Electric Bus Market by Propulsion (BEV, FCEV), Battery (NMC, LFP, NCA, Other), Length (<9m, 9-14m, >14m), Seating Capacity, Range, Battery Capacity, Power Output, Level of Autonomy, Application, Component, Consumer and Region - Global Forecast to 2030

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Report description:

The electric bus market is largely driven by decreased emission limits in upcoming emission regulations and increased demand for sustainable mobility. However, as this market is at its initial growth phase, the major restraint faced by this industry is the higher cost of electric buses than conventional diesel buses due to the high cost of batteries. The biggest challenge for this market is safety concerns and the low range associated with batteries.
"Above 400 kWh is estimated to be the fastest growing battery capacity for electric buses."
Electric buses usually offer the above 400 kWh battery capacity range for intercity or long-distance commutes. The developments in battery technologies and the reduction in prices of batteries have positively impacted the growth of above 400 kWh batteries. In their product offerings, many leading OEMs have introduced electric buses with above 400 kWh battery capacity. For instance, in 2021, AB Volvo (Germany) launched its electric bus BZL Electric with a battery capacity of 470 kWh.
The above 400 kWh battery capacity segment is projected to be the fastest-growing battery segment during the forecast period. Asia Pacific leads the above 400 kWh segment of the electric bus market. This is mainly because of the region's focus on R&D in battery technologies. It is also expected that the declining battery prices and the ongoing innovations in battery compositions will drive market growth in this region during the forecast period.

The above 200 miles range electric buses will be the fastest-growing market.
The incorporation of electric buses in long-distance commutes is gradually increasing, and electric bus manufacturers have

recognized the need for electric buses with a higher range per charge. Hence, electric buses above 200 miles are expected to be the fastest-growing market over the forecast period. The key reason is - increased R&D in battery technologies by leading manufacturers and OEMs. Manufacturers are actively developing batteries that offer a higher range. For instance, Proterra's (US) fifth-generation battery-electric transit bus features a new streamlined vehicle design, maximizing the energy stored onboard the vehicle to increase power and range up to 329 miles. The Proterra ZX5+ model can travel up to 240 miles with a 440-kWh battery on a single charge.

North America is expected to command the above 200 miles segment during the forecast period. This is mainly because the region has a relatively more developed charging infrastructure, which aids the easier incorporation of electric buses in long-distance commutes. Many North American cities and transit agencies have installed high-capacity charging stations along major transit corridors to support the deployment of electric buses. For instance, the Toronto Transit Commission has installed ten fast-charging stations along a busy transit corridor. Furthermore, many North American OEMs have product offerings above 200 miles of range, further driving the growth of electric buses with above 200 miles range.

North America is expected to be the fastest growing second largest electric bus market.

North America is home to major electric bus manufacturers and is renowned for innovations, cutting-edge R&D, and technological advancements in electric buses. Government support through incentives and tax benefits, the presence of individual investors, and technological edge drive the North American electric bus market. Robust infrastructure, improved power grid, government support, and increased adoption have enabled OEMs to develop electric buses and coaches of varying specifications. For instance, in September 2021, BYD (China) announced that it would build battery-electric buses for Tampa International Airport in Florida at the company's US Coach & Bus factory in Lancaster, California.

North America has many OEMs, such as Proterra, NFI Group, and Blue Bird Corporation, which provide innovative electric buses incorporated with advanced technologies. The increasing demand for zero-emission public transport will further boost the North American electric bus market. Many policies have been drafted to promote the adoption of electric buses in the region. Toronto has announced that it will convert 50% of its fleets into electric buses by 2050.

The US is North America's largest and fastest-growing market for electric buses. The country has a well-developed power grid, charging infrastructure, and a strong economy. In September 2021, Capital Metro in Austin, Texas, approved a plan to purchase 26 40-foot Proterra ZX5 Max electric transit buses. Government mandates and the willingness to adopt new technologies would fuel the US electric bus market. Canada also has schemes and funding by the government that will encourage private fleets to adopt electric buses and coaches. Such government schemes are driving the North American electric bus market.

Breakdown of primaries

The study contains various industry experts' insights, from component suppliers to Tier 1 companies and OEMs. The break-up of the primaries is as follows:

- By Company Type: OEMs - 80%, Tier I/Tier II players - 10%
- By Designation: C level - 70%, Others- 30%
- By Region: Asia Pacific - 70%, Europe - 20%, North America - 10%

The key players in the Electric bus market are BYD (China), Yutong (China), Proterra (US), CAF (Solaris) (Spain), VDL Groep (Netherlands), and AB Volvo (Sweden). The key strategies adopted by major companies to sustain their position in the market are expansions, contracts and agreements, and partnerships.

Research Coverage

Electric Bus Market By Propulsion (BEV, FCEV), Battery (NMC, LFP, NCA, Other), Length (<9m, 9-14m, >14m), Seating Capacity, Range, Battery Capacity, Power Output, Level of Autonomy, Application, Component, Consumer and Region - Global Forecast to 2030

Reasons to buy this report:

The report will help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall electric bus market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and to plan suitable go-to-market strategies. The report also

helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

-□ Analysis of key drivers (The increasing need for sustainable mass transit solutions and the need to reduce the GHG emissions), restraints (Safety Converns in EV batteries and high development costs), opportunities (Transition towards hydrogen fuel cell electric mobility, electric bus as a service), and challenges (High cost of developing charging infrastructure) influencing the growth of the electric bus market

-□ Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the electric bus market

-□Market Development: Comprehensive information about lucrative markets - the report analyses the electric bus market across varied regions

-□Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the electric bus market

-□Competitive Assessment: In-depth assessment of market shares, growth strategies and service offerings of leading players like BYD (Build Your Dreams) (China), Proterra (US), CRRC Electric (China), Yutong (China), and AB Volvo (Sweden), among others in the electric bus market

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