

Major Automotive Global Trends of September on the background of "Iron Swords" war in Israel

October 2023



Table of Contents

1. Preface	3
2. Global	4
3. USA	5
4. China	9
5. Europe	12
6. UK	23
7. Israel	26



1. Preface

On October 7, at 6:30 a.m., the State of Israel woke up to a new reality. The break of dawn heralded challenges of an unparalleled magnitude that tested the resilience and spirit of our country.

Hamas Terrorists initiated a comprehensive assault on Israel, striking from the skies, sea, and ground. Simultaneously, over 2,000 rockets were launched at Israeli territories, targeting homes, medical centers, and even ambulances, clearly violating the International Humanitarian Law. During this brutal assault, Hamas was accountable for the tragic loss of over 1,300 innocent lives (a number that continues to rise). The horror deepened with more than 2,300 persons wounded, homes set ablaze with residents inside, entire families mercilessly killed together, and infants tragically slain in their sleep. Furthermore, they abducted more than 200 individuals, including children, infants, older people, women, and teenagers. The magnitude of the harm they inflicted is immeasurable.

This edition of our monthly review of the major global automotive trends for September was crafted prior to these harrowing events, and its release was briefly halted due to the evolving situation. These are undoubtedly the most difficult days our country has ever faced. Nevertheless, the indomitable spirit of Israel persists. We continue to stand tall, striving to maintain our daily routines. As this monthly edition highlights key trends in the global automotive



sector, our hearts and thoughts are with every individual in Israel, yearning for a return to peace and security for all.

2. Global

New research: EVs may constitute 60% of new car sales by 2030

The prices of EVs will be at par with equivalent ICE cars earlier than expected, reveals new research made by the Rocky Mountain Institute (RMI) specializing in clean energy. According to the research, the decrease in battery prices trend is expected to continue and result in the prices of EVs being equal to those of ICE cars in Europe by 2024 and in the US in 2026. The institute estimates that due to the decrease in battery prices and the lowering of EV prices, by 2030, EV sales will constitute two-thirds of new car sales worldwide.

RMI's research estimates that the cost of batteries will shrink from 151\$ per kW last year to 60-90\$ per kW by the end of the decade. The research states that by 2030, the price of EVs will be identical or cheaper to that of equivalent petrol or diesel models, and their maintenance will be significantly more affordable, increasing the motivation to purchase them even without exterior tax incentives.

The research assesses that battery prices will drop due to huge industry investments in developing a new generation of batteries that use cheaper and more accessible raw materials, alongside



improvements in the effectiveness of EVs that will enable equipping them with smaller batteries.

Also, the researchers estimate that the current swift growth in EV sales in Europe and China will increase worldwide EV sales by six times at least by 2030. The demand for petrol and diesel cars peaked in 2019 and has been declining since then.

3. USA

The UAW (United Auto Workers) declared a comprehensive strike in the middle of September. Damages to the auto industry are estimated at billions of dollars

In September, the labor dispute between the American auto manufacturers and the UAW turned into a strike of a magnitude and intensity not seen in the US for decades. As recalled, the dispute started due to the UAW's demand for a fundamental change in the wage system towards renewing the multi-year contracts with the three largest auto manufacturers. The workers also demanded protection from the accelerated changes occurring in car manufacturing in the US, headed by the swift shift to EVs encouraged by the Biden administration.

The strike broke in the middle of September in plants of all three large auto manufacturers, Ford, GM, and Stellantis, and the cost of



the damages is estimated at almost 500 million dollars a day. It should be noted that the UAW has nearly 146,000 members that the three large manufacturers employ.

The initial reaction of the auto manufacturers was to reject outright all demands, such as moving to a four-day working week for all workers, the right to shut down in case of production cuts or closing of production lines, matching wages to the cost of living and enhanced sharing of profits with the workers. The auto companies tried to propose a compromise of an addition of up to 20% in wages but were rejected by the UAW.

