

INDUSTRY OVERVIEW

The information and statistics set out in this section have been extracted, in part, from various official government sources and a market research report prepared by Frost & Sullivan (the “F&S Report”) and commissioned by us. We believe that these sources are appropriate sources for such information and statistics and reasonable care has been exercised by us in selecting and identifying the named information sources, compiling, extracting and reproducing the information, and ensuring no material omission of the information. We have no reason to believe that such information and statistics are false or misleading or that any fact has been omitted that would render such information and statistics false or misleading in any material respect. Neither our Company nor any of the Relevant Persons (which, for the purpose of this paragraph, excludes Frost & Sullivan) has independently verified the information and statistics from official government sources, and no representation is given as to its accuracy.

GLOBAL TRANSPORTATION EQUIPMENT SYSTEM INDUSTRY

Definition and Overview of Transportation Equipment System

The transportation equipment system industry refers to a sector that relies on the in-depth integration of multidisciplinary technologies such as mechanical engineering, electronic information, and automatic control, providing safe and efficient transport vehicles as well as supporting equipment and systems including control systems, dispatching systems, and monitoring systems for full-scenario transportation activities such as highways and railways. The transportation equipment system industry synthesizes foundational technologies to meet the complex operational requirements and stringent safety standards of diverse transportation scenarios. The industry continuously improves transportation efficiency, enhances operational safety, and reduces operating costs through ongoing equipment iteration and system optimization, thereby ensuring the smooth flow of people and goods and continuously driving the modernization of the transportation system.

Market Size of Global Transportation Equipment System Industry

Governments worldwide are actively promoting transportation equipment system, along with the maturation of technologies such as vehicle-road-cloud coordination and large-scale traffic models, driving the sustained development of the transportation equipment system industry. The market size of global transportation equipment system industry in terms of revenue increased from RMB3.1 trillion in 2021 to RMB3.6 trillion in 2025, growing at a CAGR of 3.9%. In the future, the global demand for efficient, safe, and low-carbon transportation equipment system will continue to be released, thereby driving the continuous growth of the market. The market size of global transportation equipment system is expected to reach RMB4.2 trillion by 2030, with a CAGR of 3.1% from 2025 to 2030.

Future Opportunities of Global Transportation Equipment System Industry

Safe. Given the growing passenger volumes, constrained road space, and the shift toward larger vehicles, safety has become a paramount concern and serves as a baseline for public governance and also as an essential precondition for the expansion of transport operations. On the vehicle side, safety performance has been continuously enhanced across critical systems including articulation mechanisms, chassis, and thermal management systems. On the system side, a predictive safety network built on multi-source perception has driven consistent reductions in accident rates, equipment failure rates, and emergency response times.

Efficiency. Given constraints on rapidly expanding road infrastructure and driver availability, enhancing operational capacity must rely on improved organizational and dispatch efficiency. By leveraging digital twin technology for road network optimization, combined with dynamic lane

INDUSTRY OVERVIEW

allocation, intermodal transportation involving regular buses, BRT and ART, as well as hub coordination, this approach reduces congestion delays, operational volatility and empty running rates, while improving on-time performance and load factors.

Intelligence. Traditional dispatch systems are limited by fragmented data and delayed decision-making. A multi-task model is being built that connects vehicles (including subsystems), roads, stations, and users, supporting operational condition recognition, demand forecasting, root-cause analysis of anomalies, and strategy generation. This model progressively enables the scaled deployment of autonomous driving, unattended operations, and self-managed systems.

Sustainability. In response to tightening carbon limits and fluctuating energy costs, the focus of energy and emission management is shifting from individual vehicle efficiency to optimization of the entire transportation chain. Vehicle-level energy efficiency is optimized through alcohol-electric systems and thermal management systems, meanwhile, full-cycle energy management is achieved through roadside information linkage, cloud-based energy consumption and carbon intensity forecasting, as well as the integration of renewable energy sources.

GLOBAL VEHICLE ARTICULATION SYSTEMS INDUSTRY

Definition and Overview of Vehicle Articulation Systems Industry

A vehicle articulation system is a device that enables relative rotation and torque transfer between two or more vehicle sections. It is primarily used in (i) urban public transport, where the system enables higher passenger capacity per vehicle and a smaller turning radius within limited road space; and (ii) intercity and mainline logistics, where it enhances freight efficiency and safety per lane.

