



Major Automotive Global Trends of November 2024

December 2024 Edition



Table of contents

1 . Global.....	3
2. Europe.....	5
3. USA.....	14
4. South Korea.....	21
5. China.....	22
6. Israel.....	25



1. Global

New research: the average price of Lithium batteries may drop by almost 50% by 2026, and the market share of Lithium iron phosphate is expected to grow

A new study by the investment bank's research division, Goldman Sachs, estimates that by the end of this year, the average price of lithium batteries for use in vehicles and other uses is expected to fall to about \$111 per kWh. This is compared to about \$153 per kWh in 2023. The price is also expected to fall steeply to about \$80 per kWh by 2026. **In other words, by 2026, the average price worldwide will have fallen by almost 50% compared to 2023.** This decrease may reduce the need for EV subsidies in the USA and other countries.

The study indicates two main reasons for this decline. The first is accelerated technological progress in the industry, mainly the improvement in the energy density of batteries, resulting from innovations in the battery structure. These make it possible to use fewer cells and to reduce production costs.

The second reason is the ongoing decline in the prices of critical materials for battery production, including lithium and cobalt. Raw material costs account for almost 60% of the cost of batteries. The published data shows that the increase in raw material prices caused the cost of producing EV batteries to soar in 2022. However,



by 2030, about 40% of the total reduction in battery costs will result from falling raw material prices.

According to the study, the batteries that currently dominate the market are lithium iron phosphate (LFP) and Ternary Lithium batteries. In addition, solid-state and sodium batteries are gradually appearing on the market, but the study estimates that the transition to mass production of both still faces significant challenges. Currently, Ternary Lithium batteries account for about 60% of the market share, and lithium iron phosphate batteries account for 35-40% of the market share. The study predicts an increase in the market share of lithium iron phosphate batteries in 2025 from 41% to 45%, while nickel-based batteries will continue to dominate the competition for the segment of more expensive batteries with high energy density.



2. Europe

EU: Slim chances for a swift compromise with China regarding tariffs imposed on EVs imported to Europe

During November, news was published about what was supposedly substantial progress in negotiations between the EU and China against the backdrop of Chinese attempts to abolish the "Punitive tariffs." As mentioned, these tariffs were imposed in early November on EVs, made in China, that are imported into the EU.

However, senior EU sources told news agencies in November that progress had been very limited and the chances of reaching a quick agreement were slim. According to the sources: "China has not yet agreed to the EU's strict demands, which aim to prevent Chinese manufacturers from gaining an unfair commercial advantage in the car market".

The two sides were examining a compromise proposal from the Chinese side called a "Price undertaking agreement" – a kind of complex mechanism to control the export prices and quantities of EVs from China that was designed to make tariffs unnecessary.

However, people close to the talks said that the Europeans are insisting on a mechanism to prevent "Cross-compensation," meaning a situation in which the Chinese would offset the cost of committing to minimum import prices for EVs against measures to increase sales of hybrid and plug-in vehicles, which are more profitable.



The Chinese government, for its part, has opposed the possibility that the EU would sign separate deals on more favorable terms with specific Chinese automakers, such as with European automakers that manufacture and export vehicles in China. The European side of the talks claims that such deals align with WTO rules. Still, the Chinese side insists that only China's Ministry of Commerce will negotiate a general, sweeping agreement that would apply to the entire industry.

In this context, the Swedish Foreign Minister said that he hopes the EU and China can quickly reach an agreement on minimum price commitments for EVs imported from China.

It should be noted that in early October, additional tariffs of up to 35%, in addition to the existing 10% tariff, came into effect in the EU on EVs imported from China. This is for a minimum of five years unless a compromise deal is reached. As a result, the Chinese government submitted a request to the WTO for consultations as a formal step before filing a formal complaint.

In a request to the WTO, the Chinese Ministry of Commerce said, "To protect the interests of the EV industry and global cooperation in the transition to green energy, the Chinese government has decided to file a complaint against the EU's anti-subsidy measures". The WTO acknowledged receipt of the complaint but did not comment on the matter.



