cause fatigue and stress.

B. Vibration Specifications

The bus structure must have the lowest natural frequency of:

- 5 Hz for vertical and bending modes
- 3 Hz for torsional modes

This ensures the structural stability of the bus body, making it rigid enough to withstand rattling and flexing during operation.

RMS Vibration Levels

Acceptable RMS vibration levels

Suspension Type	Driver & Passenger Seats	Gangway
Front and Rear Mechanical Suspension	3 m/s ²	6 m/s ²
Front Air and Rear Mechanical Suspension	2 m/s ²	4 m/s ²
Front Mechanical and Rear Air Suspension	1 m/s ²	2 m/s ²

Table 1



Passenger comfort is at the core of these regulations. AIS 153 lays down specific limits on how much noise, vibration, and sudden jolts passengers and drivers should be exposed to during a bus journey.

are specified differently based on the suspension type (mechanical or air suspension) and location in the bus (driver seat, passenger seat, gangway), ranging from 1 to 6 m/s².

The root mean square (RMS) vibration levels at both the driver's and passenger's seats shall not exceed the permissible limits specified in Table 1.

It has to be noted that, if a stricter suspension setup (like all mechanical) meets the vibration limits of a more comfortable setup (like air suspension), then the test results can be used (or "extended") for the more comfortable setup without re-testing.

C. Harshness (Transient Vibration)

AIS 153 prescribes specific



quantitative limits related to harshness, focusing on vibration levels that impact passenger comfort and vehicle durability.

- Driver seat: Max. 3 m/s²
- Passenger seats: Max. 10 m/s²
- Dominant frequencies must lie outside the ranges 0.5–1 Hz, 5–7 Hz, and 18–20 Hz

These frequency bands are avoided because they coincide with the natural resonant frequencies of the human body, which can cause discomfort, motion sickness, or fatigue during travel.

Harshness depends on suspension type and location. If a harsher setup (like all mechanical) meets the limits for a softer suspension (like air suspension), the test results can be extended to the softer variants without retesting.

Vibration Measurement Protocol for Sleeper Buses

For sleeper buses, vibration levels must be carefully measured to ensure passenger comfort during rest. Accelerometers are positioned at three key locations:

- Driver's seat
- Upper and lower berths of

the middle row closest to the vehicle's transverse and longitudinal

- Upper and lower berths at designated points within the sleeping area

2. Intelligent Transport System (ITS)

To improve fleet management, safety, and passenger experience, AIS 153 requires:

- LED Destination Board System
- GPS-based tracking and location systems
- Real-time passenger information displays (interior)
- Driver behavior monitoring systems
- CCTV surveillance inside and outside with 30-day recording capability

In addition, all ITS equipment must meet electromagnetic interference (EMI) and electromagnetic compatibility (EMC) norms standards per AIS 004 to maintain electromagnetic compatibility and avoid disruptions in functionality.

3. Fire Safety System

Fire safety is a critical component of the AIS 153 framework, aimed at minimizing fire-related risks and ensuring timely evacuation of



“The new mandates are not just about compliance - it's about elevating the entire travel experience. By making buses quieter, smoother, safer, smarter, and more inclusive, it's setting the stage for a new generation of mobility in India.”

-Yash Sharma,
Director, Damodar Group



bus occupants. Two key systems have been mandated, based on the type of bus:

Fire Detection Alarm System (FDAS) for Seater Buses:

This system must detect smoke, heat, or other fire signatures promptly and alert passengers and the driver through audible and visual alarms while activating hazard signals. The FDAS must comply with AIS-135.

Fire Detection and Suppression System (FDSS) for Sleeper Buses & School Buses:

FDSS extends detection by also including automatic suppression of fire in affected compartments, reducing the risk of fire spread and facilitating occupant evacuation.

Smoke, heat, and CO detection technologies are used, and suppression agents are strategically discharged to contain fire outbreaks.

For buses below 3.5 tonnes GVW, installation of FDAS or FDSS is optional.

4. Emergency Exits

The amended AIS 119 rules lay out clear requirements for emergency exits, specifying the number, type, and placement of exits based on the length of the bus.

Buses Up to 12M in Length

A minimum of four emergency exits including:

- One emergency door
- Minimum two escape hatches (on the roof)

Buses Exceeding 12M in Length

A minimum of five emergency exits including:

- One emergency door
- Minimum three escape hatches (on the roof)

The remaining emergency exit(s) can be in the form of windows or additional doors.



Emergency Door

The emergency door must be equipped with collapsible steps and should be operable from both inside and outside the bus. It must be located on the side opposite the service door - either at the rear face (aligned with the gangway) or in the middle section, depending on the bus layout.

In rear-engine buses, emergency doors cannot be placed on the rear face. Instead, they must be positioned on the side opposite the service door, following one of the placement options below:

- If the service door is at the front or rear half, the emergency door must be in the middle
- If the service door is at the front, the emergency door must be at the rear — and vice versa.

Escape Hatches

Escape hatches must be separated by at least 1 meter, measured between their nearest edges along a line parallel to the longitudinal axis of the bus.

In buses with CNG/LNG cylinders, batteries, battery cooling systems,

or AC units mounted on the roof, escape hatch(es) must be positioned appropriately to avoid obstruction and ensure safe evacuation.

Please note that all emergency exits must comply with the prescribed standards for size, accessibility, and visibility.

One of the key updates in the amended AIS 153 regulations is the prohibition of driver partition doors. This measure aims to ensure unrestricted passenger access to exits, particularly in emergency situations.



Driver Partition Door Not Permitted

One of the key updates in the amended AIS 153 regulations is the prohibition of driver partition doors. This measure aims to ensure unrestricted passenger access to emergency exits, particularly in critical situations such as accidents or fire.

While buses may still include a driver cabin partition for operational or privacy purposes, doors or any physical barriers that could obstruct movement between the passenger area and the driver's cabin are no longer permitted.

5. Lighting & Illumination

Buses must be equipped with sufficient lighting to ensure safe entry, exit, and movement within the passenger compartment at all times, especially during night time operations.

Driver Cabin Lighting

Cabin lighting must enable the driver to clearly identify all components of the cabin, read wall signages, and printed instructions. The luminous flux of cabin lamps should be between 30 and 150 lux, measured at 500 mm above the driver seat base.

Passenger area lighting must allow clear visibility of signages, including emergency signs. Illumination should be at least 50 lux, measured at 500 mm above any seat base.

Dashboard lighting must be discreet and must not distract the driver during night driving. The brightness should be adjustable, optionally through a rheostat or other suitable means.

Passenger Compartment Lighting

Passenger area lighting must allow clear visibility of signages, including emergency signs. Illumination should be at least 50 lux, measured at 500 mm above any seat base.

All buses, except Type I, must have at least two night lights in the passenger compartment. Interior lighting must be designed to avoid glare or reflections that could distract the driver.

Luggage Hold Lighting

Each luggage compartment must have lighting that activates when opened to ensure proper visibility during use.





For operators, this means investing in buses that meet rising expectations around passenger safety and comfort. For body builders, it's a chance to modernize and future-proof their products, and lead confidently into India's next chapter of public transport.

Exit Lamps

Exit lamps are to light up automatically when the doors for exit or entry are opened. In the absence of closable doors at the entry and exit point, the lights are to be permanently lit during night operations of the bus.

