



The Automotive Industry and the Impact of NEVs

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Abstract. Renewable energy is a growing concept that manifests itself in many forms in other industries. One of the most notable industries is the NEV (New Energy Vehicle) industry. In recent years, the NEV industry has become a very hot topic among all people throughout society, from investors and entrepreneurs to average citizens. This is the best time to write about the NEV industry since it is still a relatively new industry, but the dust seems to have settled for most markets related to this industry. With markets and investment being a crucial and omnipresent aspect of any economy to this day, it is important to understand how they work and how they interact with other aspects of the economy and society as a whole. From demand and supply to risks associated with the economic aspect of NEVs, this piece uses examples and data analyses to hopefully enhance the knowledge of the economic aspect of the NEV industry for all its viewers.

Keywords: Automotive Industry, NEVs, New Energy Vehicle.

1 Introduction

The automotive industry is ever-changing and has been a key component in boosting the global economy and trade for centuries. The industry provides ample employment opportunities and is an ever-growing source of technological advancements. The automotive industry is one of the world's leading sectors, and thus, it profoundly shapes industrial activity and consumer spending patterns. Furthermore, for the last hundred years the marketplace has primarily relied on the Internal Combustion Engine (ICE) vehicles for personal and business transports. Recently, the industry has made a gradual turn towards renewable sources of energy, which are carried out in new energy vehicles like electric cars, plug-in hybrids, and hydrogen fuel cells [1]. These moves seek to deal with the prevalent environmental degradation, the carbon footprint pandemic, the shift towards cleaner energy, and other measures that the world is focusing on for climate change and air health concerns [2, 3].

New energy vehicles have a substantial effect on the economy even outside of the automotives through the energy sector, world supply chains, and even the stock market. Stakeholders composed of automakers, suppliers, governments, and even consumers must be able to analyze the economic patterns within NEVs. As the demand for NEVs increases, the industry is experiencing shifts within the value chain, the labour markets, and the obtaining of new raw materials. These changes, while beneficial, also have

some negative aspects. Established automakers are facing competition from new entrants such as Tesla and NIO, who have successfully altered the market, and with this, they will need to change their strategies [4]. Furthermore, this is also accelerating the construction of investment infrastructures such as charging stations, battery plants, and battery recycling technologies [5].

To formulate future policies, market strategies, and investment decisions, determining how NEVs impact the economy is critical [6]. Since governments are giving financial support alongside stricter emission regulations to encourage NEV adoption, the automotive industry has to change to be profitable in the long term. Simultaneously, however, ensuring a consistent supply of raw materials—especially for the batteries that are essential resources for parts manufacturers—has been increasingly vital for producers to address [2].

This essay will investigate the primary reasons, which include advanced technology, the government's policies, and the environment that are propelling the transition toward NEVs. It will further look into the economic risks and opportunities that accompany this change, in particular, the growth of the market, the vulnerabilities in the supply chains, and the automakers' strategic changes. All in all, this analysis will shed light on the impacts of NEVs on the automotive industry and the economy at large [7, 8].

2 Overview of the NEV Industry

The automotive industry has undergone a significant transformation since the invention of the first gasoline-powered car in the late 1800s. Internal combustion engine (ICE) vehicles revolutionized personal and commercial transportation, driving industrial and economic growth. Iconic manufacturers like Ford, General Motors, and Toyota played a crucial role in making cars more affordable through innovations such as assembly-line production and fuel-efficient engine designs. However, growing concerns over climate change, air pollution, and dependence on fossil fuels have pushed the industry toward more sustainable alternatives [9].

Such a shift has led to the evolution of New Energy Vehicles (NEVs), which use alternative sources of energy rather than the traditional fossil fuel source. NEVs fall under three broad categories in general: Battery Electric Vehicles (BEVs).

These electric cars run on rechargeable lithium-ion or solid-state batteries with no tailpipe emissions. As battery technology improves, BEVs are becoming more efficient and cost-effective. In 2022, global BEV sales surged to 7.3 million units, up 60% from the previous year, with best-selling models like the Tesla Model 3 and BYD Han EV leading the market [10].

Plug-in Hybrid Electric Vehicles (PHEV): These vehicles use an Internal Combustion Engine (ICE) paired with a rechargeable battery, enabling electric-only trips up to 45 miles, with gasoline engines being used for longer trips. This system's dual purpose enhances fuel efficiency and minimizes the emission content. Globally, sales of plug-in hybrid vehicles (PHEVs) crossed the 3-million mark in 2022—up 46% on the previous year—thanks to popular models like the Toyota Prius Prime and BMW 530e.

