AUTOMOTIVE INDUSTRY UPDATE—JANUARY 2025

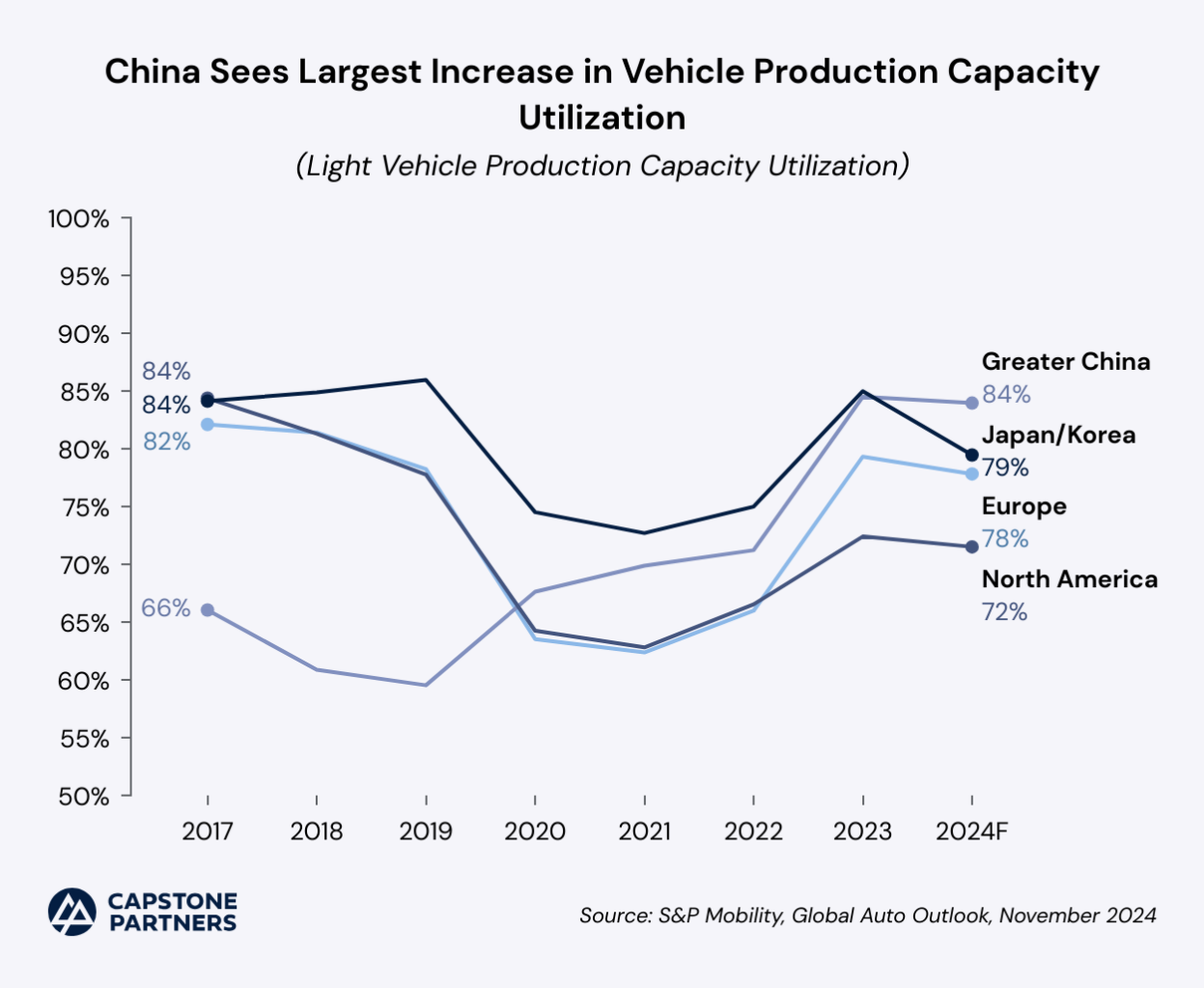
Facing Disruption, Suppliers Adopt a New Playbook

The global Automotive industry landscape has experienced rapid change, disrupted by geopolitical risks, wage inflation and labor scarcity, dynamic regulatory environments, market shares shifting in China and globally, and the pace of product and process innovation. The major upheaval occurring in the industry's balance of power as traditional Western original equipment manufacturers (OEMs) lose global market share has been a key force facing production. This phenomenon was underscored in 2024, with foreign OEM transplants outpacing the Detroit 3 in U.S. production. During the same time, China has also risen above Japan to be the world's new number one global exporter of vehicles. Traditional OEMs have lost market share due to significant competitive disadvantages on cost, speed-to-market, and innovation. OEM suppliers must now carefully assess their customer and OEM program mix, especially with respect to successful Chinese automakers.

Capstone has observed further deterioration of operating conditions particularly in Europe, a top global exporter of automobiles behind Japan and China. This deterioration has been highlighted by material year-over-year (YOY) and quarter-over-quarter (QOQ) declines in operating profitability across major European OEMs. Frequent headlines of bankruptcies, plant closures, and job cuts in Germany and other countries underscore the growing pressures of OEMs needing to adapt to declining consumer demand, fierce competition in the Electric Vehicle (EV) market (especially from Chinese OEMs), and rising operational costs.

Shifting production capacity utilization across major vehicle manufacturing regions, with the exception of China, has highlighted difficulties faced by OEMs. Utilization has recovered from prior Covid lows;

however, production growth remains slower even as OEMs continue to add new capacity for EVs and multi-energy vehicles. Declining capacity utilization rates could lead to increasing plant closures and consolidation pressures.



While many competitive OEMs have signaled a pause in battery electric vehicle (BEV) launches, BEVs have continued to come to market as the industry will likely invest significant near-term capital into the technology and charging infrastructure. Delays in BEV program launches have signaled OEM challenges in balancing EV innovation with market readiness amid slower than expected demand, highlighting the risks of production delays and evolving consumer demand.

The "shift and pause" strategy comes at a time when EV sales in Europe have declined 5.8% YOY through Q3 2024 and OEMs, such as Ford (NYSE:F) and their F-150 Lightning program, have faced price cuts, inventory issues, and growing competition, according to The European Automobile Manufacturers' Association.[1] These conditions have led to further strategic debates regarding flexible (or multi-energy) platforms as OEMs focus on adjusting production for optimal sales growth and profitability.

OEMs have also faced stubbornly high inventory levels as they tackle optimal production volumes and consumers grapple with increasing vehicle prices. A recent example of this was Stellantis' (BIT:STLAM) decision to temporarily halt production of the Jeep Grand Cherokee and Dodge Durango SUVs at its Detroit Assembly Complex for one week in order to "align production with sales" and reduce elevated inventory levels, according to Stellantis.[2]

These conditions have resulted in growing earnings pressures across the industry's value chain. Headwinds to OEM returns are expected to continue as their internal combustion engine (ICE) earnings face normalizing vehicle prices and they struggle to profitably build EVs to support their large investments. Despite this, OEM suppliers will likely need to continue making significant investments in new technologies while also potentially facing increased pricing pressure as their OEM customers strive to remain competitive. Suppliers have focused on cost reduction efforts, restructuring for lower capacities, and prioritizing margins and free-cash-flow over growth.

Given the disruption occurring at the global level, dynamic regulatory environments, the fluidity of demand and production, and deteriorating industry conditions, stakeholders have strategically assessed their operations to "future proof" in the face of disruption. This was recently highlighted by Volkswagen's (XTRA:VOW3) agreed to restructuring plan that is designed to streamline operations, enhance efficiencies, and secure a competitive financial footing with $4.2 billion in targeted cost savings per year as the OEM pivots to producing EVs, according to a company press release.

Industry stakeholders have also carefully monitored and assessed their operations, with many in a "wait and see" mode, as the result of the U.S. Presidential election are expected to have a direct impact on the U.S. and global Automotive industry. Discussions within the value chain have focused on key themes around trade and protectionism, EVs, and automotive regulations.