6. Engine Power to Gross Vehicle Weight

All buses shall have engine/ electric traction motor power to gross vehicle weight ratio greater than 5 kW/ton.

AIS 153 Type Approval Procedure for Buses

To get certified under AIS 153, bus body builders must approach an accredited testing agency such as ARAI, ICAT, or CIRT. The process begins with submitting detailed documentation, including technical specifications, design layouts, safety features, and system integrations.

After this, a representative variant of the bus must undergo physical performance and safety testing, **on test tracks** as required by AIS 153 and its referenced standards.

Once all technical parameters are met and the documentation is in order, the test agency issues a Type Approval Certificate for the specific bus model or variant. This certificate, along with the supporting documentation, must be submitted to regulatory authorities and is mandatory for vehicle registration.

Wrapping it Up

The new AIS 153 mandates are more than just a regulatory update - they represent a transformative step toward building buses that are safer, smarter, and more passenger-friendly. With clear standards on comfort, safety, and technology, the regulations raise

the bar for how buses are designed and experienced in India.

"The new mandates are not just about compliance, it's about elevating the entire travel experience. By making buses quieter, smoother, safer, smarter, and more inclusive, it's setting the stage for a new generation of mobility in India," says **Yash Sharma**, Director at Damodar Group.

For operators, this means investing in buses that meet rising expectations around passenger safety and comfort. For body builders, it's a chance to modernize, future-proof their products, and lead confidently into India's next chapter of public transport. While compliance may come with added costs, it also brings a clear competitive edge in quality, credibility, and readiness for a rapidly evolving mobility landscape. ●



Can Electric Buses Go the Distance? LeafyBus Is Betting on It

“ The future of intercity travel is electric, powered by technology, progressive policy, and private sector ambition ”

Rohan Dewan, CEO & Co-founder, LeafyBus

CLEAN MOBILITY

In a country where diesel still rules the highways, one startup is betting on electric volts over fossil fuel. New Delhi-based LeafyBus rolled onto the scene in December 2024, with a daring mission - to prove that electric buses can conquer India's long-haul routes, and still turn a profit, even in the hands of a private operator.

At the wheel of this disruption is industry veteran Rohan Dewan, who spent 14 years managing his family's bus business before launching a fleet built for the future. Today, supported by a 46-member team, LeafyBus operates 10 electric buses across two routes in three states, with plans to scale up to 100 buses by 2026.

Dewan's vision is simple but ambitious - to modernize and standardize intercity travel, with sustainability at the core.

In this candid conversation with Coach Builders India, Dewan reflects on the challenges of launching an electric fleet in a diesel-dominated market, the policy gaps holding back private adoption, and why fast-charging infrastructure has become LeafyBus's biggest competitive edge.

What inspired you to launch LeafyBus? How did your past experience in mobility influence the company's vision?

Leafybus was born from a deep-rooted desire to modernize and standardize intercity travel in India, a sector long dominated by diesel buses and fragmented service quality. I have spent 14 years managing my family's bus business in North India, witnessing first-hand the shift from counter-based ticketing to digital platforms like redBus and Paytm. This evolution sparked a vision to create a tech-enabled, sustainable, and passenger-friendly alternative that could redefine long-distance travel.

What were some of the biggest roadblocks you faced while launching LeafyBus, especially in a market still dominated by diesel intercity buses?

One of the biggest challenges we faced was the lack of high-capacity charging infrastructure for long-distance electric travel. At the time, India didn't have the kind of fast-

charging stations needed to support consistent intercity operations. We had to take the lead in setting up 360 kW fast-charging hubs to enable a daily run of up to 900 kilometers.

Financing was another major hurdle. Electric buses come with a high upfront cost, and securing funding wasn't easy. But the team's passion and long-term vision helped us gain the trust of NBFCs like AMU Leasing and Electrigo, who came forward to support us.

Another critical piece was vehicle customization. Every route has different operational demands, and we had to plan bus specifications accordingly, e.g., deploying sleeper buses on routes where that format is preferred. These decisions were essential to making the service both efficient and relevant to the market.

LeafyBus was among the first to use India's 360 kW fast-charging setup. How has this tech impacted your route planning and operations?

LeafyBus's early adoption of 360 kW fast-charging tech has transformed our intercity operations and

“
The fast-charging strategy isn't a supporting feature, it's a central pillar in the EV-first narrative LeafyBus is writing across highways. It helps us balance sustainability with profitability, reshaping how India moves between cities.
”



“

To accelerate adoption, India must build shared charging hubs along highways, integrate smart grids with dynamic tariffs, and develop a stronger maintenance ecosystem through OEM partnerships and regional service centers. Policy reforms like permit & tax exemption, longer loan tenures, and inclusive subsidies for private operators are vital.

”

TAX



turbocharged route planning. The ability to charge in under 50 minutes enables a daily range of up to 900 km, allowing buses to complete three round trips between Delhi and Dehradun with minimal idle time. That's not just speed, it's strategic efficiency.

By slashing downtime, we optimized our scheduling and boosted fleet utilization, supporting tight timetables without compromising battery life or passenger comfort. This tech helped achieve 85%+ occupancy rates, validating electric travel's reliability and economic potential.

What's more, fast charging gave LeafyBus the confidence to explore longer routes and denser networks, expanding its reach beyond early pilot zones. It also made scaling financially feasible, improving unit economics and attracting fresh investment, like our partnership with JBM to deploy 200 new buses.

Ultimately, this infrastructure is more than an engineering feat - it's the backbone of LeafyBus's clean mobility revolution. It helps us balance sustainability with profitability, reshaping how India moves between cities. The fast-charging strategy isn't a supporting feature, it's a central pillar in the EV-first narrative LeafyBus is writing across highways.

How have national policies like NEMMP and FAME-II impacted your business?

Govt. policies have been the cornerstone of Leafybus's journey, offering more than just subsidies. They've laid the foundation for a bold transition to clean intercity travel. As a startup, the financial incentives from these schemes, like subsidies, tax exemptions, and upfront cost reductions, gave Leafybus the breathing room to innovate early and scale confidently.

These initiatives didn't just ease entry, they created a climate of encouragement. The support emboldened Leafybus to invest in India's first fast-charging infrastructure, roll out smart onboard tech, and standardize EV

fleet operations. Every policy move, from relaxed permits to public trust-building campaigns, served as both shield and springboard, helping the company move from idea to industry force.

In essence, the policy push didn't just help Leafybus survive, it inspired us to lead the EV transition. And with evolving guidelines and increased investment on the horizon, we are revving up for even bolder chapters in clean mobility.

Are there any policy gaps or on-ground challenges that you believe still need to be addressed for e bus operators?

Yes, ofcourse! India's EV policies have definitely helped electric bus startups like LeafyBus take off, but gaps still remain.

FAME-II excludes most private operators, and fragmented state regulations complicate intercity permits. Financing is tough too - short loan tenures and lack of payment security deter lenders. On the ground, fast-charging infrastructure is limited, battery reliability needs improvement, and OEM support is thin for scalable contracts.

To truly accelerate adoption, India needs leasing reforms, shared charging hubs, and incentives for private fleets. These changes could unlock broader participation and make electric intercity travel not just viable, but mainstream. LeafyBus is already navigating this with tech and partnerships.



What's your view on the infrastructure available for electric buses in India right now? Is the current ecosystem, charging stations, grid access, maintenance, ready for large-scale electric bus operations? What's still missing, and what needs to change to accelerate adoption of electric buses across the country?

