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Adjustments to Automobile Policies in Europe, the US, and Japan, and Countermeasures for China's Automotive Industry

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Abstract: In 2025, major countries and regions worldwide signed and implemented a series of policy measures related to new energy vehicles. Overall, Europe, the United States, and Japan exhibited distinct differences in their support policies for new energy vehicles. The U.S. tended to favor traditional fuel-powered vehicles, curbing the development of new energy vehicles, shifting from policy-driven to market-led autonomy. Some European countries no longer maintain their original subsidies for new energy vehicles, instead focusing on advancing charging infrastructure and investing in technological R&D for these vehicles. Meanwhile, Japan continued to encourage new energy vehicle consumption while optimizing its domestic new energy vehicle supply chain to drive industrial upgrades and enhance competitiveness in the international market.

Keywords: Automobile policy; Competitiveness

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1. Introduction

1.1. Multiple "new policies" in the United States support the development of traditional fuel vehicles

(1) Adjust electric vehicle sales targets and administrative orders. In January 2025, an executive order will be signed to abolish the non-mandatory target of "50% new energy vehicles by 2030" and to announce once again the withdrawal from the Paris Agreement, paving the way for expanding the production of traditional energy vehicles. In June, exemptions for priority use of California's second-generation advanced clean vehicle regulations were abolished, such as revisions to California's low emission vehicle (LEV) and zero emission vehicle (ZEV) regulations and termination of California's 2035 "no burning" exemption, further weakening restrictions on gasoline vehicles. In July, the "Big and Beautiful" bill was signed to abolish fines for companies that did not meet the Corporate Average Fuel Economy (CAFE)

standards [1].

(2) Cancel various subsidies and financial support related to electric vehicles. According to the "Big and Beautiful" tax reform bill pushed by the Trump administration, the United States will no longer provide tax credits for electric vehicles as of September 30, 2025. The maximum tax credit of $7500 for new electric vehicles and plug-in hybrid vehicles, as well as the maximum tax credit of $4000 for used vehicles, will be terminated. At the same time, funding for the construction of charging stations will be suspended, the Biden administration's $5 billion Federal Highway Administration electric vehicle infrastructure plan to deploy 500000 charging stations will be frozen, and the construction of new charging station sites funded by the plan will be suspended, weakening the expansion capacity of charging infrastructure [2].

(3) Maintain high tariffs and restrict Chinese automotive-related products. Trump continues the Biden administration's restrictions on imported goods from China, including high tariffs on electric vehicles and battery products (such as a comprehensive tax rate of 147.5% for electric passenger vehicles, including a base tax rate of 2.5%, Section 301 of 100%, fentany related 20%, and 232 tariff of 25%). The power battery tariff rate is 73.4%, which is a combination of a base tariff of 3.4%, fentanyl related 20%, Section 301 of 25%, and 232 tariff of 25%.

1.2. EU makes minor adjustments to electric vehicle incentive plan

(1) Adjust the subsidy policy for electric vehicles. Starting from January 1, 2024, France will reduce the subsidy standard for electric vehicle purchases from 5000 euros to 4000 euros. The reduction of subsidy standards directly weakens the purchasing willingness of some consumers, especially middle and high-income families. On the contrary, Germany announced the allocation of 3 billion euros to subsidize the purchase of electric vehicles, which will officially take effect on January 1, 2026. The purchase of an electric vehicle priced below 45000 euros can enjoy a maximum subsidy of 4000 euros, and is only applicable to pure electric vehicles with carbon dioxide emissions below 50 grams per kilometer. It also plans to extend the tax exemption policy for electric vehicles until 2035.

(2) Agree to use synthetic fuel vehicles. The EU has agreed that internal combustion engine vehicles using synthetic fuels can continue to be sold on the premise of achieving carbon neutrality, and specific regulations on the use of synthetic fuel vehicles will be introduced in the future.

(3) Promote the development of the battery industry. On March 5, 2025, the European Commission announced that it will invest 1.8 billion euros to launch the "Battery Boosting Program", specifically aimed at creating a competitive battery raw material supply chain. This plan is based on the European Commission's "Strategic Dialogue on the Future of the European Automotive Industry" and supports the production of electric vehicle battery cells and components through direct funding and other forms.

(4) Publish simplified regulations for CBAM. On October 17th, the European Parliament and the Council of the European Union issued a simplified regulation on the EU carbon border adjustment mechanism. Although this regulation has to some extent reduced the compliance burden on enterprises, it is essentially aimed at protecting local EU companies by imposing carbon tariffs on imported products. This will increase the export cost of China's new energy vehicles, weaken price competitiveness, and raise market entry barriers.

1.3. Japan continues to implement the electric vehicle incentive plan

(1) Increase financial subsidies. The Ministry of Economy, Trade, and Industry of Japan announced that from April 1, 2025, consumers who purchase electric vehicles will receive an additional subsidy of up to 50000 yen (approximately 2500 yuan), mainly for models that use low-carbon steel (green steel) as the body material. Japan hopes to encourage steel manufacturers to increase investment in decarbonization technology through this measure, thereby reducing carbon dioxide emissions in the production process. At present, Japan's subsidy standards for environmentally friendly cars are: a maximum of 850000 yen for electric vehicles, 550000 yen for light electric vehicles and plug-in hybrid vehicles, 2.55 million yen for fuel cell vehicles, and an additional subsidy of up to 50000 yen for models using green steel.

