The information and statistics set out in this section were extracted from the Frost & Sullivan Report prepared by Frost & Sullivan, which was commissioned by us, and from various official government publications and other publicly available publications. We engaged Frost & Sullivan to prepare the Frost & Sullivan Report, an independent industry report, in connection with the **[REDACTED]**. *The information from official government source has not been independently verified by us, the Joint Sponsors, the* **[REDACTED]**, *the* **[REDACTED]** *or any other party involved in the* **[REDACTED]** *and no representation is given as to its accuracy.*

SOURCES OF INFORMATION

We commissioned Frost & Sullivan, an independent global consulting firm that offers industry research and market strategies and provides growth consulting and corporate training to conduct a detailed analysis and prepare an industry report on the road freight market, the EV logistics market, and the logistics EV management market. We have agreed to pay a fee of RMB850,000 to Frost & Sullivan in connection with the preparation of the Frost & Sullivan Report. We have extracted certain information from the Frost & Sullivan Report in this section, as well as in the sections headed "Summary," "Risk Factors," "Business," "Financial Information" and elsewhere in this document to provide our potential investors with a more comprehensive presentation of the industries where we operate.

During the preparation of the Frost & Sullivan Report, Frost & Sullivan performed both primary and secondary research, and obtained knowledge, statistics, information, and industry insights on the industry trends of the target research markets. Primary research involved interviewing industry insiders such as leading market players, suppliers, customers, and recognized third-party industry associations. Secondary research involved reviewing company reports, independent research reports, and data based on Frost & Sullivan's own research database. Projected data was obtained from historical data analysis plotted against macroeconomic data with reference to specific industry-related factors. Frost & Sullivan believes that the basic assumptions used in preparing the Frost & Sullivan Report, including those used to make future projections, are factual, correct and not misleading. Frost & Sullivan has independently verified the information, but the accuracy of the conclusions of its review largely relies on the accuracy of the information collected. Frost & Sullivan's research may be affected by the accuracy of assumptions used and the choice of primary and secondary sources. The Frost & Sullivan Report was compiled based on the following key assumptions: (i) the social, economic and political environments of the PRC, and other primary countries worldwide will remain stable during the forecast period, which will ensure a sustainable and steady development of defined markets; and (ii) there are no significant adverse material changes in government policies in respect of the defined markets.

OVERVIEW OF THE GLOBAL ROAD FREIGHT INDUSTRY

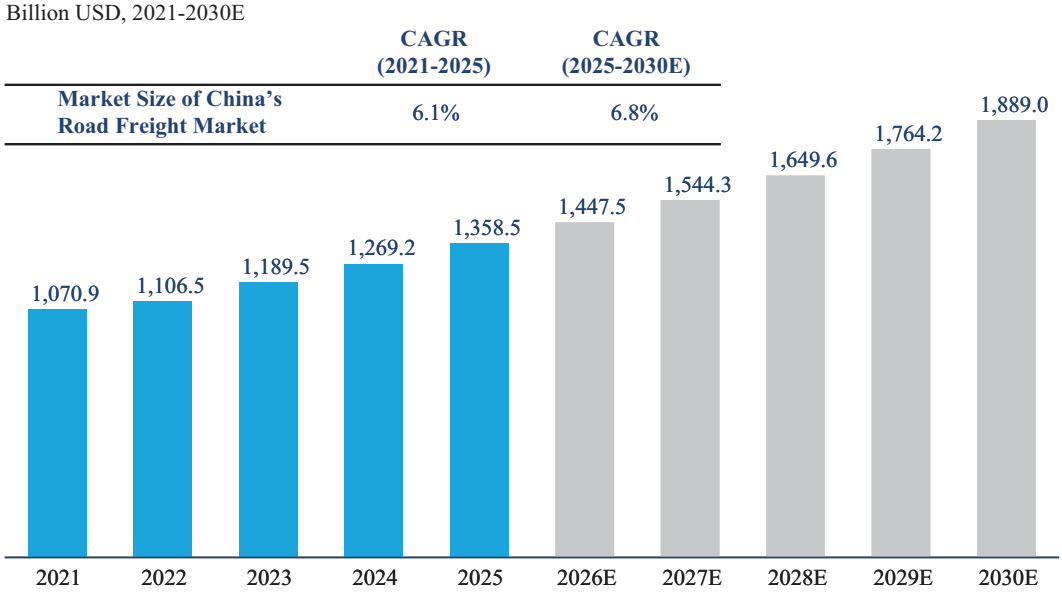
Market Status and Commercial Potential of Road Freight Industry

Road freight refers to the transportation of goods through road networks by motor vehicles. Based on shipment weight and transport scope, it is generally divided into three major businesses: full truckload (FTL), less-than-truckload (LTL), and express delivery, which together form an efficient and flexible urban-rural logistics network. As a core component of the modern logistics system, road freight undertakes both short-haul regional distribution and cross-regional vehicles transportation. It is also a key infrastructure supporting economic activities, carrying approximately 70% of China's total freight volume, connecting major economic corridors, and facilitating rural revitalization and industrial upgrading through the extension of road networks.

Moreover, amid the green transition, the industry has become a key sector for carbon reduction, contributing over 50% of transport-related carbon emissions. Accordingly, the industry is accelerating its transition toward a more intelligent and sustainable supply chain through digitalized vehicle-cargo matching, reduced deadhead ratio, broader adoption of new energy trucks, and the exploration of autonomous last-mile delivery solutions.

The road freight market is substantial and continues to expand. From 2021 to 2025, China's road freight market size (measured by gross transaction value ("**GTV**") increased steadily from USD1,070.9 billion to USD1,358.5 billion, representing a compound annual growth rate, or CAGR, of 6.1%. Driven by the continued growth of emerging sectors such as e-commerce, instant delivery, and cold-chain logistics, the market is expected to maintain its upward trajectory, reaching approximately USD1,889.0 billion by 2030, with a projected CAGR of 6.8% from 2025 to 2030.

Market Size of China's Road Freight Market, by GTV



Source: Frost & Sullivan

Key Pain Points and Challenges in the Global Road Freight Industry

- **High Energy Costs:** Energy expenditure represents the largest cost component for road freight companies, accounting for approximately 35% of total costs. According to Frost & Sullivan, the energy cost of fuel-powered urban logistics vehicles is approximately RMB1.0 per kilometer, compared to around RMB0.4 per kilometer for electric vehicles, representing a reduction of about 60%. Going forward, electrification remains the most direct pathway to cost reduction and efficiency improvement, with electric vehicle penetration expected to increase steadily.