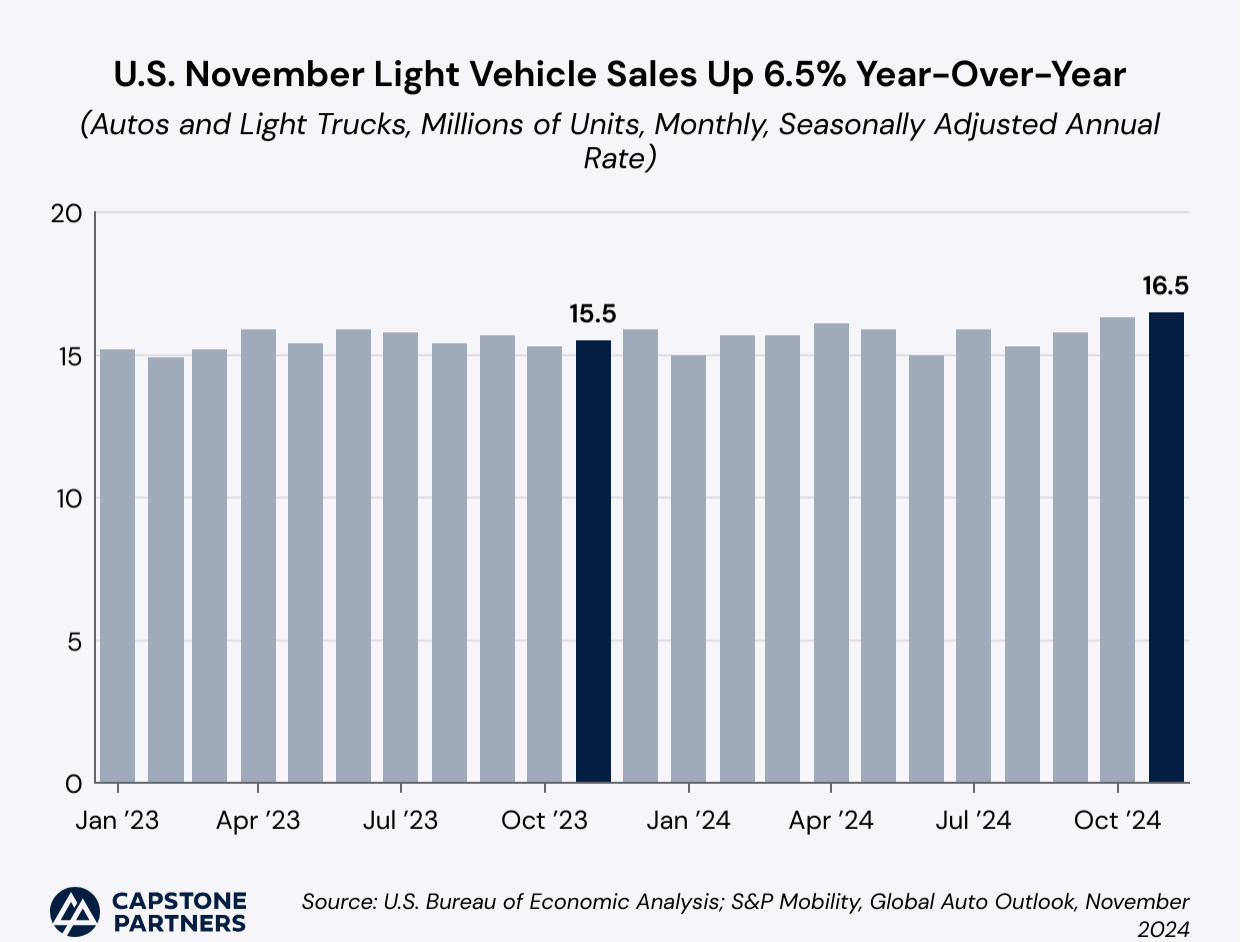
Key Industry Considerations Following November 2024 U.S. Elections

Trade/Protectionism	Electric Vehicles	Automotive Regulations
		
Short-Term	***Mid-Term***	***Long-Term***
• U.S. election has historically not had material near-term market impact. • A wait-and-see approach is likely as it relates to changes in direction and tactical strategic plans within the Global Auto industry. • Initial fallout could be a BYD plant in Mexico and potentially delayed or cancelled EV launches. • Tariffs would raise vehicle pricing with imports and potentially the industry and could impact topline volume and brand share.	• A potential rollback of the Inflation Reduction Act (IRA) and emission regulations likely means a slower EV transition in the U.S. and fewer or delayed EV launches in the critical 2026-2028 window. • Additional plant investment or vehicle sourcing in the U.S. may be announced or started. • Autonomous Vehicle (AV) development could get fast tracked under Trump, which is somewhat counter to the focus on ICE vehicles.	• Softer regulation will likely impact the share of EVs well after Trump leaves. • Industry forecasts for North American EV adoption and production are expected to be reversed downward from baseline forecasts. • Maintained tariffs could suggest investment and sourcing in the U.S. would be higher in order to support local demand efficiently. • Looser AV regulations could bring forward deployment of robo taxis and AV car sharing in the long run and restart investment but lower topline sales volume.

Source: Capstone Partners

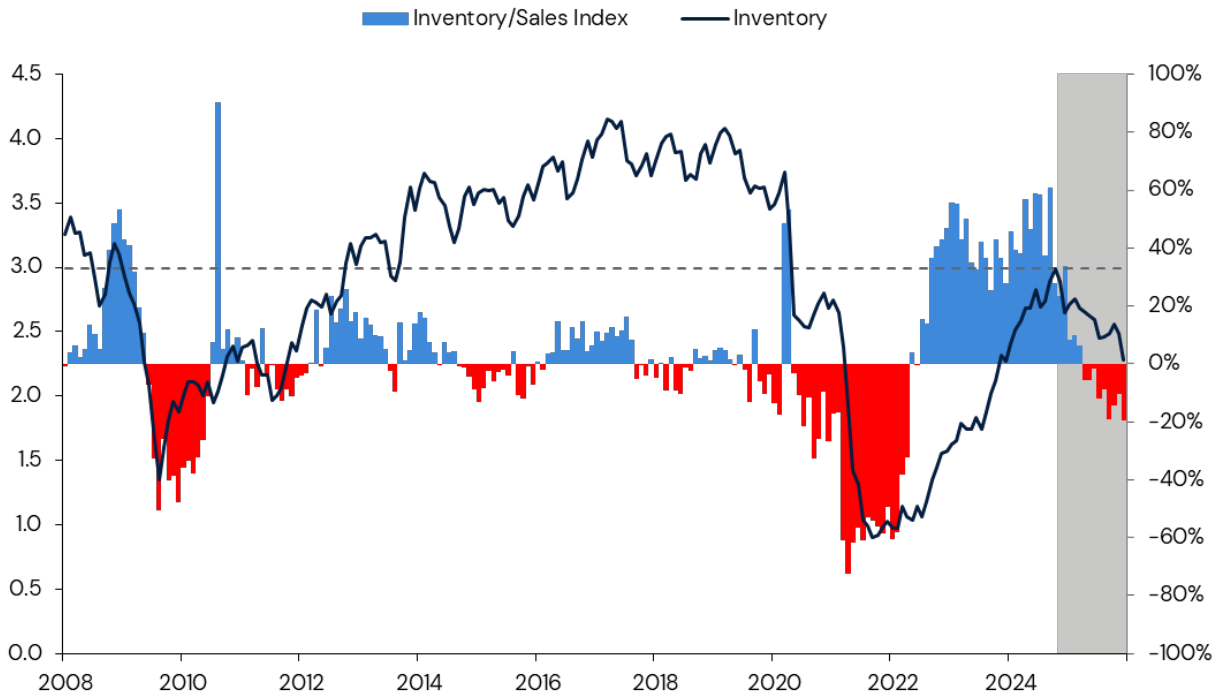
Suppliers must continue adapting to the industry's new normal. It is not enough that suppliers rely on the "old playbook" of cost cutting, conserving cash, executing flawlessly, and waiting patiently for

volumes to rebound. Instead, suppliers must also rely on a new playbook where they clearly position themselves for the future, selectively target customers and platforms, and strategically invest in the right technologies.