Vehicle articulation systems are primarily categorized into traditional mechanical and advanced types. Traditional mechanical articulation systems are predominantly passive in design. They lack real-time sensing and active control capabilities, relying on fixed damping mechanisms and driver experience for stability. Safety margins are ensured mainly through mechanical limiters and structural redundancies. While these systems offer straightforward maintenance, they have a relatively shorter service life, making them suitable for low-speed, low-complexity, and cost-sensitive application. In contrast, advanced articulation systems integrate hydraulic and electronic control components into the mechanical framework. They can actively adjust angle limits, self-centering, and damping in response to variables such as vehicle speed, steering input, load conditions, and road surface state. This enhances safety, stability, and ride comfort and also enables remote diagnostics and predictive maintenance. These systems are designed to meet the demands of high-capacity transport, complex road environments, and the integrated safety, efficiency, and coordination requirements within advanced transportation ecosystems.

The importance of vehicle articulation systems in the transportation equipment system industry includes: (i) they substantially reduce the turning radius of high-capacity vehicles such as extra-long buses and articulated trucks, enhancing maneuverability and compatibility with stations and urban infrastructure; (ii) by providing anti-jackknifing control, angle limitation, and stability management, they mitigate rollover and instability risks, thereby safeguarding passengers and vehicle safety; (iii) they enable high-density operation of buses, BRT, and ART, increasing lane-based transport capacity and punctuality within existing road networks; (iv) they offer critical posture and load boundary conditions for electric drive, hybrid power, and thermal management systems, supporting overall energy optimization and component lifecycle management; and (v) through full-lifecycle monitoring and predictive maintenance, they reduce vehicle downtime and maintenance costs while improving overall vehicle availability.

INDUSTRY OVERVIEW

Value Chain of Vehicle Articulation Systems Industry

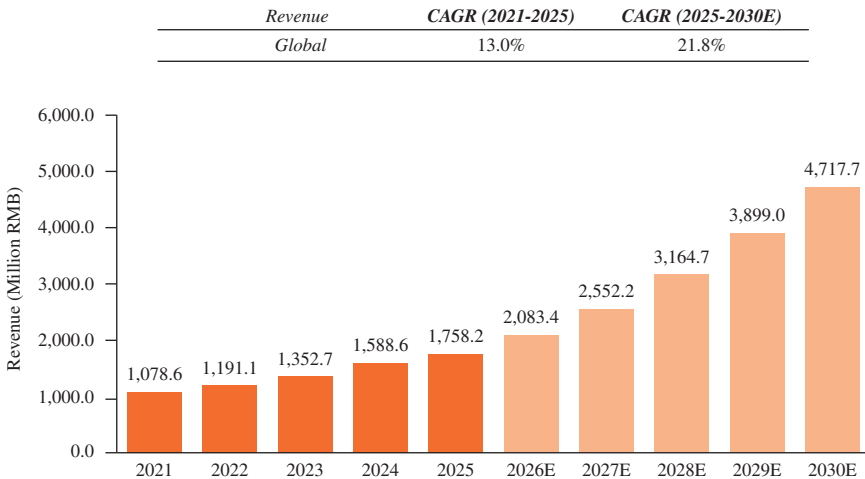
The value chain for vehicle articulation systems comprises upstream material and component suppliers, midstream vehicle articulation system manufacturers, and downstream applications.

Upstream material and component suppliers primarily provide materials such as profiles, castings and forgings, seals, and rubber, as well as electronic parts including sensors, controllers, and wiring harnesses. Midstream vehicle articulation system manufacturers are mainly responsible for the research and development, manufacturing, sales, and maintenance of vehicle articulation systems. Downstream applications primarily include urban public transportation, intercity logistics, and mainline freight transport.

Market Size of Global Vehicle Articulation Systems Industry

In recent years, driven by accelerated urbanization and growing demand for public transportation, the vehicle articulation systems industry has maintained steady growth. The market size of global vehicle articulation systems industry in terms of revenue increased from RMB1,078.6 million in 2021 to RMB1,758.2 million in 2025, representing a CAGR of 13.0%. In the future, as urbanization accelerates in emerging markets such as Southeast Asia and Latin America, infrastructure expansion and public transportation modernization are driving substantial demand for vehicle articulation systems. The market size of global vehicle articulation systems industry is expected to reach RMB4,717.7 million by 2030, with a CAGR of 21.8% from 2025 to 2030.