The WTO complaint procedure states that the organization can only be asked to rule on a dispute 60 days after it is filed. Therefore, a delegation from the EU will travel to China to try to find a compromise.

EU's climate commissioner: there is no change in the deadline for banning the sale of ICE vehicles

Despite heavy pressure from the automotive industry and several European governments to postpone the deadline for phasing out ICE vehicles in the EU (2035), the EU's climate commissioner claims that the 2035 deadline remains in place, as does the schedule for reducing emissions starting in 2025.

Already last year, the EU passed legislation on the subject that has already caused a significant delay and even a halt to the development of new models with gasoline and diesel engines in the European automotive industry. In addition, as part of that legislation, new interim targets will come into effect at the end of 2025, which dictates a significant reduction in CO2 emissions.

Italy and the Czech Republic have already asked the EU to reexamine the targets for banning the sale of gasoline vehicles in light of the sharp decline in EV sales in their territory. However, the Commission refused.

However, the Commission announced that it would hold broad talks with the automotive industry to "Clarify thoroughly how we can shape the future and how we can meet the targets." According to



the Commissioner, many industry CEOs now say that the targets are achievable.

The Commission already agreed to be flexible when it accepted Germany's request last year to allow cars running on "Synthetic fuel" or "e-fuel", as it is called, to continue to be sold after 2035.

Several carmakers continue to warn that they will not be able to meet average emissions reduction targets that come into effect next year in the EU and could, therefore, face billions of euros in fines. According to the Commissioner, these concerns are exaggerated, given the relatively low fines that will be imposed for exceeding the target.

Despite this, in late November, seven countries in the EU (within which automobile manufacturing activity takes place) issued a joint call for the Union to find a solution to cancel the fines that are supposed to be imposed on automobile manufacturers if the average emissions of their models do not meet, starting in 2025, the threshold set in the Union regulations.

According to those regulations, a maximum average emissions of up to 116 grams of CO₂ is set for all models marketed by any car manufacturer in Europe. For every gram exceeding the maximum, the manufacturer will pay approximately 95 euros per vehicle, with the final fine multiplied by the number of vehicles sold by that manufacturer.



According to the seven countries, the European automotive industry is currently at a "Critical juncture" with significant development, production, and global competition challenges. This fact requires an urgent response from the EU to protect the industry and not harm it with huge fines. According to the countries, the sharp decline in EV sales makes achieving the targets almost impossible, and most importers will not meet them and will have to pay huge fines.

German government adopts the EU's "Battery legislation" as part of its national law

In November, the German federal government decided to change the country's national battery law to align it with the new EU battery regulation, which was approved last year by the European Parliament.

The new German law specifies the responsibilities and powers of government bodies and companies regarding the new tasks in the battery sector. This is "So that the goals of battery collection and individual recycling of raw materials can be achieved and manufacturers can be held accountable".

Among other things, the scope of battery disposal will now be expanded to include eMobility: that is, the obligation to collect batteries will also apply to "Light means of transport", such as electric bicycles and electric scooters, with specific municipal collection points being set up for this purpose in the future. Larger



batteries, originating from hybrid or electric cars, are now also included in the German Battery Recycling Act.

The new EU battery legislation, approved in August 2023, is the first in the world to mandate oversight of the entire life cycle of batteries, from production and beyond to recycling. It includes regulations regarding materials, design, labeling, compatibility, testing of batteries, and, of course, the collection and treatment of used batteries.

The initiators of the legislation in Germany say that "The new EU battery legislation is an important milestone in achieving a better 'Circular economy' in Europe. The increasing demand for new batteries should not dictate an increase in the mining of raw materials in the future. New batteries will increasingly be produced from existing resources and recycled batteries. The new law creates the necessary conditions for this in Germany".

France seeks assistance from the EU for EV purchasing subsidies

In November, the new French Industry Minister, Marc Ferracci, called for an EU aid package for the European automotive industry, focusing on subsidies for the purchase of EVs. This is to prevent a situation similar to the complete elimination of EV subsidies in Germany, which led to a collapse in overall demand in this segment in Europe this year.