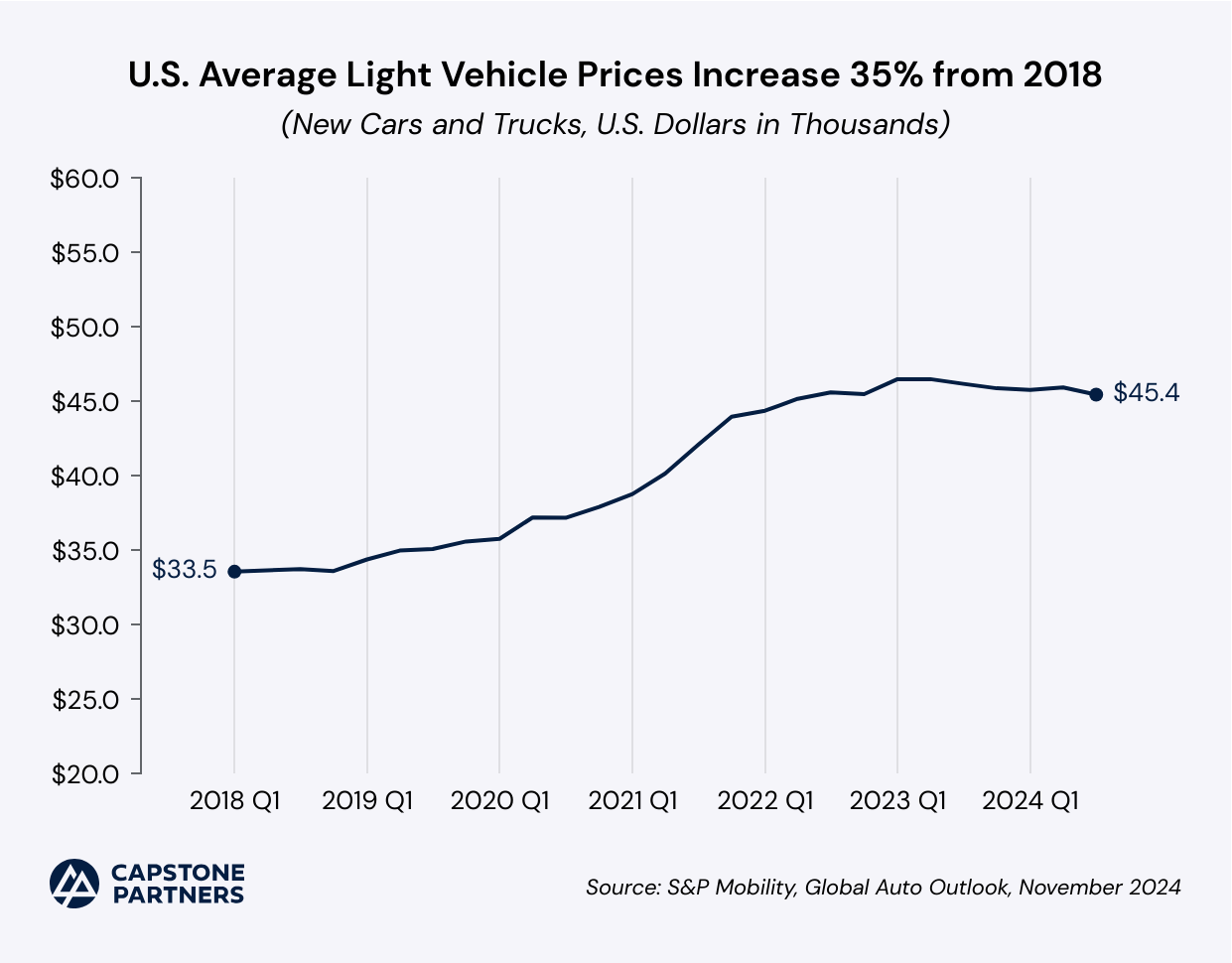
Now that supply chain challenges have largely subsided, OEMs have restocked inventories and have shifted their focus from supply to demand fundamentals. Supply chain challenges during Covid enabled automakers to reap record profits as the pandemic created shortages of new car production and OEMs resultantly raised vehicle prices. Covid-induced inventory challenges have now largely abated and enabled an inventory rebuild; however, average new vehicle prices remain elevated and have increased 35% from Q1 2018 to Q3 2024, according to S&P Mobility.[3]

OEM's Restock Inventories as COVID-Supply Chain Disruptions Ease
(U.S. Light Weight Vehicle Inventories)

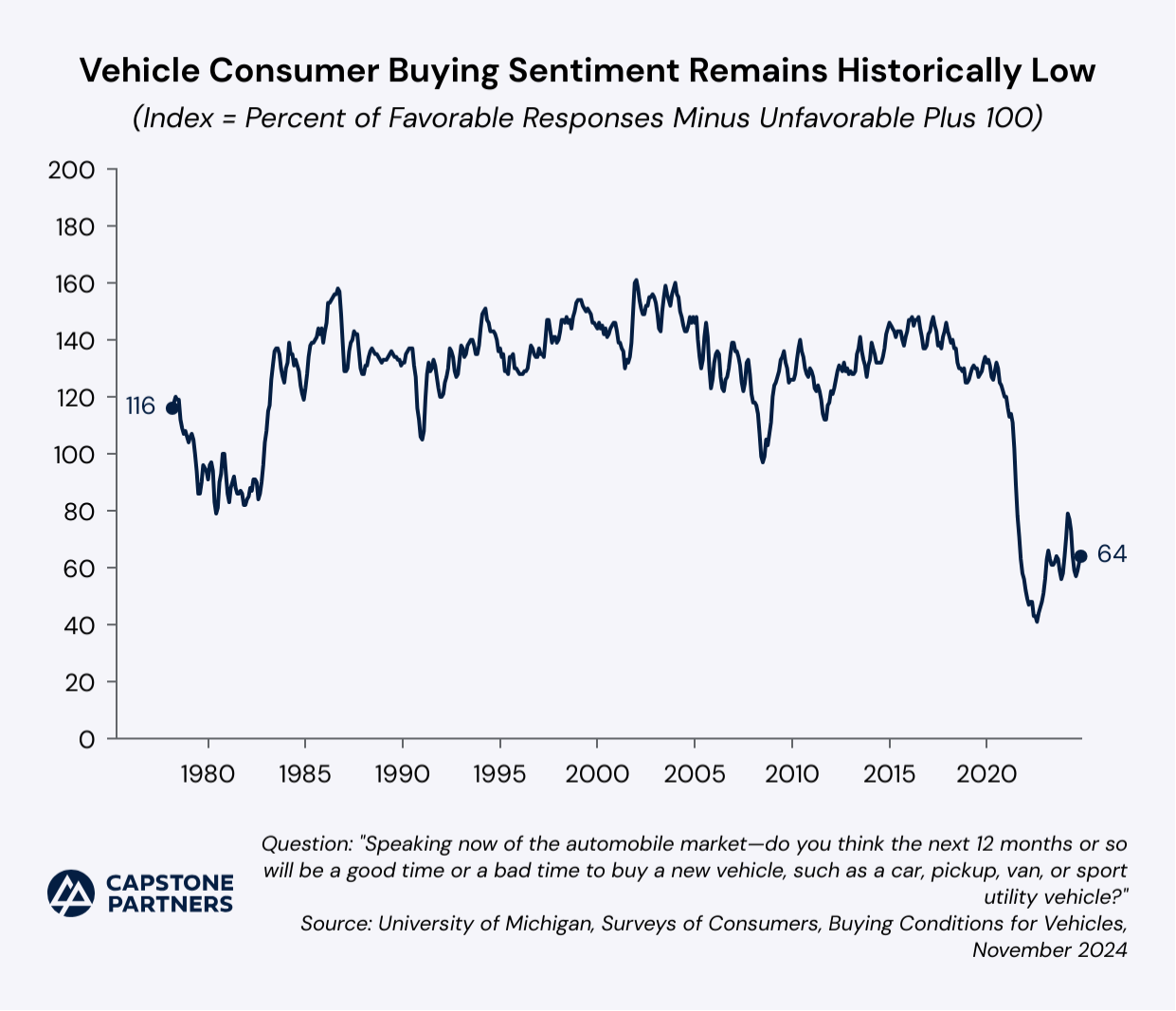


Note: Shaded area indicates forecast.
Source: S&P Mobility, Global Auto Outlook, November 2024.

The shift from pandemic-era supply chain problems to demand constraints has put pressure on retailers and automakers to more aggressively price unsold inventories. Of note, car buyers received $3,400 in discounts and incentives on average in December 2024, according to research from J.D. Power.[4] This represents a 25% increase compared to December 2023 as OEMs aim to attract inflation-weary car shoppers. However, it remains to be seen if incentives and discounts prove to be enough to improve consumer sentiment and buoy demand in 2025.



