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Global Intelligent Driving Forecast-2024

Oct,2024

Introduction

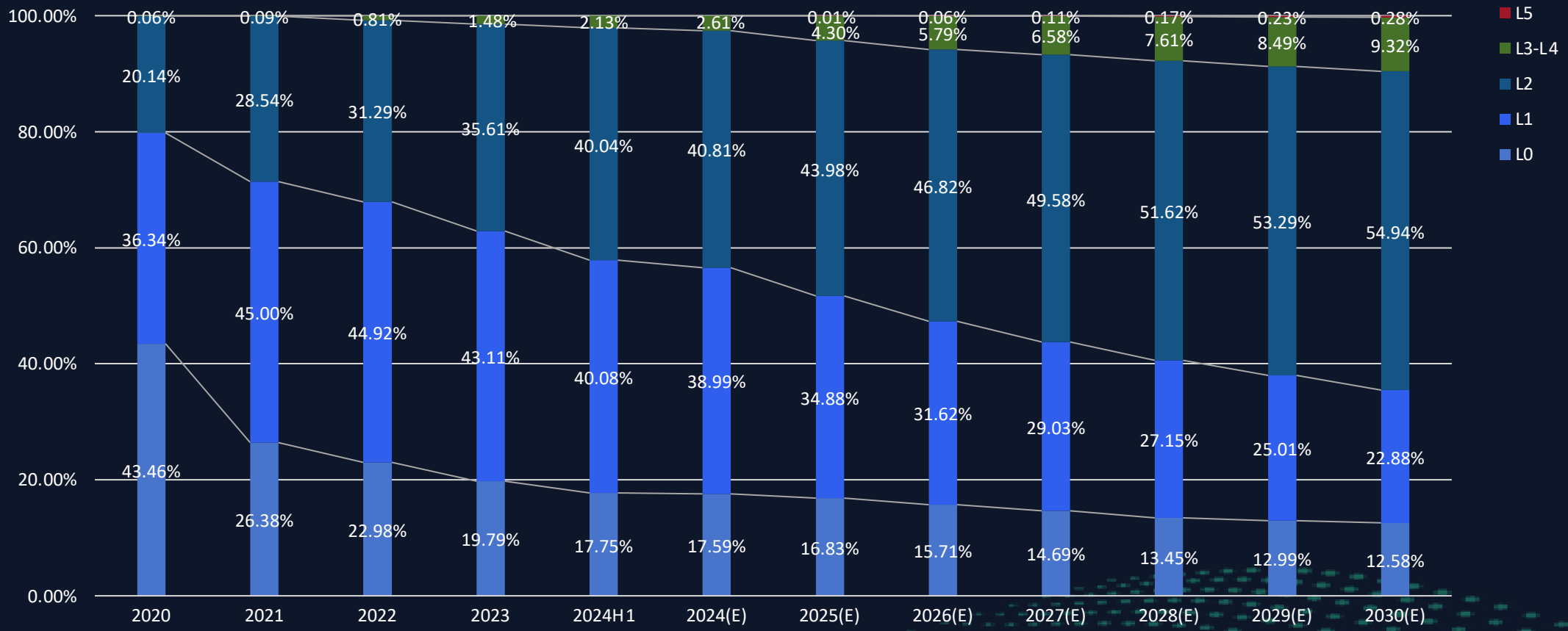
In this report, we will thoroughly present the changes in the penetration rates of global intelligent driving passenger vehicles from Level 0 to Level 5 between 2020 and 2030. We will conduct an in-depth analysis of the development trends and future directions of intelligent driving technologies worldwide.

The report will be organized by region, examining the current market penetration status and future forecasts for different levels of intelligent driving passenger vehicles across various continents. Additionally, we will explore the development status and driving factors of intelligent driving technologies in key countries.

Our aim is to provide investors, entrepreneurs, and policymakers with profound industry insights and trend forecasts, helping readers understand the trajectory of intelligent driving technology, seize future investment opportunities, and promote the continuous advancement of the global intelligent driving industry.

2024 will be a milestone year for global intelligent driving

Global intelligent driving penetration (%)-By number of passenger vehicles delivered



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In the first half of 2024, the global level of intelligent driving further improved, with the penetration rate of L2 intelligent driving vehicles surpassing 40%. Levels L3 and L4 of passenger cars also began to take shape, with a penetration rate of 2.13%. Only 17.75% of passenger cars lack any driver assistance features.

Since 2023, global intelligent driving has developed rapidly, with a primary market focus on the commercialization of Level 2 and Level 3 technologies.