Market Size of Vehicle Articulation System Industry (Global), 2021-2030E



Source: Frost & Sullivan Analysis

Market Drivers of Global Vehicle Articulation Systems Industry

Urban Transport Capacity and Spatial Constraints. From 2021 to 2025, the global urbanization rate increased from 56.5% to 58.0% and is expected to reach 60.8% by 2030. The continued urbanization worldwide is driving growing demand for urban passenger transport, which coincides with increasingly constrained road space. Given the constraints on expanding road infrastructure and the driver workforce, enhancing per-vehicle capacity and lane efficiency has become an essential requirement. In recent years, BRT and ART have become the preferred solutions for cities with medium passenger flow to quickly improve public transport service levels and advance their low-carbon transition. These systems are favoured due to their cost effectiveness, rapid deployability, and lower carbon footprint. By utilizing dedicated lanes, signal priority, bay-style stations, and high-capacity articulated vehicles, they enable the rapid establishment of high-capacity urban corridors. Furthermore, digital dispatch systems significantly improve

INDUSTRY OVERVIEW

operational punctuality and efficiency. Globally, the total operational length of BRT reached approximately 5,900 kilometers in 2025, it is expected to grow to approximately 8,000 kilometers by 2030, with a CAGR of 6.3% during this period. In 2025, the global operational length of ART reached approximately 200 kilometers and it is expected to reach approximately 450 kilometers by 2030, with a CAGR of 17.6% during this period. Vehicle articulated vehicles achieve higher passenger capacity while maintaining a smaller turning radius, making them well-suited to meet the demands for peak-period throughput and schedule reliability in systems such as BRT and ART, as well as in airports, campuses, and transport hubs. This alignment is driving the broader adoption and integration of vehicle articulation systems.

Growing Expectations for Passenger Experience. The service-oriented transformation of public transportation has raised requirements for ride comfort. Meanwhile, the trend toward larger vehicle models and high-density operations during peak hours has made vehicle attitude control increasingly challenging. Articulation systems that dynamically adjust damping and centering stiffness based on scenarios including road conditions, speed, load, and turning radius effectively reduce in-vehicle vibration and roll-related discomfort, enhance the experience of both passengers and drivers, and thereby boost the brand value of vehicle operators and manufacturers.

Optimization of Total Lifecycle Costs. Vehicle operators are placing greater emphasis on per-unit vehicle costs and overall availability. Vehicle articulation systems equipped with sensing capabilities and remote diagnostics enable predictive maintenance, reduce unplanned downtime, and prevent excessive component wear. Despite a slightly higher initial installation cost, these systems deliver lower total lifecycle expenses and extended service life. In addition, Chinese manufacturers of vehicle articulation systems hold a distinct cost-performance advantage. A well-established local supply chain in China helps cut production costs and shorten delivery lead times. Combined with their responsive service capabilities, these strengths have unlocked substantial growth opportunities in overseas markets. This is particularly true for emerging economies where cost optimization is a priority, and where rapid deployment and maintenance responsiveness are emphasized, allowing Chinese market players to accelerate their market penetration.

Emerging Applications. In special scenarios such as mining, ports, cold regions and narrow road networks, vehicles are required to maintain a small turning radius and stable posture under operating conditions including low-adhesion surfaces, heavy loads, frequent turns and complex ramps. Meanwhile, emerging demands such as autonomous shuttle services, park shuttle systems and multi-module vehicles require higher vehicle maneuverability and controllability. Articulation systems with built-in redundancy and strong environmental adaptability can meet the requirements of complex scenarios and unmanned operation, thereby create new growth opportunities.

Future Opportunities of Global Vehicle Articulation Systems Industry

Electro-hydraulic Integration. As vehicles grow in size and operational intensity increases, articulation mechanisms need to maintain a small turning radius in constrained road networks while ensuring posture stability and safety redundancy under heavy loads and complex working conditions. Consequently, vehicle articulation systems are evolving from passive mechanical designs toward integrated electro-hydraulic architectures with sensing, actuation, and control. By incorporating multiple sensors for angle, load, temperature, and other parameters, these systems can adjust angle limits, return-to-center behavior, and damping in real time based on vehicle speed, steering input, load, and road conditions. This enables full-range control characterized by agility at low speed, stability at high speed, and automatic locking in emergencies.