The auto manufacturers claimed during the negotiations that accepting the demands of the workers would severely damage their competitiveness since already today, the average cost of a working hour in the US is significantly higher than that of Asian and even European companies that manufacture cars in the US in factories without organized labor. The manufacturers presented calculations made by banking firm Wells Fargo & Company, according to which if all the UAW's demands are met, the average work-hour cost will climb to 135\$, compared with 66\$ today and 45\$ only at Tesla, whose employees are not unionized. The manufacturers claim that despite the high profitability of H1 2023, they will have to invest heavily in the upcoming years in EV R&D and the conversion of production lines.



However, the dispute on the background of the presidential race quickly escalated, and almost 18,000 workers in 20 states went on strike. After a short while, the strike became selective as Ford left the traditional united front of the manufacturers and accepted many of the UAW demands. As a result, on September 22^{nd,} the UAW announced that it was expanding the strike against the remaining two auto manufacturers. However, there is still potential for expanding the strike that currently includes only 10% of UAW members.

The strike quickly became a political issue after presidential candidate Donald Trump accused the Biden administration of environmental policy and promised that he would completely revoke President Biden's shift to EVs, which he claims caused damage to the workers. On the other hand, President Biden embraced a public position of supporting the workers and even flew to Michigan to participate in the protest.

Delivery forecast for US in September: the strike and interest rates haven't stopped sales

Despite the high-interest rates for car financing in the US and the UAW strike. The American auto market kept strengthening in September. So, it reveals the forecasts of J. D. Power and GlobalData.



According to the forecast, 1.31 new cars were sold in September, a leap of 13.8% compared with September last year and a sales rate beginning to remind pre-COVID rates. The yearly sales rate is currently at 15.4 million units. In the third quarter of the year, deliveries are expected to reach 3.27 million units, an increase of 12% compared with last year.

According to the researchers, the UAW strike affected sales only marginally in September. However, should the strike expand, they expect it to significantly impact sales from October onwards.

Dealer's inventory levels in the US kept expanding to 1.3 million units in September – an increase of 15.4% compared with last September. However, the average deal price for new car purchases dropped only slightly by 0.2% and is still above 45,000\$. Due to inventory shortage, sales to fleets are continuing the continual "Correction" to close equipping gaps following a prolonged slowdown in the past two years. In September, it rose 56% compared with last year.

The dealers present encouraging figures as well. The average profit per sale, including income from financing and insurance, amounted in September 3,000\$. This figure represents a decrease of 28.6% compared with last year, but it is still a high profit, almost three times that of pre-COVID figures. According to the composers of the forecast, the dealers keep selling new cars even before they reach



the lots. In September, 43% of all new cars were sold within less than ten days. The average time a new car is in inventory is 29 days compared with 70 days in pre-COVID times. The average discount per sale in September was 1,800\$ or 3.7% of the MSRP. The EV market kept its' share with 8.4% of all deliveries, and Tesla's market share was close to 60% of EV sales.

4. China

New Nikkei financial research: Chinese government keeps subsidizing battery and EV manufacturers for billions of dollars annually

The Chinese government keeps streaming subsidies in vast amounts for Chinese companies operating in the EV area, reveals an analysis made by the Japanese Nikkei research division, published in September on the background of the EU announcement on opening an investigation concerning the "flooding" of European markets with cheap Chinese EVs. Based on the analysis of reports from over 5,000 publicly traded Chinese companies, the research showed that five out of every ten companies that received the most significant governmental grants this year are operating in battery and EV manufacturing.

At the head of the list is battery production giant CATL, which holds the largest market share in China and supplies batteries to Western



manufacturers such as Tesla. According to the analysis, the company received in the first half of the year 391 million US\$ worth of government subsidies, almost three times more than in the first half of last year.