- **Low Fleet Management Efficiency:** The current level of digitalization in road freight operations remains relatively low, resulting in insufficient vehicle uptime and limited ability to optimize overall fleet operating costs. In the future, the adoption of technologies such as big data and artificial intelligence has enabled more intelligent fleet management, including real-time tracking of vehicle location, operational status, and battery conditions. This will effectively reduce deadhead ratio and significantly enhance overall operational efficiency and profitability.

Policy Analysis of Green Transformation in Road Freight Industry

At the national level, a comprehensive policy support framework has been established, providing a solid foundation for the development of EV logistics. The current policy system is broad-based, encompassing top-level strategic directives from the State Council, as well as sector-specific plans issued by ministries and incentive measures introduced by local governments, forming a systematic and well-coordinated framework.

Coordinated efforts across multiple dimensions, including the "dual carbon" strategy, equipment upgrading initiatives and road access incentives, are driving the adoption of logistics EVs. In addition, clear quantitative targets have been set to ensure the steady and orderly advancement of the industry.

Policy name	Date issued	Issuing authority	Key content
Guiding Opinions on Promoting the Integrated Development of Transport and Energy (《關於推動交通運輸與能源融合發展的指導意見》)	2025.04	Ministry of Transport and nine other ministries	Focuses on energy support for electrification, setting targets such as pure electric vehicles becoming the mainstream of new vehicle sales by 2027, and promoting the integrated development and coordinated operation of transport and energy infrastructure.
Opinions on Accelerating the Comprehensive Green Transformation of Economic and Social Development (《關於加快經濟社會發展全面綠色轉型的意見》)	2024.07	The Central Committee of the Communist Party of China and the State Council	The policy sets targets for achieving notable progress in green transformation across key sectors by 2030 and establishing a green, low-carbon, and circular economic system by 2035. It promotes the adoption of low-carbon transportation vehicles and the construction of green transportation infrastructure, accelerates the green and intelligent transformation of logistics and delivery systems, and supports the development of unmanned systems and low-altitude economy application scenarios.
Action Plan for Large-Scale Equipment Renewal in the Transport Sector (《交通運輸大規模設備更新行動方案》)	2024.05	Ministry of Transport and twelve other ministries	Emphasizes "trade-in and replacement" initiatives, providing financial subsidies to accelerate the phase-out of outdated diesel trucks and promote the adoption of new energy trucks in urban logistics, port collection and distribution, and related scenarios.
Notice of the Ministry of Industry and Information Technology and Seven Other Departments on Organizing Pilot Programs for the Comprehensive Electrification of Vehicles in Public Sectors (《工業和信息化部等八部門關於組織開展公共領域車輛全面電動化先行區試點工作的通知》)	2023.01	Ministry of Industry and Information Technology and Seven Other Departments	The policy promotes the comprehensive electrification of public-sector vehicles, encourages the adoption of new energy heavy-duty trucks in short-distance transportation, urban logistics, and mining scenarios, and accelerates the replacement of old vehicles with logistics EVs. It also supports innovative business models such as battery swapping, financial leasing, and vehicle-battery separation, driving the development of the EV logistics industry.

Policy name	Date issued	Issuing authority	Key content
Action Plan for Carbon Peak by 2030 (《2030年碳達峰行動方案》)	2021.10	Four Departments under the State Council	Identifies green and low-carbon transport as one of the ten major actions, establishing a national-level framework for carbon peaking in the transport sector.

Key Development Trends in the Road Freight Industry Driven by Electrification and Digitalization

- **Electrification represents the primary pathway to cost reduction and efficiency enhancement in the road freight industry.** Compared with internal combustion engine vehicles, EVs offer significant advantages in energy costs due to the lower price of electricity relative to diesel. For example, a light-duty truck with an annual mileage of 50,000 kilometers can achieve annual energy cost savings of approximately RMB30,000. Meanwhile, ongoing advancements in battery technology and the expansion of charging infrastructure are gradually alleviating range constraints and improving operational convenience. Policy support, including "dual carbon" strategy, road access prioritization and vehicle replacement subsidies, further reinforces the electrification trend.

- **Digitalization constitutes a core enabler of intelligent and system-wide efficiency enhancement in logistics EV fleets.** Leveraging inherent connectivity and data capabilities, such vehicles enable real-time monitoring and digital management of energy consumption, routing, payload and driving behavior. Building on this foundation, cloud-based dispatch platforms support functionalities including positioning, remote control and data analytics, while facilitating integrated coordination across vehicles, energy systems, road networks and cloud infrastructure, thereby advancing full value chain intelligent operations. Driven by big data and AI-based fleet management systems, operators can optimize capacity allocation, reduce deadhead ratio, and achieve system-level route optimization and improved delivery timeliness. Predictive maintenance based on operational data enables early fault detection, reducing downtime and enhancing vehicle uptime, while driving behavior analytics improve safety and further lower energy consumption. Overall, digitalization and intelligentization not only improve the transparency and controllability of transport operations, but also enable the continuous accumulation of data to build advanced operational systems. This creates sustained cost advantages and competitive barriers for road freight enterprises, positioning digital transformation as a central force in the industry's evolution.

EV logistics Industry

Definition of EV logistics Industry

EV logistics refers to a logistics model that utilizes logistics EVs as core carriers, integrated with energy management and digital technologies to achieve systematic cost reduction and efficiency enhancement. Its primary application scenarios are city cluster distribution, including express delivery, less-than-truckload services, cold-chain logistics and on-demand delivery, typically characterized by moderate transport distances of 100 to 300 kilometers, relatively fixed routes, frequent start-stop operations and high sensitivity to road access policies. As an innovative service model, it represents the digital upgrading and green transformation of the road freight industry, currently focused on urban applications with potential to expand into trunk-line and specialized scenarios.

Characteristics of EV Logistics

EV Logistics constitutes a systematic upgrade integrating intelligent vehicles, new energy and digitalization, rather than a simple substitution of fuel with electricity. The transition to electric vehicles enables cost reduction, efficiency enhancement and incremental value creation across vehicle, energy and digital dimensions.

- At the vehicle level, EV logistics is inherently intelligent, leveraging multi-sensor systems to enable integrated coordination across vehicles, energy systems, road networks and cloud infrastructure, and evolving into key nodes for intelligent operations.