The minister also called on the EU to launch a pan-European initiative to encourage the purchase of EVs in commercial fleets, including direct subsidies for purchases or investment assistance. The minister acknowledged that China is “Both cheaper and more innovative” when it comes to EVs. He said: “We are facing a competitive challenge, which includes biased demand and unfair trading practices”. At the same time, he said, European manufacturers must make “Significant investments” to comply with European environmental regulations. “The future of our automotive industry depends on whether we find an answer to these enormous challenges.” He also reiterated his country’s position in favor of imposing tariffs on EVs imported from China.

At the same time, France continues to support a ban on the sale of carbon-emitting vehicles in the EU from 2035. According to the minister: “A withdrawal from the target would undermine the strategy of European manufacturers.” However, France wants to achieve a “Targeted solution” to the tough emissions restrictions from 2025 onwards so that “Car manufacturers who are obliged to switch to EVs do not have to pay billions in fines”.

European automotive chip suppliers: the trend of adopting a “Nationalistic” approach may harm business development in the industry

In early November, the CEOs of the three largest computer chip manufacturers in Europe said that the current policies of the United States, China, and Europe, which require manufacturers to



establish semiconductor (chip) production lines within their territories, constitute an obstacle to the development of the industry.

At an electronics conference, the CEOs of the German chip giants Infineon, the French-Italian STMicroelectronics, and the Dutch NXP Semiconductors said that their companies have been "Challenged in recent years by market uncertainty and a clear trend toward 'Nationalist' industrial policy".

According to the CEO of Infineon, "The danger is that the fragmentation between the trading blocs will accelerate. Production is already divided between the blocs, and potential trade tariffs will only worsen the situation". The CEO of STMicroelectronics said that re-establishing separate supply chains and manufacturing networks for chips for China and the West would be very expensive regarding raw materials and engineering.

According to the CEO of NXP Semiconductors, "No country can control the chip industry, and no country can exist independently of the rest of the world." He said: "If there is a complete separation between the production of chips in the different trading blocs, the cost of chips will be so high that no consumer will be able to purchase them... I am sure that every government will understand this in time." The three companies are major chip suppliers to the global automotive industry, and all three have extensive operations in China, the world's largest automotive market.



After a long struggle, the salaries of most engineering and automotive workers in Germany will increase

After a long political and social struggle, the German metalworkers' union, IG Metall, announced on November 12 that employees of German car manufacturers and engineering companies would receive a 5.5% pay increase over the next 25 months. This is part of a collective agreement signed with employers with the government's encouragement.

As part of the deal, employees will receive a 2% pay increase from April 2025 and an additional 3.1% from April 2026. IG Metall also said that in addition, employees will also receive a one-time grant of 600 euros (about \$637) until February 2025, while interns' allowances will increase by 140 euros per month from January next year.

The agreement is expected to cover approximately 3.9 million unionized workers at Mercedes-Benz, BMW, and more. The deal has been welcomed in the German auto industry because it is expected to prevent widespread shutdowns and bring long-term stability to the industry, which is essential in light of the challenges that the German industry is currently facing, primarily compliance with strict Euro 7 regulations and a widespread transition to EVs.

Analysts in Germany point out that the wage increase achieved in the overall agreement is still lower than the 7% increase demanded by German unions and is unlikely to cover the full inflationary



erosion. However, it is still higher than the wage increase of only 3.6% over 27 months, as proposed by employers.

The European Central Bank announced that it is "Closely monitoring" the agreement's impact on inflation in Germany. According to analysts, the agreement marks a turning point from the large wage increases that were common in the past. However, it is not clear whether it will be able to preserve jobs in the auto industry in the long term.

It should be noted that not all auto industry workers are "Covered" by the agreement. The Volkswagen Group, for example, is not bound by it and is conducting separate and lengthy negotiations with its employees, which have already lasted several rounds.

