



FUELLING THE FUTURE



FOSTERING

A SUSTAINABLE FUTURE



Take a step towards Eco Friendly Transportation and leave a Green footprint Propelling EV.

We are the earth and the earth is us.

With environmental concerns looming large all over the globe and now posing a threat to healthy lifestyle, the world of mobility is geared towards a major transformation. The quest for eco-friendly mode of transportation, smooth traffic and improved public transport is at its innovative best. Over the past decade, Indian cities have been witnessing an increasing trend of higher vehicle penetration with deteriorating air quality. Efficient public transportation has been proposed as a way out of this gridlock.

It is in this context that electric buses can play an instrumental role. There are several benefits associated with the shift from fossil fuel buses to electric buses including eliminating fossil fuels, reducing pollution & NVH.

JBM Group has introduced the ECOLIFE series, India's first 100% electric bus. Today JBM Electric buses are successfully plying across the country and now penetrating some key global markets as well.

We have a long journey to ensure zero emission public transport solutions and electric buses would be a catalyst. Today countries across the globe are embarking on creating sustainable EV policies & if India achieves the FAME II targets it will be amongst the top 3 countries in the world in terms of number of EVs. This will also generate around 10 million jobs and open many avenues for direct and indirect employment in E-Mobility along with allied sectors.



JBM GROUP'S JOURNEY

GEARED UP FOR A PROMISING TOMORROW

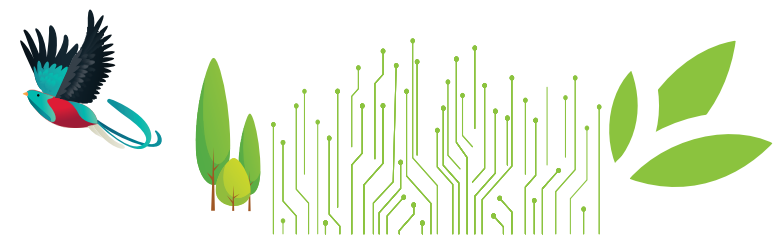
JBM Group is a progressive conglomerate delivering nearly four decades of excellence. We have presence in diverse sectors such as Automotive, Buses & Electric vehicles, EV Charging Infrastructure, Renewable Energy, Engineering & Design services and Railways sectors. JBM has an infrastructure of 60 manufacturing plants, 5 Engineering & Design centres in over 10 countries globally.

The Group has been consistently diversifying into newer areas that not only promote sustainable development but are also aligned to the vision of 'Think Local Act Global'. JBM has launched its bus division as an OEM and is moving ahead as an EV Ecosystem front-runner today. Further, the Group has also established its unique proposition of 'Well-to-Wheel' by generating renewable energy (solar energy & energy from waste) to fuel the EVs.

JBM Group believes that success depends on collective competencies and commitment of human capital. The core strength and value asset of the Group is the dedication of 30,000+ employees who synergize to deliver quality results consistently. JBM Group has set up its own Skill Development Centres to enhance employability in the society thereby increasing availability of skilled personnel for its own business requirements and the society at large.

JBM believes in acting as a one-stop shop encapsulating end-to-end solutions to attain and sustain customer delight. The Group's state-of-the art in-house R&D Centre has been recognized by the Department of Scientific & Industrial Research, Ministry of Science & Technology, Govt. of India.

At JBM, we believe in scaling up the business in tandem with our accountability towards the environment, thus, propelling our belief of shared prosperity.





LEe

"We offer integrated EV charging ecosystem and a technology agnostic approach to sustain EV demand."

JBM ELECTRIC VEHICLES

The EV vertical of JBM Auto Ltd. has been a pioneer in bringing products that have been significantly ahead of the products and solutions.

JBM buses are built with cutting-edge technology providing the highest levels of comfort and safety with state-of-the-art features. The Group is committed to combining fuel efficiency with utility and performance using Green & Efficient technologies.

