Morgan Lewis

REPORT

NAVIGATING CHANGE

INNOVATION, POLICY, AND MARKET SHIFTS IN THE AUTOMOTIVE INDUSTRY

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NAVIGATING CHANGE: INNOVATION, POLICY, AND MARKET SHIFTS IN THE AUTOMOTIVE INDUSTRY

The automotive industry is undergoing a period of rapid transformation, driven by advancements in electric vehicle (EV) technology, artificial intelligence (AI), and digital connectivity amid shifting trade policies and evolving labor regulations. While innovation continues to shape the future of mobility, the regulatory and economic landscape remains uncertain, requiring industry players to remain agile in adapting to new challenges.

Morgan Lewis's Automotive Hour webinar series explored the key trends defining the industry, from the expansion of EV infrastructure and cybersecurity concerns in connected vehicles to the impact of new tariffs and labor policies on global supply chains. This report compiles insights from these discussions, highlighting how manufacturers, suppliers, and investors can navigate an increasingly complex regulatory environment while positioning themselves for long-term success.

ELECTRIFYING THE FUTURE: TRENDS, OPPORTUNITIES, AND CHALLENGES IN EV DEVELOPMENT

Market Growth and Consumer Adoption

The electric vehicle (EV) market saw another year of strong growth in 2024, with more than 1.2 million fully electric vehicles sold in the United States, accounting for 7.6% of all new light-duty vehicle sales—up from 5.9% in 2022. EV sales continued to climb into 2025, with a 15% year-over-year increase in Q1 driven by consumer demand, expanded model availability, and advancements in battery technology.

However, recent policy shifts have introduced uncertainty. The federal government has already moved forward with efforts to roll back EV incentives, with Republican senators introducing a bill in early February seeking to eliminate the $7,500 federal tax credit while proposing a new $1,000 fee on EV purchases to support road infrastructure funding. Although long-term projections still suggest sales could reach 4.8 million annually by 2030, the extent of federal support in the United States will play a critical role in shaping future growth.

Despite these shifts, automakers continue to invest heavily in electrification. Advances in manufacturing efficiency and battery technology are expected to further reduce costs, addressing a key consumer concern. However, overcoming lingering misconceptions about EV range and charging reliability and availability remain crucial for broader adoption.

Charging Infrastructure Expansion

In 2024, the United States made significant progress in expanding its EV charging network, reaching approximately 78,000 public charging stations and 170,000 ports. Yet, this still falls short of the estimated 1.2 million public charging ports estimated to be needed by 2030. Federal initiatives, such as the National Electric Vehicle Infrastructure (NEVI) Formula Program, provided substantial funding to accelerate deployment, particularly in underserved areas.

Looking ahead, however, executive actions have put the future of federal charging infrastructure funding in doubt. The US administration has paused new funding obligations under the NEVI Formula Program, placing approximately $3 billion in expected state funding on hold while the program undergoes review by the US Department of Transportation's (DOT's) Federal Highway Administration, a move that could delay planned charging infrastructure projects across the country.

While private sector investment in charging networks continues, uncertainty over government support could slow expansion efforts, particularly in rural regions where public-private partnerships have been critical to development.

Global Leadership in EVs

Global EV leadership also remains in flux. China continues to dominate both domestic EV sales and exports, while Europe saw battery-electric vehicle registrations surpass diesel models for the first time in 2024. In the United Kingdom, EVs now account for one-fifth of the total market. But despite this progress, European subsidy programs continue to be uneven, with some nations scaling back incentives, while others work to expand them.

In the United States, previous efforts to establish a competitive domestic EV industry through programs like the Inflation Reduction Act (IRA) are now facing challenges. Policy uncertainty may impact automakers' long-term investment strategies as companies evaluate supply chain resilience and manufacturing incentives.

Cybersecurity and Compliance

As EV adoption accelerates, so do concerns about cybersecurity threats to charging infrastructure and vehicle communication systems. The interconnected nature of EVs—through vehicle-to-vehicle, vehicle-to-grid, and vehicle-to-everything technologies—creates new cybersecurity risks that automakers and infrastructure developers must address.

While comprehensive federal cybersecurity regulations for EV infrastructure remain lacking, 2024 saw an increased emphasis on best practices from the US Department of Commerce's National Institute of Standards and Technology (NIST) and the US Department of Energy and DOT's Joint Office of Energy and Transportation. Looking ahead, regulatory developments could tighten compliance requirements for automakers and charging network operators.

In addition, EV charging stations must navigate complex compliance standards, including the Americans with Disabilities Act (ADA), the Buy American Act, and state-specific accessibility requirements. As federal grants for charging projects become more uncertain in 2025, businesses will need to be strategic in securing funding and ensuring compliance.