Overseas Market Expansion of New Energy Buses. The overseas expansion of China’s new energy buses is creating significant development opportunities for domestic vehicle articulation system manufacturers. The rapid implementation of BRT and ART projects by Chinese complete vehicle manufacturers in regions such as Latin America, Southeast Asia, and Europe is driving the export of vehicle articulation systems as bundled components with complete vehicles. On the other

INDUSTRY OVERVIEW

hand, overseas operators prioritize total lifecycle cost and low-carbon performance, and show a preference for integrated electro-hydraulic articulation systems. Leveraging advantages in comprehensive supply chains and cost-performance ratio, Chinese market players can effectively shorten product introduction cycles and capture market share in the replacement and upgrade of vehicle articulation systems.

Lightweight and Durable Material Technology. Given the rise in operational intensity and growing pressure from energy consumption and costs, lightweight and durable materials will be widely adopted in the production of vehicle articulation systems. On the premise of ensuring load-bearing reliability, hybrid designs incorporating high-strength steel, aluminum alloy, and composite materials will be increasingly applied, combined with surface strengthening and low-friction coatings. This approach balances lightweight design, corrosion resistance, and service life, while materials continue to undergo iteration toward higher weather resistance, lower noise, and easier maintenance, thereby extending service life, reducing maintenance time, and cutting overall costs.

Entry Barriers of Global Vehicle Articulation Systems Industry

Technical Barriers. The articulation system is a highly coupled system integrating mechanics, hydraulics, electronic control, sensing, and control algorithms. It must not only achieve consistent dynamic responses across steering, braking, suspension, and vehicle stability systems, but also pass durability validation through bench testing, road testing, and trials under extreme climatic conditions. New entrants lacking cross-domain models and massive operating condition datasets will find it difficult to master the core technologies.

Talent Barriers. Manufacturers of vehicle articulation systems rely on cross-disciplinary engineering teams and experienced senior engineers, while also requiring comprehensive capabilities covering processes, quality control, and compliance. Such talents involve long training cycles and high turnover costs, and leading enterprises exhibit a distinct talent magnet effect. It is challenging for new entrants to attract talents and establish sufficient talent reserves in a short period.

Customer Resource Barriers. Vehicle manufacturers and operators place high importance on historical installation volume, application cases, and industry experience. They typically require multiple rounds of trial installation and long-duration road validation before selecting a supplier, which favours established companies with strong reputations. Lacking verifiable track records, new entrants often fail to meet the continuously rising expectations of customers. In contrast, companies that already serve leading clients generally find it easier to attract new business.

Supply Chain Barriers. Stringent requirements are imposed on the consistency and traceability of key raw materials and components. Meanwhile, enterprises need scale-based bargaining power to control costs and delivery lead times. New entrants lacking stable partners and global supply chain capabilities will find it hard to build reliable supply systems and cost advantages.

Capital Investment Barriers. In the vehicle articulation systems industry, enterprises must make substantial initial investments in production equipment, production line construction, and related infrastructure. They must also continuously invest in R&D to meet the growing requirement from vehicle manufacturers and operators for product performance and quality. These factors create significant capital investment barriers for new entrants.

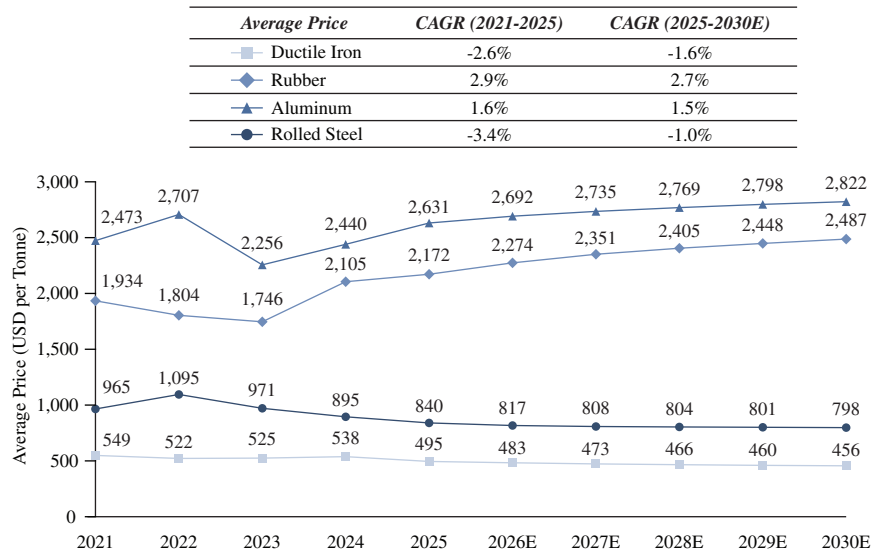
Raw Material Prices Analysis of Global Vehicle Articulation Systems Industry