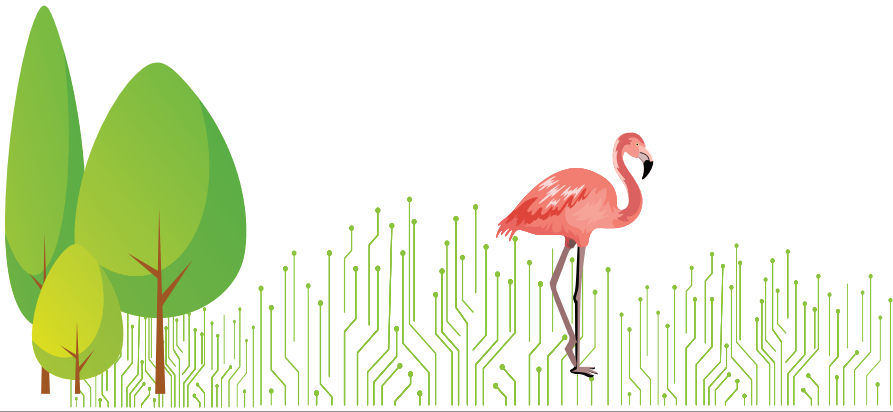
Expanding the product portfolio further, JBM introduced ECOLIFE series, India's first 100% electric bus, under 'Make in India' vision. These buses come in as the ideal solution addressing the growing environmental concerns in our country. ECOLIFE can be customised in 9m and 12m variants.

Almost four decades of strong track record in manufacturing, JBM's focus is to be a one-stop solution provider in the Electric Vehicles segment by providing a complete ecosystem for E-mobility i.e. Electric Bus, Battery Technology & Charging Infrastructure.

The Group offers an entire gamut of activities under one roof including design, development, engineering, prototyping, testing and validation through its in-house R&D centres.



“ We believe in moving forward by the virtue of excellence in delivery, consistent growth and creating sustainable value for all our stakeholders. ”





Dear Friends,

We embark on the new decade with the vision of being the market leader in high-tech environment friendly mobility solutions. With the roll-out of our Electric Vehicles all over India, we established the first of its kind EV Ecosystem. JBM Electric Bus vehicle, ECOLIFE, is equipped with world-class technology and is zero-emission.

The EV Ecosystem of JBM Group holistically comprises vehicle, battery, charging infrastructure and the operating system. All our new initiatives like electric vehicles, renewable energy and environment management systems are subsets of the 'LIFE', our theme.

Continuous innovation, constant learning and best in class technology in all our endeavors has fuelled our sustained and consistent growth over the decades. We strongly believe in the 'Total Cost of Ownership' (TCO) approach and have focused on providing compelling customer benefits through lower TCO solutions over the long term.

As we embark on this momentous journey, I take this opportunity to thank each one of our stakeholders. We appreciate the undaunting support and trust you have always reposed in JBM Group. Your faith has encouraged us to move ahead confidently. We hope to continue scaling new height and delivering excellence to our stakeholders through the power of People, Innovation and Technology.



Nishant Arya
Executive Director



FEATURES OF JBM ELECTRIC BUS



Amplifying the E-Mobility Ecosystem

With focus on comfortable and eco-friendly transportation, JBM Auto Ltd. has introduced ECOLIFE, India's first Zero-emission 100% Electric Bus with the sole intention of transforming today's customary mass commutation into tomorrow's congenial eco-transportation.

The ECOLIFE series of buses is being indigenously manufactured at the company's facilities located at Faridabad, Haryana and Kosi, Uttar Pradesh. Yet another facility with the capacity of producing 10,000 buses is in the pipeline.

JBM's ECOLIFE is a zero-emission vehicle (ZEV) as it is powered by lithium batteries, which is equipped with fast charging solutions, and runs 150-200 km in 10-15 hours of city bus operation, depending on traffic conditions.

The electric bus technology is adaptable to city bus operations depending on the demographic and geographic conditions. This bus is currently available in 9m and 12m length variants.

"Our focus is to bring pathfinding innovation in EV business. We offer the complete Ecosystem for E-mobility, thus supporting a green and sustainable environment."





LITHIUM BATTERY

Pro Green

Feature : Advanced Technology High Voltage Battery

Benefit : Zero Emission

- High Energy Density High Voltage Battery
- Propelled with advanced lithium – ion cells for fast charging.
- Certified and ensured for Environment, Safety, User-friendly & trouble-free maintenance



PLUG IN CHARGING

Ease Of Charging

Feature : One-stop Charging Point

Benefit : Operational Efficiency

- Advanced CCS2 Charging Technology for Enhanced Charging performance.
- Ultra-fast charging with Dual Gun Plug-in Charging system



PANTOGRAPH CHARGING

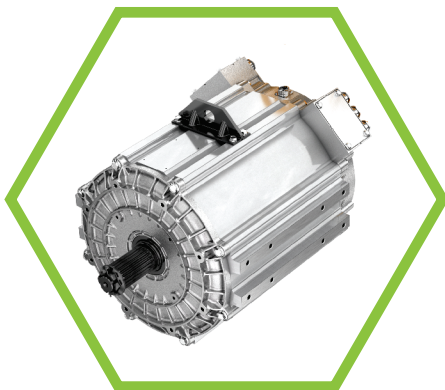
Futuristic Charging

Feature : Convenient/On Route Charging

Benefit : Fast Charging

The pantograph for smart fast charging is designed as a single arm pantograph with an insulated pole contact head which allows the current transmission from charging station to energy storage on the bus in seconds. This design allows an extreme compact and light-weight arrangement of the complete charging system deployed on route with top up charging cycles.