Looking Ahead

The EV market remains in a state of rapid evolution. While 2024 saw major gains in consumer adoption, infrastructure, and global market expansion, 2025 has introduced new uncertainties due to shifting US policies. Automakers, infrastructure developers, and investors will need to stay agile in navigating these changes to sustain momentum in the transition to electric mobility.

TECHNOLOGY AND INNOVATION: AI, DIGITAL TRANSFORMATION, AND DATA GOVERNANCE

AI Integration: Transforming Automotive Design and Operations

While artificial intelligence (AI) has been a feature of the automotive industry for years, recent advancements have made it a catalyst for innovation across the automotive value chain, enhancing processes from design to production and post-production. Newer generative AI platforms now allow manufacturers to leverage vast amounts of data to optimize supply chains, streamline production, and improve predictive maintenance scheduling.

However, AI's expanding role also brings complexities with it, particularly regarding liability, data governance, and regulatory compliance. Companies must engage early with AI providers to ensure transparency and address potential risks related to intellectual property rights and data quality. Without proper oversight, issues such as unchecked biases in AI algorithms can result in major disruptions in the automotive manufacturing and production process.

The regulatory landscape is also evolving rapidly under the new US administration, which has issued multiple executive orders aimed at promoting AI innovation while setting new guidelines for its governance. The administration's AI initiatives emphasize reducing regulatory barriers to AI adoption in manufacturing and transportation while establishing risk management frameworks for high-impact applications. These adapting measures are expected to play a crucial role in shaping compliance strategies for automotive companies, particularly as they increasingly integrate AI-driven technologies into their operations, supply chains, and regulatory frameworks in the years to come.

Digital Transformation in Automotive Contracts

As the automotive industry undergoes a rapid digital transformation, organizations will need to adapt traditional contracting approaches to ensure their use of technology, workforce strategies, and operational processes align with evolving business and market demands. For initiatives that involve AI and other emerging technologies, it requires clear definitions of final product expectations to ensure alignment between all parties and mitigate any potential risks.

Understanding and keeping pace with established timelines is a key contractual consideration going forward as well, keeping in mind critical milestones, and addressing missed deadlines with appropriate remedies such as milestone credits. Additionally, strong supply chain management strategies like exclusivity agreements or second-source options can help stabilize operations, reduce risks, and ensure long-term stability.

Connected and Autonomous Vehicles: Navigating Cybersecurity and Privacy Laws

The growing adoption of connected and autonomous vehicles (AVs) in the United States and abroad has introduced complex regulatory challenges, primarily regarding data privacy and cybersecurity. These vehicles generate and transmit vast amounts of data, requiring automakers to comply with what is currently just a patchwork of data protection and cybersecurity laws that vary across multiple jurisdictions.

In the European Union and United Kingdom, the General Data Protection Regulation (GDPR) mandates strict requirements on accountability, data subject rights security, and cybersecurity. The EU AI Act enacted in 2024 categorizes AI systems by risk, placing strict obligations on high-risk applications, such as AV technologies. Meanwhile, the NIS 2 Directive and the EU Cybersecurity Act also require automakers to implement robust security protocols and incident response mechanisms.

In contrast, the United States still lacks a uniform federal data privacy law for automotive technologies. Instead, companies must navigate a mix of state and federal regulations, including the Driver's Privacy Protection Act, as well as agency oversight from the Federal Trade Commission (FTC) and the US Department of Transportation's National Highway Traffic Safety Administration.

Since President Donald Trump's election, reported plans have signaled a favorable stance toward AV development, with early indications that it may seek to relax federal regulations to accelerate AV deployment. According to initial reports, the US administration is considering a federal framework to regulate self-driving cars, potentially easing roadblocks, such as the current cap on the number of AVs allowed on public roads. Bipartisan discussions on new AV legislation remain ongoing, and the current administration's approach is expected to prioritize innovation and industry growth. However, any regulatory changes will still need to address safety, cybersecurity, and privacy concerns, particularly if state-level AV regulations continue to vary across jurisdictions.

California still leads the way regarding consumer privacy protections, while other states like Virginia and Utah have introduced opt-in consent requirements and specific exemptions for data collection. The evolving regulatory environment will require automakers to closely monitor state and federal developments as AI and AV technologies become more prevalent in the industry.

Data and Privacy Regulations: Challenges in Compliance and Transparency

The growth of data-driven technologies requires a strategic approach to information governance, ensuring transparency in how companies collect, process, and share data to meet legal obligations and build consumer trust.

Compliance with supply chain transparency standards, such as the European Council's Corporate Sustainability Due Diligence Directive (CSDDD) and Germany's Act on Corporate Diligence Obligations in Supply Chains (LkSG), is particularly critical. These frameworks emphasize accountability for human rights and environmental concerns within supply chains, requiring automakers to implement risk management processes and align with ethical sourcing mandates.