The primary raw materials for vehicle articulation systems include ductile iron, rubber, aluminum, rolled steel and others. The prices of these raw materials are generally determined by manufacturing costs and are also influenced by factors such as the macroeconomic environment, supply-demand dynamics and international trade activities.

INDUSTRY OVERVIEW

In 2025, the average prices of ductile iron, rubber, aluminum and rolled steel reached USD495 per tonne, USD2,172 per tonne, USD2,631 per tonne and USD840 per tonne, with a CAGR of -2.6%, 2.9%, 1.6% and -3.4% from 2021 to 2025, respectively. By 2030, the average global prices of ductile iron, rubber, aluminum and rolled steel are expected to reach USD456 per tonne, USD2,487 per tonne, USD2,822 per tonne and USD798 per tonne, representing a CAGR of -1.6%, 2.7%, 1.5% and -1.0% from 2025 to 2030, respectively.

Average Price of Major Raw Materials (Global), 2021-2030E



Source: UN Comtrade; IMF; Frost & Sullivan Analysis

Competitive Landscape of Global Vehicle Articulation Systems Industry

The global vehicle articulation system industry has a limited number of market participants due to barriers to entry such as technology, talent, customer resources, and supply chains. As of December 31, 2025, there are approximately 10 vehicle articulation system manufacturers globally. In terms of revenue in 2025, the top three global vehicle articulation system manufacturers account for approximately 97.1% of the market share, among which our Group ranked second with a market share of approximately 10.8%.

The market size of vehicle articulation systems industry in China reached RMB450.1 million in 2025. In terms of revenue of vehicle articulation systems in China in 2025, our Group ranked second with a market share of approximately 30.0%.

Top Three Vehicle Articulation System Manufacturers in terms of Revenue (Global), 2025

Ranking	Company	Listing Status	Headquarter	Market Share (%)
1	Company A	Unlisted	Hessen, Germany	86.0%
2	Our Group	–	Jiangsu Province, China	10.8%
3	Company B	Unlisted	Emilia-Romagna, Italy	0.3%
Others				2.9%
Total				100%

INDUSTRY OVERVIEW

Notes:

- (1) Company A is a group established in 1946, engaging in the provision of articulation and gangway systems for buses and railway vehicles.
- (2) Company B is a group established in 1980, engaging in the provision of machine tool protections systems, transportation solutions and vibro-acoustic systems.

Source: Interviews Conducted by Frost & Sullivan with Experts from Leading Market Players; Frost & Sullivan Analysis

CHINA’S COMMERCIAL VEHICLE THERMAL MANAGEMENT SYSTEM INDUSTRY

Definition and Overview of Commercial Vehicle Thermal Management System Industry

The commercial vehicle thermal management system is a system designed to sense, transfer, and regulate heat from key thermal sources and loads within a commercial vehicle. It encompasses cooling and heating circuits, heat pumps and air-conditioning units, waste heat recovery, electric water pumps and electronic valves, heat exchangers and thermal storage units, as well as control strategies based on model predictive and adaptive algorithms. Its objective is to achieve temperature regulation and efficiency optimization under all operating conditions and climate environments. The commercial vehicle thermal management system is primarily applied in buses, trucks, and construction machinery, serving as a critical technology to ensure vehicle safety, efficiency, and durability.