EVE Energy, one of CATL's main competitors in China, entered the list due to the 150 million US\$ in subsidies it received, approximately four times more than last year. According to the company, the sources of the subsidies are the central government and local governmental bodies.

In August, Chinese car exports neared half a million units, headed for an all-time high. Most considerable thrust comes from Russia

Car export from China keeps breaking records. In August alone, 346,000 units were exported, an increase of 39% compared with last August. Between January-August, 3.22 million cars were exported from China, an increase of 65% compared to the previous year.

At the current rate, overall export from China is expected to overtake the record from 2022 (3.4 million units), and at the end of the year, it may cross the historic threshold of 4 million units. According to information published by the CAAM (China Association of Automobile Manufacturers), the average value of cars at the factory



gate (CIF) in the first eight months of the year was \$ 20,000 compared with \$ 18,000 last year. This figure suggests that more luxurious and expensive cars are being exported, emphasizing EVs.

However, most of the export still goes to developing countries, especially Russia, which is being "Flooded" with Chinese cars following the boycott of Western auto companies after the invasion of Ukraine. Export to Russia between Jan-Aug was almost 544,000 units, 664% more than last year, most of them with petrol engines. In August alone, 80,000 units were exported to Russia, the largest export market for China, with a share of 16.9%. In that same period, 155,000 units (4.8%) were exported to Europe, excluding Britain.

5. Europe

The EU is investigating Chinese EV manufacturers' breaching of flood laws in Europe. In reaction, the Chinese send an implied warning to the Europeans

After a long period of "Sitting on the fence" in response to European auto manufacturer's warnings regarding the threat of Chinese EV companies' "Invasion" of the EU, the EU Commission decided on a policy change. In September, the commission announced that it is opening an investigation to examine the Chinese auto industry's possible breaching of the anti-dumping laws in the EU. The investigation will concentrate specifically on the claims that Chinese



auto manufacturers receive broad governmental subsidies to manufacture vehicles for export markets, enabling them to flood Europe with cheap EVs in contrast to the rules of free competition.

The president of the EU Commission, Ursula von der Leyen, said during the announcement that world markets are now flooded with cheap Chinese EVs, whose price is artificially kept low through government subsidies. She said that Europe is open to competition, not to a race of destruction.

Reactions came swiftly, including an expected harsh backlash from the Chinese government. The Chinese trade ministry called on the EU to create a fair and undiscriminating market that will enable joint development of the EV industries in China and Europe. The ministry accused the EU Commission that the goal behind the investigation is to give the local European industry an advantage in the guise of fair competition that constitutes a discriminating policy that will distort and disrupt the global auto industry supply chain and damage its' suppliers, including those from the EU. This may negatively affect the trade and financial relations between China and the EU. The response hinted at the dependence many large European auto industry suppliers have on the Chinese auto industry and the vast investments made by Chinese companies in various European industries.



The Chinese Ministry of Trade added that in recent years, the Chinese EV industry developed quickly and improved its competitiveness due to an unprecedented investment in scientific and technological innovation and the development of an entire supply chain for EVs. The ministry further added that this competitive advantage that wad by hard work is welcomed by consumers globally, also in the EU, and is beneficial to the global and European alignment to climate change.

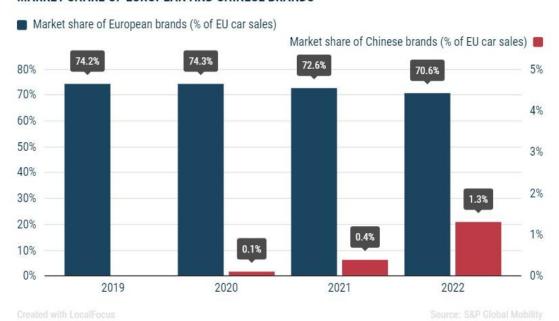
The ministry called for opening a dialogue on the subject and claimed that China and the EU's auto industry share various interests. It argues that EU auto manufacturers have operated and invested in China for many years, and China has always taken an open approach. It encourages EU manufacturers to expand their investments in China in general and for EV production in particular.