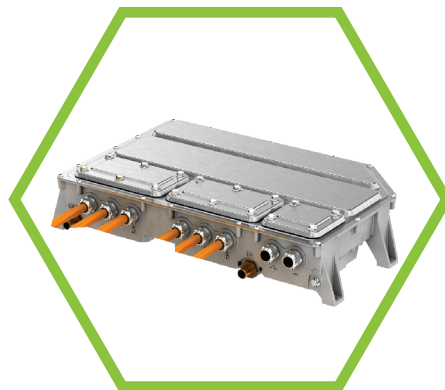
TRACTION MOTOR

Proven Powertrain

Feature : Well Synchronized Proven Driveline

Benefit : Performance

- Synchronous Traction Motor with High Torque and Power
- Higher energy regeneration



TRACTION INVERTER

Efficient Driveline

Feature : SPORTS & ECONOMY modes for different driving conditions

Benefit : Optimized Energy Consumption

- Latest technology used in Processor-based Traction Motor Drive
- High-end Technology implemented with Increased Controllability and Optimized Power Losses



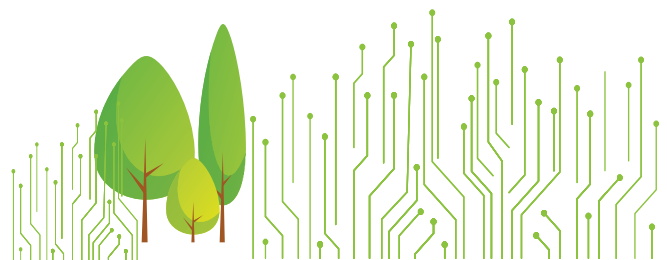
TECH-RIDE

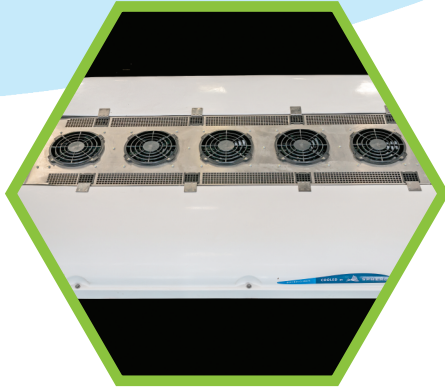
IFS with ECAS

Feature : Jerk-free Ride Over Uneven Terrain

Benefit : Comfort

The suspension of ECO-LIFE provides the ultimate passenger comfort, akin to limousines. At the front, there is the Independent Front Suspension and at the rear a Double Pneumatic Spring coupled with Anti Roll Bar. The entire suspension is controlled by ECAS. The result is Jerk-Free smooth ride over the roughest city roads with potholes.





MAX-KOOL

Air Conditioning

Feature : Optimum Cooling

Benefit : Comfort

- Higher Cooling capacity Air Conditioning with Advanced Inverter Technology



COMFORT ALWAYS

Comfort & Connectivity

Feature : Convenient Attributes

Benefit : Comfortable Ridership

- Passenger Information system for the convenience of the passenger
- Multi Interface Touch screen provided for Driver's comfort
- Electronically-Controlled Air Suspension



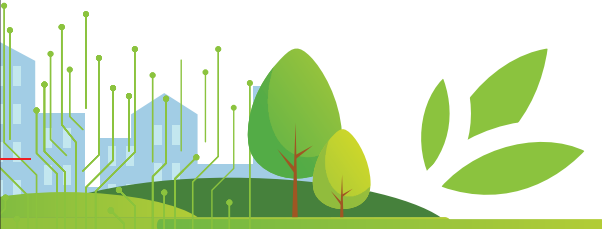
SAFETY FIRST

EBS & ABS For All Disc-brakes

Feature : Safe And Reliable Braking

Benefit : Safety

- EBS for sure & efficient braking
- Efficient isolation monitoring to prevent HV hazards
- Highest safety standard for all weather and driving conditions.