A commercial vehicle thermal management system typically includes: (i) electric drive thermal management system, which provides bidirectional heating and cooling control and efficiency optimization for power components such as motor stators/rotors and electric drive inverters. It maintains the winding, core, and power module junction temperatures within a safe window under varying speeds and loads, suppresses demagnetization and thermal failure, and balances energy consumption with reliability; (ii) battery thermal management system, which integrates thermal and safety management for battery packs, modules, and cells. It keeps cells within the optimal temperature range, reduces internal resistance and degradation rates, shortens fast-charging time, prevents thermal runaway propagation, and collaborates with the battery management system to achieve longevity-friendly and energy-optimal operation; and (iii) cabin thermal management system, which provides cooling, heating, dehumidification, and air-quality assurance for the passenger compartment through an integrated heat pump and air-conditioning system. By identifying operating conditions and predicting thermal loads, it dynamically allocates airflow and heat-exchange capacity, reducing energy consumption while ensuring comfort, visibility safety, range stability, and an enhanced riding experience.

A BEC-TMS refers to a coordinated solution that integrates the electric drive, battery, and cabin thermal management subsystems. Traditional commercial vehicle thermal management systems operate independently, occupying more space, consuming more energy, and lacking the ability to exchange or recover heat across components. In contrast, the BEC-TMS uses a unified electronic control unit and sophisticated valve-circuit design to coordinate the redistribution of battery waste heat, motor waste heat, and cabin heating demand. This enables comprehensive thermal management, significantly improving system efficiency, reducing energy consumption, and extending component lifespan.

In the field of transportation equipment system, the commercial vehicle thermal management system forms the foundation for safe and efficient operations. By ensuring the reliable functioning of core components, it directly enhances vehicle uptime and operational safety while preventing extreme risks such as battery thermal runaway. At the same time, optimized thermal management significantly reduces energy consumption, thereby extending driving range or lowering operating costs. Moreover, as part of the vehicle’s overall energy management architecture, the commercial vehicle thermal management system can collaborate with cloud-based dispatching platforms to dynamically adjust strategies based on real-time operating conditions and external environments.

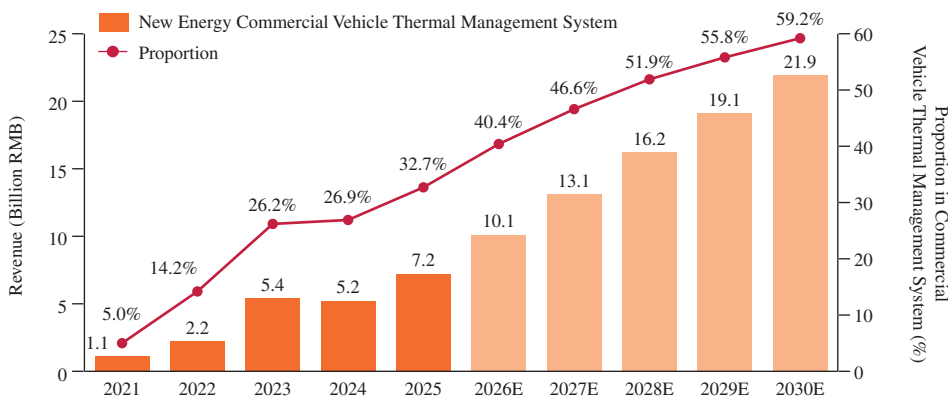
INDUSTRY OVERVIEW

Market Size of China’s New Energy Commercial Vehicle Thermal Management System Industry

The market size of the new energy commercial vehicle thermal management system industry in China in terms of revenue reached RMB7.2 billion in 2025, representing a CAGR of 60.0% from 2021 to 2025. By 2030, the market size of the new energy commercial vehicle thermal management system industry in China in terms of revenue is projected to reach RMB21.9 billion, with a CAGR of 24.9% from 2025 to 2030. With the continuous penetration of new energy commercial vehicles, the proportion of new energy commercial vehicle thermal management system in overall commercial vehicle thermal management system grew from 5.0% in 2021 to 32.7% in 2025, and is expected to further increase to 59.2% by 2030.