3. USA

Trump's new appointments: a new director for the Environmental Protection Agency (EPA), who previously opposed environmental reforms, and billionaire Elon Musk for the US government's "Ministry of Efficiency"

On November 11, US President-elect Donald Trump announced that he had selected Lee Zeldin to serve as the new US Environmental Protection Agency (EPA) administrator. This is the



federal body responsible for oversight, enforcement, and strategy development in the field of environmental quality in the US.

In a statement, Trump said: "The elected manager has a solid legal background and has been a loyal defender of the 'America First' policy... He will ensure that environmental regulatory decisions are made fairly and quickly while maximizing the potential of American businesses and maintaining the highest environmental standards, including the cleanest air and water in the world".

Zeldin is a Republican from New York who ran unsuccessfully for governor in 2022. After his appointment, Zeldin said on social media: "It is an honor to join President Trump's cabinet and serve as manager of the Environmental Protection Agency. We will restore America's energy dominance, revitalize the auto industry, bring jobs back to the US, and make it a world leader in AI, all while protecting clean air and water".

However, commentators in the US note that while in the House of Representatives, Zeldin voted against several articles of pro-environmental legislation, including the restriction of ICE emissions. In addition, he has a low rating among the environmental lobby in the US. In the United States, it is estimated that one of his first steps will be to "Delete" the strict targets for reducing vehicle emissions in the US by the end of the decade, which his predecessors promoted in the position appointed by President Biden.



Another controversial appointment by Trump is the appointment of billionaire Elon Musk, the "Richest man in the world" and owner of Tesla, to head a new Department of Government Efficiency (DOGE). This is with the stated goal of "Paving the way for eliminating bureaucracy in the US government, reducing unnecessary regulation and wasteful spending, and reorganizing US federal agencies".

It should be noted that during his election campaign, Trump said that he intended to improve the efficiency of the US government to eliminate "Fraud and improper payments" and to conduct a "Comprehensive financial and performance audit" of the US federal government. On November 12, Trump said the US Government Efficiency Department would work with the White House Office of Management and Budget. He said that the department's work would be completed no later than July 4, 2026, the 250th anniversary of the founding of the United States.

Musk may receive the designation of a "US Government Special Employee," a designation for professional employees with specific knowledge who the US government hires for the short term. This designation would allow Musk to maintain management records at companies he owns, including Tesla and SpaceX, and be exempt from federal conflict of interest rules.

Last month, at a Trump rally, Musk said that he could cut at least \$2 trillion from the US federal budget. This would require significant cuts to popular welfare programs such as Social Security, Medicare,



and more. In the last fiscal year, the US government spent more than \$6.75 trillion, of which more than \$5.3 trillion flowed to welfare programs such as Social Security. The auto industry estimates that under his influence, the US administration is expected to advance the regulation of autonomous vehicles that have been delayed and continue to "Filter" foreign EV manufacturers from the market.

Analysts: the tariffs the Trump administration aims to impose on cars and auto parts import may increase car production costs in the US by up to 40 billion US\$

The automotive policy that US President-elect Trump intends to implement after taking office could increase the annual production costs of US-made cars by about \$40 billion. This, in addition to slowing the reduction of carbon emissions and delaying the adoption of AI technology, estimates the NIKKEI in a new report published in November.

According to Trump's campaign statements, upon taking office, he intends to impose 10% to 20% tariffs on all vehicles imported into the US and related products. In the case of vehicles and parts imported from Mexico and Canada, which were exempt from tariffs, a 25% tariff will now be imposed. According to the law, the US president can raise tariffs by using "Emergency economic regulations" even without the approval of the US Congress.

NIKKEI estimates that the high import tariffs will significantly impact the US auto industry, which sells about 15 million vehicles a year.



Many of the popular cars in the US market are currently imported from factories in Mexico, Canada, and Japan, and higher import tariffs will lead to an increase in car prices.

The new import tariffs are expected to apply not only to finished vehicles but also to auto parts, of which Mexico is considered a major supplier, in part due to the trade war between the US and China, which is contributing to a reduction in imports of spare parts from China. Between January and June of this year, almost 41% of total auto parts imports to the US were from Mexican suppliers.