BENEFITS OF ECOLIFE SERIES



1. HV Batteries

- High energy density High voltage battery
- Advanced cell chemistry battery cells for less self-discharge rate
- Fast charging (up to 5C) HV battery

2. Traction Motor

- Traction motor with higher torque to weight ratio

3. Bus Charging

- Ultra-fast charging with Dual Gun plug-in charging system

4. Bus Controls & Safety

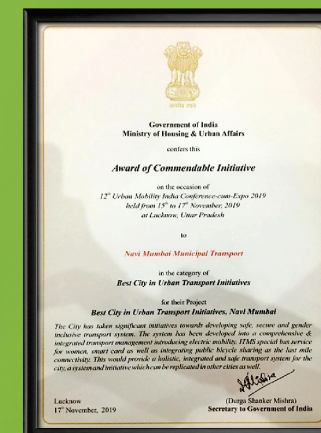
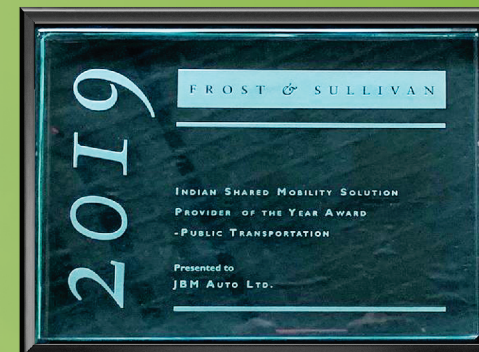
- Advanced technology BMS & VCU to enhance vehicle performance, health & safety
- Roof mounted HV aggregates prevents electrical HV hazards during water logging

5. Others

- Higher energy regeneration during braking decreases average energy consumption per km running
- Optimized HV battery pack size reduces tare weight and increases passenger carrying capacity (Highest seating capacity for city & inter city transportation)

“
**Zero noise pollution, 100% emission-free,
distinguished by its ultra-modern design
with lower operational costs.**
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AWARDS



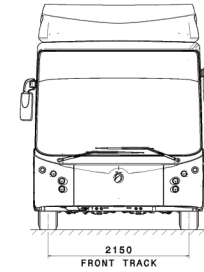
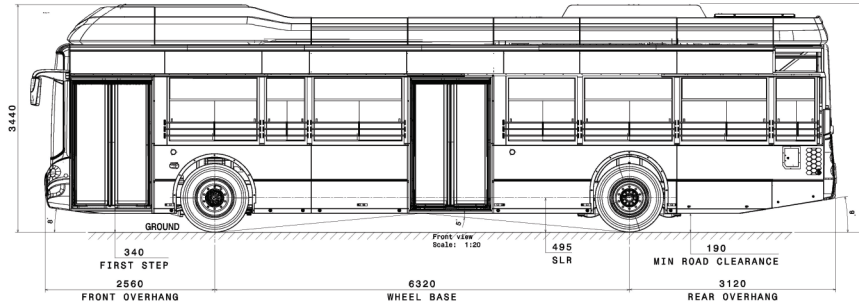
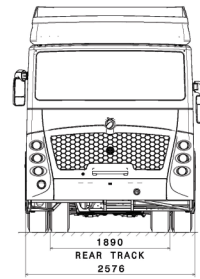