India's infrastructure for electric buses is progressing, but it's not yet fully ready for large-scale adoption. Urban hubs like Delhi and Bengaluru are pioneering fast-charging depots and electric fleets, but most of the country still lacks shared, reliable intercity charging stations. For example, highways and tier-2 cities often don't have corridor-based hubs, making long routes risky for EV operators.

Grid limitations, such as load constraints and lack of smart charging, raise downtime and energy costs. Financing infrastructure remains tough too, with land for depots being expensive and loans offering short tenures without guarantees. Battery reliability and maintenance also need improvement, especially during peak summers when SOC drops and overheating are common.

To accelerate adoption, India must build shared charging hubs along highways, integrate smart grids with dynamic tariffs, and develop a stronger maintenance ecosystem through OEM partnerships and regional service centers. Policy reforms like permit & tax exemption, longer loan tenures, and inclusive subsidies for private operators are vital.

LeafyBus is showing that with tech and partnerships, these gaps can be navigated. But for true scale, India needs a holistic push across infrastructure, policy, and financing. It's not just about adding more buses, it's about building a backbone for clean mobility.

If the government wants more private players to go electric, what kind of support or incentives are truly needed?

To encourage private players to adopt electric buses, the government must offer inclusive and practical incentives. Extending subsidies like FAME-II to private fleets can reduce upfront costs. Banks should be



encouraged to offer long-term loans with interest subvention to improve financing.

Establishing shared fast-charging hubs on highways and waiving registration fees and GST for electric buses will cut operational costs. OEMs need support to offer scalable contracts and after-sales service. With these reforms, India can move beyond public-sector dominance and enable a truly market-driven EV transformation, where private innovation powers sustainable mobility.

As an operator already running an electric bus fleet, do you believe the hesitation among private players to adopt electric mobility is justified? What are they seeing that makes them hold back, and what do you think they may be missing?

Their hesitation is rooted in real challenges. Private operators see high upfront costs, limited access to subsidies, and fragmented state policies that make intercity EV operations complex.

Financing is another pain point - short loan tenures, high interest rates, and lack of payment security mechanisms make scaling risky. Add to that concerns about battery reliability, resale value, and sparse fast-charging infrastructure, and the caution becomes understandable.

Why Private Bus Operators Are Still Wary of Going Electric

- **High Upfront Costs:** Electric buses cost significantly more than diesel counterparts, and most private operators lack access to affordable financing or leasing models.
- **Limited Subsidy Access:** National schemes like FAME-II and PM-eBus Sewa primarily support public agencies, leaving out 93% of India's bus market run by private players.
- **Charging Infrastructure Gaps:** Fast-charging stations are scarce on intercity routes, and land acquisition for depots is expensive and complex.
- **Policy Fragmentation:** Varying EV policies across states create uncertainty for operators crossing multiple jurisdictions.
- **Technology Concerns:** Worries about battery life, resale value, and maintenance reliability, especially in extreme weather, make operators cautious.
- **Lack of OEM Support:** Manufacturers are reluctant to offer flexible contracts or support small fleets, limiting access to scalable solutions.



**“
Going ahead, buses
will no longer be
seen as a mode of
transport - they’ll
become a cornerstone
of India’s clean mobility
revolution, powered by
tech, policy, and private
innovation
”**

But here’s what they may be missing - the long-term viability and strategic edge. Electric buses offer lower operating costs, smoother rides, and growing public demand for clean travel. With smart tech, fast-charging, and supportive partnerships, early adopters like us are proving that EVs aren’t just sustainable, they’re scalable. The transition may be tough, but the payoff is transformative.

What’s your vision for the Indian bus industry over the next 10 years? What major changes do you expect to see?

Over the next decade, India’s bus industry is set to transform

dramatically, from fragmented diesel fleets to a smart, clean, and connected mobility ecosystem. Electrification will lead the charge, with over 50% of new bus sales likely to be electric by 2035, boosted by subsidies, rising fuel costs, and climate goals.

Buses will become tech-enabled assets, featuring real-time tracking, predictive maintenance, and intelligent route planning. Passenger experiences will evolve with airline-like features - dynamic pricing, seat selection, and live updates.

Growth will move beyond metros into tier-2 and tier-3 cities, supported by highway charging corridors and stronger OEM partnerships. Intercity travel will be redefined by premium sleeper EVs, offering comfort and sustainability.

Expect deeper public-private collaboration, with private operators managing fleets while governments build infrastructure and offer policy support. Leasing and financing reforms will unlock participation for startups and SMEs. Looking outward, India will aim for net-zero transport by 2070, and domestic manufacturers may begin exporting electric and hydrogen buses across the globe.

In short, buses will no longer be seen as a mode of transport - they’ll become a cornerstone of India’s clean mobility revolution, powered by tech, policy, and private innovation.





LeafyBus plans to deploy 1,000 electric buses by 2030 and is rapidly scaling from 6 to 100 by 2026, starting with 50 new buses across Delhi, Uttar Pradesh, Uttarakhand, and Punjab.

LeafyBus aims to deploy 1,000 electric buses in the next five years. What are LeafyBus's expansion plans going forward? Are you looking at new states, more routes, or even new service models?

LeafyBus is charging ahead with an ambitious plan to deploy 1,000 electric buses by 2030, and its expansion strategy is as bold as its vision. We are currently scaling from 6 to 100 buses by 2026, starting with 50 new vehicles across Delhi, Uttar Pradesh, Uttarakhand, and Punjab. These routes are chosen for their high demand and supportive EV policies.

Beyond North India, we are eyeing Eastern and Southern states for its next wave of growth, targeting regions with favorable regulatory frameworks and rising intercity

travel demand. The company plans to register buses in states offering EV-friendly permits, subsidies, and charging infrastructure.