- At the energy level, electricity substitution significantly reduces energy costs, while intelligent charging optimizes charging timing based on operational demand and electricity price dynamics, enabling energy value realization and transforming energy from a cost center into a potential profit source through carbon-related benefits.

- At the digital level, real-time data collection and analytics support digital twin applications, intelligent dispatch, predictive maintenance and driving behavior optimization, reducing deadhead ratio and improving operational efficiency, while establishing a continuously improving, feedback-driven operational system. The accumulation of large-scale operational data, combined with algorithmic advancement, further accelerates the development of autonomous driving and supports the commercialization of unmanned logistics.

	Vehicle Level	Energy Level	Digital Level
Core competencies	• Large-scale centralized procurement • Customized development • Full lifecycle management • Vehicle-to-vehicle and vehicle-to-grid interaction	• Electricity replacing fuel • Smart charging • Energy trading • Carbon trading	• Digital twin • Intelligent deployment • Predictive maintenance • Driving behavior optimization
Value creation	• Reduce procurement costs • Increase vehicle residual value • Reduce capital occupation • Intelligent driving	• Reduce energy consumption costs • Reduce charging costs	• Reduce deadhead ratio • Reduce failure rate • Increase uptime rate

Source: Frost & Sullivan

Empowerment of EV Logistics to the Road Freight Industry

- *Economic Advantage in Reducing Operating Costs:* Logistics EVs demonstrate clear advantages in total cost of ownership, or TCO, over the full lifecycle. Through optimization in bulk procurement, improved residual value, reduced energy and maintenance costs, and intelligent management, TCO can be lowered by approximately 30%—40% compared with fuel-powered vehicles in certain scenarios, thereby accelerating substitution and establishing logistics EVs as a mainstream choice in the road freight industry.

- *Efficiency Enhancement Across the Full Value Chain:* The inherent intelligent capabilities of logistics EVs serve as a key carrier for the digitalized and intensive transformation of the road freight industry. Through intelligent dispatch algorithms, vehicles can be precisely matched with orders, effectively reducing deadhead ratio and improving capacity utilization. In addition,

real-time monitoring via vehicle connectivity and predictive maintenance mechanisms enable early identification of potential faults, reducing unplanned downtime and significantly improving vehicle attendance and uptime rates, thereby supporting a steady increase in daily orders per vehicle.

- *Improved Operational Experience Driven by Road Access Advantages:* Road access rights refer to permissions governing whether vehicles may operate within specific urban areas, time periods or road segments. Conventional fuel-powered trucks are typically restricted in core commercial districts and during peak hours due to emissions and noise constraints. In contrast, recent policy relaxation has granted logistics EVs broader access to urban core areas, significantly increasing average daily completed orders and further strengthening their competitiveness within the road freight system.

- *Contribution to Carbon Reduction and Green Transition:* Logistics EVs play a key role in advancing low-carbon transformation in the road freight sector. Each vehicle can reduce carbon dioxide emissions by approximately 8–10 tons per year compared with fuel-powered counterparts, supporting compliance with increasingly stringent emissions regulations. At the same time, freight operators may generate additional value through carbon reduction.

	Reduce costs	Improve efficiency	Enhance the experience	Green emission reduction
Specific measures	• Reduce total lifecycle cost	• Optimize vehicle-order matching through intelligent scheduling • Reduce failure rates through predictive maintenance	• Relaxing road rights	• Carbon emission reduction
Key Indicators	• Reduce TCO	• Reduce deadhead ratio • Improve vehicle uptime • Increase daily order volume	• Increased order volume	• Each vehicle reduces CO_2 emissions by 8-10 tons per year

Source: Frost & Sullivan

Market Size of the EV Logistics Industry[(1)]

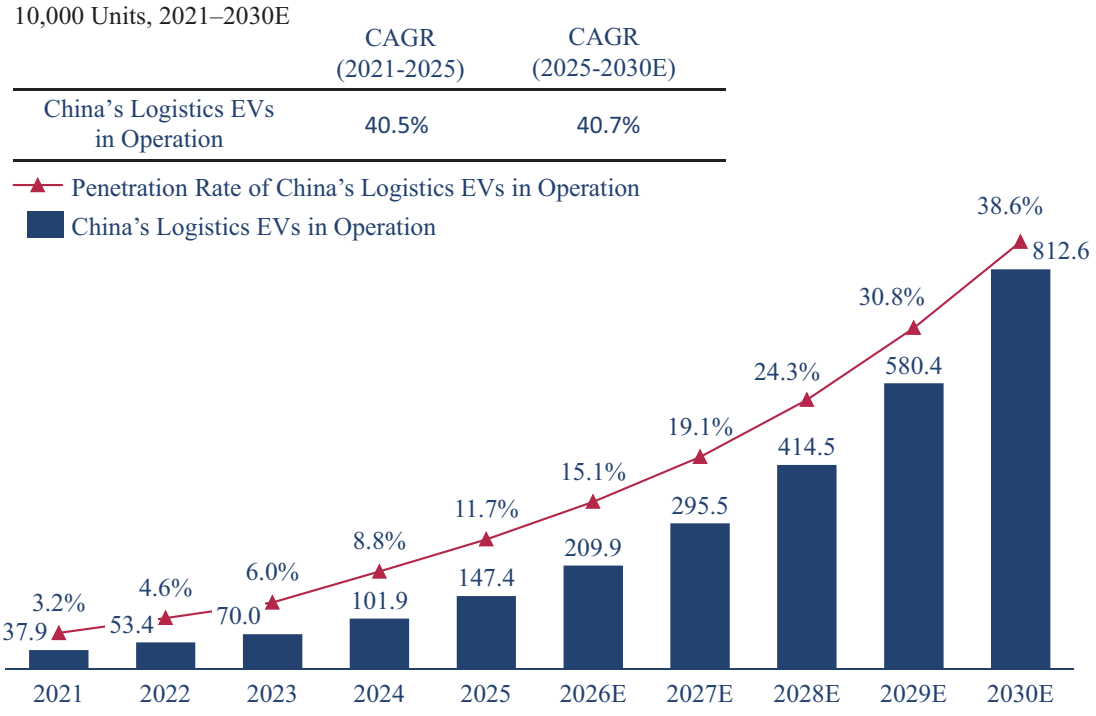
Driven by the consumption needs of China's 940 million urban residents, city logistics has maintained steady growth. As of the end of 2025, the number of logistics vehicles in operation in China reached approximately 12.3 million units, of which logistics EVs accounted for approximately 1.5 million units.