The announcement made by the EU was welcomed by governments that their auto industry doesn't have a lot of interests in China, including France and Italy. On the other hand, the investigation met with severe criticism in Germany, which has tight relations with China primarily, the primary export market and essential source for EV production destined to be exported into Europe. The Germans expressed concern about the damages that may occur from opening a new front in a trade war between China and the EU.



The European Association of Automobile Manufacturers (ACEA) has yet to express a clear and decisive stance on the issue but published a research document on the auto trade between China and Europe in September. According to the research, China is the third largest export market for European European-made, owing Britain and the US. European brands (including those manufactured in China) captured 6% of China's EV sales. On the other hand, Chinese brands (excluding Tesla, which exports three from China to Europe) captured European EV sales last year by 0.4% only three years ago.

MARKET SHARE OF EUROPEAN AND CHINESE BRANDS



Source: ACEA



The conflict between the auto industry and environmental organizations in the EU intensifies surrounding the proposal to soften EURO 7 regulations

The "Flood" of environmental auto regulations declared recently by the EU almost managed to make the public forget the new EURO 7 regulations that should take effect in 2025. As recalled, these regulations placed a new bar for decreasing emissions from auto vehicles besides CO2. They created a severe controversy between the EU Commission, the "Environmental lobby" and the European auto industry, whose senior officers claim that this is an expensive and unneeded move that will deflect unnecessary resources from the shift to electric propulsion.

The EU countries also disagreed when eight countries, including France and Italy, called for a complete cancelation of the regulations. On the other hand, the environmental lobby in the union's headquarters claims that the EU should not succumb to auto companies' threat since the price that the public will pay will be health issues with various consequences.

In September, European media published that Spain, currently presiding as the EU presidency, is trying to reach a draft for a compromise that all sides will agree upon. According to the reports, it is a "Softened" version of EURO 7 in which the date of taking effect for passenger cars will be postponed to the middle of 2025 and



those for trucks and commercial vehicles to the middle of 2027. In addition, the draft offers various corrections in the threshold of the permitted emissions.

The controversy continues, and this publication received harsh criticism from environmental organizations, claiming that the new offer made by the Spanish president leaves emission requirements for passenger cars unchanged compared with EURO 6. In contrast, other parameters for diesel cars are even higher under the new regulations. If and when the EU countries decide on a united stance regarding EURO 7 regulations, they are supposed to start negotiations with the European Parliament on the final formula of the agreement that may be crystallized this year.

The French government published a new formula for EV subsidies, which caused turmoil among its' trade partners in Asia

In September, the French government published the final version of its new subsidy plan for EVs. In its midst stands a new calculation mechanism for CO2 emissions that gives EVs subsidies according to the overall emission levels of the vehicles, starting with the production phases of the cars and the batteries, through the emissions associated with their transportation, and ending with the marketing process.



EVs marketed in France will receive an "Environmental grade" according to different criteria of each model, such as its' weight, the sources of the raw materials for its batteries, the environmental impact of their production, the environmental pollution of the manufacturing plant, and the transportation route.

For an EV model to receive the environmental rate that will make it eligible for an "Ecological" subsidy, the manufacturer has to present, within a short while, all the information needed to the French Ministry of Environmental Change (ADEME). The model will have to score at least 60 out of 100 points. A list of all car models eligible for subsidy is expected to be published on December 15, 2023, a few weeks before the new system takes effect on January 1, 2024.

The French government is not trying to hide the fact that this is indeed environmental taxing, whose goal is to provide an advantage to European-made models over limiting the import of competing Chinese-made EVs. French government ministers even declared that the country would stop subsidizing models with a high carbon footprint. They added that the state is giving an advantage to French and European companies aspiring to reduce their environmental footprint.