- In 2023, the penetration rate of L1 and above intelligent driving vehicles exceeded 80%, reaching 80.21%, showing a significant increase compared to 2022.

- In 2023, the penetration rate of L1 vehicles was 43.11%, but the decline became more pronounced afterward. By the first half of 2024, the L1 penetration rate had dropped to 40.08%, indicating that passenger cars with lower levels of intelligent driving will gradually decrease in the future.

Future Expectations

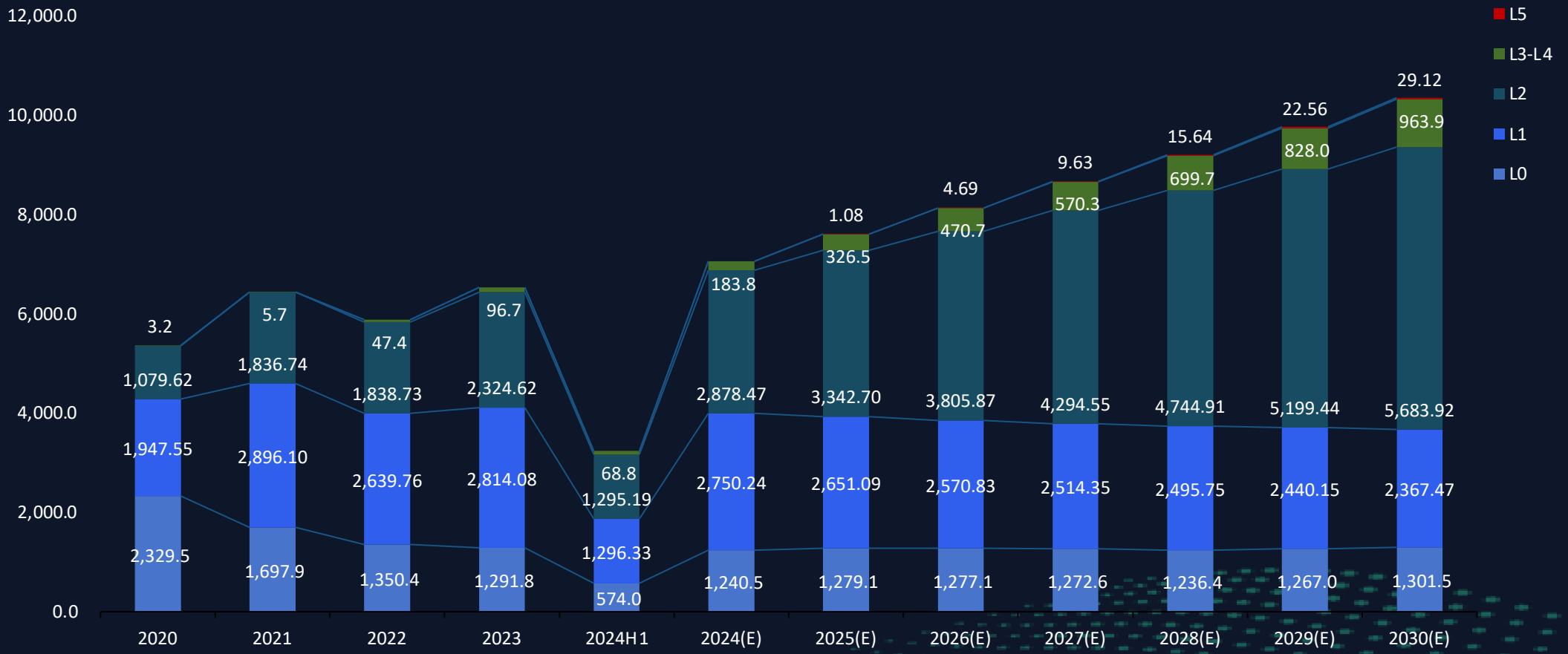
- By 2030, it is projected that the global market penetration rate of L2 and above intelligent driving vehicles will reach 64.54%, totaling approximately 66.77 million units, making them the dominant force in the passenger car market.

- Additionally, with various countries implementing policies and regulations for L3 and above passenger cars in recent years, the development of L3 and higher-level vehicles is expected to accelerate in the future.

- By 2030, the penetration rate of L3-L4 passenger cars is expected to reach 9.32%, with an annual compound growth rate of 65.8% from 2020 to 2030.

In the future, passenger vehicles sold globally are expected to be commonly equipped with advanced intelligent driving suites and functionalities.