Beyond these transparency regulations, financial and consumer protection laws are increasingly intersecting with automotive data governance. The FTC's CARS Rule, a major price disclosure regulation passed in early 2024, was designed to enhance transparency in vehicle transactions, preventing deceptive pricing and unfair add-on product sales. The CARS Rule was vacated by the US Court of Appeals for the Fifth Circuit on procedural grounds in January 2025, and it remains unclear whether the FTC will seek further review or attempt to reissue the rule, particularly in light of recent leadership changes at the FTC. Enforcement actions from the Consumer Financial Protection Bureau (CFPB) have also highlighted concerns around inaccurate data reporting by auto lenders, deceptive loan marketing, and unfair practices regarding vehicle financing.

To manage these evolving regulatory landscapes, companies should develop effective compliance measures that take into account the following:

- **Privacy and security by design:** Embedding data protection principles into vehicle software, connected systems, and digital services to comply with privacy laws such as GDPR and the FTC's vehicle data oversight
- **Consumer data transparency:** Clearly informing consumers about how their data is collected, stored, and used while ensuring compliance with disclosure requirements under applicable law
- **Supply chain due diligence:** Implementing contractual safeguards to ensure suppliers comply with global data protection laws, ethical sourcing mandates (e.g., the CSDDD or LkSG), and cybersecurity best practices
- **Regulatory compliance training:** Conducting ongoing employee education programs to reinforce compliance with financial, data privacy, and consumer protection laws, reducing legal exposure
- **Incident response and risk mitigation:** Establishing robust breach notification protocols, cybersecurity risk assessments, and clear liability allocation in contracts to manage potential regulatory penalties

GLOBAL TRENDS AND REGULATORY SHIFTS: NAVIGATING A DYNAMIC LANDSCAPE

Trade Policies and Tariffs: Shifting Strategies and Global Supply Chains

Tariffs were widely anticipated to play a central role in US trade strategy under the administration, leaving automakers just months to begin preparing for potential disruptions and long-term shifts in supply chain dynamics. During President Trump's first term, tariffs were leveraged to address trade imbalances, particularly targeting Chinese-origin goods under Section 301 of the Trade Act of 1974, with rates ranging from 7.5% to 25%, as well as global steel, aluminum, and derivative articles with tariffs of 10% to 25% under Section 232 of the Trade Expansion Act of 1962. Notably, the Biden administration maintained many of these measures, expanding tariffs on Chinese EV and EV battery imports and tightening exemptions of the Section 232 tariffs while prioritizing domestic production through subsidies in the IRA and Infrastructure Investment and Jobs Act.

The administration has already implemented aggressive trade measures impacting the automotive industry as one of its primary policy moves. On March 26, the president announced an additional 25% tariff, effective April 3, 2025, on automobiles (i.e., cars and light trucks) and certain identified parts (i.e., engines, transmissions, powertrain parts, and electrical components), with a process to expand application to additional parts. Automobiles that qualify for United States-Mexico-Canada Agreement (USMCA) preferential treatment will be given the opportunity to certify the amount of US-origin content and will be responsible for a tariff only on any foreign-origin content. USMCA-qualifying parts will not be subject to the tariff until the government establishes a process for identifying and applying tariffs to non-US content. These policy shifts have sparked major concerns within the automotive sector over supply chain disruptions and rising manufacturing costs, prompting industry leaders to explore strategies such as adjusting sourcing and production practices to mitigate the impact.

On April 2, 2025, the president issued an executive order declaring a national emergency over non-reciprocal trade relationships and imposed "reciprocal" tariffs under the International Emergency Economic Powers Act (IEEPA). Effective April 5, 2025, a 10% ad valorem tariff now applies to imports from all countries, with that rate increasing on April 9, 2025 to between 11% and 50% for certain countries. Those increased reciprocal tariffs were paused for 90 days beginning on April 10, so imports from all countries other than Mexico, Canada, China, Cuba, North Korea, Russia, and Belarus will be subject to the previously announced 10% baseline tariff.

Importantly, automobiles and automotive parts subject to existing Section 232 duties are exempt from this new tariff regime, although companies should be aware that this does not preclude other future trade actions targeting the sector. Goods that qualify for preferential treatment under the USMCA remain exempt from both swaths of IEEPA tariffs, while non-USMCA qualifying goods remain subject to duties of 25%, except for Canadian-origin energy and energy resources, which are subject to a 10% tariff. While USMCA qualification can also offer a reprieve from the Section 232 duties affecting automobiles and parts, in some instances that relief is limited to the value of US-origin content and not applicable to the value of the import as a whole.