Benefiting from the implementation of China's dual-carbon strategy and supportive policies for EV logistics industry in areas such as road access, operational subsidies and vehicle registration, logistics enterprises have significantly increased their adoption of logistics EV models. Meanwhile, improvements in battery energy density, the expansion of charging infrastructure and increasingly evident lifecycle cost advantages have accelerated the replacement of traditional fuel vehicles in high-frequency operating scenarios. Supported by advantages including low energy consumption, low maintenance costs and high vehicle uptime, the number of logistics EVs in operation in China increased from 379.0 thousand units in 2021 to 1,474.0 thousand units in 2025, representing a CAGR of 40.5% and accounting for 11.7% of the total logistics vehicle in operation.

(1) In terms of the number of EVs.

Looking ahead, with further relaxation of road access restrictions for new energy trucks, continued improvement in charging infrastructure, ongoing advancements in battery technologies and the expansion of product offerings, the number of logistics EVs in operation in China is expected to continue to grow. By 2030, the number of vehicles in operation is projected to reach approximately 8.1 million units, representing a CAGR of approximately 40.7% from 2025 to 2030 and accounting for 38.6% of the total logistics vehicle in operation.

China's Logistics EVs in Operation and Penetration Rate



Source: Frost & Sullivan

Growth Drivers of the EV Logistics Industry

- *Technological Advancements Drive Product Innovation and Industry Intelligentization:* The technological maturity of logistics EVs continues to improve across battery technology, electrification and intelligent manufacturing, providing support for large-scale adoption. The development of new materials and processes has enhanced battery energy density, reduced unit battery costs and improved driving range. Continuous optimization of core electric systems and vehicle platforms has brought failure rates close to those of traditional fuel-powered vehicles, while improving vehicle uptime and durability. The integration of industry data with technologies such as Internet of Things, or IoT, 5G communication and digital twins has enabled AI to empower the entire vehicle manufacturing process, enhancing the overall level of intelligent manufacturing. Intelligent technologies are increasingly embedded into vehicle architectures, enabling coordinated development of smart batteries, intelligent chassis, smart cabin and autonomous driving systems.

- *Infrastructure Transformation Supports Large-scale Industry Operations:* The rapid development of infrastructure provides a foundation for the large-scale deployment of logistics EVs. The accelerated rollout of charging networks has established a nationwide charging infrastructure, with approximately 6.5 million public charging points in China as of September 2025, covering major urban distribution nodes. Breakthroughs in fast-charging technology have further reduced charging

time, enabling high-power charging systems to reach 80% capacity within 30 minutes, significantly reducing idle time and increasing effective daily operating hours, while alleviating range and charging concerns. The integrated development of vehicle–road–cloud infrastructure continues to advance, laying the foundation for large-scale deployment of high-level autonomous driving and supporting applications across multiple scenarios.

- *Artificial Intelligence Enables Product and Business Model Innovation:* A new wave of technological and industrial transformation is reshaping product forms, industrial ecosystems and the broader mobility landscape. With the deep integration of AI and digital technologies, the EV logistics industry is evolving from a single transportation tool to a "product + service" integrated model. Vehicles are becoming intelligent carriers integrating electric propulsion, intelligent chassis, smart cabin, onboard computing platforms and cloud-based systems, enabling modular development and layered self-evolution. Meanwhile, the industry ecosystem is being redefined, with coordinated participation from OEMs, energy service providers and ICT (information and communications technology) companies, promoting cross-sector integration across transportation, energy, smart cities and the low-altitude economy. The EV logistics industry is increasingly embedded into broader socio-economic systems, supporting carbon reduction goals, enhancing human–vehicle interaction and driving structural transformation in logistics employment, thereby contributing to a low-carbon, efficient and intelligent mobility system.

- *Policy Support:* Under the guidance of China's "dual carbon" strategy and the establishment of a green transport policy framework, governments at various levels have introduced a series of supportive measures to promote the adoption of logistics EVs and create a favorable environment for large-scale deployment. The "Technology Roadmap for Energy-saving and New Energy Vehicles 3.0" released by the China Society of Automotive Engineers sets a clear target of achieving a logistics EV penetration rate of over 80% by 2040. Furthermore, China continues to advance the "Five Key Areas of Finance," including technology finance, green finance, inclusive finance, and digital finance to support industry development. Technology finance supports R&D in power batteries, autonomous driving, and vehicle connectivity, driving technological advancement; green finance provides low-cost funding for vehicle procurement, charging infrastructure, and fleet operations, reducing capital costs; inclusive finance improves access to financing for SMEs and individual drivers, supporting market penetration; and digital finance enhances asset management and capital efficiency through data-driven risk control, enabling scaled and intelligent development.

Logistics EV Management Industry

Definition and Core Concepts of Logistics EV Management

This industry takes the operation and management of logistics EVs as its strategic entry point and aims to provide one-stop service solutions to enable full lifecycle management of vehicles across procurement, utilization, maintenance, management and disposal. By transforming fixed vehicle asset investments into flexible and predictable operating costs for customers, it helps downstream clients reduce logistics costs, improve efficiency and increase revenue. From a commercial perspective, logistics EV management market embodies the following core concepts:

Logistics EV operations involve two layers from a cost evaluation perspective. The first is TCO, which includes not only vehicle procurement (accounting for approximately one-third of TCO), but also aftermarket operational costs such as insurance claims, maintenance coordination, fleet management (accounting for approximately two-thirds of TCO), fleet safety compliance and annual inspections. For a fleet of 100 vehicles, independently managing these functions may require five to eight full-time personnel and supporting management systems. The second is total cost of usage, or TCU, which builds on TCO by incorporating digital fleet management capabilities and vehicle uptime assurance. Through

scalable operational oversight and service guarantees, leading innovative service providers in China help customers convert hidden and fragmented aftermarket costs under the TCO model into transparent and quantifiable service expenditures under the TCU framework, while achieving net cost savings through economies of scale.

Under traditional models, freight enterprises primarily focus on TCO, emphasizing asset acquisition and static cost control. In contrast, next-generation service providers focus on TCU, shifting the core question to how much it costs to operate a vehicle, how much can be saved and how much value can be generated, thereby emphasizing operational efficiency and value creation.