TECHNICAL SPECIFICATIONS

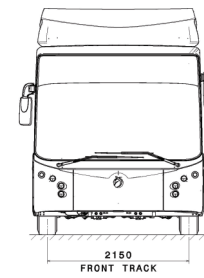
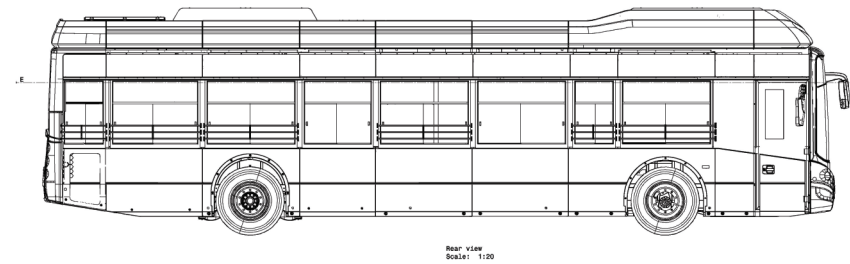
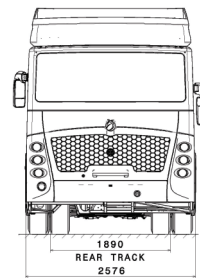
VEHICLE DESCRIPTION	ECO-LIFE E12 (12m LF AC)
Emission Level	Zero Emission
Vehicle Dimensions (L x W x H)	12000 mm X 2576 mm X 3470 mm
Wheel Base	6320 mm
GVW	18000 kg
Floor Height (mm)	380 mm
Seating Capacity	"36 + 2 folding + Driver (UBSII) / 40 + 2 folding + Driver (CMVR)"
Front Axle	Low Floor
Rear Axle	Inverted Portal / Banjo Type
Suspension	Electronically controlled air suspension system (ECAS)
Brakes	Dual circuit full air S-cam brake with disc & ABS in all four wheels
Kneeling system	Available
Tyres (Front & Rear)	295/80R22.5 Radial Tubeless
Structure	Corrosion resistant monocoque structure
Side Panels	Aluminum
Emergency Exits	Available
Passenger doors	1 at front & 1 at middle
Type of Doors	In swing type
Wheelchair Ramp	Manually Operated
Traction Motor	150 - 200kW
Steering	Power Steering
Turning circle radius (mm)-minimum	As per CMVR
Ground Clearance	As per CMVR
Max Speed	75 kmph minimum
Battery Specification	Advance Chemistry Lithium-ion Liquid cooled battery system
Regenerative Braking System	Available
Charging System	Off Board Plug-in fast charging / Pantograph
HVAC	Cooling Type only, heating-optional
Motor Type	AC Induction Motor / Permanent Magnet Synchronous Motor
Gradeability	As per CMVR / UBSII
Range	Min 200 kms running in a day



ECO-LIFE (AC)



ECO-LIFE (Non AC)

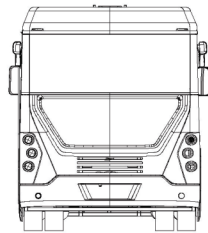




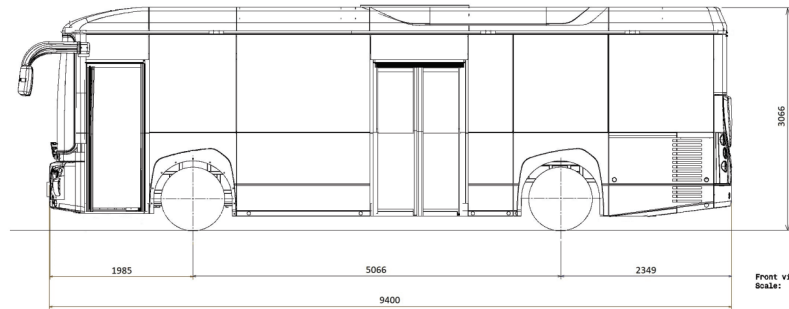
TECHNICAL SPECIFICATIONS

VEHICLE DESCRIPTION	ECO-LIFE E9 LF
Emission Level	Zero Emission
Vehicle Dimensions (L x W x H)	9400 mm X 2450 mm X 3066 mm
Wheel Base	5066 mm
GVW	13000 kg
Floor Height (mm)	400 mm
Seating Capacity	31 + 1 Wheel Chair + Driver
Front Axle	Low Floor
Rear Axle	Fully Floating
Suspension	Electronically controlled air suspension system (ECAS)
Brakes	Pneumatic dual circuit full air brake with disc on front & drum on rear and ABS in all four wheels
Kneeling system	Available
Tyres (Front & Rear)	255/70 R22.5 Radial Tubeless
Structure	Corrosion resistant monocoque structure
Side Panels	Waist level-Stretched steel & Lower Skirt Panel-Aluminum
Emergency Exits	Available
Passenger doors	1 at front & 1 at middle
Type of Doors	Jack-knife type / Outswing / In swing
Wheelchair Ramp	Available
Traction Motor	120-160kW
Steering	Power Steering Electro-Hydraulic with Tilttable & Telescopic both
Turning circle radius (mm)-minimum	As per CMVR
Ground Clearance	As per CMVR
Max Speed	75 kmph minimum
Battery Specification	Advance Chemistry Lithium-ion Liquid cooled battery system
Regenerative Braking System	Available
Charging System	Off Board Plug-in fast charging
HVAC	Cooling Type only, heating-optional
Motor Type	Permanent Magnet Synchronous Motor
Gradeability	As per CMVR / UBSII
Range	Min 160 kms running in a day

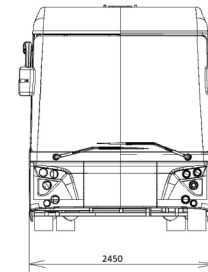
ECO-LIFE (Low Floor)