Global intelligent driving car sales forecast 2020-2030E（10 thousand）



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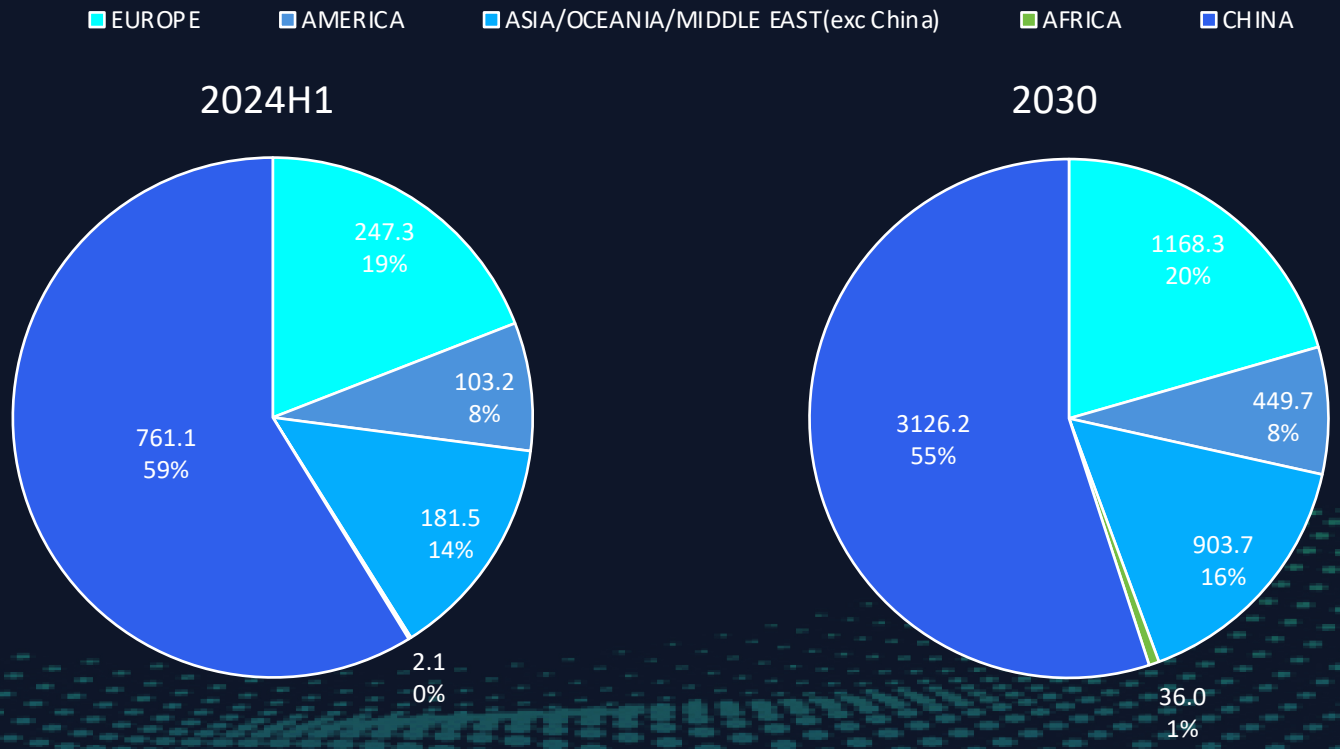
The year 2024 will be a pivotal one for global intelligent driving, as L2 passenger car sales are expected to be nearly on par with L1 for the first time. By the end of 2024, the penetration rate of L2 and above intelligent driving will approach 50%. This signifies that starting in 2024, cars sold worldwide will generally be equipped with advanced intelligent driving systems and features.

Both in terms of global share and absolute growth, the Chinese market will be a key driver of global intelligent driving technology development.

- From a regional distribution perspective, the Chinese market accounted for 59% of global L2 passenger car sales in the first half of 2024. As other regions gradually improve their intelligent driving technologies, it is projected that by 2030, China's share of the global L2 market will slightly decline to 55%, with sales increasing to 31.26 million units.