(2) Strengthen the construction of charging infrastructure. The Japanese government has formulated the "Guidelines for Promoting the Improvement of Charging Infrastructure" with the goal of improving 300000 charging infrastructure by 2030, including 30000 public fast charging stations, and encouraging enterprises to invest in charging infrastructure construction, providing policy incentives to charging station operators. In addition, the Japanese government plans to double the average output power of fast charging from the current 40kw to 80kw, with a unit output power of 90kw or more for highways and 50kw or more for non-highways. The Japanese government will provide financial subsidies to encourage businesses and individuals to invest in the construction of charging facilities. At the same time, tax reduction policies will be implemented for charging facility construction and operation enterprises to alleviate their financial burden.

2. The deep impact of the implementation of "new policies" in various countries on the global and Chinese automotive industry landscape

2.1. Global electrification target slightly wavers

The support policies for new energy vehicles in Europe, America, and Japan are showing a turning trend. In particular, the "Big and Beautiful" bill passed by the United States in July abolished multiple green energy incentives such as tax credits for new energy vehicles, terminated the federal tax incentive mechanism for new energy vehicle purchases that had been implemented since 2008, and shifted from relying on policy subsidies to emphasizing market-driven growth. Some European countries have also tightened their subsidy policies and increased their support for the construction of charging infrastructure and the research and development of new energy vehicle technologies. The policy focus has shifted from stimulating consumption to improving the industrial ecosystem. Japan is also adjusting its policy direction, focusing not only on encouraging the consumption of new energy vehicles but also on promoting the optimization and upgrading of the local new energy vehicle industry chain and enhancing the international competitiveness of the industry.

2.2. The new policy is conducive to promoting the transfer of the automotive industry to the United States

In the short term, Trump's new policies can increase car companies' investment in the United States and promote the return of the manufacturing industry. Trump has imposed tariffs on countries such as Canada, Mexico, and China to guide the global automotive industry chain towards the United States. Several multinational car companies have adjusted their production plans to avoid the impact of high tariffs.

In the long run, the slowdown in electrification will shake corporate investment plans and weaken early

development advantages. Trump's revocation of electric vehicle sales targets and executive orders will help reduce the technology and cost investment of automakers in electrification compliance. High-profit fuel pickup trucks and SUVs are expected to rebound in production, but this will affect the established electrification investment plans of companies.

2.3. Major global car companies are strategically adjusting their direction towards the long-term coexistence of gasoline and electric vehicles.

Major European and American car companies are adjusting their electrification development strategies, no longer pursuing comprehensive electrification, and shifting towards long-term coexistence of gasoline and electric vehicles, while optimizing electric technology research and development and cost control [3]. As shown in **Table 1**, the strategic adjustments made by major European and American automakers are not only a pragmatic response to the changes in the demand structure of the global new energy vehicle market and the shift in the pace of industrial development, but also an important measure to ensure the stability of corporate operations during the critical period of industrial transformation [4]. By dynamically balancing R&D investment and market layout across different powertrain vehicle models, these enterprises have effectively enhanced their comprehensive risk resilience amid industrial transformation, achieving the coordinated improvement and long-term development of technological innovation breakthroughs and market economic benefits.

Table 1. Adjustment direction of electrification development strategies for major automobile companies

No.	Companies	Strategic adjustment direction
1	Audi	Audi has withdrawn its plan to completely cease the sale of fuel vehicles by 2033, no longer setting a timetable for the withdrawal of internal combustion engines, and adopting a regional differentiation strategy. Europe mainly promotes plug-in hybrids, North America retains fuel vehicles, and China focuses on intelligent electric vehicles.
2	Mercedes Benz	Mercedes-Benz has abandoned its previous 2030 goal of "fully transitioning to pure electric sales in markets where conditions permit" and instead adopted a flexible strategy of long-term coexistence of gasoline and electric vehicles, adjusting the proportion of new energy vehicle models (hybrid) to a maximum of 50% by 2030.
3	GM	GM will no longer mention the goal of producing only electric vehicles by 2035, cancel plans to build electric vehicles and related battery factories, increase huge investments in V-8 engines, gasoline-powered pickup trucks, and SUVs, and plan to launch 9 new hybrid models by 2027.
4	Ford	Ford has abandoned its plan to fully launch electric vehicles in Europe by 2030 and will continue to invest in hybrid technology to meet the needs of different customers while advancing electrification. Reduce the proportion of investment in electrification from 40% to 30%, and prioritize the development of hybrid pickup trucks.
5	VW	Volkswagen has postponed its original plan to achieve full electrification in the European market before 2033. Consider increasing investment in retrofitting existing internal combustion engine models to extend the lifecycle of fuel vehicles.
6	Porsche	Porsche has decided to extend the lifecycle of its existing fuel and plug-in hybrid models and delay the launch of some pure electric vehicle models until after 2030.
7	Volvo	Volvo will no longer adhere to its plan to electrify all models by 2030. It is expected that by 2025, pure electric and hybrid models will account for about half of the total sales.