Fuel Cell Vehicles (FCEVs) are the vehicles that convert hydrogen fuel into electricity through a fuel cell to power an electric motor, only emitting water vapour. FCEVs are highly-promising in terms of sustainability; however, their widespread adoption is hindered by high-production costs and a limited refuelling infrastructure. Nonetheless, vehicles like Toyota's Mirai and Hyundai's Nexo are starting to gain traction, with FCEV sales already exceeding 50,000 units in 2023. [11]

The NEV industry has gotten more competitive, with interest from both legacy manufacturers as well as new entrants. Name brand automakers like Volkswagen, Toyota, Ford and General Motors are investing billions in the process of electrification just to remain relevant. Volkswagen, for example, plans to invest \$193 billion through 2028 to grow its EV portfolio and battery production. On the other hand, Tesla, BYD, NIO, and Rivian break through with pure electric vehicle platform, powerful autonomous driving capability, and extensive charging network [4]. Tesla dished out 1.31 million EVs in 2022: 17% of global EV volume [11].

Government policies and incentives have played a vital role in accelerating NEV adoption. Countries such as China, the U.S., and several European nations have implemented strict emissions regulations, tax credits, and subsidies to encourage consumers to switch to electric vehicles. In China, the global leader in EV adoption, NEVs accounted for 30% of all new car sales in 2023, thanks to aggressive government incentives and infrastructure investments. The European Union has set a 2035 deadline to phase out new ICE vehicle sales, further pressuring automakers to transition toward electrification. In the U.S., the Inflation Reduction Act of 2022 introduced \$370 billion in clean energy investments, including EV tax credits of up to \$7,500 to make electric vehicles more accessible [12].

Consumer interest in NEVs is also growing due to lower operating costs and improved infrastructure. Studies show that EV owners spend 40% less on maintenance than ICE vehicle owners since electric cars have fewer moving parts and do not require oil changes. Additionally, the expansion of charging networks is easing range anxiety, a key concern for potential buyers. The number of public charging stations worldwide exceeded 2.7 million in 2023, reflecting a 37% year-over-year increase. Advancements in fast-charging technology are also making a difference, with ultra-fast chargers now capable of restoring 80% battery capacity in under 20 minutes [11].

Despite these advancements, challenges remain. The high upfront cost of NEVs remains a hurdle for many consumers, although price parity with ICE vehicles is expected between 2025 and 2030 as economies of scale and battery cost reductions take effect. Additionally, raw material shortages—particularly for lithium, cobalt, and nickel—pose risks to battery production. The price of lithium skyrocketed by 500% between 2020 and 2022 due to rising demand, prompting automakers to explore alternative battery chemistries such as lithium-iron-phosphate (LFP) and solid-state batteries to reduce reliance on scarce resources [13].

In conclusion, the global automotive industry is undergoing a major transformation as NEVs gain traction, driven by technological innovation, government policies, and shifting consumer preferences. While challenges like charging infrastructure, raw material constraints, and high initial costs persist, continued investment in research and development, government incentives, and supply chain diversification are paving the

way for a more sustainable future. As the market continues to evolve, NEVs are set to play a dominant role in shaping the next era of transportation.

3 Market Demand and Price Parity

Environmental concern, economic conditions, government intervention, and technological advancement have been driving the demand for NEVs. Additionally, there is a price reduction in electric and hybrid vehicles since battery production is improving, which makes the gap smaller between gas-powered cars and NEVs. Thus, more people are switching towards NEVs. For instance, in 2022, EV sales surpassed 14 million units globally which is a remarkable increase of 35% compared to the previous year. This further supports the claim that NEVs are being adopted at an exponential rate [14].

There is a growing interest in NEVs due to increased scrutiny towards environmental issues. Climate change and air pollution are major culprits that unfit the consumer's needs, thus NEVs can aid in cleaning pollution and reducing government expenditure. Nearly 25% of CO₂ emissions come from the transportation sector which makes it necessary for policymakers to introduce tougher emission regulations. The great urban air pollution can be solved through the implementation of tail pipe NEVs, which has zero emissions. Furthermore, rising fuel costs along with electric and hybrid vehicles are also proving to be beneficial for consumers. For years, gas prices have changed drastically, but electricity remains stable making NEV users spend significantly less over time [15].