TCU = direct costs + indirect costs − incremental benefits. Direct costs mainly include vehicle acquisition or leasing costs, operation and maintenance costs, insurance costs, energy costs and management costs; indirect costs include losses caused by operational disruptions and deadhead ratio; incremental benefits include increased daily transport volume enabled by improved road access and additional gains from optimized carbon trading. Based on the objective of optimizing TCU, service providers deliver full lifecycle service offerings and achieve systematic cost reduction and efficiency enhancement through multi-stage coordination.

	Flexible Asset Allocation	Vehicle Use	Vehicle Management	Energy Management	Maintenance and Repair	Retired and Replaced
Service Content	car usage mode	short/long-term leasing	data monitoring	charging network	predictive maintenance	residual value assessment
	vehicle selection	nationwide offline service centers	state management	energy monitoring	regular maintenance	asset disposal
	asset allocation		safety management	smart charging	upgrade and renovation	trade-in
Core Values	• Configure as needed, adjust flexibly	• Adapt to business fluctuations and respond quickly	• Real-time visibility and refined management	• Reduced energy costs, additional benefits	• Reduce failure rate and extend lifespan	• Maximize residual value, seamless transition

Source: Frost & Sullivan

Development Stages of the Logistics EV Management Industry

The logistics EV management industry has undergone four stages of development.

- Leasing Stage (2015–2018): Centered on "vehicles," this stage represented the early phase of industry development, addressing customers' transition from "no vehicle" to "vehicle ownership" and lowering the adoption barrier for logistics EVs. The primary business model was financial leasing, particularly lease-to-own arrangements that reduced upfront procurement costs. The industry was characterized by extensive growth, with market participants focusing on rapid expansion of fleet size and market share, while operational and service capabilities remained relatively basic.

- Service Stage (2019–2021): Centered on "vehicle + services," this stage marked the industry's transition from asset-oriented competition toward service-oriented operations. The business model evolved into operating leasing combined with ancillary services, with operators providing integrated solutions including charging, maintenance and repair services

to ensure stable vehicle operations and reduce customers' operational complexity. Service capability gradually replaced scale as the key competitive differentiator, and professional service providers with stronger operational capabilities began to establish competitive barriers.

- Digital and Intelligent Stage (2022–2024): Centered on "data," this stage marked the industry's shift toward refined and data-driven operations. The core value proposition evolved from operational support to improving operational efficiency and asset value through end-to-end digitalization. The business model further evolved into integrated "vehicle + energy + digitalization + ecosystem" solutions, enabling intelligent dispatching, energy management and residual value assessment through digital platforms. In-vehicle intelligent terminals and digital fleet management systems gradually became standardized, while leading companies increasingly expanded collaboration with ecosystem partners such as financial institutions and insurers.

- Ecosystem Stage (2025–future): Centered on "scenario + embodied intelligence," this stage represents the industry's transition toward scenario-based intelligent services and ecosystem collaboration. The core value proposition lies in leveraging embodied intelligence technologies to achieve precise adaptation to logistics scenarios and intelligent coordination across the industry chain. Logistics EVs increasingly integrate onboard and cloud-based perception and decision-making capabilities, enabling more accurate matching of operational scenarios and logistics demand. Industry participants are gradually transforming from standalone service providers into intelligent ecosystem platforms supporting collaborative industry operations.

Currently, the industry is transitioning from the digital and intelligent stage to the ecosystem stage. Leading players are expected to define industry standards and become essential infrastructure platforms within the intelligent logistics ecosystem.

Experience from mature overseas markets demonstrates that professional fleet asset management services can support the large-scale operation of million-vehicle fleets. As logistics EVs penetration continues to rise, China, as the world's largest logistics EV market, is also positioned to cultivate million-vehicle fleet management platforms.

Business Models Analysis of Logistics EV Management Industry

By business format, the logistics EV management industry mainly consist of vehicle sales, leasing and fleet management, collectively forming an integrated service system covering the full vehicle lifecycle.

- **Logistics EV Sales:** Provide vehicle sales, customized vehicle solutions and delivery services for logistics enterprises, platform customers and individual operators, addressing diversified vehicle usage needs.

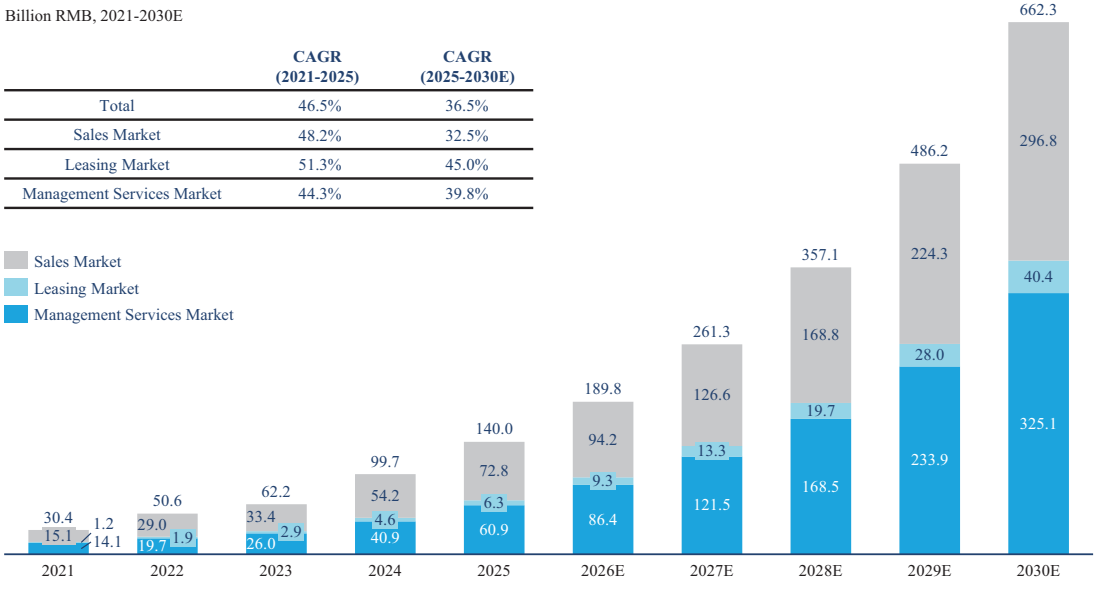
- **Logistics EV Leasing:** Provide flexible vehicle usage solutions through long-term leasing, short-term leasing and lease-to-own models, helping customers reduce upfront vehicle procurement costs. This model primarily serves urban distribution logistics, instant delivery and small-to-medium-sized fleet operators.