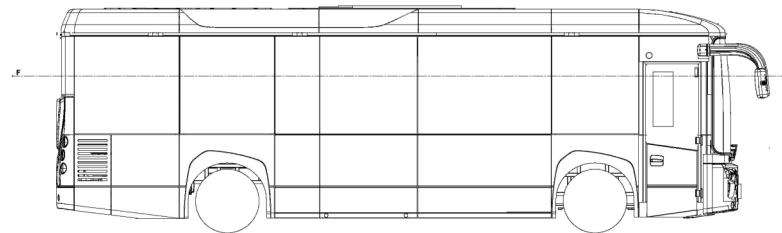
Right view
Scale: 1:20



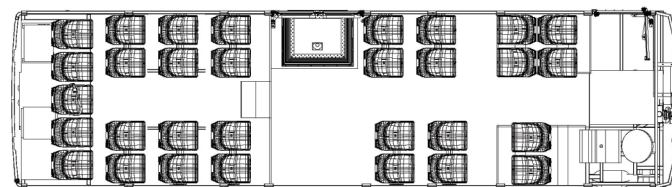
Front view
Scale: 1:20



Left view
Scale: 1:20



Front view(3)
Scale: 1:20



SEAT LAYOUT
NO OF SEATS= 31
DRIVER SEAT=1

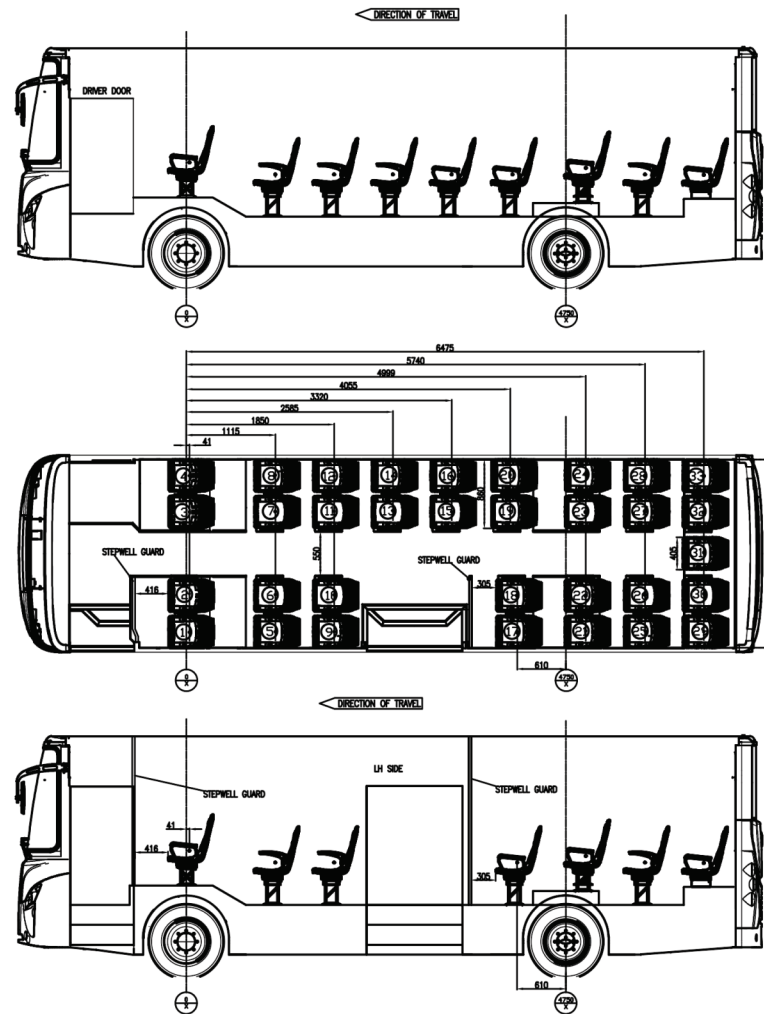


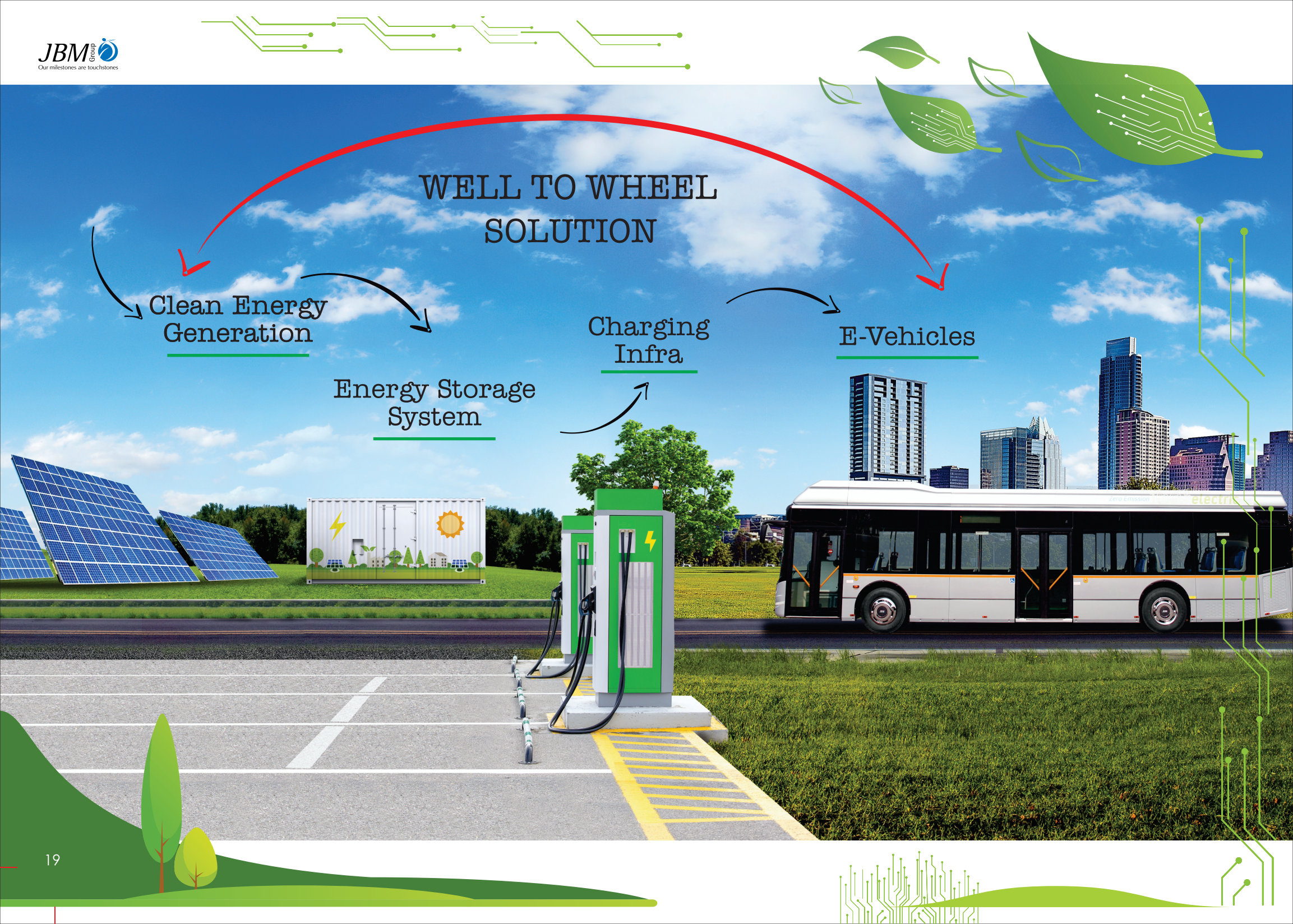


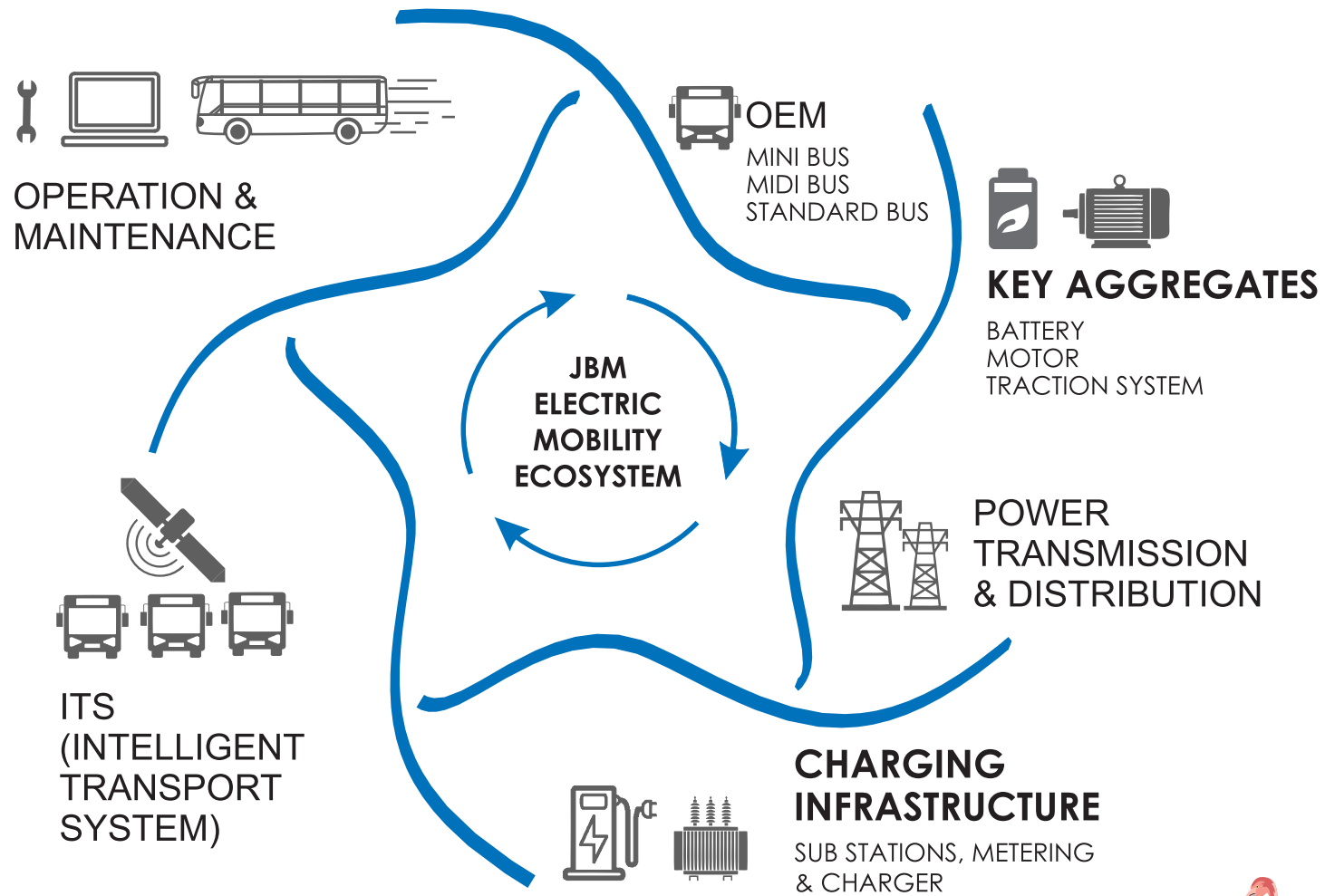
TECHNICAL SPECIFICATIONS

VEHICLE DESCRIPTION	ECO-LIFE E9
Emission Level	Zero Emission
Vehicle Dimensions (L x W x H)	9300 mm X 2477 mm X 3350 mm
Wheel Base	4750 mm
GVW	13000 kg
Floor Height (mm)	900 mm
Seating Capacity	33 + Driver
Front Axle	Reverse Illiot , I-Beam solid Axle