Along with materially higher new vehicle pricing, consumers have grappled with higher overall costs of vehicles propelled by elevated interest rates, repair bills, and insurance premiums. Heightened automotive insurance prices have underscored the rising costs for consumers, which have increased approximately 51% from December 2019 to November 2024, according to the U.S. Bureau of Labor Statistics.[5] In addition, November 2024's consumer price index (CPI) rose 2.7% YOY, primarily driven by a 15% YOY increase in automotive insurance premiums, according to the U.S. Bureau of Labor Statistics.[6] The cost for insurers to replace vehicles after a car accident has been higher primarily due to elevated new vehicle prices.

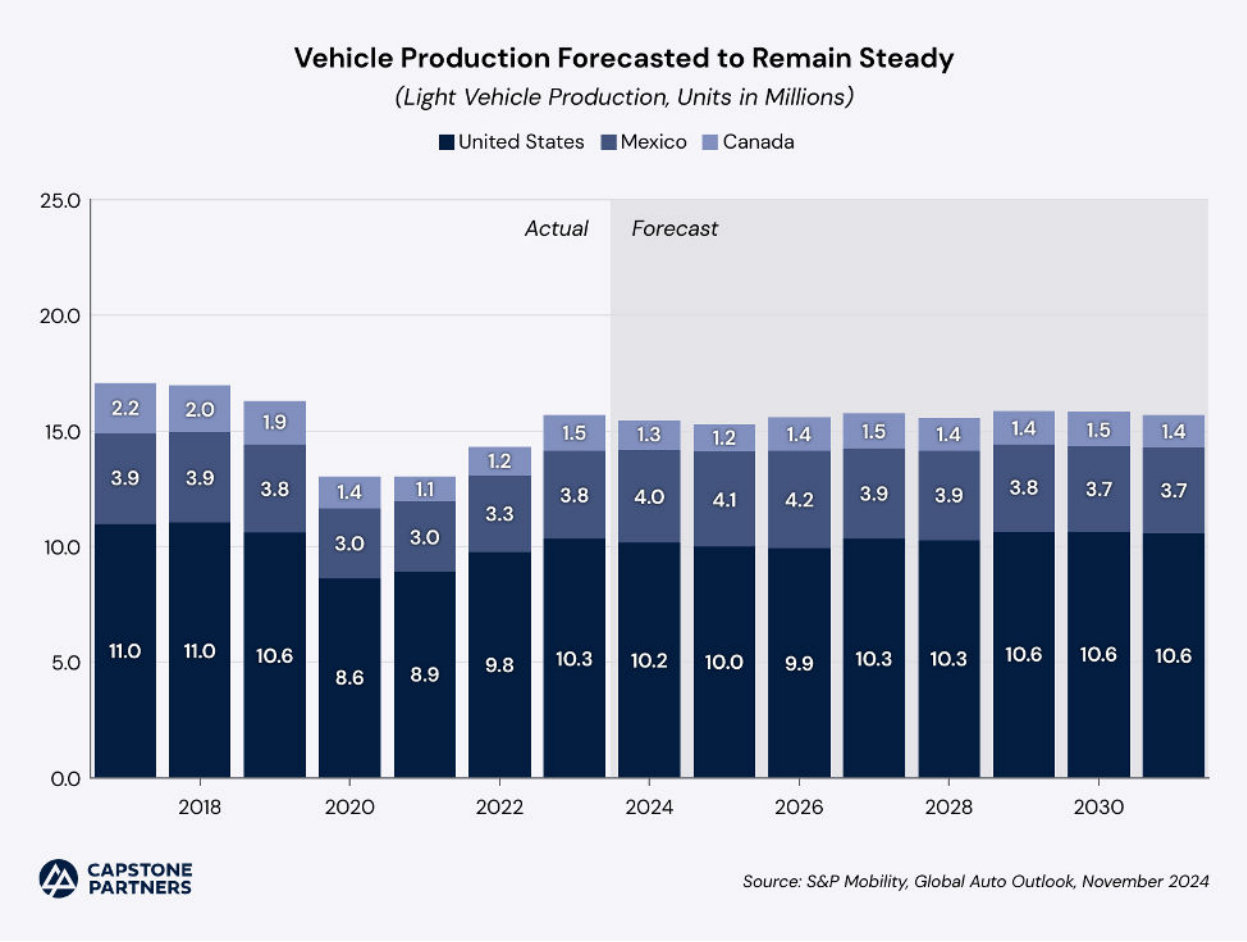


Finding an affordable car in the U.S. could continue to be a problem for consumers in 2025 as new import tariffs threaten to raise vehicle prices. Notably, approximately 33% of all vehicles priced below $30,000 and sold in the U.S. are built in Mexico, according to WARDS Intelligence. Similarly, Canada has remained key trading partner for the U.S. Automotive industry and China has continued to be an important source of components and raw materials for virtually all carmakers.

North American OEMs Require Additional Capital for Refreshed Program Launches

In North America, inventory tailwinds have largely subsided for OEMs. As a result, areas of high inventory need to be addressed by OEMs while also managing concerns around high vehicle pricing and an uneven BEV transition. The BEV transition has been hindered by slower adoption and increased uncertainty. This has translated into delays, cancellations, and weaker launch curves for many OEM EV programs. As a result, capital needs will likely intensify as OEMs continue with planned new EV and refreshed ICE program launches—many of which have great potential for variability. Industry stakeholders have closely observed Chinese OEM and supplier activity in Mexico as it has threatened

the status quo and added pressure to the United States–Canada–Mexico Agreement (USMCA) scheduled to be reviewed in 2026.



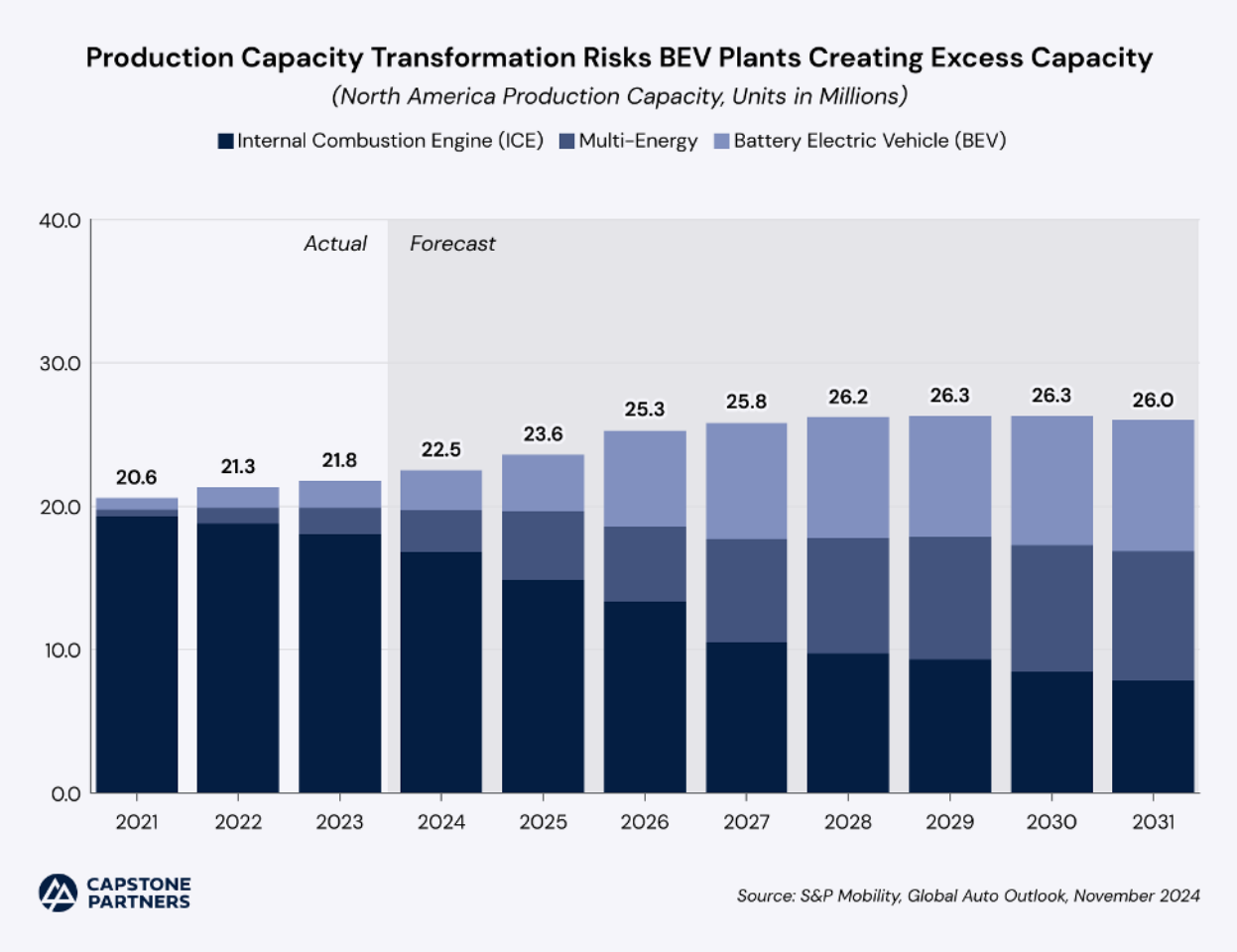
North American BEV Plants Create Excess Capacity in Anticipation of Increased Production Volume