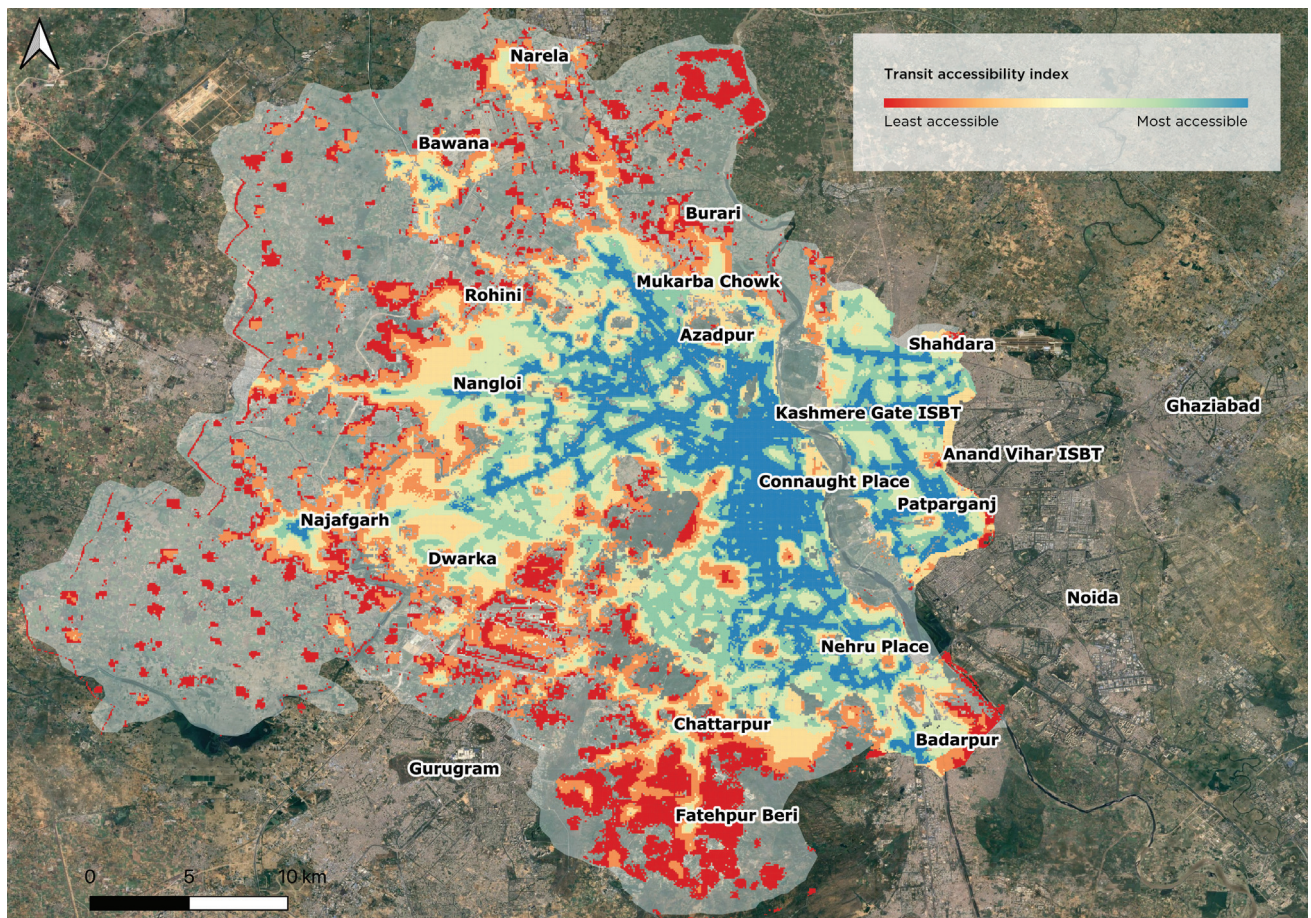
On the service front, LeafyBus is exploring premium sleeper EVs, tech-enabled booking systems, and AI-powered route optimization to enhance passenger experience. Our “Bus Buddy” assistant and real-time tracking are already setting new standards in intercity travel.

With partnerships like JBM and Glida for charging, we are building a scalable model that balances affordability with reliability. The goal isn't just to grow, it's to redefine how India moves between cities. ●

Neighborhood Public Transit Services:

Situational Analysis of Bus-Based Public Transport Supply in Delhi

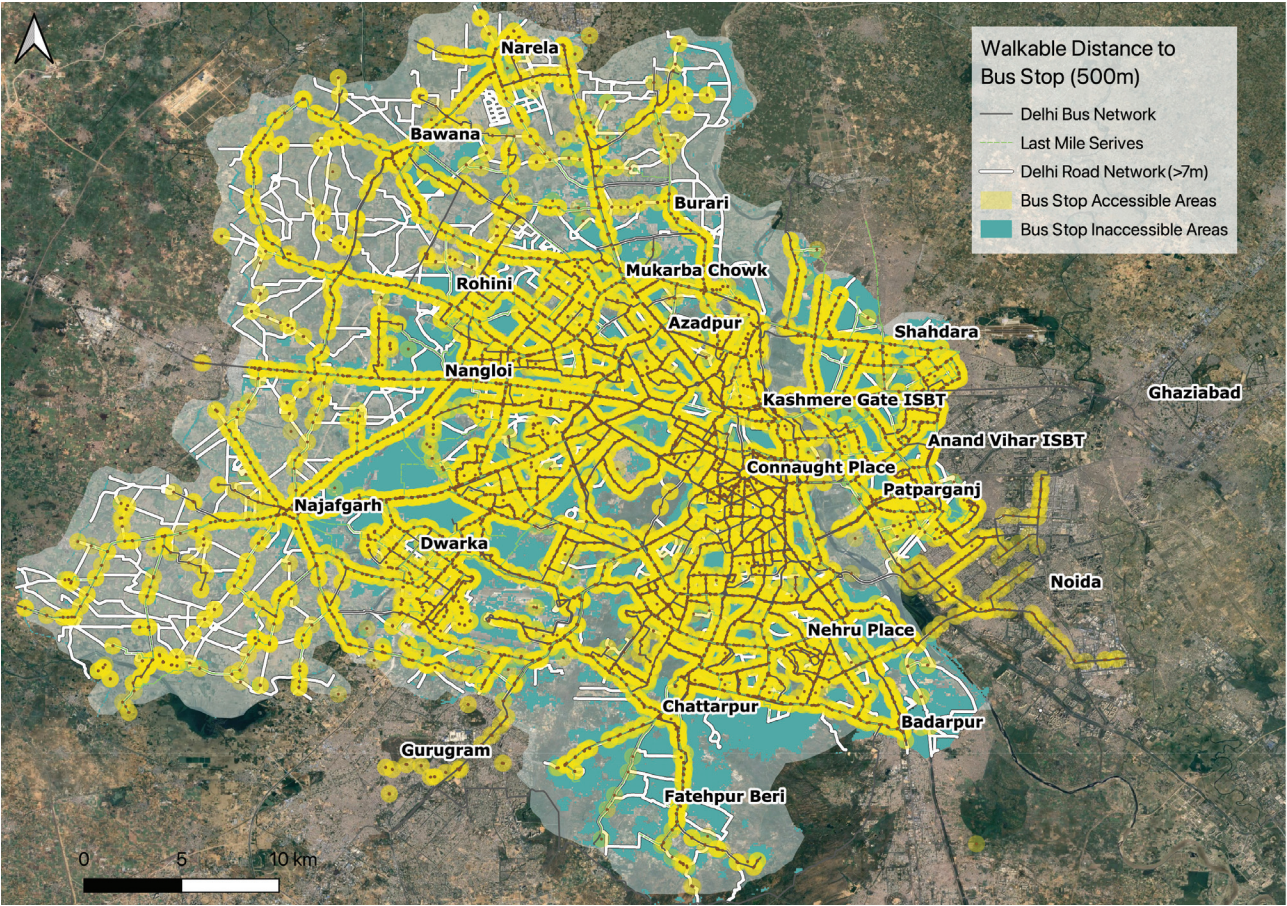
Bhaumik Gowande, Associate Researcher, ICCT and Revathi Pradeep, Researcher, ICCT



Delhi, a rapidly expanding metropolis, faces significant challenges in ensuring equitable access to public transportation as approximately 31% of buildings in the city are located more than 500 meters from the nearest bus stop. Nearly one in three Delhi neighborhoods lacks walkable access to a bus stop, impacting communities most reliant on public transport for daily mobility.

A recent study by the International Council on Clean Transportation (ICCT) titled “*Neighborhood Public Transit Services: Situational Analysis of Bus-Based Public Transport Supply in Delhi*” identifies the mismatch between mobility patterns and service design, offering a compelling, data-backed case for restructuring Delhi’s bus network to include short-distance, neighborhood-level electric buses.