Historically, the high price of NEVs compared to conventional cars has been a major barrier to widespread adoption, primarily due to the cost of batteries. However, rapid advancements in battery technology are bringing production costs down. The price of lithium-ion battery packs has dropped by nearly 89% since 2010, reaching approximately \$132 per kWh in 2023 [16]. Improvements in battery efficiency and energy density are also enhancing vehicle performance and extending driving range, addressing concerns about reliability and convenience. As automakers scale up production to meet growing demand, economies of scale are further driving down costs. Experts predict that by 2025–2030, NEVs will achieve price parity with gasoline-powered vehicles, with smaller electric cars and commercial EVs expected to reach this milestone even sooner [17].

Consumer behaviour is also evolving, further boosting NEV demand. While early adopters tended to be environmentally conscious or tech-savvy buyers, mainstream consumers are now showing greater interest. Lower maintenance costs—EVs typically have 30–40% lower maintenance expenses than ICE vehicles—along with improved charging infrastructure and better overall performance make electric cars more appealing to a wider audience. However, some consumers still hesitate due to concerns about charging availability, limited range, and higher upfront costs. Even as the price gap narrows, the initial cost of NEVs remains a challenge for certain buyers. Range anxiety, especially for long-distance travel, persists as charging stations are still not evenly distributed across all regions. Expanding charging networks, advancing battery

technology, and continuing cost reductions will be key to ensuring sustained NEV market growth [18].

4 Government Regulations and Policies

To address concerns about NEV adoption, both automakers and governments are implementing strategies to boost consumer confidence. Advances in battery technology have steadily increased vehicle range, with some models now exceeding 400 miles per charge. At the same time, significant investments in charging infrastructure are making it more convenient to charge NEVs. In 2023 alone, more than 2 million public charging stations were installed worldwide, with fast-charging networks expanding to reduce charging times dramatically. Ultra-fast chargers can now deliver an 80% charge in as little as 15 minutes, making electric vehicles increasingly practical for everyday use. Additionally, government incentives and subsidies are helping to ease financial barriers, making NEVs a more viable option for a broader range of consumers. With these challenges being addressed, adoption is expected to accelerate, with global EV sales projected to exceed 17 million units in 2024 [19].

The adoption rates of NEV differ sharply between countries, which is a direct reflection of the unique policies and market strategies of every nation. China is both the largest producer and seller of electric vehicles, as they contribute to approximately 60% of global sales, and this dominance is primarily due to heavy government input with funding, infrastructure placement, and laws. The Chinese government's incentives for NEV's fuels more than a hundred billion dollars' worth of subsidy spending, which allows electric vehicles to be more affordable. Consequently, local companies like BYD and NIO grew to be significant EV manufacturers, and by the end of 2023, BYD had even outperformed Tesla in sales [19].

The other continent witnessing the NEV boom is Europe, whose growth continues to be fuelled through stringent CO₂ emission rules and increased government subsidies. Countries such as Norway, Germany, and the Netherlands are moving towards drastically reducing ICE vehicle sales. For example, Norway practically banned the new registration of petrol and diesel fuelled cars after having more than 80% of new car registrations as EVs in 2023 owing to tax exemption, toll exemptions, and a highly developed charging infrastructure. Also, the European Union's plan to stop selling new ICE vehicles completely by 2035 has intensified the speed towards electrification [12].

The United States electric vehicle adoption index is improving alongside investment and supportive policies made at both federal and state levels. The Inflation Reduction Act has set aside funds amounting to \$369 billion for clean energy endeavours, which also covers up to \$7,500 tax credits per EV purchase and gives out funds for battery manufacturing in the US. As a result, significant players in the automotive industry such as Ford, General Motors, and Tesla are increasing their EV production capacity. For example, Ford plans to manufacture 2 million electric vehicles each year by 2026 [20].

Fleet corporate electrification and the emergence of ride-sharing services have also greatly contributed to the adoption of New Energy Vehicles. Uber and Lyft are two

drivers in fleet electric vehicle adoption, turning their entire fleet to electric by 2030. Additionally, major delivery service providers are buying thousands of electric vans to cut down on operating costs and achieve sustainability goals. In 2023, Amazon made another step towards the complete electrification of their fleet by using 10,000 Rivian electric delivery vans across numerous cities. This reinforces the rapid shift of corporate industries towards NEV adoption. This will boost supply and increased spending on NEV technology [3][21].