As production volumes have continued to increase for BEVs and multi-energy vehicles, BEV plants have created excess production capacity. Of note, ICE production capacity is forecasted to decrease from 83% in 2022 to 37% by 2028, according to S&P Mobility. The significant capacity transformation presents an interesting dilemma for OEMs and their suppliers, especially in 2030 and beyond, to either reduce ICE production capacity or convert.

The industry has closely monitored capacity utilization rates in the face of weaker than expected EV demand and fierce competition in export markets. Further declines could lead to cost cutting efforts as OEMs and their suppliers seek to execute savings initiatives. The declines also highlight a risk where the industry is producing more BEVs than the current amount of BEV consumers. Production of multi-

energy vehicles is expected to act as a hedge for any extended period of underutilization and declines in ICE utilization. These pressures enable an environment for increased industry consolidation.

It is important to note that light vehicle electrification forecasts are under review as a realignment of expectations continues under a new U.S. Presidential administration that is expected to reduce focus on EVs.

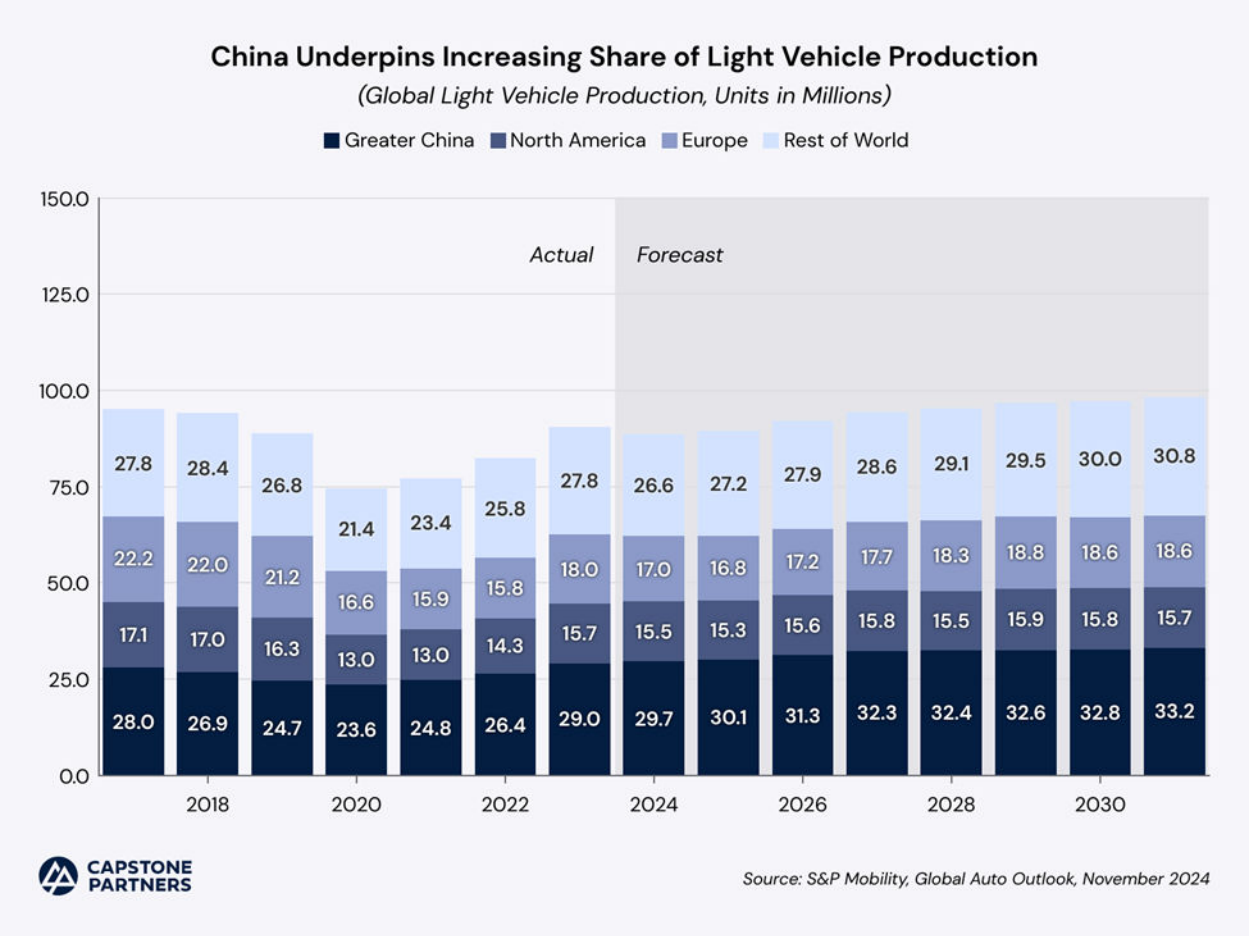


Global Production Hinges on Balancing Pricing and Volume Pressures

Global supply chain disruptions have been largely mitigated with easing demand and chip lead times. After two years of strong gains, 2024 was characterized by balancing pricing and volume pressures.

European activity has highlighted stalling growth led by backlog depletions and weak demand conditions, particularly with EVs. Production has remained under pressure due to imports, cost optimization on entry-level vehicles, and offshoring offset by support provided by Chinese OEM localization. In addition, European Union tariffs on Chinese EV imports could further slow Europe's EV market development.

Chinese activity has underpinned increasing production share of domestic OEMs with foreign OEM production share declining ~21% from 2019 to 2024, according to S&P Mobility. Domestic OEMs are expected to contribute ~69% of production volume by 2030. Domestic demand has been buoyed by New Energy Vehicles (NEV) incentives providing production scale for domestic OEMs. Export opportunities have also driven increased production and capacity utilization.



OEM Operating Profits Largely Decline, Select Players Record Growth

OEM operating profits largely declined in Q3 2024, apart from a few industry players such as BYD (SHE:002594), GM (NYSE:GM), and Kia (KRX:000270). In Q3 2024, BYD's and GM's operating profits increased 29.2% and 21.5% YOY, respectively, according to S&P Capital IQ. Kia recorded a slight uptick of 3.1% YOY during the same period. GM, seemingly an outlier among other OEMs, reported better than expected Q3 earnings and raised its profit forecast for the third time in 2024. The company has focused on executing a ~$2 billion annual cost reduction plan, optimizing ICE and EV margins, and has benefited from SUV, pickup, and EV sales. BYD's rapid gains in difficult market conditions highlight the Chinese OEMs' aggressive domestic and international expansion. Profit warnings from major European OEMs have largely cited a worsening industry outlook due to weak demand in major markets, rising

costs, and increased foreign competition particularly from Chinese OEMs. In Asia, OEMs are under similar pressures from declining demand coupled with ballooning costs and inventories. Nissan (TKS:7201), under considerable pressure, has resultantly engaged in aggressive cost cutting efforts and is in merger discussions with Honda (TKS:7267).

