

## Electric Bus Battery Pack - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2024 -2029)

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### Abstracts

The Electric Bus Battery Pack Market size is estimated at 4.98 billion USD in 2024, and is expected to reach 7.42 billion USD by 2029, growing at a CAGR of 8.28% during the forecast period (2024-2029).

Rising environmental concerns and governmental initiatives are driving the growth of the global electric bus market, supported by expansions in battery manufacturing

Buses remain a popular mode of transportation globally, but rising environmental concerns and governmental moves to phase out conventional vehicles, like diesel and petrol buses, are fueling the demand for e-buses. However, factors like the COVID-19 pandemic led to a dip in e-bus demand in 2020. As the EV market rebounded, e-bus sales surged by 32% in 2021, propelling battery pack sales up by 30.9% in the same year.

The growing demand for electric buses, driven by expanding public transportation services, is spurring the need for diverse battery types in both battery electric and plugin hybrid buses. Notably, the US witnessed a remarkable 66% surge in transit electric bus sales in 2022 compared to the previous year. States like California are setting ambitious zero-emission targets, aiming to sell only zero-emission buses by 2030. These developments collectively pushed the global demand for bus batteries up by 15% in 2022 over 2021.

In April 2023, Lion Electric, a Canada-based battery company, inaugurated a new



manufacturing facility dedicated to batteries for medium- and heavy-duty vehicles, including buses. The company was eyeing a production capacity of 1.7 GWh by the close of 2023. Such initiatives, seen not only in Canada but globally, are poised to bolster the demand for electric bus batteries in the coming years.

Asia-Pacific, led by China, dominates the global EV battery pack market with remarkable growth

The global electric bus battery pack market witnessed significant growth during the historical period (2017-2021), driven by the increasing adoption of electric buses in several countries worldwide. The adoption of electric buses is driven by the growing need for clean and green public transportation to combat air pollution and greenhouse gas emissions. Additionally, the continuous research and development activities undertaken by leading battery manufacturers have resulted in the development of advanced electric bus battery packs with high energy density and longer lifespan, which are an ideal replacement for traditional fossil fuel-based buses.

In the base year of 2022-2023, the global electric bus battery pack market is expected to witness steady growth, driven by several factors such as the increasing need for ecofriendly public transportation, the rising demand for electric vehicles, and the government initiatives to promote the adoption of clean energy. Furthermore, the growing focus on renewable energy and sustainable infrastructure is expected to boost the demand for electric buses in various regions across the world.

The global electric bus battery pack market is expected to witness significant growth, driven by the increasing adoption of electric buses, the rising need for clean and green public transportation, and the expanding electric vehicle market during the forecast (2023-2029). Furthermore, leading OEMs and battery manufacturers are investing heavily in research and development to create new and advanced technologies that offer better performance and efficiency, which is expected to further boost the growth of the market.

Electric Bus Battery Pack Market Trends

BYD AND TESLA ARE LEADING THE CHARGE IN THE EV MARKET AND SHAPING THE FUTURE

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In 2022, BYD was the market leader in electric vehicle sales and held a share of 13.3%. BYD's leading position can be attributed to several factors. It has been an early and prominent player in the EV industry, with a strong focus on producing electric vehicles and related technologies. The company's early entry into the market allowed it to establish a solid foundation and gain recognition among consumers. BYD has also been actively expanding its operations globally, forging partnerships, and investing in research and development, all of which contribute to its leading position.

Tesla has been at the forefront of electric vehicle innovation and has played a crucial role in popularizing EVs worldwide. Tesla was a significant player in the EV industry in 2022, with a market share of 12.2%. Tesla's strong brand image, cutting-edge technology, and extensive Supercharger network have contributed to its success.

Among the other players in the EV market, there are several notable companies that hold significant market shares. BMW's established reputation in the automotive industry, coupled with its commitment to electric mobility through its "BMW i" sub-brand, has contributed to its market presence. Similarly, Volkswagen, which held a market share of 3.9% in 2022, has been actively investing in electric mobility under its "Volkswagen Group" umbrella. These companies, along with others like Mercedes-Benz, Kia, and Hyundai, are recolonizing the EV industry by leveraging their existing brand recognition, introducing compelling electric vehicle models, and investing in technology to enhance the range and performance of their electric offerings.

#### TESLA AND BYD DOMINATED THE BEST-SELLING EV MODELS OF 2022

The best-selling EV models in 2022 were dominated by two key OEMs: Tesla and BYD. Tesla held a strong market position with two of its models, the Model Y and Model 3, capturing the first and third spots, respectively. The Tesla Model Y was the most popular plug-in electric vehicle, with global unit sales of roughly 771,300 in 2022. That year, deliveries of Tesla's Model 3 and Model Y surpassed 1.2 million, a Y-o-Y increase of 36.77% for Tesla's best-selling models. While two of the five best-selling plug-in electric vehicle (PEV) models were Tesla-branded, the battery electric vehicle manufacturer faced competition from Asian brands in 2022. China-based BYD overtook Tesla as the best-selling PEV brand in 2022, relying on a large offering of plug-in hybrid electric models. Following closely behind the Tesla Model Y, the BYD Song Plus (BEV + PHEV) secured the second spot, with sales reaching 477,090 units. BYD's established presence in the Chinese market, along with its reputation for producing



reliable and technologically advanced electric vehicles, likely contributed to the strong sales performance of the Song Plus models.

The Volkswagen ID.4 stood out among the best-selling EV models as the only European PEV (Plug-in Electric Vehicle) in the top ten. With a sales volume of 174,090 units in 2022, the ID.4 demonstrated Volkswagen's commitment to electric mobility and its growing presence in the EV market.

Overall, these top-performing EV models from Tesla and BYD, along with other notable contenders like the Wuling Hong Guang MINI EV and Volkswagen ID.4, demonstrate the increasing consumer demand for electric vehicles.

Electric Bus Battery Pack Industry Overview

The Electric Bus Battery Pack Market is fairly consolidated, with the top five companies occupying 85.35%. The major players in this market are BYD Company Ltd., China Aviation Battery Co. Ltd. (CALB), Contemporary Amperex Technology Co. Ltd. (CATL), Gotion High-Tech Co. Ltd. and Guoxuan High-tech Co. Ltd. (sorted alphabetically).

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