The following statements highlight the advancements that led to the adoption of NEVs; these include the growing focus on environment conservation, technology advancement, and the economic benefits that come from it. The government helps reduce the adoption barrier by providing subsidies, investing in infrastructure, and employing regulatory policies which significantly ease repeat investments. Even though the range of the cars and the availability of the charging stations raise concerns, the persistent development of battery technology and charging infrastructure is slowly mitigating them. Electric vehicle adoption is driven by increasing market growth in China, Europe, and the USA, change in consumer behaviour, and corporate electrification initiatives. Given these changes, it appears that NEVs will lead the global automotive industry, and estimates give a range of 50% of new car sales by 2030 [22].

5 Impact of NEVs on Global Supply Chains

The rise of New Energy Vehicles (NEVs) is reshaping global supply chains, particularly in raw material procurement, the restructuring of traditional automotive networks, and the localization of battery production. As demand for NEVs continues to grow, automakers and policymakers are adapting to new challenges and opportunities in the industry [23].

One of the most significant changes in global supply chains is the rising demand for key materials used in battery production. Lithium, cobalt, nickel, and rare earth metals are essential for high-capacity batteries, but sourcing these materials presents several challenges. With demand surging, lithium prices soared by over 400% between 2020 and 2022 before stabilizing, while cobalt prices fluctuated due to geopolitical tensions and mining restrictions in the Democratic Republic of Congo, which supplies over 70% of the world's cobalt. Additionally, China controls about 60% of the global supply of rare earth metals, raising concerns about geopolitical risks in sourcing strategies. To mitigate supply chain vulnerabilities, manufacturers are diversifying supply routes and investing in alternative battery chemistries, such as lithium-iron-phosphate (LFP) batteries. These batteries require fewer scarce materials and are now used in over 30% of electric vehicles worldwide [16].

The transition to NEVs is also disrupting traditional internal combustion engine (ICE) supply chains. Unlike gasoline-powered cars, electric vehicles require 60% fewer moving parts, significantly impacting industries focused on engine and transmission manufacturing. This shift has led to job displacement in traditional automotive sectors, with some automakers retraining workers for EV production while others face layoffs. Companies such as General Motors and Ford are investing billions into battery

production and software development, shifting their focus to electric drivetrains and digital vehicle connectivity [24]. At the same time, the demand for advanced microchips has surged due to NEVs' reliance on electronic components, further straining global semiconductor supply chains. The 2021 semiconductor shortage, which caused production delays for major automakers, highlighted the vulnerability of NEV production to supply chain disruptions [25].

To reduce these risks, automakers and governments are focusing on localizing battery production. The U.S. Inflation Reduction Act, for example, incentivizes domestic EV supply chains by offering tax credits for U.S.-produced batteries, while the European Union has introduced similar initiatives to decrease reliance on Asian imports. Tesla has invested over \$10 billion in battery gigafactories across North America and Europe to strengthen domestic production, while Volkswagen has announced plans to build six battery plants across Europe by 2030. Meanwhile, Chinese battery giant CATL is expanding its global presence, securing partnerships with automakers like BMW and Ford to maintain its dominance in the battery sector [26][27].

Sustainability is also a major emerging theme in supply chain management. Traditional mining practices for lithium, cobalt, and nickel have raised environmental and ethical issues, such as habitat destruction, overuse of water in lithium extraction, and labour rights violations. In response to these concerns, automakers and policymakers are encouraging more sustainable sourcing and production practices. In 2023, Northvolt managed to build the first battery cell that consisted of 100% recycled nickel, manganese, and cobalt – the pillars of a circular battery economy. The recycling of used batteries for energy storage, in particular, is gaining traction as an effective way to use resources wisely [28].

Research into alternative battery technologies—such as solid-state and sodium-ion batteries—is also underway to reduce reliance on scarce and environmentally harmful materials. Solid-state batteries, which offer higher energy density and faster charging times, are expected to enter mass production by 2028, with Toyota and QuantumScape making significant investments in the technology. Toyota has even announced plans to release its first solid-state battery EV by 2027. Meanwhile, sodium-ion batteries, which use more abundant materials, are gaining attention as a cost-effective alternative for lower-range EVs. Chinese automaker BYD plans to introduce sodium-ion batteries in its models starting in 2024 [29].