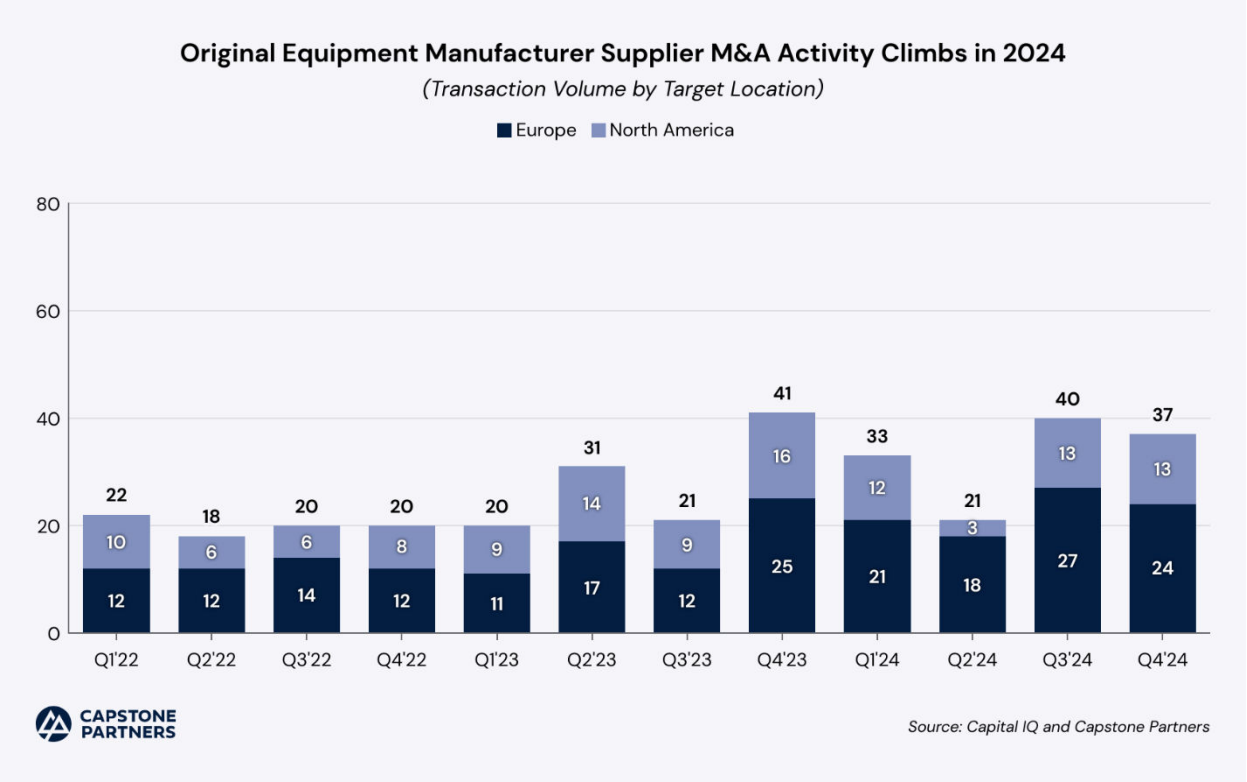
Reported Quarterly Operating Profit by Major OEM & Region
($U.S. Dollars in Billions)

		2023 Q1'23	2023 Q2'23	2023 Q3'23	2023 Q4'23	2024 Q1'24	2024 Q2'24	2024 Q3'24	Change QOQ	Change YOY
Europe										
BMW	(ETR:BMW)	$5.83	$4.75	$4.61	$4.74	$4.39	$4.18	$1.79	-57.3%	-61.3%
Mercedes	(ETR:BMG)	$5.47	$4.95	$4.20	$4.60	$3.54	$3.95	$2.39	-39.4%	-43.0%
VW	(ETR:VOW3)	$6.18	$6.08	$5.42	$8.49	$4.88	$6.08	$3.17	-47.9%	-41.5%
Volvo	(STO:VOLCAR B)	$1.68	$1.41	$1.76	$2.86	$1.71	$1.97	$1.44	-27.1%	-18.1%
Renault	(PAR:RNO)	$1.09	$1.10	$1.06	$1.11	$1.16	$1.15	NA*	-0.7%	5.1%
Totals		**$20.25**	**$18.28**	**$17.05**	**$21.80**	**$15.68**	**$17.34**	**$8.79**		
Detroit 3										
Ford	(NYS:F)	$1.96	$2.64	$1.41	-$0.80	$1.34	$1.79	$1.24	-30.8%	-12.3%
GM	(NYS:GM)	$2.71	$2.83	$3.15	$0.87	$3.82	$3.88	$3.83	-1.2%	21.5%
Stellantis	(NYS:STLA)	$7.44	$7.47	$4.91	$5.13	$4.27	$4.24	NA*	-0.7%	-43.3%
Totals		**$12.10**	**$12.93**	**$9.47**	**$5.20**	**$9.42**	**$9.90**	**$5.07**		
Asia										
Toyota	(TKS:7203)	$4.68	$7.75	$9.63	$11.92	$7.37	$8.13	$8.07	-0.8%	-16.2%
Nissan	(TKS:7201)	$0.66	$0.89	$1.39	$1.00	$0.60	$0.01	$0.22	3493.5%	-84.0%
Honda	(TKS:7267)	$0.35	$2.73	$2.02	$2.69	$2.02	$3.01	$1.80	-40.3%	-11.0%
Hyundai	(KRX:005380)	$2.79	$3.23	$2.84	$2.80	$2.65	$3.11	$2.73	-12.2%	-4.1%
Kia	(KRX:000270)	$2.20	$2.58	$2.13	$1.90	$2.55	$2.64	$2.19	-17.0%	3.1%
BYD	(SHE:002594)	$0.79	$1.01	$1.73	$1.38	$0.64	$1.75	$2.24	27.4%	29.2%
Totals		**$11.48**	**$18.19**	**$19.75**	**$21.71**	**$15.82**	**$18.66**	**$17.25**		

**Renault and Stellantis have not published Calendar Year Q3 2024 earnings, QOQ and YOY % Δ metrics based on Q2 2024 and Q2 2023 values.*
Source: Capital IQ

OEM Supplier M&A Rises, Buyers Pursue Geographic Expansion and New Technologies

Merger and acquisition (M&A) volume in the North American and European supplier base ticked up with 131 reported deals in the 2024 calendar year, representing a 16% YOY increase. Further consolidation appears likely in 2025 as the supplier base faces industry wide disruption. Several recent announcements have supported this outlook including ABC Technologies' announcement to acquire TI Fluid Systems (LON:TIFS) in September 2024 for an enterprise value of $2.2 billion (0.6x EV/Revenue, 6.7x EV/EBITDA), Dana's (NYSE:DAN) announced plan to divest its Off Highway business (October 2024, undisclosed), Continental AG's (ETR:CON) planned spin off its Automotive business (August 2024, undisclosed), and merger discussions between Honda and Nissan.



Carve out activity has remained a priority as suppliers and investors shore up liquidity by divesting non-core (and sometimes distressed) business units. Carve outs and divestitures have attracted private equity carve out specialists to realize potential unforeseen value creation. This was highlighted in October 2024 with Atlas Holdings' acquisitions of both REHAU Automotive (a division of REHAU Group) and SRG Global (a division of Guardian Industries) to create a newly formed global platform company. Terms of the transactions were not disclosed.

Strategic acquisitions have been focused on geographic manufacturing rationalization, new production capabilities and process automation, material sciences, and new technologies. Certain strategics and private equity-backed strategics have fulfilled additional production capacity by pursuing distressed acquisitions as well.

Select Industry News

- President Joe Biden, in a move with major implications for the automotive supply chain, blocked the sale of U.S. Steel (NYSE:X) to Japan's Nippon Steel (TSE:5401), ending a $14.1 billion deal that has faced months of vocal opposition and raising questions over the future of a U.S. industrial giant. The companies have signaled that they may challenge the legal grounds of any block, raising the prospect that the matter will remain in dispute. President-elect Donald Trump has also pledged to block the transaction.