Analysts estimate that the tariffs may also affect future decisions by foreign automakers to invest in NAFTA countries. Among other things, Toyota is currently reexamining its planned \$1.45 billion investment in Mexico, which is intended to increase production of the Tacoma pickup truck for the American market.

Meanwhile, the American consulting firm AlixPartners estimates that if high tariffs are imposed on auto parts imported from Mexico, the cost of producing a U.S.-made vehicle could jump by as much as \$4,000 per vehicle. Furthermore, as the Trump administration also imposes high import tariffs on steel and machinery, these industries will be forced to raise prices.

Other analysts estimate that import tariffs may increase US revenues by \$3.8 trillion in the long term. Still, in the short term, there is concern that American companies will compensate for the rising costs by raising prices.



The renewable energy industry is also expected to face price increases in light of Trump's position that "Lowering energy costs is the necessary step to curb inflation." To this end, he may encourage increased production of fossil fuels and expand the production and export of liquefied natural gas. This is at the expense of investments and subsidies for renewable energies such as solar energy, car batteries, etc.

According to recent estimations, EV market share in the US is expected to drop during Trump's second term in office by 15-20% compared with previous estimates

The uncertainty in the American auto industry following Donald Trump's victory is deepening. The industry is now anticipating a sharp retreat from the pro-environmental policies of the Biden administration, which supported extensive government encouragement of the electric vehicle manufacturing and charging industry in the US. Therefore, many estimate that the slowdown in EV sales in the US will deepen in the coming years.

In November, automotive consulting firm GlobalData released a new forecast, which lowered its expectation for EV penetration in the US by the end of the decade (2030) from 33% to just 28%. According to the consulting firm's analysts, the US transition to EVs will be hampered under the Trump administration due to the Trump administration's promise to lower fuel prices and ease emissions standards for internal combustion vehicles.



US automakers have already invested billions of dollars in recent years in establishing battery and EV manufacturing plants in the US under the environmental goals published by the Biden administration. However, according to the assessment of the consulting firm AlixPartners, the planned investments in EVs in North America by 2027, estimated at approximately \$129 billion, "Are currently at risk." So is the \$7,500 tax credit for consumers who purchase US-made EVs, despite Elon Musk's integration into the government.

The consulting firm estimates that in five years, the US EV market will be smaller than originally projected, and the volume of US EV production is expected to decline in the long term. Automakers will continue to slow their investment in EVs and postpone or cancel the launch of new electric models.

Automakers are also expected to seek to increase production of more profitable gasoline models while converting EV plants to produce plug-in and hybrid models, as Volkswagen is currently doing at its new \$2 billion EV plant in South Carolina.

Despite this, analysts estimate that the Trump administration will have difficulty completely repealing the Biden administration's "War on Inflation Act," which has driven a significant surge in EV production and the establishment of battery factories, which increase employment (many of which are located in states sympathetic to Republicans).



4. South-Korea

South Korean auto manufacturers will have to increase investments in the US as a response to the import tariff increase

In early November, South Korea's trade minister said he expected Korean companies to have to invest more in the US if it raises tariffs on imported goods, especially vehicles. The minister said the South Korean government would take diplomatic steps as the US takes priority measures, but "Individual companies may respond even more quickly".

When asked how the trade and tariff policies of incoming US President Donald Trump will affect the Korean auto industry, the minister said: "If import tariffs are raised in the US, the first alternative that Korean automakers should consider is to increase their direct investments and local manufacturing activities in the US... The Korean auto industry is currently investing capital in the US, and the pace of investment is expected to accelerate in the future".

A South Korean government think tank estimated in November that under current conditions and without a Korean response, the U.S. tariff hike would cost South Korea up to \$44.8 billion in lost exports. Much of that is due to a decline in auto exports.



Higher import tariffs would be a particularly hard blow to its automakers, led by Hyundai Group. According to government trade data, South Korean companies invested \$27 billion in the United States last year, about 44% of their total overseas investment. Last year, South Korea's trade surplus with the United States hit a record \$44.4 billion, more than any other country. Auto exports from Korea account for nearly 30% of total exports to the United States.