Rear Axle	Fully Floating
Suspension	Air Suspension (FRONT & REAR)
Brakes	Pneumatic dual circuit full air brake with drum & ABS in all four wheels
Kneeling system	Not applicable
Tyres (Front & Rear)	255/70 R22.5 Radial Tubeless
Structure	Ladder frame chassis, Body Structure-Corrosion resistant high strength steel
Side Panels	Waist level-Stretched steel & Lower Skirt Panel-Aluminum
Emergency Exits	Available
Passenger doors	1 at front & 1 at middle
Type of Doors	Jack-knife type, Outswing-optional
Wheelchair Ramp	Not applicable
Traction Motor	120-160kW
Steering	Power Steering Electro-Hydraulic with Tilttable & Telescopic both
Turning circle radius (mm)-minimum	As per CMVR
Ground Clearance	As per CMVR
Max Speed	75 kmph minimum
Battery Specification	Advance Chemistry Lithium-ion Liquid cooled battery system
Regenerative Braking System	Available
Charging System	Off Board Plug-in fast charging
HVAC	Cooling Type only, heating-optional
Motor Type	Permanent Magnet Synchronous Motor
Gradeability	As per CMVR / UBSII
Range	Min 160 kms running in a day

ECO-LIFE (High Floor)









Our milestones are touchstones



HSIIDC, Plot No. 118, Sector-59,
Faridabad-121004



Enquiry No.
9953110455 (North & East)
7387700988 (South & West)



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