



Automotive Industries, the Wheels to Move towards

Intelligent and Electrification Passenger Car

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Factors Influencing Global Passenger Car Development

♦ Environment

With "Carbon neutral" concept, many countries declare to end ICE sales.

Nation	ICE End Time	Nation	ICE End Time
Norway	2025	Slovenia	2030
India	2030	Sweden	2030
Holland	2030	UK	2030
Israel	2030	Japan	2035
Ireland	2030	France	2040
Denmark	2030	Spain	2040

♦ Technology



♦ Customer

Millennials and Young generation are gradually becoming the main consumers.







Passenger cars become

Intelligent

Electric





Intelligent Passenger Car Trend

Consumers need a **smarter** car.

♦ Voice Interaction



♦ Safe Drive









♦ Cloud Computing

♦ Autonomous Drive

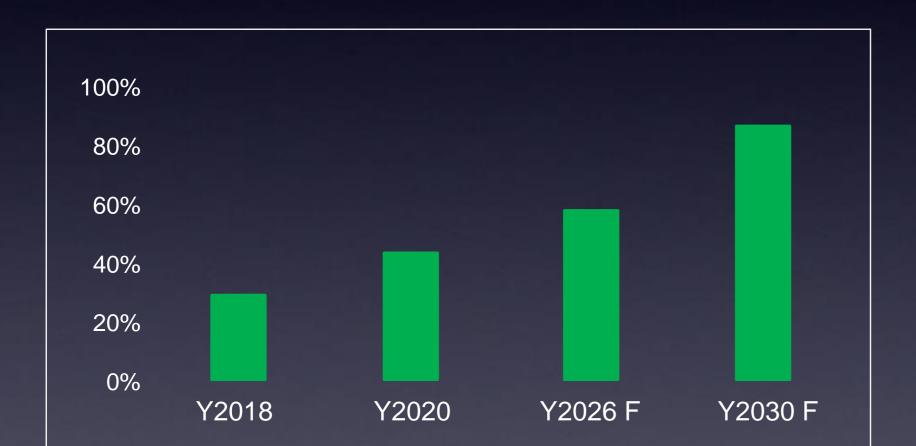






Technology is fulfilling consumers' needs.

♦ The proportion of intelligent cars going up



^{*} Data from HIS Markit, China Industry Innovation Alliance for the Intelligent and Connected Vehicles

♦ Intelligent functions upgrade rapidly in recent years

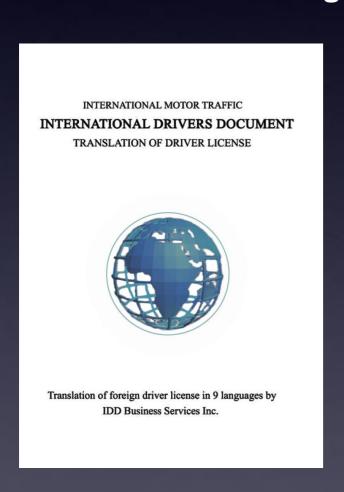






Government and OEMs are providing full support.

Improving Rules and Regulations: autonomous driving



♦ Infrastructure:Four-in-one smart road(5G, V2X, remote drive, autonomous drive)