Global L2 class passenger car sales -By region(10 thousand)



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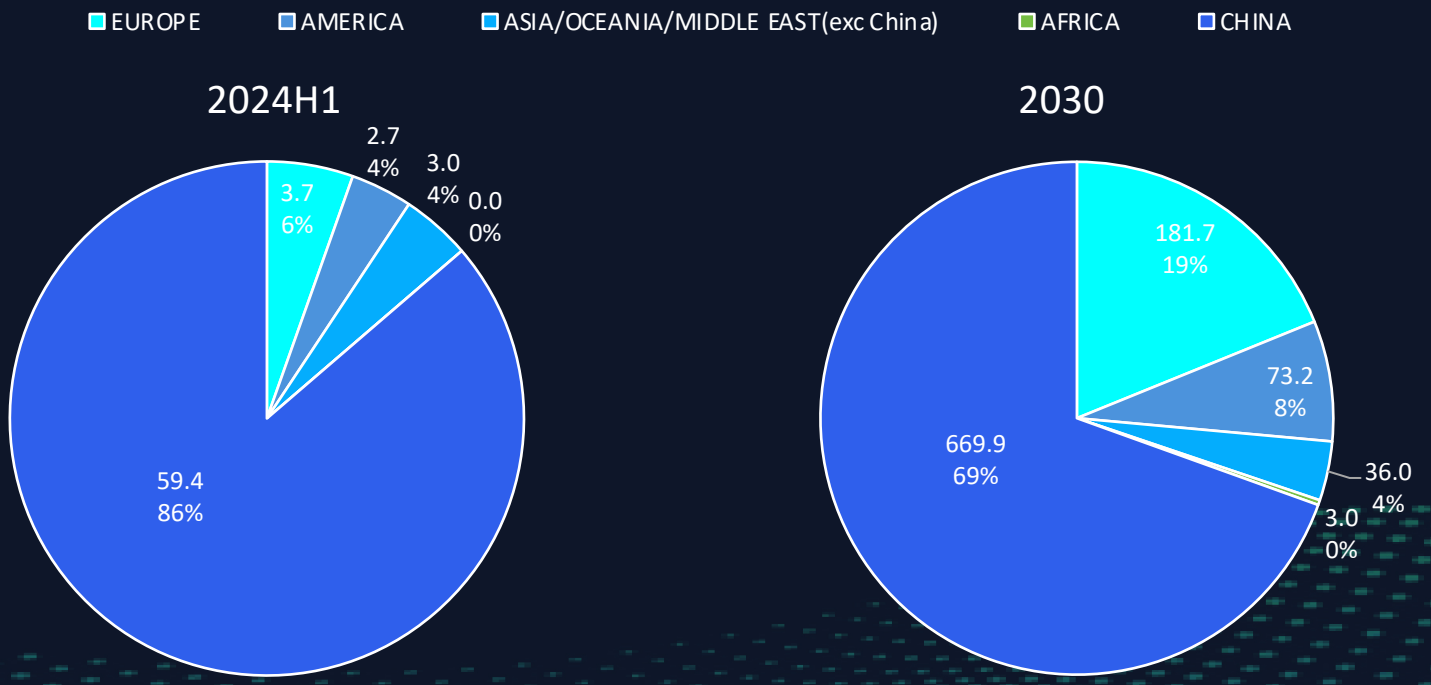
Both in terms of global share and absolute growth, the Chinese market will be a key driver of global intelligent driving technology development.

- With the explosive growth of the new energy vehicle market in China over the past two years, along with strong policy support at the end of 2023, China has a first-mover advantage in the L3-L4 vehicle segment. By 2030, it is expected that China's global market share in this category will reach nearly 70%.

Global L3-L4 class passenger car sales -By region(10 thousand)



Driving factors behind the rapid development of China’s intelligent driving industry

China is undergoing a rapid growth phase in the intelligent driving industry, and the various factors driving this trend are noteworthy and can serve as valuable lessons for other regions.

National Policy Support

The national government has provided robust support for the development of intelligent driving technologies. For instance, at the end of 2023, the Ministry of Industry and Information Technology, along with three other departments, issued a notification regarding the access and pilot operation of intelligent connected vehicles. Seven cities, including Beijing, Shanghai, and Guangzhou, were designated as pilot areas for Level 3 and Level 4 autonomous driving technologies. The implementation of this policy has significantly accelerated China’s progress in the field of high-level autonomous vehicles.

Large Consumer Market

- China's vast automotive consumer market, combined with the increasing purchasing power of consumers, creates a highly favorable environment for the widespread adoption of intelligent driving technologies. As more individuals gain access to disposable income, they are increasingly willing to invest in advanced automotive features, including autonomous driving capabilities.

Rapid Business Growth

- China's deep involvement of companies in the intelligent driving sector, along with the rapid growth of innovative enterprises, has not only enhanced the country's position in global technological competition but also enabled effective cost control in automotive manufacturing by leveraging the advantages of its manufacturing industry. This, in turn, further promotes the prosperity of the intelligent driving market.