

North America Electric Vehicle Market by Vehicle Type (Passenger Vehicle, LCV, HCV, Two-wheeler, e-Scooters & Bikes); Propulsion Type (BEV, FCEV, HEV); Power Output (Less Than 100kW, 100 kW to 250 kW); End Use, Charging Standard, and Geography - Regional Forecast to 2029

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# **Abstracts**

North American Electric Vehicle Market by Vehicle Type (Passenger Vehicle, LCV, HCV, Two-wheeler), Propulsion Type (BEV, FCEV, HEV), Power Output (Less Than 100kW, 100 kW to 250 kW); End Use, Charging Standard, and Country—Regional Forecast to 2029

The research report titled, 'North American Electric Vehicle Market by Vehicle Type (Passenger Vehicle, LCV, HCV, Two-wheeler), Propulsion Type (BEV, FCEV, HEV), Power Output (Less Than 100kW, 100 kW to 250 kW); End Use, Charging Standard, and Country—Regional Forecast to 2029", provides an in-depth analysis of the electric vehicles market across North America and emphasizes the current market size, market shares, recent developments, and forecast till 2029.

The North America Electric Vehicle Market is expected to record a CAGR of 39.4% from 2022 to 2029 to reach \$570.47 billion by 2029 from an estimated \$55.81 billion in 2022. By volume, this market is expected to reach 7.62 million units by 2029 from an estimated 1.54 million units in 2022, at a CAGR of 25.7% during the forecast period.

The growth of this market is attributed to supportive government policies and regulations, rising environmental concerns, increasing adoption of electric mobility. The growing adoption of autonomous driving vehicles, increasing adoption of electric vans



and trucks for delivery, and increasing trend of shared mobility offer lucrative growth opportunities for this market's growth.

Based on vehicle type, the light commercial vehicles segment is expected to grow at the highest CAGR during the forecast period. The high growth is mainly driven by the growing awareness regarding the role of electric vehicles in reducing emissions, increase in demand for electric vehicles to reduce fleet emissions, and stringent government rules and regulations towards vehicle emissions. Electric LCVs are a key element of urban distribution and transport systems and offer a promising low-emission solution. They require low maintenance and have relatively lower operating costs, as there is no need to lubricate the engines nor the maintenance costs associated with gas engines. Electric LCVs contribute to reducing greenhouse gas emissions and reducing the dependence on fuels. These are the key factors driving the adoption of electric light commercial vehicles.

Based on propulsion type, the fuel cell electric vehicles segment is expected to grow at the highest CAGR during the forecast period. The high growth is mainly driven by the increasing demand for vehicles with low carbon emissions, strict carbon emission norms, a growing emphasis on the adoption of FCEVs due to advantages such as fast refueling and increasing government initiatives and investments for advancing fuel cell technology. Fuel cells are lighter and smaller, more expensive than conventional electric cells and hybrid cells, and are suitable for medium-large and long-range vehicles. However, insufficient hydrogen infrastructure and high vehicle costs are the major factors restraining the growth of this segment. To counter this, governments across the region are investing in hydrogen fuel cell charging stations and technologies.

Based on power output, the more than 250kW segment is expected to grow at the highest CAGR during the forecast period. The growth of this segment is attributed to the increasing adoption of electric buses and trucks for heavy applications, the implementation of numerous wireless EV charging pilot projects for heavy commercial vehicles, and the increasing adoption of electric mobility in emerging economies. Several companies are focused on ultra-high-power charging systems due to the growing need to produce new electric passenger vehicles, e-bus, and e-truck models. For instance, in 2019, Tesla, Inc. (U.S.) introduced the third generation of its superchargers called the ultra-fast "Supercharger V3," having a power output of up to 250kW. The supercharger allows for fast charging, reducing charging time by an average of approximately 50%.

Based on end use, the commercial use segment is expected to grow at the highest



CAGR during the forecast period. The growth is mainly driven by the increase in fuel prices and stringent emission norms set by governments, the growing adoption of autonomous delivery vehicles, and the increasing adoption of electric buses and trucks. Electric vehicles being used for commercial applications will be an increasingly common sight on roads in the future. Electric commercial vehicles help lower greenhouse gas emissions, reduce dependence on fossil fuels, ensure smooth operation, and meet the latest emissions regulations.

Based on country, Canada is expected to record the highest CAGR during the forecast period. The local government's policies majorly drive the Canadian EV market and incentives, increased driving range, and affordable vehicle prices due to increased spending of consumers on environment-friendly automobiles and developing infrastructure resulting in faster charging times. Owing to these factors, in 2018, Canada registered a sale of 43,000 units of EVs, positioning itself among the top 10 leading countries in the global market.

The key players operating in the North American electric vehicles market are AB Volvo (Sweden), BMW Group (Germany), BYD Company Ltd. (China), Daimler AG (Germany), Faraday & Future Inc. (U.S.), Tata Motors Limited (India), Ford Motor Company (U.S.), General Motors Company (U.S.), Honda Motor Co., Ltd. (Japan), Hyundai Motor Company (South Korea), Zero Electric Vehicles Inc. (U.S.), Nissan Motor Co., Ltd. (Japan), Rivian LLC (U.S.), Tesla, Inc. (U.S.), Volkswagen AG (Germany).

Key Questions Answered in the Report-

Which are the high growth market segments in terms of vehicle type, propulsion type, power output, charging standard, end use, and country?

What is the historical market size for electric vehicles across North America?

What are the market forecasts and estimates for the period 2022-2029?

What are the major drivers, restraints, opportunities, and challenges in the North American electric vehicles market?

Who are the major players in the market, and what are their market shares?

How is the competitive landscape for the North American electric vehicles



market?

What are the recent developments in the North American electric vehicles market?

What are the different strategies adopted by the major players in the market?

Which are the high-growth countries?

Who are the local emerging players in the North American electric vehicles market, and how do they compete with other players?

Scope of the Report

North American Electric Vehicles Market, by Vehicle Type

Passenger Vehicles

**Light Commercial Vehicles** 

**Heavy Commercial Vehicles** 

Two-wheelers

e-Scooters & Bikes

North American Electric Vehicles Market, by Propulsion Type

Hybrid Electric Vehicles

Pure Hybrid Electric Vehicles

Plug-In Hybrid Electric Vehicles

**Battery Electric Vehicles** 

Fuel Cell Electric Vehicles



North American Electric Vehicles Market, by Power Output
Less Than 100 KW
100 KW to 250 KW
More Than 250 KW
North American Electric Vehicles Market, by End Use
Private Use
Commercial Use
Shared Mobility
Micromobility
Public Transport
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North American Electric Vehicles Market, by Country
U.S.
Canada



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