♦ OEM's production strategy: **consumer demand-centered**

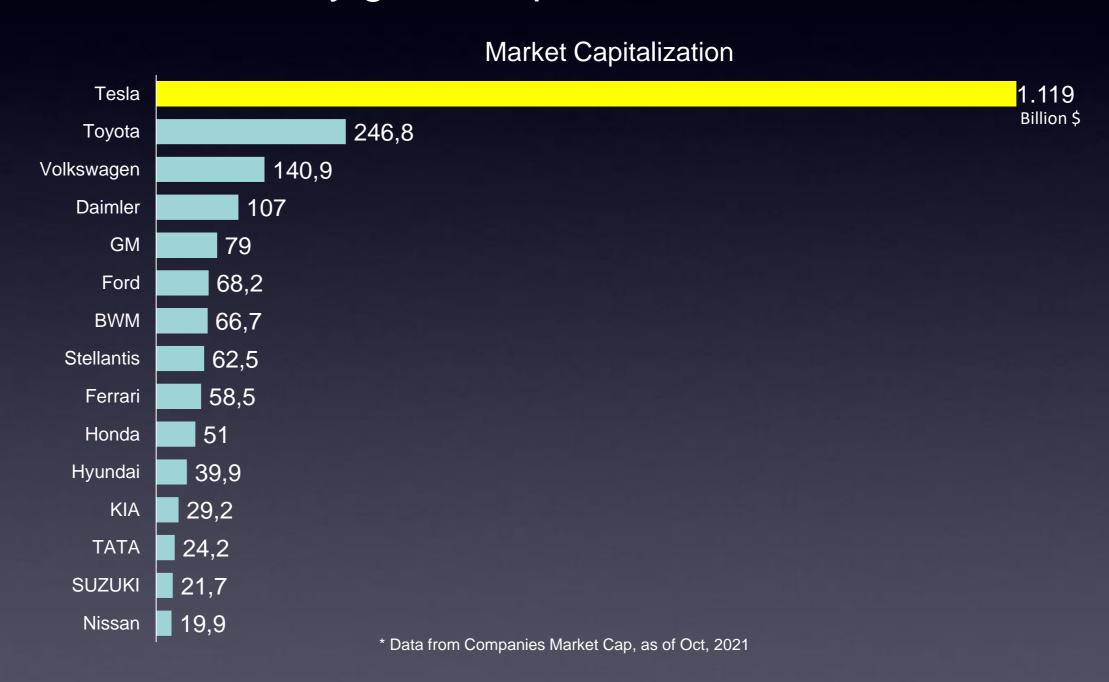






Electrification Passenger Car Trend

Electric vehicle is favored by global capital and stockholders.







Electric vehicle is taking up rising market share with its rapid growing sales.