"U.S. Steel will remain a proud American company—one that's American-owned, American-operated, by American union steelworkers—the best in the world," the President said in a statement. – ***Automotive News***

- Honda Motor and Nissan Motor signed a memorandum of understanding to formally begin talks to explore a merger to create the world's third largest automotive group behind Toyota and Volkswagen. Honda and Nissan are currently Japan's second and third largest automakers. Mitsubishi Motors, a longtime partner of Nissan, said it would also consider joining the new group.

  Over the next six months, the companies will discuss combining their operations under a holding company, with the goal of completing the merger in August 2026. Honda's CEO, Toshihiro Mibe, explained that the combination can better navigate the industry's technological transition while tackling R&D and new investments as a combined force. – ***Reuters***

- GM announced that it will refocus its autonomous driving development by merging its Cruise robotaxi business with its in-house, consumer-facing autonomous and driving assist technology group in charge of its Supercruise assisted driving software. GM reportedly deployed $9 billion into the Cruise robotaxi business before the merger and expected the business to contribute $1 billion to 2025 revenues.

  "Given the considerable time and expense required to scale a robotaxi business and an increasingly competitive market, combining forces would be more efficient and therefore consistent with our capital allocation priorities," GM CEO, Mary Barra, said on a conference call with analysts. – ***GM Press Release***

- Stellantis announced that the company's Board of Directors accepted CEO Carlos Tavares' resignation. The OEM announced the process for appointing a new permanent CEO will be concluded by the first half of 2025. A new Interim Executive Committee, chaired by John Elkann, will be established until the new permanent CEO is assigned. Tavares' resignation comes less than two months after the company announced he would retire at the end of his contract in early 2026. – ***Stellantis Press Release***

- American all-electric automaker Rivian Automotive (Nasdaq:RIVN) announced a conditional commitment from the U.S. Department of Energy's Advanced Technology Vehicle Manufacturing (ATVM) Loan Program for a loan of up to $6.6 billion (including $6 billion of principal and approximately $600 million of capitalized interest) to accelerate its growth and leadership of EV design, development and manufacturing in the U.S. The funds are intended to help Rivian build out a $5 billion factory in Georgia with capacity to produce 400K SUVs and crossovers, a project that the company initially halted to save more than $2.3 billion.

The announcement comes after Illinois Governor, J.B. Pritzker, in Spring 2024 pledged $827 million of State incentives for Rivian to expand production capacity at an Illinois plant to 215,000 vehicles per year. - ***Rivian Press Release***

OEM and Supplier News

- Continental AG has announced plans to spin off its Automotive sector group by the end of 2025 and list it on the Frankfurt stock exchange. The company plans to present the spin-off proposal to the supervisory board in March 2025, with a resolution to be made at the annual shareholders' meeting scheduled for April 2025. The company highlighted its efforts to strengthen the independence of its profitable Tires and ContiTech groups, while simultaneously preparing for the upcoming Automotive spin-off. Continental also announced that the process of selling off ContiTech's Original Equipment Solutions (OESL) unit will begin in the first quarter of 2025.

  "The Automotive spin-off will unlock new strengths, because focused companies are more agile, especially in times of transformation. The entire Supervisory Board supports this ambitious plan," stated Wolfgang Reitzle, Chairman of Continental's Supervisory Board. **-** **Continental Press Release**

- Stellantis announced to an Italian government panel that it will invest $2.1 billion into Italian production in 2025 and another $6.3 billion into the supply chain. The investments are expected to boost production at Stellantis' six automaking factories in Italy from 2026 with the launch of more than a dozen new models through 2032.

  The announcement comes as Italian plants in have been cycling through short-term layoff programs due to lagging sales, especially of EVs. Economic Development Minister Adolfo Urso said that one reason for production lulls are new European rules that come into effect January 1, 2025, that one-fifth of cars being produced must be EVs or face stiff fines. In October 2024, the Italian government outlined plans to cut €4.6 billion of €5.8 billion of funding earmarked to support the country's Automotive industry between 2025 and 2030. The government cited the cut was to avoid funding cars made in China. **-** ***Associated Press***

- GM informed shareholders that it would record two non-cash charges totaling more than $5 billion on its joint venture with SAIC in China. The non-cash charges relate to restructuring costs and reduced joint venture value. A once reliable source of equity income, the joint venture has lately struggled to compete with the dramatic rise of domestic Chinese automakers. **-** **Associated Press**

- Swedish battery supplier, Northvolt AB, filed for Chapter 11 bankruptcy protection in the Southern District of Texas with ~$30 million in available cash and ~$5.8 billion in debt. Its debts include a $330 million convertible instrument from Volkswagen, its biggest shareholder, that's due in December 2025. The group lost $1.2 billion in 2023, which it attributed to Asian manufacturers driving down prices. The company was seen as a standard bearer for European hopes to prop a supply chain for EVs that would counter well established Chinese and South Korean manufacturers. Scania CV AB, the trucking unit of TRATON and a key customer, will provide ~$100 million in debtor in possession financing as part of the reorganization.

  Northvolt subsidiaries responsible for planned factories in Germany and Canada remain outside of the Chapter 11 process. Northvolt communicated that the planned $7 billion EV battery plant in Quebec, known as Northvolt Six, will not be impacted. Despite active work at the site, questions have arisen about the $2.4 billion in funding pledged by Quebec and Ottawa, including $240 million in secured loans and $270 million invested in the parent company. – ***Automotive News Canada***

- Stellantis has postponed the production of its Ram electric pickup trucks to the first half of 2025, citing a need to ensure quality amid high workloads. The delay reflects the ongoing turbulence in the EV transition, as automakers face slower-than-expected demand and strategic debates over flexible platforms. Stellantis is developing the STLA Frame platform, designed for large trucks and SUVs, which supports gasoline, hybrid, and fully electric models. The delay signals automakers' challenges in balancing EV innovation with market readiness, underscoring the risks of production delays and evolving consumer demand.

  Stellantis reported global YOY revenue declines of 27% in Q3 2024. North American vehicle sales dropped 47% and global vehicle sales fell 20%. The OEM temporarily halted production of the Jeep Grand Cherokee and Dodge Durango SUVs at its Detroit Assembly Complex for one week "to align production with sales" and reduce high inventory levels. – ***Reuters;*** ***Stellantis Press Release***

- Chinese EV OEM, BYD, has hired 200,000 new employees between August and October as production capacity continues ramping up to meet surging global demand. BYD sold 1.1 million new energy vehicles (NEVs) in Q3 2024, with net income reaching $1.6 billion (an 11.5% QoQ rise), surpassing Tesla's revenue for the quarter. BYD's ~503,000 NEV units sold in October marked the Company's fifth consecutive month of record highs and first time surpassing the 500,000 unit mark.

  BYD's hiring is part of its strategy to rapidly expand globally, including opening new manufacturing plants in Thailand, Hungary, and Mexico. Competitive pricing and consolidated supply chain control have helped BYD gain market share from traditional OEMs.

In March 2022, the Company ceased production and sales of vehicles powered entirely be ICE and switched to producing plug-in hybrid electric vehicles (PHEV) and BEV models. From January 2024 to October 2024, BYD's PHEV sales increased ~62% YOY and BEV units sold increased ~12%. **-** ***Reuters***

EV and Zero Emission Technology News

- Stellantis and Chinese battery maker, CATL, formed announced plans to invest $4.3 billion in a 50-50 Joint Venture to build an electric vehicle battery factory in Zaragoza, Spain. Production at the all-new lithium iron phosphate battery plant is planned to start by the end of 2026 and could reach up to 50 GWh of capacity. The investment underpins Stellantis' efforts to bring affordable BEVs to market. **-** **Stellantis Press Release**

- ExxonMobil (NYSE:XOM) and LG Chem (KRX:051910) have signed a memorandum of understanding to supply up to 100,000 metric tons of lithium carbonate from ExxonMobil's planned lithium extraction project in Arkansas to LG Chem's upcoming cathode plant in Tennessee. LG Chem's Tennessee facility, set to be the largest cathode plant in the U.S., will produce 60,000 tons of material annually to support EV battery production. - ***Yahoo Finance***

- Ford announced that it will not produce battery materials at a planned ~$860 million joint venture cathode manufacturing plant in Quebec as the OEM slows EV production due to high costs and weaker consumer demand. South Korean company, EcoPro, and lead partner in the joint venture will continue to manage the construction project despite Ford's exit. Other joint venture partners include SK On Co.