Market Size of New Energy Commercial Vehicle Thermal Management System Industry (China), 2021-2030E

Revenue	CAGR (2021-2025)	CAGR (2025-2030E)
New Energy Commercial Vehicle Thermal Management System	60.0%	24.9%

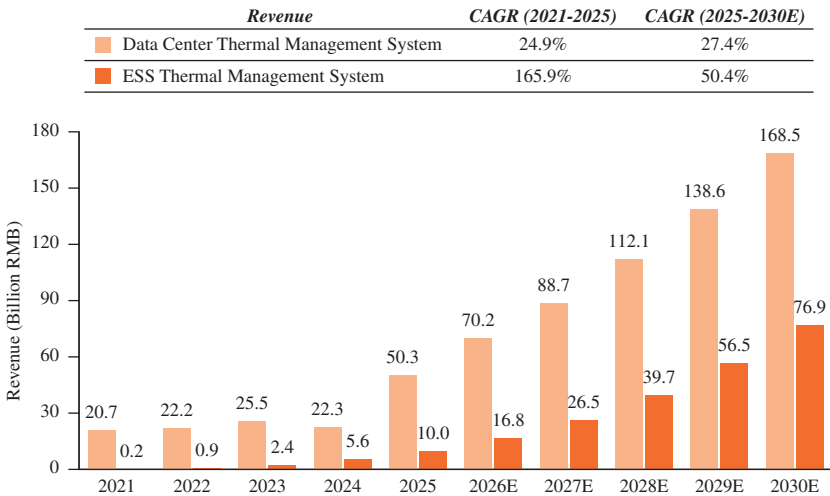


Source: China Association of Automobile Manufacturers; Frost & Sullivan Analysis

Manufacturers of new energy commercial vehicle thermal management systems can extend their technologies and products to broader application scenarios, such as data center thermal management and energy storage system (ESS) thermal management, as these applications share highly similar core thermal-management principles, including liquid-cooling technology, precise temperature control, and energy-efficiency optimization. The high-reliability and high-heat-flux cooling solutions accumulated by commercial vehicle thermal management system companies under complex operating conditions can effectively meet the demand for efficient and reliable heat dissipation in data centers and energy storage systems, enabling technological synergy and cross-sector market expansion. In 2025, the market size of data center thermal management system industry and ESS thermal management system industry in China in terms of revenue reached RMB50.3 billion and RMB10.0 billion, with a CAGR of 24.9% and 165.9% from 2021 to 2025, respectively. By 2030, the market size of data center thermal management system industry and ESS thermal management system industry in China in terms of revenue is expected to reach RMB168.5 billion and RMB76.9 billion, with a CAGR of 27.4% and 50.4% from 2025 to 2030.

INDUSTRY OVERVIEW

Market Size of Data Center and ESS Thermal Management System Industry (China), 2021-2030E



Source: China Academy of Information and Communications Technology; China Energy Storage Alliance; Frost & Sullivan Analysis

Market Drivers of China’s Commercial Vehicle Thermal Management System Industry

Favorable policies. In 2024, the Ministry of Transport and twelve other departments jointly issued the “Action Plan for Large-Scale Equipment Upgrades in the Transportation Sector (《交通運輸大規模設備更新行動方案》)”, which calls for accelerating the electrification of urban buses and promoting the orderly adoption of new energy commercial freight vehicles. Policy direction is driving commercial vehicle powertrains toward hybridization and low-carbon transformation, directly increasing the demand for thermal management of batteries, electric motors, and related systems. At the same time, commercial vehicles must operate under carbon-emission and energy-efficiency assessment frameworks. Efficient thermal management systems can significantly reduce cooling energy consumption, improve overall vehicle thermal efficiency, and slow battery degradation, making them a critical pathway to achieving low-carbon and energy-efficiency targets.

Rising penetration of new energy commercial vehicles. In recent years, China’s new energy commercial vehicle sector has grown rapidly. From 2021 to 2025, the penetration rate of new energy commercial vehicles increased from less than 5% to around 20%. As application scenarios continue to expand and penetration continues to rise, demand for thermal management systems grows accordingly. Compared with the per-vehicle value of thermal management systems in traditional fuel commercial vehicles, the per-vehicle value of thermal management systems in new energy commercial vehicles has increased by more than threefold. This creates substantial growth potential for the commercial vehicle thermal management system industry and enhances the cost-effectiveness of R&D and large-scale production.

Demand for adaptability in harsh operating conditions. Commercial vehicles operate in highly diverse and demanding environments, from long-haul logistics to mining operations, placing far higher requirements on thermal management systems than passenger vehicles. On one hand, high-voltage fast-charging technology improves energy-replenishment efficiency but requires thermal management systems with strong instantaneous heat-dissipation capability. On the other hand, all-climate adaptability is essential for commercial vehicles; reliable performance in extremely cold regions and stable operation in high-temperature environments both depend on robust thermal management systems. As a result, the demanding nature of commercial vehicle applications continues to drive technological advancements in commercial vehicle thermal management systems.