While the transformation of supply chains presents both challenges and opportunities, it is only one aspect of the broader economic, market, and strategic risks associated with NEVs. The rapid shift toward electric mobility has far-reaching implications for global trade, labour markets, and industry competitiveness. Understanding these risks is crucial for governments, businesses, and consumers as they navigate the evolving NEV landscape [30].

6 Supply Chains, Technological Advancements, and R&D

The emergence of New Energy Vehicles (NEVs) is having a dramatic impact on the global supply chain, from sourcing raw materials to reconfiguring traditional

automaking networks to finding ways to localize battery production. As interest in NEVs rises, both auto manufacturers and policymakers must navigate new challenges and opportunities in the sector [31].

The demand for critical materials used in batteries is one of the most impacted areas of supply chains by NEVs. Lithium, cobalt, nickel and rare earth metals are required to build the high-capacity batteries that run electric vehicles. However, the sourcing of these material poses challenges, such as price volatility and geopolitical risks [31][32].

As global demand has exploded, the price of these raw materials has shot up, creating an incentive for automakers to build stable supply chains. These geopolitical elements create additional complications—the global supply of rare earth metals, for example, is dependent on China, which controls roughly 60% of the market and can leave manufacturers in different regions vulnerable. In response, many automakers are diversifying their supply routes or investing alternative battery chemistries that require fewer rare elements, such as lithium-iron-phosphate (LFP) batteries [33].

The transition to NEVs is also upending legacy internal combustion engine (ICE) supply chains. The industries that used to center around the production of engines and transmissions are now rapidly adapting or have transformed completely, since EVs have less than half the parts of internal-combustion cars [28].

Localization efforts extend beyond battery production. Governments worldwide are offering incentives to attract investments in EV-related infrastructure, including charging networks and component manufacturing. Major players like Tesla, Volkswagen, and BYD are expanding their production facilities in key markets to align with regional policies and reduce transportation costs [34].

Therefore, the rise of the NEVs is changing the world supply chain structure. From transforming existing ecosystems to increase access to critical raw materials, to restructuring old automotive networks, the industry is finding new ways to adapt to a future that is more sustainable and efficient. Localization efforts are reducing the dependence on foreign suppliers, while an increased focus on sustainability is prompting automakers to reevaluate their sourcing and recycling strategies. With NEV adoption continuing to grow, the ability for the industry to adapt to these supply chain shifts, and innovate sustainably, will prove critical for sustained growth [35].

7 Risks Associated with NEVs

While the global automotive industry is undergoing unprecedented change called New Energy Vehicles (NEV), this significant change brings two risks. Automakers face many challenges, among the most notable being the huge upfront investment needed to make the switch from internal combustion engines to electric vehicles. This transition requires massive capital to retool factories, develop new vehicle platforms, and build factories to produce batteries at scale. Ford, for example, has also promised more than \$50 billion through 2026 to grow its electric vehicle (EV) lineup and battery manufacturing operations. Such companies need to perform constant R&D to improve battery efficiency, charging technology, and vehicle range. Though government incentives have offset some costs, the future profitability of NEVs is uncertain, particularly for

manufacturers who have failed to achieve economies of scale. Without ever-increasing demand, or if production costs remain high, some companies will struggle to compete [36].

Profitability continues to be an urgent issue. But many EVs need government subsidies to be affordable, so automakers have a way to go. Yet, as these incentives decline, manufacturers need to be able to lower production costs with competitive pricing [37]. Compounding this uncertainty, prices of the essential raw ingredients—chiefly lithium, cobalt, and nickel—volatility a lot [21]. If automakers fail to manage these financial pressures effectively, NEV adoption could slow, leaving the market dominated by only a few major players [14].

Geopolitical risks further complicate the situation. China dominates the global battery supply chain, controlling a significant portion of lithium refining, cobalt processing, and battery manufacturing. This dependence on a single country creates a major vulnerability for automakers in other regions. Trade disputes, export restrictions, or geopolitical tensions could disrupt supply chains, leading to higher costs and production delays. In response, some governments and companies are working to develop localized battery production and diversify raw material sources, but these efforts require time and substantial investment. The U.S. Inflation Reduction Act, for example, offers tax incentives for domestically produced batteries, encouraging automakers to source materials from North America rather than relying on Chinese suppliers [4].