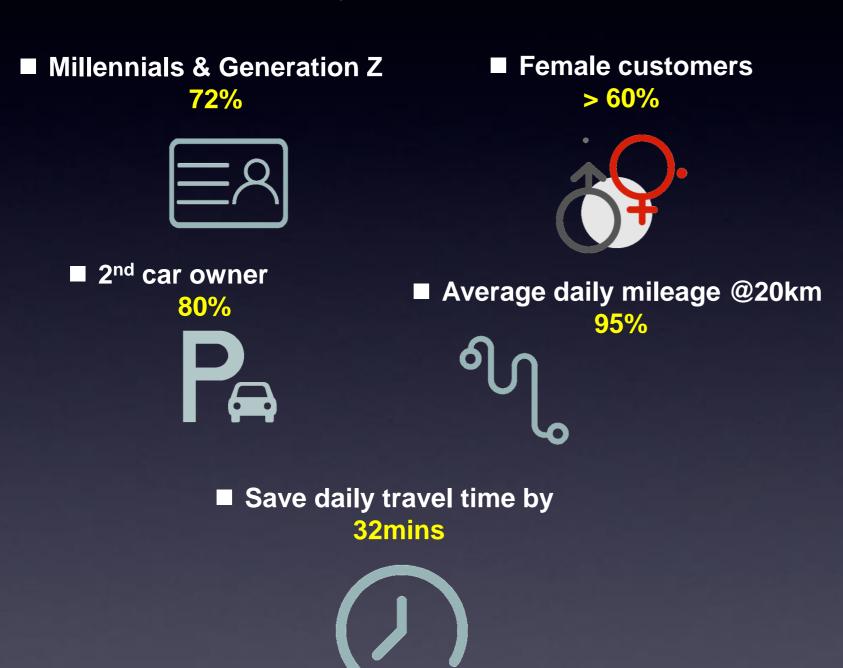


^{*} Data from PEW Research Center

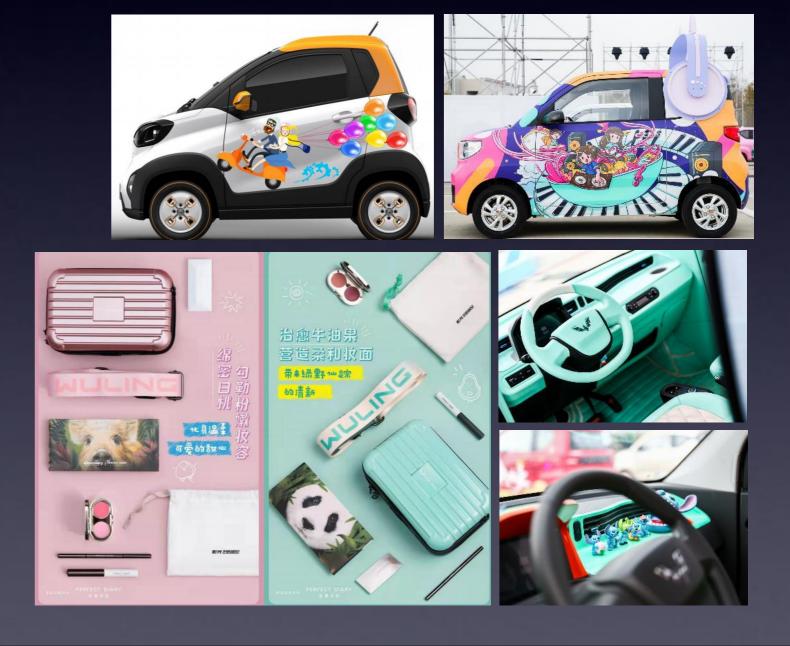




Electric vehicle is providing various possibilities for drivers, and becomes more than a mobility device.



■ Electric Vehicle is Pop Culture



^{*} Data from Big Data Report on Chinese Small Pure Electric Passenger Cars





Customized products with advanced technology benefit efficient governance.

■ Multiple government operational vehicles









■ Benefits of 1,000 operational electric vehicles



Total cost saved: \$2.2 million / year



CO2 Reduced: 260 tons



Fuel saved: 180,000 liters



Equivalent to planting: 13,562 trees





Smart City Practice

(Liuzhou, in southwest China, a tier 3 city with 4 million population)



In 2020, electric vehicles take up **31.5%** of total sales, among 80,000 units, 25,000 electric vehicles.



Build 7,346 charging piles and 18,177 charging sockets.



Add **15,367** special parking spaces for Electric vehicles.



About **80%** government operational vehicles realize electrification.













Intelligence and Electrification Generate

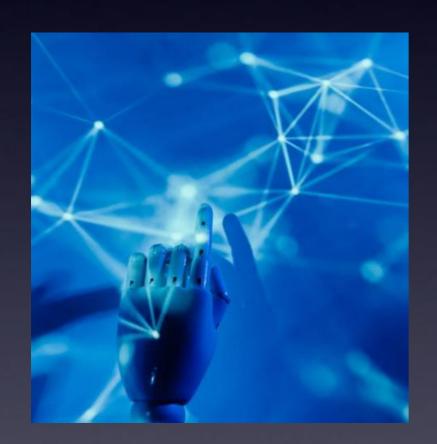
New Growth Points

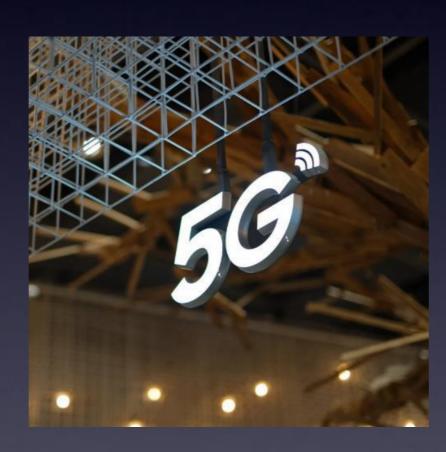




Broad Prospects for Indonesian Intelligent and Electrification Passenger Car

◆ Encourage development and application of advanced technology in Indonesia







Al

5G

Autonomous Drive





◆ Accelerate the upgrading of Indonesia's automobile industry and the improvement of supply chain.

Indonesia's nickel mines account for 25% in the world's reserves, and there is unique advantages to develop vehicle batteries industry.







◆ Contribute to efficient and orderly urban construction and management

■ Smart Governance

Advanced police car, Ambulance, Firefighting car,

...

■ Green Mobility

Electric vehicle market share going up

■ Smart Traffic Autonomous drive,

Real-time traffic info,



■ Electric Vehicle Ecosystem

No limitation on Plate number, Charging ecosystem, Priority to parking,

. . .

■ Big Data Application

Charging capacity,
Parking space capacity,
Traffic info,

. . .





◆ With the export business of Wuling and other brands, the strategic position of Indonesian manufacturing in the global automotive market is enhanced.







Thank You