The study offers a unique, highly detailed view of Delhi’s bus service coverage using advanced GIS tools. GIS tools, ward-level demographic data, and official route information from the Delhi Transport Corporation (DTC) and Delhi Integrated Multi-Modal Transit System (DIMTS), the analysis identifies critical access gaps. 31% of urban neighborhoods in Delhi fall outside a 500-meter radius of any bus stop, a benchmark defined under India’s Transit-Oriented



% of Buildings Not Accessible	Name of the Wards
100%	Deoli, Hari Nagar Extension, Jaitpur, Sangam Vihar-A, Sainik Enclave, Ghonda, Mustafabad, Prem Nagar
90-99%	Karawal Nagar-East, Kirari, Sangam Vihar-B, Ballimaran, Binda Pur
80-89%	Sangam Vihar-C, Sant Naga
70-79%	Saboli, Nithari, Said-Ul-Ajaib, Sadh Nagar, Vikas Nagar, Aya Nagar, Harsh Vihar
60-69%	Hastsal, Sarup Nagar, Mohan Garden, Sagarpur, Bazar Sita Ram, Zakir Nagar, Dayalpur, Gautam Puri, Tigri, Raj Nagar, Aman Vihar, Vasant Kunj, Baprola
50-59%	Badarpur, West Patel Nagar, Nawada, Matiala, Mukundpur, Uttam Nagar, Madanpur Khadar West, Subhash Mohalla, Begumpur, Khanpur, Manglapuri, Budh Vihar, Brij Puri, Nilothi, Madhu Vihar

Development (TOD) policy as the standard for walkable public transport access.

Bhaumik Gowande, Associate Researcher at ICCT, adds, “Our GIS-based research highlights critical gaps and opportunities in neighborhood-level access

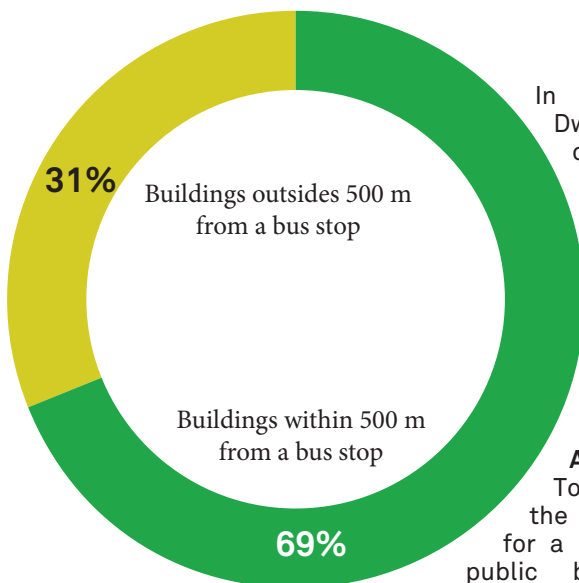
to public bus transit across Delhi NCT. Mapping these gaps enables targeted, equitable service provision.”

Certain municipal wards such as Deoli, Jaitpur, Sangam Vihar, Mustafabad, Ghonda, Sainik Enclave, Hari Nagar Extension, and

Prem Nagar were found to have zero buildings within 500 meters of a bus stop. This highlights both a major service gap and the challenge of using 12-meter buses in dense, narrow-road areas.

The study notes that while Delhi has expanded its metro network and added new buses through government programs, many areas still lack adequate access. The City also sees 60% of daily trips under 4 km and 80% under 6 km, yet its bus network remains geared toward long-haul trunk routes.

For many residents, especially in underserved wards, the first and last mile of daily commutes often involve extended walking or costly informal transport modes. This disconnect lowers the utility of high-capacity fixed-route systems and reinforces dependence on private and motorized travel that contribute in emissions within residential neighbourhoods.



If successful, this scheme could not only benefit Delhi but also have a strong ripple effect across other cities in the country.

In neighborhoods like Dwarka, where intra-sub city travel dominates and the average trip length is just 4.3 kilometers, the absence of localized public bus connectivity even in metro-accessible zones highlights a structural gap in multimodal integration.

Addressing The Issues

To address these issues, the ICCT study advocates for a reorientation of Delhi's public bus network around neighborhood-level service models. Specifically, it recommends deploying 9-meter electric buses on roads 7 meters or wider within a maximum operational trip distance ranging between 10-12 km.

These smaller vehicles are suited to operating in dense urban settlements and can navigate narrower lanes where 12-meter standard buses cannot and smaller trip length will faster operational trips with high frequency and lesser

headways. These Electric buses would enable shift from private and intermediate transport to electric buses, enabling decarbonisation of transport at the neighbourhood level.

This recommendation aligns with the Delhi Government's launch of the Delhi Electric Vehicle Interconnector (DEVI) initiative. These e-buses, recently introduced by Chief Minister Rekha Gupta, are designed to function as last-mile and intra-zonal connectors. ICCT India played a technical advisory role in developing the pilot, including contributing to international consultations, identifying assessment parameters, validating proposed routes, and facilitating stakeholder engagement.

To ensure operational efficiency and support charging opportunities for e-buses, the study recommends limiting neighborhood bus routes to a 5-kilometer radius from designated depots. This service radius minimizes dead kilometers, non-revenue-generating travel time from depot to route start,



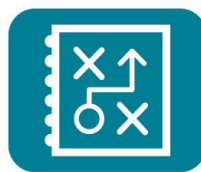
Insufficient
door-to-door
connectivity



Overcrowding



Service gaps



Underperforming
routes



Lack of targeted
Solutions

and enhances the feasibility of electric operations within constrained urban environments.

By introducing this parameter, the study offers a scalable model for localized e-bus deployment not only in Delhi but potentially across other Indian cities experiencing similar urban growth patterns and mobility gaps.

Amit Bhatt, Managing Director of ICCT India, underscores the potential ripple effect of the DEVI model: "If successful, this scheme could not only benefit Delhi but also have a strong ripple effect across other cities in the country."

While the report highlights accessibility gaps, the larger ambition is systemic decarbonization. Encouraging modal shift from private and informal vehicles to electric neighborhood buses directly supports India's clean mobility and emissions reduction targets. As buses remain among the most energy-efficient motorized modes, optimizing their deployment can yield significant environmental gains.

Revathy Pradeep, ICCT Researcher, emphasizes the alignment with Delhi's air quality goals: "To achieve its clean air and accessibility targets, Delhi must actively integrate electric neighborhood

buses into its policy frameworks," he adds.

The ICCT study serves a diagnostic and a prescriptive framework for neighborhood-based transit in Delhi. By identifying access gaps, proposing route design strategies based on road-width and trip length data, and recommending an electric-first deployment model within a 5-km radius of depots, the study charts a roadmap for sustainable and inclusive urban mobility.

As Indian cities continue to grow, the adoption of neighborhood electric buses, supported by data, enabled by policy, and designed for local contexts, should mark a turning point in the country's transit transformation.

The question now is not whether more buses are needed, but how and where they should be deployed to achieve the twin goals of decarbonization and equitable access. ●

Our GIS-based research highlights critical gaps and opportunities in neighborhood-level access to public bus transit across Delhi NCT. Mapping these gaps enables targeted, equitable service provision.