Another challenge is the ongoing semiconductor shortage. Modern NEVs rely heavily on advanced semiconductor chips for battery management, infotainment, autonomous driving features, and vehicle-to-grid communication. The global chip shortage, which began in 2020, caused production delays for major automakers like General Motors and Toyota, costing companies billions in lost revenue. As NEVs become more technologically advanced, their reliance on semiconductors will only increase, putting further strain on an already struggling supply chain. If chip manufacturers cannot keep up with demand, automakers may face production slowdowns, delaying widespread EV adoption [11].

Environmental concerns also need to be addressed. Increased electricity demand from widespread EV adoption could reduce the environmental benefits of electrification if the power used to charge NEVs primarily comes from fossil fuels. In countries like China, where coal still plays a major role in electricity generation, EVs may not deliver as much of a reduction in carbon emissions as expected. To maximize sustainability, investments in renewable energy—such as solar, wind, and hydroelectric power—must grow alongside the expansion of the NEV market. Additionally, advancements in smart grid technology and vehicle-to-grid integration could help balance electricity demand and reduce strain on power infrastructure [28].

Real-world examples highlight the complexity of these challenges. Tesla, for example, continues to struggle with scaling battery production because of supply chain constraints and high raw materials costs. The company has poured billions into its own gigafactories for lithium-ion batteries to reduce dependence on external suppliers and bring down production costs, but securing a steady supply of lithium and other vital minerals is still proving difficult. In the same vein, legacy manufacturers like General Motors and Ford have faced the steep expenditures of overhauling their vehicle lineups

at a time when supply chains have been disrupted and more competition has been brought to bear. Ford's EV division posted a 3-billion-dollar loss in 2023, demonstrating the financial dangers of the transition [10].

Despite these obstacles, the long-term outlook for NEVs remains optimistic. Continuous advancements in battery technology—such as the development of solid-state batteries—promise to address key concerns related to cost, range, and sustainability. Companies like Toyota and QuantumScape are leading research in this area, with commercial production expected by 2028. Additionally, collaboration between automakers, technology firms, and policymakers is accelerating innovation and expanding charging infrastructure [37].

The transition to NEVs presents both opportunities and risks. Economic pressures, supply chain vulnerabilities, environmental concerns, and market uncertainties create significant challenges, but proactive investment and policy support can help mitigate these risks. Automakers must navigate fluctuating material costs, geopolitical tensions, and consumer adoption barriers while ensuring long-term sustainability and competitiveness. As the industry continues to evolve, a comprehensive approach that integrates technological advancements, infrastructure development, and regulatory alignment will be essential for building a resilient and successful NEV future [38].

8 Conclusion

The transition to New Energy Vehicles (NEVs) is reshaping the automotive industry, global supply chains, and consumer behaviour. As demand for sustainable transportation continues to grow, NEVs—including electric vehicles (EVs), plug-in hybrid vehicles (PHEVs), and hydrogen fuel cell vehicles (FCEVs)—are becoming central to the future of mobility. This shift is largely driven by technological advancements, such as improvements in battery efficiency, alongside government policies designed to promote cleaner, more energy-efficient vehicles. However, despite these gains, significant challenges remain. High upfront costs, limited charging infrastructure, and the need for a stable supply of raw materials like lithium, cobalt, and nickel must all be addressed as the market continues to expand.

For automakers, adapting to this evolving landscape requires substantial investment in research and development (R&D) to drive innovation and enhance vehicle performance. At the same time, strengthening supply chains is essential to mitigate risks related to material shortages, geopolitical tensions, and semiconductor constraints. To remain competitive, automakers must explore new business strategies, such as vertical integration, localizing battery production, and collaborating with governments and other stakeholders to build sustainable infrastructure. These efforts will help lower costs, improve efficiency, and make NEVs more accessible to a wider range of consumers.

While the shift to NEVs presents economic, supply chain, and strategic challenges, it is a crucial step toward a more sustainable transportation future. Continued investment in charging infrastructure, advancements in battery recycling, and strong regulatory support will be key factors in ensuring NEVs become the dominant mode of

transportation in the years ahead. As the NEV market expands, it will not only transform the automotive sector but also shape global energy policies, environmental standards, and economic trends. Ultimately, the success of NEVs will depend on overcoming current obstacles and seizing the opportunities they offer to create a cleaner, more sustainable future.

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