

EV Charging Station Market by Application, Level of Charging, Charging Point, Charging Infrastructure, Operation, Electric Bus Charging, DC Fast Charging, Connectivity, Connection Phase, Service, Installation and Region - Global Forecast to 2027

Market Report | 2023-03-29 | 405 pages | MarketsandMarkets

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Report description:

The global EV Charging Station market is projected to grow from USD 11.9 Billion in 2022 to USD 76.9 Billion by 2027, registering a CAGR of 45.0% from 2022 to 2027. EVs have been reducing in price over the years with decreasing EV battery prices. The price of EV batteries was as high as USD 1,100 per kW in the 2010s, which is reducing each following year. This led to a decreasing cost of EVs around the world. Nowadays, affordable EVs are available in many countries around the world. A breakeven point is expected, where EV price will be equivalent to ICE vehicles. According to various EV respondents, this may happen around 2027. The EV market will grow much faster and replace the demand for ICE vehicles. Thus, the growing demand for EVs will lead to increased demand for charging stations.

"The Level 1 Ultrafast DC segment is expected to account for the largest share in 2027."

Faster charging stations were developed to cater to High Power Charging Station (HPCS) demand. Since 2018, ABB, Delta, etc., have developed Level 1 Ultra Fast DC (150-349 kW) for the market. These chargers found a fast-growing demand in China, US, and Europe. With charging speeds of a full charge in around 10-20 mins, these chargers started replacing demand for other fast and slow DC chargers. These chargers have gained prominence with companies such as IONITY (Germany), ABB (Switzerland), Schneider Electric (France), Delta (US), Siemens (Germany), Tritium (Australia), Bosch (Germany), BTC, and Hyundai (South Korea).

"The AC charger segment is expected to account for the largest market share in 2022."

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AC chargers are commonly used for home charging and in semi-public and private charging stations. In semi-public charging, AC normal charging stations can be found in workplaces, public parking lots, or shopping centers, and they require payment or membership to access. These charging stations offer a convenient way for EV drivers to top up their batteries while carrying out daily activities and promote EV adoption. AC normal charging is often the primary method for private charging, allowing EV owners to charge their vehicles overnight and have a full battery in the morning.

"Rest of the World is expected to witness significant growth rate during the forecast period."

The rest of the World comprises Brazil, South Africa, Mexico, and Others. Brazil has made significant strides in EV charging infrastructure, intending to install 30,000 charging stations by 2030. The country has several local EV manufacturers, such as BYD and the Brazilian company Agrale. However, the high cost of EVs remains a barrier to adoption. Chile has a relatively small EV market, but the government has set ambitious targets to increase the number of EVs on the road. The country aims to have 40,000 EVs on the road by 2022 and 100,000 by 2025. The government is investing in the development of charging infrastructure, with plans to install 1,500 public charging stations by 2022. Mexico is the second-largest economy in the region and has a growing EV market. However, the charging infrastructure in the country is still relatively underdeveloped. The government has set a target of installing 4,000 public charging stations by 2024, but progress has been slow. South Africa has a small but growing EV market, with several international car manufacturers offering EV models. However, the lack of charging infrastructure remains a major barrier to adoption. The government has announced plans to install 2,500 public charging stations by 2030, but progress has been slow due to funding constraints.

Overall, the EV charging station market in the Rest of the World is growing, but the level of development varies widely among countries. Governments in these regions are increasingly investing in charging infrastructure to support the growth of the EV market, but progress is often slow due to funding constraints and other barriers.

In-depth interviews were conducted with CEOs, marketing directors, other innovation and technology directors, and executives from various key organizations operating in this market.

- -□By Company Type: Tier I 67%, Others 9%, and OEMs 24%
- By Designation: C Level Executives 33%, Directors 52%, and Others 15%
- By Region: North America 40%, Europe 20%, Asia Pacific 28%, RoW 3%, China 6% and Middle East 3% The electric vehicle charging station market is dominated by major EV charging players, include ABB (Switzerland), Shell (Netherlands), ChargePoint (US), Tesla (US), and BYD (China).

Research Coverage:

This research report categorizes EV charging station market by level of charging (level 1, level 2, and level 3), application (private, semi-public, and public), based on charging point type [AC (normal charging), DC (super charging), and inductive charging], charging infrastructure type (CCS, CHAdeMO, normal chargers, Tesla superchargers, GB/T Fast, and Type 2), electric bus charging type (off-board top-down pantographs, on-board bottom-up pantographs, and charging via connectors), charging service type (EV charging services and battery swapping services), connectivity (non-connected charging stations and smart connected charging stations), DC fast charging type [Slow DC (<49 kW), Fast DC (50-149 kW) and Level 1 Ultra Fast DC (150-349 kW), and Level 2 Ultra Fast DC (>349 kW), installation type (portable chargers and fixed chargers), operation (mode 1, mode 2, mode 3, and mode 4), connection phase (single phase and three phase), and Region (China, Asia Pacific, Europe, North America, Middle East and Rest of the World). The scope of the report covers detailed information regarding the major factors, such as drivers, restraints, challenges, and opportunities, influencing the growth of the EV charging station market. A detailed analysis of the key industry players has been done to provide insights into their business overview, solutions, and services; key strategies; Contracts, partnerships, agreements, new product & service launches, mergers and acquisitions, and recent EV charging station market developments. This report covers the competitive analysis of upcoming startups in the EV charging station market ecosystem.

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 EV charging station market and the subsegments. This report will help stakeholders understand the

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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 market pulse and provides information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

- Analysis of key drivers (Rising EV sales worldwide, Government policies and subsidies, Limited driving range, Reduced EV prices), restraints (Lack of standardization of charging infrastructure, Installing and maintaining EV charging stations, Primitive power grid infrastructure), opportunities (V2G EV charging stations, IoT and smart infrastructure, Development of EV charging stations, Growing demand for battery swapping stations, Plans for smart city deployment, Shift to smart EV chargers), and challenges (Higher initial cost of EVs than ICE vehicles, Stringent rules for installation, Dependence on fossil fuels and their limited production, Shortage of lithium) influencing the growth of the EV charging station market
- Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the EV charging station market
- Market Development: Comprehensive information about lucrative markets the report analyses the EV charging station market across varied regions
- Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the EV charging station market
- Competitive Assessment: In-depth assessment of market shares, growth strategies and service offerings of leading players like ABB (Switzerland), Shell (Netherlands), ChargePoint (US), Tesla (US), and BYD (China), among others in the EV charging station market

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