Passenger Vehicle Expo 2.0 Wraps Up with Big Launches, Policy Push, and Industry Collaboration



The second edition of the Passenger Vehicle Expo concluded on August 2 at the Chennai Trade Centre, cementing its place as one of India's most important showcases for passenger mobility.

Organised by the All Omni Bus Owners Association (AOBOA) with

support from the Bus Operators Confederation of India (BOCI), the expo placed special emphasis on electrification, regulatory reforms, and technology adoption in intercity and premium passenger transport.

Over three days, the event created a common platform for bus and coach OEMs, body builders, component suppliers, technology innovators, policymakers, and fleet operators to exchange ideas and strategies shaping the next phase of India's passenger transport sector. With a packed agenda of product displays, technical sessions, and business networking, the expo highlighted the growing importance of passenger vehicles in meeting the country's mobility needs.

This event witnessed several new bus launches, with OEMs unveiling electric intercity coaches, premium sleeper

PASSENGER VEHICLE EXPO 2025

models, and staff transport models tailored for evolving passenger expectations.

From policy dialogues on AIS 153 compliance to debates on financing models for electric buses, the event fostered collaboration across stakeholders, underscoring the collective effort needed to drive India's bus industry into a new era of efficiency and sustainability.

Government Push for Infrastructure and PPP

During the inauguration, S.S. Sivasankar, hon'ble Minister for Transport and Electricity, Tamil Nadu, assured the Omni Bus sector that its long-standing demands will be addressed in due course.

"Neither the government nor the private sector alone can fulfil growing public transport demands. A Public-Private Partnership model is essential to improve service delivery," he said.

Industries Minister T R B Rajaa announced that high-speed charging infrastructure for commercial vehicles will soon be rolled out along key highways.

"The facility will enable full charging in 30 minutes and 70% charging in just 15 minutes," he said, adding that the first setup will be in Ulundurpet.

Agenda Highlights Over Three Days

The expo agenda featured technical sessions, product demos, and policy discussions curated with IIT Madras, Anna University, SRM University, ITDP, and state transport training institutes.

Day 1:

- Opening ceremony and flagship bus launches (Damodar Rudra, Ashok Leyland Garud)
- Inaugural policy panel on Electrification of Tamil Nadu's Transport Sector
- Showcases from Tata Motors, SRMPR Autotec, VECV, Force and Mahindra





Day 2:

- Workshops on Regulatory Modernisation and Alternative Fuels
- Technology sessions on AI, IoT, and connected vehicle innovations
- Fleet-Tech pitches from Rapido, Bitla Software, and Ezeinfo

Day 3:

- Panel on Improving Emission Standards and Customer Service
- Fleet aggregator roundtable with IntrCity Smartbus, FlixBus, and Zingbus
- Closing keynote on Future of Long-Distance Public Mobility in India

Industry Participation

The 2025 edition of the expo featured several headline-grabbing launches, including Damodar Motors' Rudra Sleeper Coach, Tata Motors' new Magna EV 13.5M coach, and SRMPR Auto Tec's Grand 1. Leading OEMs such as Volvo, Eicher, and Tata Motors also showcased their latest models.



The event brought together prominent OEMs like Eicher, Volvo, and Force Motors, along with key component suppliers including Apollo Tyres, Michelin, JK Tyres, Wheels India, Rambal, ELGI, Viva, and SPAL. Finance and fuel infrastructure providers such as Federal Bank, Think Gas, and Shell were also in attendance.

Expanding beyond buses, the expo also featured special displays like the Force Gurkha and a Volvo-Eicher caravan by SRMPR Auto Tec, highlighting the diverse range of passenger mobility solutions on offer.



Passenger Vehicle Expo 2.0's Impact

Passenger Vehicle Expo 2.0 has grown from a trade fair into a policy-shaping, innovation-driving platform. With strategic launches, high-level government engagement, and an emphasis on electrification infrastructure, this year's edition set a roadmap for India's intercity and premium transport sector.

The focus now shifts to how quickly PPP models and EV charging networks can be rolled out, and whether the momentum generated in Chennai will translate into long-term industry transformation. ●

Ashok Leyland Aims to Reclaim Intercity Market with New 6-Cylinder Garud

The return of Ashok Leyland’s 6-cylinder platform, long-awaited by operators nationwide, sparked strong enthusiasm across the industry.

Ashok Leyland made a strong statement at the Passenger Vehicle Expo 2.0 in Chennai with the unveiling of its all-new **6-cylinder bus chassis**, the **TF2513.5HF6R**. Engineered for premium intercity and long-haul travel, this 13.5-metre chassis is powered by a **BS-VI diesel engine**, reinforcing the brand’s renewed push into the high-performance diesel bus segment.

The reveal created quite a stir among fleet operators, many of whom have long awaited the return of a powerful 6-cylinder platform from Ashok Leyland. The consensus on the show floor was clear: this is a promising step toward re-establishing the company’s leadership in the premium intercity space.

Operators expressed renewed optimism, viewing the chassis as a much-needed, reliable addition to their fleets. With expectations of higher torque output, smoother power delivery, and improved fuel economy, the **TF2513.5HF6R** is designed to meet the rigours of long-haul routes while enhancing passenger comfort and reducing total cost of ownership.

When Will It Hit the Roads?
In my conversation with **R. Abhilash**, Sales Head at Ashok Leyland, he clarified that the chassis is still in its **pre-production validation stage** and hasn’t been officially launched yet

It is expected to be **commercially available within 6 to 8 months**, once final testing and homologation processes are completed.



Key Specifications	
Category	Specification
Engine & Powertrain	
Engine	H-series, 6-cylinder, 4-valve BS-VI diesel
Power Output	184 kW (247 hp) @ 2400 rpm
Torque	900 Nm @ 1200–1900 rpm
Displacement	6.014 litres
Seating & Configuration Options	
2x1 Sleeper	36+D berths, single door
2x2 Pushback	52+D seats, single door
Additional Specifications	
Fuel Tank	375-litre cross-linked polymer tank
Tyres	295/80 R22.5 tubeless
Electrical System	24V–200Ah battery with 150A alternator



GEMS Signs Landmark MoUs to Accelerate Intercity Electric Bus Deployment in South India

Green Energy Mobility Solutions (GEMS) has signed two significant MoUs to revolutionize South India's intercity travel, securing 100 Magna EV intercity coaches from Tata Motors and 50 electric buses through a leasing partnership with Electrigo.

Green Energy Mobility Solutions Pvt. Ltd. (GEMS), an EV-first mobility startup, is making bold strides in transforming India's intercity transport landscape. In a significant development, the company recently signed two key Memoranda of Understanding (MoUs) aimed at scaling electric vehicle adoption across South India.

On July 31, 2025, GEMS signed a landmark MoU with Tata Motors,

India's largest commercial vehicle manufacturer, for the procurement of 100 Magna EV intercity coaches. The signing took place at Passenger Vehicle Expo 2.0 in Chennai, in the presence of Dr. T.R.B. Rajaa, Hon'ble Minister for Industries, Government of Tamil Nadu.

Speaking at the event, the Dr. T.R.B. Rajaa said, "Tamil Nadu continues to lead the way in automotive and clean mobility

innovation. This collaboration is a significant step toward greener and safer public transportation. It affirms our commitment to building a future-ready, sustainable transport ecosystem for the state and the country."

The partnership marks a major milestone in the transition of long-distance passenger mobility to electric alternatives. The Magna EV coaches, purpose-built for intercity travel, will help GEMS establish a

high-performance, sustainable fleet across key routes in the region.