However, in October this year, South Korea's export growth slowed to the lowest level in seven months, missing market forecasts. According to the Korean minister, South Korea's Ministry of Trade has drawn up response plans for various scenarios and will hold consultations with the next US administration.

5. China

New research: China is the world leader in the number of public charging stations

China is not only the world's largest market for EVs but also the country with the highest concentration of public charging stations, according to a new study by consulting firm TrendForce published in November.

The study estimates that by the end of 2024, China will have 3.6 million public charging points, nearly 70% of all public charging stations worldwide. China is expected to continue to be the world's



dominant player in this field, although South Korea is expected to overtake it in terms of growth rate, which is **expected to stand at about 39%**.

The growth rate of the number of charging stations in China and the world is mainly limited by land availability, regulation, and regional policies. The distribution of charging stations in China is also far from uniform. According to the study, in October 2024, about 20% of the total public stations in China were concentrated in Guangdong Province, while in large areas of the country, especially in rural areas and small cities, the deployment of stations is still very sparse.

Research: the Chinese auto market heading to a renewed “Price war” next year

The Chinese auto industry has yet to recover from the severe price war it has faced over the past two years, significantly eroding profitability. In recent months, it appeared that the increase in demand for EVs in China had curbed the price war and improved the industry's business environment.

However, a new study by investment bank UBS predicts that the price war will resume in full force in January 2025. The reason is the expected end of the government scrappage program, which this year provided generous government incentives to customers who scrapped polluting vehicles and purchased new, lower-emission vehicles in their place. This program significantly increased demand



for EVs in China by about 1.2 million vehicles and reduced competitive pressure.

However, analysts point out that at the same time, it has also led to an increase in production capacity, and after the tariffs are lifted, a significant production surplus will be created, and factory utilization will drop from about 73% today to 56% next year.

6. Israel

Government offices considering benefits for electric LCV between 3.5-4 tons

The government is considering tax reform to encourage the use and purchase of electric commercial vehicles weighing 3.5 to 4 tons, according to information provided by representatives of the Ministry of Environmental Protection at the annual UN climate conference, held in November in Baku.

According to data from the Ministry of Finance and the Ministry of Environmental Protection, while in the private vehicle sector, the penetration rate of private EVs in Israel is parallel to that of Europe and even exceeds that of some countries (about 25% in 2024), in the electric commercial vehicle segment the penetration rate is only about 2%, which is about a quarter of the European average.



Under the plan, which is currently under review, electric-powered commercial vehicles and vans weighing 3.5 to 4 tons will receive a significant purchase tax discount, up to 30% less than comparable gasoline and diesel models. However, luxury commercial electric vehicles, which are also used for recreational purposes, will likely be excluded from the benefits.

The Ministry of Finance is pressured to grant similar benefits to lighter commercial vehicles with electric propulsion, especially because under the green tax benefit reform that will take effect in January, such vehicles will not benefit from a significant tax benefit.

In addition, a "Window of opportunity" has been created for the introduction of light commercial electric vehicles since most light diesel commercial vehicles, which are in the upper pollution groups (14 and 15), will be "Punished" starting in January 2025 with a "Green fine", which will increase their cost. In addition, additional benefits are being considered for the electric commercial vehicle segment, such as subsidies, recognition of the costs of establishing high-capacity charging stations within organizations with EV fleets, and more.

Commercial vehicles in the 3.5 to 4-ton weight range are considered a popular segment in Israel and benefit from tax relief and benefits, including 15% annual depreciation, recognition of the cost of converting a driver's license for drivers of vehicles up to 4 tons, recognition of operating expenses, exemption from use value in certain cases, VAT refund on purchase, and more.



However, buyers in Israel currently have a negative incentive to purchase commercial vehicles with electric propulsion due to operational limitations in range and loading weight and due to higher purchase prices than those of equivalent diesel models.

Hezi Shayb, Ph.D
CEO – I-Via

A handwritten signature in black ink, appearing to be "H. Shayb", located below the printed name and title.