3. Suggestions

China must always place the development of the new energy vehicle industry in an important strategic position and unwaveringly adhere to the established development path [5]. At the same time, deepen international cooperation with an open attitude, strengthen technological cooperation, and create a mutually beneficial and win-win model [6].

Promote cooperation and weave a global interest network. Deepen mutually beneficial international cooperation, support Chinese enterprises to engage in various forms of cooperation, such as joint ventures and technology licensing with overseas enterprises, and deeply bundle and develop with international leading automotive companies [7].

Expand domestic demand and alleviate internal pressure. Improve policies for new energy vehicles, further optimize resource allocation, enhance the efficiency of resource utilization in research and development, production, and after-sales service systems, and concentrate efforts on expanding and strengthening [8].

Expand overseas and establish a comprehensive system capability. Support car companies to build factories overseas, effectively avoid trade barriers, and reduce transportation costs. Improve energy replenishment infrastructure and build a more complete overseas industrial chain ecosystem [9].

Follow policies and observe new international trends. China needs to continuously track the global trend of new energy vehicle policies, focusing on analyzing the policy adjustments, technological route evolution, subsidies, and new carbon emission regulations of major countries such as the United States, Europe, and Japan. It is necessary to conduct an in-depth analysis of their impact on the industrial chain, market structure, and technological competition, and provide an accurate and forward-looking basis for policy optimization, industrial upgrading, and enterprise going global in China [10].

Disclosure statement

The authors declare no conflict of interest.

References

[1] Yang W, Tao QZ, Chai SS, et al., 2024, Evolutionary Game Analysis of the Adoption of New Energy Logistics Vehicles under Dual Credit Policy. In Proceedings of the 2024 4th International Conference on Big Data, Artificial Intelligence and Risk Management (ICBAR'24), ACM, 91–95. https://doi.org/10.1145/3718751.3718766

[2] Chen YX, 2024, Analyzing the Impact of Various Factors and Policies on China's New Energy Electric Vehicles. In Proceedings of the 2024 International Conference on Digital Society and Artificial Intelligence (DSAI'24), ACM, 379–384. https://doi.org/10.1145/3677892.3677951

[3] Zhang YT, Zhang F, 2022, Construction of Marketing Competitiveness Model of New Energy Vehicles at Home and Abroad Based on Big Data Algorithm. In Proceedings of the 5th International Conference on Information Technologies and Electrical Engineering (ICITEE'22), ACM, 75–79. https://doi.org/10.1145/3582935.3582949

[4] Mateos-Melero E, Moralejo-Piñas J, Martínez-Gil F, et al. 2025, Evolutionary Optimization of the Gas/Charging Stations Topology for the Electric Vehicle Market. In Proceedings of the Genetic and Evolutionary Computation Conference Companion (GECCO'25 Companion), ACM, 867–870. https://doi.org/10.1145/3712255.3726622

[5] Chen JSX, Zhang YT, Gao CZ, et al., 2024, Based On Authoritative Information Retrieval, The BSLSM Trend Model of the New Energy Market and Its Development in China. In Proceedings of the 5th International Conference on Computer Information and Big Data Applications (CIBDA'24), ACM, 264–267. https://doi.org/10.1145/3671151.3671199

[6] Xiang LJ, Liu JY, Zhu YB, 2025, Forecast of China's New Energy Passenger Vehicle Sales Based on System Dynamics and Other Methods. In Proceedings of the 2025 2nd International Conference on Innovation Management and Information System (ICIIS'25), ACM, 410–414. https://doi.org/10.1145/3745676.3745737

[7] Liu Q, He JN, 2024, The Impact of ESG Investment on the Diffusion of Green Technology Innovation in New Energy Vehicle Enterprises under Complex Network Game. In Proceedings of the 2024 International Conference on Cloud Computing and Big Data (ICCBD'24), ACM, 515–520. https://doi.org/10.1145/3695080.3695169

[8] Aydeger A, Zeydan E, Mangues-Bafalluy J, et al., 2025, Enhancing Electric Vehicle Security and Privacy through Decentralized Identity Management. Digital Threats: Research and Practice, 6(3): 1–20. https://doi.org/10.1145/3743151

[9] Li Y, 2021, A Case Study on Profitability and Prospects of New Energy Vehicle Industry. In Proceedings of the 2021 3rd International Conference on E-Business and E-commerce Engineering (EBEE'21), ACM, 237–242. https://doi.org/10.1145/3510249.3510291

[10] Liu R, Lei HZ, 2023, Evolutionary Strategies for Collaborative Innovation in Artificial Intelligence-Based New Energy Vehicle Enterprises. In Proceedings of the 2023 3rd International Conference on Big Data, Artificial Intelligence and Risk Management (ICBAR'23), ACM, 865–869. https://doi.org/10.1145/3656766.3656909

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