- **Logistics EV Management:** Provide integrated operational management services throughout the vehicle lifecycle, including fleet hosting, charging, maintenance, insurance (including safety management) and residual value recycling. Through digitalized and professional operations, service providers improve fleet efficiency and reduce overall operating costs.

Market Size of the Logistics EV Management Industry

Driven by the continuous increase in logistics EV penetration, the accelerating electrification of urban logistics and growing downstream operational demand, China's logistics EV management market has continued to expand rapidly. From 2021 to 2025, the market size of China's logistics EV management market increased from RMB30.4 billion to RMB140.0 billion, representing a CAGR of 46.5%. Supported by the continued growth in vehicle parc, the gradual improvement of operational service systems and increasing industry scale, the market size is expected to further grow to RMB662.3 billion by 2030, with a projected CAGR of 36.5% from 2025 to 2030.

China's Logistics EV Management Industry Market Size, by Revenue



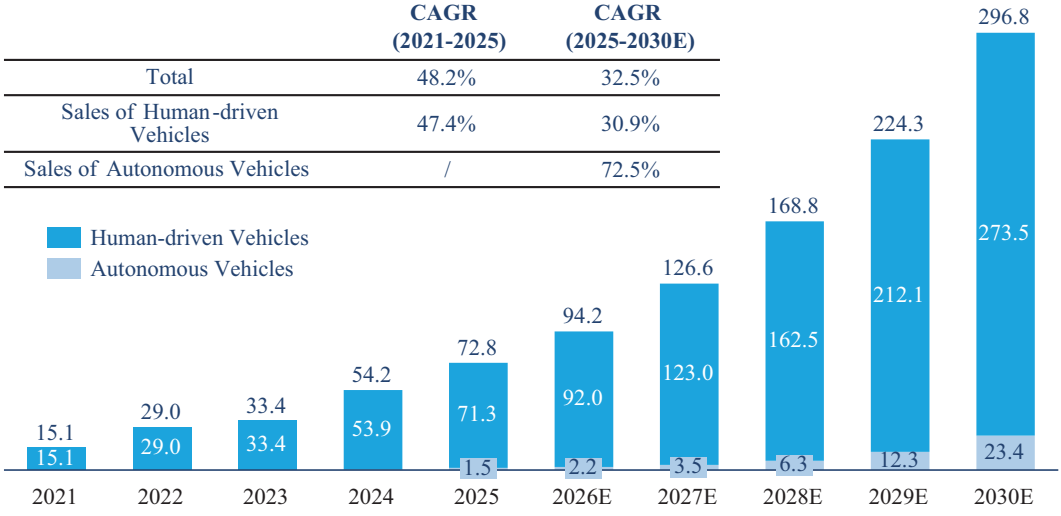
Source: Frost & Sullivan

Driven by the rapid development of logistics EVs in China in recent years, logistics EVs are accelerating the replacement of traditional logistics vehicles. From 2021 to 2025, the sales market size of logistics EVs increased from RMB15.1 billion to RMB72.8 billion, representing a CAGR of 48.2%. With continued technological advancements and improvements in infrastructure, the sales market size is expected to further grow to RMB296.8 billion by 2030, representing a CAGR of 32.5%.

Market Size of China's Logistics EV Sales Market, by Sales Revenue

Billion RMB, 2021-2030E

	CAGR (2021-2025)	CAGR (2025-2030E)
Total	48.2%	32.5%
Sales of Human-driven Vehicles	47.4%	30.9%
Sales of Autonomous Vehicles	/	72.5%



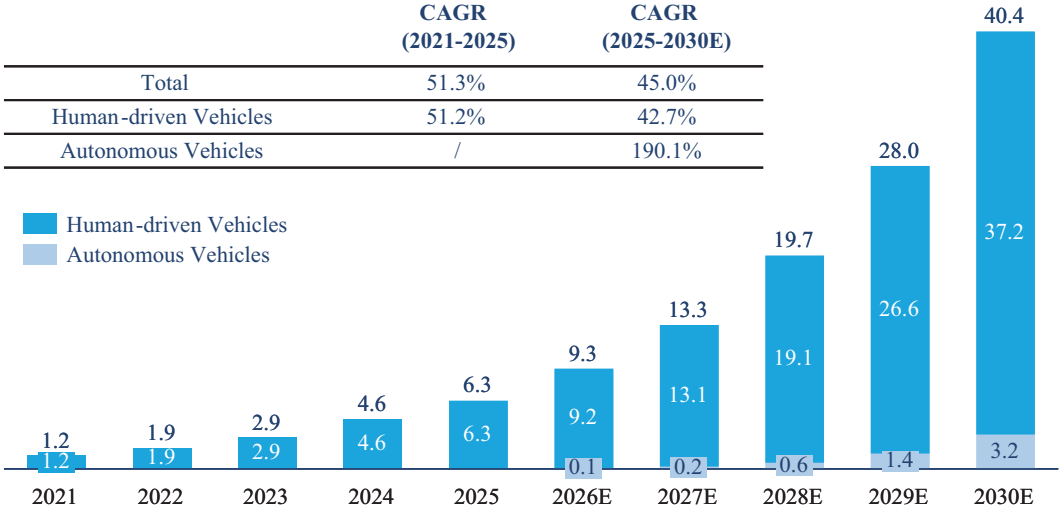
Source: Frost & Sullivan

The market size of leasing revenue for logistics EVs in China increased from RMB1.2 billion in 2021 to RMB6.3 billion in 2025, representing a CAGR of 51.3% during the period. It is expected to further grow to RMB40.4 billion by 2030, with a CAGR of approximately 45.0%. The rapid growth of leasing validates the core value proposition of the industry, where subscription-based models reduce upfront capital requirements for customers and enhance operational flexibility.