Additionally, the April 2 order eliminates the de minimis exemption (duty-free treatment for imports valued under $800) for most countries, pending systems that allow for collection. For imports from China and Hong Kong, this exemption will be removed entirely starting May 2, 2025. Goods from these regions will be subject to a 30% ad valorem duty plus a $25 per item postal fee—rising to $50 per item on June 1, 2025—posing significant implications for low-value vehicle parts and aftermarket components.

These developments underscore the need for automakers to stay agile in responding to rapidly shifting trade policies, as ongoing negotiations and potential further tariff adjustments could create additional supply chain challenges in the months ahead. Ensuring that importers are appropriately classifying and valuing

merchandise, and claiming the appropriate country of origin, will be key for mitigating the imposition of additional tariffs.

Global Market Dynamics: Balancing Growth, Regulation, and Competition in Europe and Asia

The global automotive market continues to be shaped by economic pressures, regulatory shifts, and evolving trade policies. In the European Union, strategic funding initiatives, such as the €4.6 billion subsidy for battery production, reflect an effort to bolster supply chain resilience and clean technology leadership. However, unlike in the United States and China, where government-backed financial aid plays a central role in EV adoption, EU companies face strict state aid regulations, requiring European Commission approval before engaging in subsidized transactions.

Regulatory enforcement is also intensifying, with price-fixing investigations, anti-subsidy probes, and antitrust measures aimed at preventing market distortions and ensuring fair competition. At the same time, vehicles are at the heart of current trade measures. Tariffs against Chinese EV vehicles demonstrate recent mobilization of trade measures in the European Union. US motor vehicles may also be part of a broader deal between the United States and the European Union to avoid tariffs. Updates to EU antitrust guidelines, including the Horizontal Guidelines and the Motor Vehicle Block Exemption Regulation, highlight a broader strategy of integrating sustainability goals with competitive fairness.

Beyond Europe, geopolitical tensions and shifting market forces continue to impact global automotive strategies. In Asia, China's dominance in EV production remains strong, but tightening 6b emission standards and data security laws present compliance challenges, particularly for companies working on connected and autonomous vehicles. Meanwhile, Japan's regulatory stability and focus on green innovation—underscored by its $2 trillion Green Innovation Fund—signal a long-term commitment to carbon neutrality and advancements in hydrogen and battery technologies. Japan has also taken cautious steps toward rideshare deregulation, though full-scale adoption awaits broader political consensus.

As the global industry navigates these challenges, automakers and investors must adopt agile strategies to mitigate risk. Diversifying supply chains, closely monitoring trade policies, and proactively engaging with regulators will be critical for maintaining competitiveness in an increasingly complex and regulated market.

Labor and Compliance Shifts: Workforce Dynamics and Collective Bargaining

Labor rights and union influence continued to gain momentum worldwide in 2024, particularly in the United States, European Union, and the United Kingdom.

The United Auto Workers strike of 2023 applied targeted disruption tactics to pressure the Big Three automakers, securing wage increases and contract concessions that bolstered unionization efforts at non-union plants. Across the Atlantic, the United Kingdom's July 2024 labor reforms also expanded union access, streamlined recognition processes, and banned "fire and rehire" practices, aligning with broader European efforts to strengthen worker protections through measures like the CSDDD and LkSG.

The US administration has exhibited an unpredictable stance toward labor unions that could significantly impact the automotive industry workforce. On the one hand, the new administration is likely to take a less union-friendly approach, as Republican administrations are generally more aligned with management interests. Additionally, President Trump immediately took the unprecedented step of firing National Labor Relations Board (NLRB) Member Gwynne Wilcox, rendering the NLRB without a quorum and unable to act.

On the other hand, the new US secretary of labor has pro-union leanings and was recommended by the Teamsters Union. And other actions suggest a more-favorable union posture, including the president's siding with the longshoremen's union during the recent east coast port's strike, close ties to the Teamsters and other outreaches to unions. All of this signals a shift in labor policy that could reshape the balance of power

between employers and unions, influencing collective bargaining and workplace regulations in the years ahead.

These policy shifts could weaken union influence in the automotive industry, potentially making it more difficult for workers to negotiate employment terms and workplace conditions. As the regulatory landscape evolves, automakers should remain attentive to changes in labor policy that could affect workforce stability, production efficiency, and long-term labor relations.

LOOKING AHEAD

The automotive industry is at a crossroads, as stakeholders balance technological advancements, regulatory developments, and economic pressures that will ultimately shape the industry's future. While EV adoption and AI-driven innovations offer new opportunities for growth and efficiency, evolving trade policies and regulatory frameworks pose significant challenges. As labor dynamics and supply chain strategies also shift, proactive compliance and engagement with policymakers will be key. With careful planning, automakers can adapt, innovate, and thrive in an increasingly complex global market.

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