INDUSTRY OVERVIEW

Increasing downstream demand for data center and ESS. In recent years, the rapid development of the AI and new energy sectors has driven the large-scale expansion of data centers and the energy-storage industry. Against this backdrop, the requirements for operational stability and safety in data center and ESS continue to rise, further highlighting the critical role of thermal management system in ensuring reliable equipment performance and maintaining high energy-efficiency levels. As a result, commercial vehicle thermal-management system manufacturers with mature technological expertise are accelerating the extension of their capabilities into the data center and ESS sectors, creating new avenues for business growth.

Future Opportunities of China’s Commercial Vehicle Thermal Management System Industry

Integration of thermal management system. The BEC-TMS has evolved from a set of dispersed, independent modules into a highly integrated architecture, enabling unified management of thermal loads from the battery, electric drive, and cabin. This allows efficient heat circulation and on-demand thermal allocation, significantly reducing energy consumption and extending driving range. In addition, the BEC-TMS shortens OEM integration cycles, enhances economies of scale and component commonality, and facilitates rapid industry replication and cost reduction.

Improving intelligence in thermal management system. Artificial intelligence and big-data technologies are increasingly embedded in the commercial vehicle thermal management system. Leveraging intelligent algorithms and cloud-based data, the system can predict driving patterns, analyze real-time operating conditions and environmental changes, and dynamically adjust thermal management strategies. This enables refined energy management and personalized comfort control, further improving energy efficiency without increasing hardware costs.

Modularization of thermal management system. By integrating common components into standardized modules, the system can flexibly accommodate the diverse technical pathways and complex operating scenarios of commercial vehicles. Modular design also significantly shortens vehicle integration and validation cycles and enables rapid customization and scalability based on vehicle types and application scenarios.

Competitive Landscape of China’s New Energy Commercial Vehicle Thermal Management System Industry

China’s new energy commercial vehicle thermal management system industry is relatively concentrated. Leading companies have leveraged their first-mover advantages to accumulate expertise in core component development and system engineering, and they also possess strong technical capabilities in system integration. As of December 31, 2025, there were approximately 100 market participants in China’s new energy commercial vehicle thermal management system industry. Based on revenue in 2025, the top five new energy commercial vehicle thermal management system manufacturers accounted for around 50% of the market, among which our Group accounted for approximately 0.1%. As of the latest practicable date, our Group is among the few companies in China that have mastered BEC-TMS technology.

SOURCE AND RELIABILITY OF INFORMATION

In connection with the [REDACTED], we engaged an independent market research consultant, Frost & Sullivan, to conduct an analysis of, and to prepare an industry report on the industries where we operate with a commission fee of RMB480,000. Founded in 1961, Frost & Sullivan is an independent global consulting firm that conducts industry research and prepares industry report on a wide range of industries, among other services. The information from Frost & Sullivan disclosed in this document is extracted from the Frost & Sullivan Report with its consent.

In compiling and preparing the Frost & Sullivan Report, Frost & Sullivan used the following key methodologies to collect multiple sources, validate the collected data and information, and cross-check each respondent’s information and expressions against those of others: (i) detailed

INDUSTRY OVERVIEW

primary research, which involved discussing the status of the industry with leading industry participants and industry experts; and (ii) secondary research, which involved reviewing published sources including reports of market participants, independent research reports and data based on Frost & Sullivan’s own research database.

Frost & Sullivan adopted the following primary assumptions while making projections for preparing the Frost & Sullivan Report: (i) global and China’s economy is likely to maintain steady growth in the next decade; (ii) global and China’s social, economic and political environment is likely to remain stable in the forecast period; and (iii) market drivers such as urban transport capacity and spatial constraints, growing expectations for passenger experience, optimization of total lifecycle costs, among others.

Except as otherwise noted, all of the data and forecasts contained in this section are derived from the Frost & Sullivan Report. Our Directors confirm that after taking reasonable care, there is no material adverse change in the overall market information since the date of the Frost & Sullivan Report that would materially qualify, contradict, or have an impact on such information.