Mr. Sunil Kumar Ravindran, Managing Director of GEMS, emphasized the broader significance of the partnership:

“Our collaboration with Tata Motors is more than just a fleet expansion—it’s the beginning of a robust, future-ready electric operations model. We’re building an ecosystem that spans long-haul transport, specialized applications, and dependable energy solutions.”

Mr. Ravindran is a seasoned mobility services provider and one of the largest interstate bus operators in South India. His extensive industry experience is helping GEMS lay the foundation for a scalable electric transport network.

Joining him in this mission is Mr. Balavignesh Subramani, Co-founder and Director of GEMS, who brings over a decade of operational leadership in mining and aggregates. Subramani is steering GEMS’ non-passenger electric mobility strategy, including applications in freight

and mining—areas poised for major EV disruption.

Building on this momentum, GEMS signed a second MoU on August 1, 2025, with Electrigo, a leading electric bus leasing platform. Under the agreement, Electrigo will lease 50 electric buses to GEMS, managing procurement, registration, warranty, insurance, and compliance. GEMS has already placed a purchase order for the first 10 vehicles, with deliveries expected to begin soon.

With these two strategic partnerships, GEMS is positioning itself at the forefront of India’s emerging intercity EV revolution. Its integrated approach—spanning electric vehicles, operations, leasing, and infrastructure—is designed to overcome the barriers that have long held back private-sector EV adoption in long-distance travel.

As India accelerates toward a cleaner, more efficient mobility future, GEMS stands out as a pioneering force, driven by operational expertise, strategic vision, and a firm commitment to sustainability. ●



“Our collaboration with Tata Motors is more than just a fleet expansion; it’s the beginning of a robust, future-ready electric operations model. We’re building an ecosystem that spans long-haul transport, specialized applications, and dependable energy solutions.”

**-Sunil Kumar Ravindran,
Managing Director, GEMS**



Top 5 Buses Showcased

at Passenger Vehicle Expo 2025

By Violina Pegu

The Passenger Vehicle Expo 2025 in Chennai underscored the evolving landscape of India's bus and passenger mobility sector, with a strong focus on electric and advanced diesel-powered models. The event served as a critical platform for both established OEMs and emerging players to present their latest offerings to industry stakeholders.

Below is a detailed overview of the five standout buses that garnered significant attention during the expo.



1 Damodar Motors – Rudra Sleeper Coach

Bengaluru-based Damodar Motors unveiled its latest premium sleeper coach, Rudra, which emerged as a highlight of the event.

Built on the Ashok Leyland 13.5M chassis, the Rudra offers a 36-berth full sleeper layout designed specifically for long-haul, intercity operations.

Its high-deck configuration is complemented by clean white interiors, ambient lighting, and an ergonomic passenger environment.

Key Specifications

- **Adiputro-style projector headlamps with integrated DRLs**
- **Aerodynamic front fascia with sweeping contours**
- **36 sleeper berths with premium white interiors**
- **Overhead storage with integrated aisle lighting**



2

Ashok Leyland Garud 13.5M 6-Cylinder Chassis

The Ashok Leyland Garud 13.5M 6-Cylinder Chassis was very popular and operators were optimistic that the 6-cylinder engine would bring Ashok Leyland's reliability back.

Many saw it as a strong contender to reclaim market share in the premium intercity segment. Fleet owners expressed confidence that the enhanced powertrain would offer better performance on long routes.

Key Specifications

- **Engine:** H-series CRS 6-cylinder, BS6-compliant diesel
- **Power Output:** 247 hp @ 2400 rpm
- **Fuel Tank:** 375 litres
- **Wheelbase:** 7,000 mm
- **Seating Layout:**
 - 2×1 Sleeper – 36+D berths (single door)
 - 2×2 Pushback – 52+D seats (single door)



3

Tata Magna EV 13.5M Intercity Coach

Tata Motors showcased its new Magna EV 13.5M, an all-electric coach developed for premium intercity and airport transfer applications with an extended range.

The new Magna EV delivers up to 300 km per charge and supports fast charging with a 3-hour turnaround.

Key Specifications

- **Range:** Up to 300 km per charge
- **Charging Time:** 3 hours (fast charging compatible)
- **Powertrain:** High-efficiency electric motor with regenerative braking
- **Application:** Intercity and airport transfer routes



4

Tata LPO 1822 Chassis

Designed for intercity and tourist applications, the Tata LPO 1822 is a BS-VI diesel chassis powered by a 5.6L six-cylinder Cummins engine delivering 220 hp and 850 Nm of torque.

With a GVW of 17,800 kg, air suspension, and a 400-litre fuel tank, it offers the endurance and comfort required for mid- to long-haul operations.

Key Specifications

- **Power Output:** 220 hp @ 2300 rpm
- **Fuel Tank Capacity:** 400 litres
- **Wheelbase:** 6,925 mm



5

SRMPR Grand 1

The SRMPR Grand 1 marked the comeback of Chennai-based bus body builder SRM, now rebranded as SRMPR, into the intercity coach market.

Built on the Eicher 6019S LPO 13.5M chassis, the Grand 1 features a hybrid layout with 30 sleeper berths and 12 seats, complemented by ambient lighting and a refreshed exterior styling.

Apart from the Grand 1, SRMPR also showcased a caravan and a staff bus.

Key Specifications

- **Chassis:** Eicher 6019S LPO 13.5M
- **Layout:** 30 sleeper berths + 12 seats
- **Interiors:** Ambient lighting and optimised space for long-haul comfort

BasiGo Marks 100 Electric Buses Across Kenya and Rwanda

BasiGo has reached a key milestone with the deployment of its 100th electric bus in East Africa, strengthening its position as one of the region's leading e-mobility operators.

The company began operations in Nairobi in 2022 with just two buses and has since expanded into both Kenya and Rwanda. Today, BasiGo's fleet is integrated into public transport systems in Nairobi and Kigali, supported by its Pay-As-You-Drive financing model that allows operators to adopt electric buses with lower upfront costs.

According to company data, the fleet now carries more than 20,000 passengers daily and sustains over 1,000 jobs across operations and supply chains. The shift to electric mobility is helping avoid the consumption of roughly 5,000 litres of diesel each day and cutting carbon dioxide emissions by an estimated 250 tonnes per month.

East Africa's abundant renewable energy sources, including hydropower and geothermal, provide a strong foundation for BasiGo's transition. By leveraging this clean electricity mix, the company is reducing lifecycle emissions and ensuring greater environmental benefits from its operations.

Looking ahead, BasiGo has set a target of scaling up to 1,000 electric buses in the region. While infrastructure, financing, and policy challenges remain, the company's 100-bus achievement signals clear momentum for the adoption of electric public transport in African urban centres.



Daimler Buses Supplies 10 eCitaro Electric Buses to Bonn

Daimler Buses has delivered ten 12-metre Mercedes-Benz eCitaro battery-electric city buses to Stadtwerke Bonn (SWB), along with a complete charging infrastructure. The package includes ten charging points, designed and installed by Daimler Buses in collaboration with its subsidiary, Daimler Buses Solutions GmbH.

The official handover took place on 20 August, attended by Anja Wenmakers, Managing Director of SWB Bus und Bahn, and Bonn's Mayor Katja Dörner. The new vehicles will join SWB's growing electric fleet, supporting the city's transition toward cleaner public transport.