  The announcement comes after Ford announced in October 2024 that it will idle production of F-150 Lightning EV trucks at its Dearborn, Michigan plant until January 2025, with the last shift scheduled for November 15, 2024. Ford explained that the decision was made to "adjust production for an optimal mix of sales growth and profitability" as it manages significant financial losses in its EV division, including a $1.2 billion loss in Q3 and a projected $5 billion loss for the year. Excitement around the F-150 Lightning has been met with price cuts, inventory issues, and growing competition from Tesla's Cybertruck, contributing to an uncertain path for Ford's flagship electric truck. - ***Automotive News Canada***; ***Reuters***

- BYD has become the first OEM to produce 10 million NEVs, a milestone three years after reaching the one million mark. In October 2024, BYD surpassed 500,000 monthly sales for the first time, contributing to over 3.25 million NEVs sold year to date (YTD)—a 36% increase from the previous year. Nearly 1.36 million of these units were fully electric. BYD ramped up production by 200,000 units to meet demand and recently hired an equivalent 200,000 new

employees. The company is accelerating its global expansion with new facilities in Thailand, Hungary, Brazil, Pakistan, Turkey, and Mexico, aiming to close the gap with global automakers like Ford, which BYD outsold in Q3 2024. - ***Electrek***

- Lyten, a battery startup based in Silicon Valley, has received court approval for the acquisition of manufacturing assets from Northvolt. This deal under Chapter 11 includes equipment and a lease at Northvolt's Cuberg facility in San Leandro, California. Lyten plans to invest $20 million to expand the San Leandro site and its operations in San Jose, focusing on producing lithium-sulfur batteries. With this acquisition, Lyten will be able to produce 200 megawatt-hours of batteries, generating revenue while they work on a larger plant in Nevada that is set to open in 2027. - ***TechCrunch***

Human Capital News

- Volkswagen reached an agreement with labor leaders to cut capacity at the Volkswagen brand level while avoiding plant closures. The "Zukunft Volkswagen" agreement (or "Future Volkswagen") keeps the brand's 10 German factories operational and reinstates job security agreements until 2030. In exchange, workers agreed to forego some bonuses, cut capacity at five sites by approximately 750,000 units and reduce the workforce by more than 35,000 over the next five years. The measures are estimated to result in $4.2 billion of cost savings per year in the medium term as the Volkswagen group looks to boost efficiency in German plans and optimize processes to ensure a successful transition to electromobility. **-** **Volkswagen Press Release**

- The world's largest automotive supplier by revenue, Robert Bosch GmbH, announced plans to eliminate 5,500 global jobs including 3,800 in Germany. The cuts will impact Automated Driving and Car Steering business units. The German supplier cited cuts were due to increasing competition, pricing pressures, and the industry "suffering from significant overcapacity." - ***Bloomberg***

- Webasto, a German roof systems supplier, announced planned layoffs impacting 218 employees in metro Detroit due to reduced production volumes by a key customer. The termination will impact third shifts at factories in Plymouth Township (Michigan) and New Hudson (Michigan). The Plymouth plant reportedly counts the Ford Bronco as a supported customer program.

  Webasto and its lenders are reportedly in the process of selecting a chief restructuring officer to negotiate restructuring more than $1 billion of debt in the midst of a declining market. The supplier previously sold its charging solutions business in February 2024 to Transom Capital. - ***Bloomberg***

- Ford plans to eliminate 4,000 jobs in Europe (or ~14% of its local workforce) by the end of 2027 due to "rapidly deteriorating market conditions for electric vehicles". Ford also cited "the global auto industry continues to be in a period of significant disruption as it shifts to electrified mobility. The transformation is particularly intense in Europe where automakers face significant competitive and economic headwinds while also tackling a misalignment between CO2 regulations and consumer demand for electrified vehicles".

  The reductions will mainly impact plants in Germany and the U.K., including reducing production at Ford's main German plant in Cologne where the electric Explorer SUV and Capri are produced. The strategy adjustment comes as the company is reportedly producing more vehicles at the Cologne plant than it can sell and EV sales in the European Union have declined by 5.8% in the first nine months of 2024. – ***The Associated Press***

- Stellantis will cut one of two daily shifts supporting production of the Jeep Gladiator at its Toledo South Assembly Complex and layoff approximately 1,100 union workers starting January 5, 2025. The cuts are part of Stellantis' efforts to reduce increased inventory levels following two years of declining sales and also to realign U.S. operations for 2025. **–** ***Detroit Free Press***

- Schaeffler (LONDON SE:ECAR) plans to lay off 4,700 employees in Europe as its operating profit nearly halved in Q3 2024. The layoffs spotlight European supplier challenges amid rising costs, declining demand, and increased competition, especially from China.

  Germany will see the most material impact, with approximately 2,800 jobs eliminated at ten sites. The remaining layoffs will occur at unspecified locations, affecting five European plants, including two site closures. The efficiency plan aims to save $316 million annually by 2029 but will cost $632 million. – ***Reuters***

Regulatory and Legal News

- China's commerce ministry has proposed export restrictions on technologies for making battery components and processing critical minerals lithium and gallium. The proposals would enable China to retain its 70% global market share for processing lithium into material needed to produce EV batteries. The proposals could pose challenges to Chinese battery makers with major plans for overseas expansions.

  The latest announcement comes after China imposed export limits on antimony and related elements in August 2024. China accounted for 48% of global mined antimony output in 2023, a strategic metal used in military applications such as ammunition, infrared missiles, nuclear weapons, and night vision goggles as well as in batteries and photovoltaic equipment. **–** ***Reuters***

- The Environmental Protection Agency (EPA) announced that it will allow California, and the 12 other states that have adopted its emissions standards, to ban most sales of new gas-and diesel-powered cars and light trucks starting in 2035. California has long been able to set its own emissions standards under the Clean Air Act provided they are more stringent than federal regulations. Under that authority, the state announced in 2022 a plan to phase out fossil fuel cars in stages, culminating with the ban in 2035.

  California's phase-out would begin in 2026, when the state will require 35% of automakers' sales to be zero-emissions vehicles (ZEV), either electric or hydrogen. In the third quarter of 2024, California's ZEV market share was 26.4%. In addition, 68% of new cars would have to be zero-emissions by 2030, and 100% by 2035. Plug-in hybrids could make up to 20% of sales, provided they have a range of 50 miles or more. Apart from California, 16 states and the District of Colombia have adopted some form of California's emissions standards, and the majority have a plan to phase out gas-powered cars. **–** **California Air Resources Board**

- Stellantis has filed a lawsuit against Brose North America, alleging the supplier shut down Windsor Assembly Plant operations and demanded price increases, costing the automaker more than $3 million in damages. The legal dispute, which includes claims of breach of contract, stems from Brose's refusal to ship parts without a price hike, a tactic Stellantis argues is holding its operations "hostage". The lawsuit seeks financial restitution for past price increases paid by Stellantis under protest. The ongoing legal battles illustrate mounting tensions between OEMs and suppliers over cost pressures, posing risks to operational continuity within the automotive supply chain.
  This is the fifth supplier lawsuit Stellantis has pursued in a year as it confronts escalating costs across its supply chain. Brose has expressed hope for a resolution but noted that industry volatility has strained OEM-supplier relationships. **–** ***S&P Global***

- The European Union's new tariffs of up to 45% on EVs made in China have gone into effect, aiming to shield European OEM from state subsidized Chinese competition. These tariffs vary based on subsidies each Chinese OEM received, with Tesla (Nasdaq:TSLA) starting at ~8% and SAIC Motor at ~35%, to remain in effect for five years. The tariff policy highlights rising trade tensions that could disrupt the EV supply chain and increase costs for consumers while also pushing more Chinese manufacturers to establish European production sites. European OEMs have communicated concerns regarding retaliatory tariffs and long-term impacts on business relationships in China. the Chinese government is considering reciprocal tariffs on European imports and Chinese OEMs are responding by establishing production facilities within Europe to avoid tariffs. The European Union tariffs come one week after Canada imposed 25% tariffs on imports of Chinese and aluminum products on October 22, 2024. **–** ***Reuters***; ***Government of Canada***

This page was updated January 2025. To discuss this information in more depth, or to connect with one of our Automotive industry specialists for more detailed analysis of current trends and issues, please contact us.

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Endnotes

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