Market Size of China's Logistics EV Leasing, by Leasing Revenue

Billion RMB, 2021-2030E

	CAGR (2021-2025)	CAGR (2025-2030E)
Total	51.3%	45.0%
Human-driven Vehicles	51.2%	42.7%
Autonomous Vehicles	/	190.1%



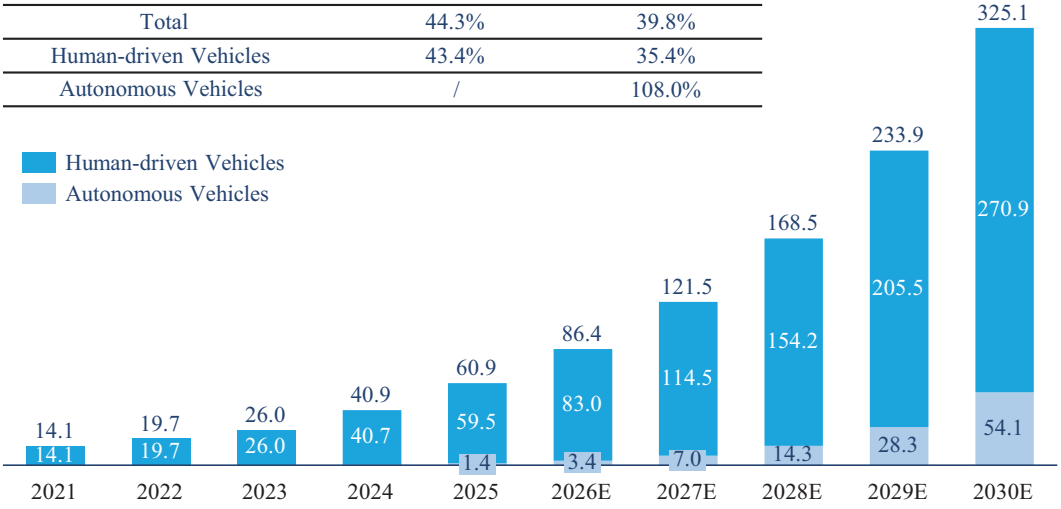
Source: Frost & Sullivan

The market size of logistics EV management services in China has grown rapidly in recent years, increasing from RMB14.1 billion in 2021 to RMB60.9 billion in 2025, representing a CAGR of 44.3%. It is expected to reach RMB325.1 billion by 2030, with a CAGR of 39.8% from 2025 to 2030.

Market Size of China's Logistics EV Management Services, by Revenue

Billion RMB, 2021-2030E

	CAGR (2021-2025)	CAGR (2025-2030E)
Total	44.3%	39.8%
Human-driven Vehicles	43.4%	35.4%
Autonomous Vehicles	/	108.0%



Source: Frost & Sullivan

Development Trends of Logistics EV Management Industry

- ***Acceleration of Electrification:*** The continuous increase in the penetration of logistics EVs has become a clear industry trend, with penetration expected to exceed 80% by 2030. This acceleration is driven by the combined effects of technological advancements, cost advantages, policy support and environmental requirements. In terms of performance, ongoing improvements in core electric technologies and the widespread deployment of charging infrastructure are enabling broader applications in urban distribution and intercity transportation. In terms of cost, the economic advantages of logistics EVs are expected to further expand. In terms of sustainability, increasingly stringent global carbon emission policies and regulations promoting the phase-out of fuel-powered vehicles will further highlight the lifecycle environmental benefits of logistics EVs, collectively driving their accelerated adoption and sustained growth in penetration.

- ***Service-oriented Transformation:*** The logistics EV management industry is undergoing a shift from ownership to subscription-based service models. Through leasing arrangements, enterprises can avoid depreciation risks associated with vehicle damage or technological obsolescence, reduce capital pressure and access comprehensive after-sales services covering maintenance, insurance and claims management. This transformation enables logistics companies to shift from owning assets to focusing on their core business, while also accelerating the industry's transition toward greater specialization and service orientation.

- ***Deepening of Digitalization and Intelligentization:*** Technologies such as the Internet of Vehicles, deployment dispatch and predictive maintenance are expected to become standard features. The operation of logistics EVs involves complex scenarios requiring simultaneous management of route planning, load allocation, energy consumption and charging. Leveraging real-time data

collection through connected vehicle systems, end-to-end data integration via big data and precise decision-making enabled by AI, a digitalized operational system can be established, covering real-time monitoring, intelligent route optimization, AI-based dispatch, predictive maintenance and dynamic energy management.

- ***Evolution Toward Ecosystem Integration:*** The industry is transitioning to an increasing integrated ecosystem. OEMs, charging network operators, logistics platforms and financial institutions are expected to collaborate closely to provide comprehensive solutions, including vehicle acquisition (through purchase or leasing subscription), intelligent dispatch and charging coordination, maintenance services, insurance claims and financial services. This integrated approach reduces cross-platform coordination costs, improves the uptime of vehicles, charging infrastructure and battery assets, and supports large-scale and sustainable industry development.

Competitive Landscape

Major Player Types and Comparison

Participants in the logistics EV management industry can be broadly categorized into four types: integrated service network operators, OEM-affiliated players, traditional leasing players in transition, and regional small-scale service providers.

- *Integrated Service Network Operators:* As industry leaders, these players demonstrate significant advantages in scale, network coverage, digital capabilities and ecosystem development. Leveraging digital operation and management platforms, they provide one-stop integrated solutions, integrating logistics ecosystem resources and combining logistics EVs with diversified value-added services. With proprietary technologies, operational experience and multi-scenario service capabilities, they are able to provide support covering vehicle procurement, operation and disposal, continuously enabling efficient and sustainable development.

- *OEM-affiliated Players*: As vertical integration pioneers, these players possess strong advantages in product development, capital strength and brand influence, while their operational capabilities and service network coverage still have room for improvement. By integrating upstream and downstream resources and collaborating with partners, they leverage their strengths in vehicle supply, leasing networks, operational services and asset management to form coordinated mechanisms and provide customers with high-quality lifecycle service solutions.

- *Traditional Leasing Players in Transition*: As transformation-oriented participants, these players benefit from established offline networks, customer resources and extensive leasing experience, forming a distinct competitive position. However, they face challenges in digital transformation capabilities as well as in logistics EV technologies and operational expertise. To adapt to industry changes, they are actively integrating internal resources, exploring new operating models and gradually building capabilities across vehicle acquisition, operation and maintenance, and asset disposal, in line with the industry's shift toward lifecycle service provision.

- *Regional Small-scale Service Providers*: As an important complement to the long-tail market, these players leverage strong localized service capabilities to maintain a presence in regional markets. Their customer-proximate service networks enable them to meet diversified and fragmented logistics demand. However, limited by scale and resource investment, they face constraints in achieving economies of scale and data accumulation. These service providers

are enhancing regional service networks, strengthening local service depth and industry coordination, while gradually expanding into broader markets to provide more resilient and adaptable operational services.