At SWB's Friesdorf depot, Daimler Buses installed two CCS2 plug-in charging points and an advanced rapid-charging system. This includes eight pantograph charging points spread across two adjacent bus lanes, enabling up to eight buses to charge simultaneously. The pantographs are mounted on a steel traverse with mobile concrete foundations, allowing the system to be relocated if required. Daimler Buses assumed full responsibility for the project, from civil engineering and cabling to electrical installation and station set-up.

The eCitaro buses feature three entrance doors, roof-mounted charging rails, safety and driver-assistance systems, as well as active emergency braking technology. Each vehicle accommodates up to 80 passengers and includes a wheelchair space opposite the central entrance, ensuring accessibility.

By combining vehicle delivery with tailored charging infrastructure, Daimler Buses is positioning the eCitaro as a comprehensive solution for cities seeking to electrify their public transport networks.

MTR Corporation Deploys First Alexander Dennis Enviro500EV Buses with Voith Drive Technology in Hong Kong

MTR Corporation has begun operating the first nine of 35 Alexander Dennis Enviro500EV double-decker electric buses in Hong Kong, each equipped with the Voith Electrical Drive System (VEDS). The vehicles are part of a wider programme to electrify MTR's feeder bus services, which link communities in the northwest New Territories to the city's Mass Transit Railway.

MTR currently runs more than 170 buses, carrying close to 160,000 passengers every day. The shift to battery-electric double-deckers marks a significant step in decarbonising this high-capacity network.

Hong Kong's demanding operating environment, with steep gradients, humid summers above 33°C and dense urban traffic, requires robust technology. The heavy-duty version of VEDS, delivering 410 kW peak and 310 kW continuous output, has been selected to handle these conditions. The system also incorporates advanced energy management features to maintain efficiency in stop-and-go traffic.

Each 12-metre Enviro500EV is built with three axles and offers capacity for 86 passengers, including a wheelchair space. The buses house 472 kWh of onboard



battery capacity, sufficient for urban operations and designed with scope for future upgrades.

The first nine vehicles entered service earlier this year, with the remaining 26 expected in the coming months. This deployment positions MTR among the early adopters of double-decker electric buses in Asia, reinforcing the operator's commitment to sustainable urban mobility.

Alexander Dennis Partners with KleanDrive for Electric Repowering Solution

Alexander Dennis has announced a new initiative to extend the lifespan of diesel bus fleets while supporting the transition to zero emissions. Through a partnership with specialist engineering firm KleanDrive, the company will begin offering electric repowering services under the AD Repower programme.

The pilot phase will focus on the popular Enviro400 double decker, with the first converted vehicle expected to enter service in the first half of 2026. Following successful trials, the solution will be scaled to additional models and markets.

The process involves replacing the diesel engine and transmission with KleanDrive's "plug and play" electric drivetrain and control software. A Voith Electrical Drive System motor and power electronics will be integrated in a skid system, a technology already proven in Alexander Dennis' latest electric buses. The conversion retains the full passenger seating layout.

KleanDrive will supply its 352 kWh CARL lithium-iron-phosphate batteries, which are expected

to deliver a range of up to 195 kilometres per charge at 50 percent passenger capacity.

Chris Gall, Group Engineering Director at Alexander Dennis, highlighted the importance of offering both new electric buses and repowered vehicles. He noted that repowering existing fleets provides operators with a quicker, cost-effective route to decarbonisation while maintaining service capacity.

With the Enviro400 long established as Britain's most popular double decker, Alexander Dennis sees the repowering solution as a way to maximise fleet value. The AD Repower programme will be fully supported by the company's AD24 service network.



Karsan Autonomous e-ATAK to Launch Passenger Service in Switzerland

Karsan is set to introduce Switzerland's first autonomous public transport service later this year with the launch of its Autonomous e-ATAK bus in Arbon. Scheduled to begin operations in autumn 2025, the project will be run by Eurobus Ostschweiz AG under the Self Controlled City Liner (SCCL) initiative led by the Technical Association of Arbon (TGA).

The 8-metre electric bus, named ARTOUR, will operate along a 2.5-kilometre route connecting Arbon's historic centre with the Saurer Werk 2 residential district. The line will feature nine stops and a maximum service speed of 30 km/h, offering local residents a fully electric, automated mobility option.

ARTOUR will function at Level 4 automation, using LiDAR, radar and RGB cameras for navigation and passenger functions. While the vehicle will be capable of autonomous operation, a safety attendant will remain on board during the initial deployment.

A second project phase will add teleoperation capabilities, enabling the bus to be monitored and controlled remotely once supporting infrastructure is complete, targeted for around a year after launch.

Karsan's Autonomous e-ATAK has already seen service in the United States, Norway, the Netherlands, Turkey and Finland. Its compact size makes it particularly suitable for Arbon's narrow urban streets.

The vehicle is designed to manage stop approaches, passenger boarding, and interaction with traffic signals without human input. With an autonomous speed capacity of up to 40 km/h, it can also operate in varied weather and lighting conditions, making it a flexible solution for urban transit.



Alexander Dennis Launches Las Vegas Facility, Rolls Out Enviro500 Buses to RTC

Alexander Dennis, part of NFI Group Inc., has inaugurated its new manufacturing facility in Las Vegas, becoming the only U.S. site producing double-decker buses. The milestone coincides with the delivery of the first two of ten Enviro500 buses to the Regional Transportation Commission of Southern Nevada (RTC), set to serve the city's iconic Deuce on the Strip route.

Built with a \$15.3 million investment, the Las Vegas facility designs, assembles, and delivers double-deck buses tailored for the North American market. Production starts at one bus per week, with plans to increase to 1.5 weekly by 2026, enabling annual output of 75 buses. Over \$5.5 million has already been spent with local suppliers, reinforcing Alexander Dennis' commitment to U.S. manufacturing and economic development.

The Enviro500 buses feature:

- **Length:** 42'5" (12.9 meters), Height: 13'6" (4.115 meters)
- **Capacity:** 100 passengers (51 upper deck, 15 fixed lower deck seats, 7 tip-up, 2 wheelchair spaces)
- Dual staircases for upper deck access

These Buy America-compliant buses join 40 Enviro500s already in the RTC fleet, with an additional 10 scheduled for 2026 delivery.

MJ Maynard-Carey, CEO of RTC Southern Nevada, noted the facility will bring quality jobs and economic growth to the region, with over 115 positions expected immediately and potential for further expansion. Paul Davies, President and Managing Director of Alexander Dennis, emphasized that the facility strengthens the company's legacy of innovation, having sold over 1,300 double-decker units in North America since 2000.

The Las Vegas plant represents a strategic investment in high-capacity, efficient, and sustainable transit, highlighting the synergy of public-private partnership in advancing U.S. bus manufacturing and urban mobility.



**Georgian
Digital**
Imagination Redefined

Digital Marketing

► Agency

Boost Your Business with Tailored
Digital Marketing Strategies that
Drive Growth and Deliver Results!

OUR SERVICES:



SOCIAL MEDIA MARKETING



SEARCH ENGINE OPTIMIZATION



PAY-PER-CLICK ADVERTISING



CONTENT MARKETING



Contact Us



Phone Number:

+91-8777-801-354



info@georgianinfotech.com
www.georgianinfotech.com