## 美國電動車市場分析

An／Analysis of U．S．Electris VehiclesMarket

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## Introduction

The global Electric Vehicle（EV）market share has taken a terrific leap forward in the past decade，and the trend is expected to grow faster．Shifting to all－electric options in hopes of creating a cleaner and more environmentally sustainable world．In terms of sales， the global electric vehicles market has experienced a tremendous increase，but still the trends show that，we have only seen a fraction of vast potential of this market．Studies estimate that global EV market will hit $10 \%$ of global passenger vehicle sales by $2025,28 \%$ by 2030 and $58 \%$ by 2040.

The key players of this market are China，Europe，and the US．China is anticipated to hold $49 \%$ of the global EV market while Europe is likely to account for $27 \%$ ．The US will hold $14 \%$ by 2030 ．Chart 1 below exhibits the monthly sales of electric cars in major car markets（China，Europe and the US）in 2021 and in comparison with 2020.

In 2019, 2.2 million electric cars were sold, representing just $2.5 \%$ of global car sales. In 2020, the overall car market contracted but electric car sales experienced a growth, climbing to 3 million and representing $4.1 \%$ of total car sales. In 2021, electric car sales were more than doubled to 6.6 million, representing close to $9 \%$ of the global car market and more than tripling their market share from two years earlier. All the net growth in global car sales in 2021 came from electric cars.

## The US Market

While the US lags behind China and the European Union is in its transition to EVs, the US is implementing procedures that would benefit the adoption in the near future. The U.S. electric vehicle market size was USD 24.03 billion in 2020 and it's expected to grow to USD 137.43 billion in 2028 at a CAGR of $25.4 \%$ in the 2021-2028 period.

Plans to construct a nationwide network of charging stations and improving EV batteries are currently being implemented. The US government has promised to set up 50,000 individual chargers, which is five times more than the current number, in 28,000 new charging stations by 2030, and this is expected to meet half the country's charging demands. This is in line with the government's plan addressing climate change and addressing the needs of environmental justice communities in the United States as their two important priorities. The Biden administration has concurrently taken substantial steps to build new regulatory programs not only to restore the environmental protections cancelled during Trump's presidency, but to substitute them with even more determined requirements. Therefore, the US would focus further on sustainable development matters over the coming years, which will be favourable for EV adoption.

Last year, the country made an impressive return to the electric car market as sales were more than doubled to surpass half a million. The overall US car market recovered as well, but electric cars doubled their share to $4.5 \%$. Chart 2 below illustrates electric cars sales in the country within the last two years.
sales of new light-duty plug-in electric vehicles, including all-electric vehicles (EVs) and plug-in hybrid electric vehicles (PHEVs), almost doubled from 308,000 in 2020 to 608,000 in 2021. EV sales accounted for $73 \%$ of all plug-in electric vehicle sales in 2021. EV sales raised by $85 \%$ from 2020 to 2021, while sales of PHEVs were more than doubled, with an increase of $138 \%$ over the previous year. The fast increase in plug-in electric vehicle sales from 2020 to 2021 is outstanding in the context of overall light-duty vehicle sales, which increased by only $3 \%$ during the same period.

Hybrid, plug-in hybrid, and electric vehicle sales in the United States have increased in recent months as sales of non-hybrid internal combustion engine (ICE) vehicles fuelled by gasoline or diesel decreased. In the fourth quarter of 2021, hybrid, plugin hybrid, and electric vehicles collectively accounted for $11 \%$ of light-duty vehicle sales in the United States, according to data from Wards Intelligence.

Sales of several existing hybrid, plug-in hybrid, and electric models increased in 2021, but a large portion of the sales increase came from new manufacturer offerings across different market segments. Manufacturers increased the number of non-hybrid ICE vehicle models by 49 in 2021, versus an increase of 126 for hybrid and electric vehicle models.

These additional hybrid or electric models were mostly either crossover vehicles, which combine attributes of passenger cars and sport utility vehicles, or vehicles such as vans and pickups, which previously didn't have many hybrid or electric vehicle options.

Manufacturers of hybrid vehicles and plug-in vehicles have expanded into market segments such as crossovers, vans, and pickups following consumer preference for larger vehicles. Within each electric or hybrid powertrain type, crossover vehicles now account for most sales.

Based on the report from United States Department of Energy,


## Sources:

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