In addition, integrated service network operators can extend their management services to other industry participants, including OEM-affiliated players, traditional leasing players in transition and regional small-scale service providers. Leveraging their service network and digital capabilities, integrated service network operators can offer digital tools, maintenance and repair, safety and risk management, and other value-added services on behalf of these players, generating service revenues. This model allows integrated service network operators to scale service volume beyond their own fleets.

Key Success Factors

- *Economies of Scale and Asset Management Capabilities:* The core competitiveness of logistics EV management service providers lies in their ability to manage large-scale logistics assets efficiently. Expanding fleet size and service networks enhances customer stickiness and response efficiency, while enabling the accumulation of large volumes of data. Leveraging data analytics to optimize vehicle deployment, energy efficiency and cost management, and building a full lifecycle management system covering procurement, operation and disposal, service providers can achieve refined operations, improve asset uptime and help downstream customers reduce costs, improve efficiency and increase revenue.

- *Service Network Coverage:* Broad service network coverage across the full value chain is a key competitive advantage. At the front end, diversified vehicle offerings and multi-city coverage are required to meet various application scenarios. At the midstream, a widely distributed and high-density charging and maintenance network enables convenient energy replenishment and rapid servicing, reducing mileage concerns and improving vehicle uptime. At the back end, intelligent deployment platforms optimize capacity allocation and energy management through AI algorithms, such as guiding off-peak charging to reduce costs and improve charging efficiency, thereby upgrading service networks from basic coverage to intelligent operations.

- *Data-driven Digitalization and Intelligentization:* Industry players need to establish comprehensive data collection capabilities and accumulate large-scale, multi-dimensional data, including real-time vehicle status, energy consumption, charging behavior and supply-demand information. Through centralized data management, a high-quality data foundation is formed, which is continuously refined through algorithm training and iteration to enable precise dispatch strategies, predictive maintenance and improved capacity matching. This enhances operational efficiency and reduces lifecycle costs. Superior services further attract customers and partners, reinforcing data accumulation and forming a self-reinforcing loop of "data accumulation → algorithm optimization → service improvement → scale expansion," thereby establishing a data-driven growth flywheel.

- *Integration of Ecosystem Resources:* By strategically integrating key resources including OEMs, charging networks, financial institutions and end customers, service providers can build an efficient and coordinated value chain. Close collaboration with OEMs ensures customized vehicle supply and stable delivery; integration of charging resources enables multi-city energy operation networks; financial institutions provide flexible financing solutions to support scale expansion; and effective customer engagement facilitates a standardized closed-loop process of "demand–capacity–delivery–service." Across the

lifecycle, customized solutions reduce upfront costs, ecosystem resources optimize operational efficiency, and partnerships enable residual value recycling and battery reuse, maximizing overall asset returns.

Competitive Landscape

Based on revenue, number of vehicles in operation, number of partnered and self-operated maintenance and repair centers, and number of cities covered in 2025, the Company is the largest logistics EV management provider in China. In addition, based on the number of charging points connected in 2025, the Company is also the largest logistics EV management provider in China.

Top Five Players in China's Logistics EV Management Market in 2025, by Revenue

Ranking	Company	Revenue
		(Unit: RMB100 million)
1	The Company	41.4
2	Company A[(1)]	~14
3	Company B[(2)]	~2.5
4	Company C[(3)]	~3
5	Company D[(4)]	~2
	Top 5	**~62.9**

* *Statistics include operation service providers primarily engaged in logistics EV management*

Notes:

(1) Company A, founded in 2017 and headquartered in Hangzhou, China, is an intelligent EV commercial vehicle operation service platform focusing on the full lifecycle management of logistics EVs, including vehicle leasing, fleet management, and digital dispatching services. The company leverages telematics and data capabilities to provide integrated mobility solutions for logistics customers. The company is not listed.

(2) Company B, founded in 2019 and headquartered in Beijing, China, is a logistics EV and ecosystem service platform covering logistics EV commercial vehicle promotion, fleet operation support, and digital logistics solutions. The company leverages commercial vehicle manufacturing capabilities to promote the application of logistics EVs in urban distribution and transportation scenarios. The company is not listed.

(3) Company C, founded in 2023 and headquartered in Nanchang, China, is a logistics EV mobility and operation service platform providing operational support and fleet management services for logistics EVs. The company focuses on urban logistics and last-mile delivery scenarios while expanding its operational ecosystem through vehicle manufacturing capabilities. The company is not listed.

(4) Company D, founded in 2011 and headquartered in Wuhan, China, is a logistics EV service platform focusing on logistics EV light-duty trucks and urban logistics transportation scenarios. The company participates in the promotion of commercial vehicle electrification and the development of operational ecosystems, leveraging OEM and distribution resources to support scenario-based deployment. The company is not listed.

In 2025, the total revenue of the top five players in China's logistics EV management market was approximately RMB6.29 billion. Based on revenue in 2025, the Company is the largest logistics EV management provider in China.

Top Five Players in China's Logistics EV Management Market in 2025, by Vehicle Under Management

Ranking	Company	Vehicle in operation
		(Unit: 10,000 units)
1	The Company	22.5
2	Company A	~7.2
3	Company C	~1.2
4	Company B	~1.2
5	Company D	~0.6
	Top 5	**~32.7**

* *Statistics include operation service providers primarily engaged in new energy vehicle subscription businesses*

In 2025, the total number of vehicles in operation of the top five players in China's logistics EV management market was approximately 327,000 vehicles. Based on the number of vehicles under management in 2025, the Company is the largest logistics EV management provider in China.

Top Four Players in China's Logistics EV Management Market in 2025, by Cooperative and Self-built Maintenance Network

Ranking	Company	Cooperative and self-built maintenance network
		(Unit: units)
1	The Company	3,246
2	Company C	~250
3	Company B	~200
4	Company D	200
	Top 4	**~3,896**

* *Statistics cover fulfillment, maintenance and repair service networks*

In 2025, the total number of cooperative and self-built maintenance networks of the top four players in China's logistics EV management market was approximately 3,896 units. Based on the number of partnered and self-operated maintenance networks in 2025, the Company is the largest logistics EV management provider in China.

Top Five Players in China's Logistics EV Management Market in 2025, by Number of Covered Cities

Ranking	Company	Number of covered cities
		(Unit: cities)
1	The Company	333
2	Company A	150
3	Company C	<30
4	Company B	<30
5	Company D	<30

* *Covered cities refer to prefecture-level cities in China*

In 2025, based on the number of cities covered by business operations (measured under China's prefecture-level city classification), the Company was the largest logistics EV management provider in China.