The French PM Emmanuel Macron even declared, "We must not repeat the mistakes we made with the solar industry". His statement referred to companies that developed and manufactured solar cells



that received intensive subsidizing and incentives in Europe, but eventually, all the manufacturing in the area moved to China. According to him, France is not focused on protectionism but is also not interested in using French taxpayers' money to accelerate non-European industrialization.

The announcement made by the EU Commission regarding the opening of an investigation of Chinese manufacturers' breach of the flood rules (see separate item on this subject) has given the French initiative a tailwind and removed the concerns about it being classified as a "Non-legal trade barrier" by the WTO or the EU.

However, the initiative is expected to face harsh resistance from France's other trade partners that their car export to France is liable to suffer "Collateral damage" from the reform. Those include American Tesla, which exports to France the famous Tesla 3 from its factory in Shanghai; several German models made by VW and BMW and exported to France; and several EV models made by Hyundai-Kia. Even though most of these models are manufactured in "Green" factories, the formula discriminates them by giving a high coefficient to the CO2 emission factor attributed to maritime transport derived from the length of the car trip from the factory to French shores.

The Korean response came swiftly, and the Korean Trade, industry and energy ministry said that "we will thoroughly analyze the final



version of the reform and its' implications for South Korean companies. On that base, we will continue to further practical discussions with high levels in the French authorities to minimize the damage to our companies, including adjustment of the CO2 coefficient figures". Commentators estimate that there is a high probability that France will not bend the regulations according to the Korean requests despite the tight trade relations between the two countries.

Research: The German auto industry loses power in the face of the Chinese industry's strengthening

The import of Chinese spare auto parts to Germany leaped in H1 2023 by 75% while export of parts and components from Germany to China slumped steeply, reveals research made by the German IW financial institute published in the middle of September. The number of Chinese car brands exported to Germany rose to eight, although their sales only constitute 1.5% of all new cars sold in Germany. Non-Chinese brands exported to Germany, like BMW and VW, also contributed to the rise in imports.

The research was published a few days after the EU commission started investigating whether Chinese auto manufacturers are using a "Flood" policy and marketing cheap EVs that enjoy governmental subsidies in Europe.



The research shows that exports of cars and car parts from Germany to China dropped 21% in the first half of the year. According to the report's authors, "The business model according to which the German auto industry was built, produced, and exported high-end vehicles is at great risk today...German manufacturers are moving production lines to China at an increasing rate, including those of premium models that were previously manufactured exclusively in Germany".

According to the data in the research, almost 60% of the cars sold in Germany last year were produced in an Asian country, compared with 31% in 2000. The data suggests that only Germany and Spain are now between the top ten auto manufacturers globally, a list that in 2000 also included France, Britain, and Italy.

The research mentions that Germany is suffering from the image of the "Weak link" as far as the EU's attempts to disconnect from Chinese dependence due to Germany's strong business ties with the Asian super-power that became its' largest trade partner in 2016.

German federal government allocates hundreds of millions of Euros to promote fast charging in companies and fleets

Governments of the largest European countries keep promoting and incentivizing the shift to electric propulsion in their territories to meet



the "Deadline" for the shift to electric transportation as mandated by the EU. The focus of regulators is gradually moving from private users to fleets among the "Heavy" kilometer consumers in the EU; hence, their contribution to pollution is significantly higher than average.

Until now, fleets in the EU have enjoyed the same subsidizing for EVs as private consumers, including various benefits for "Slow" charging stations in the workplace. However, as part of the change in perception, governments are now starting to incentivize the establishment of fast DC charging stations. This month, the German Federal Ministry of Transportation declared a plan to allocate 400 million Euros to subsidize fast charging stations in companies and fleets.

Incentives will be given to fast charging stations with a capacity of at least 50 kW and fast charging stations for trucks. The financing is under the article "Expenditure and investment in fast charging infrastructure" and "Expenditure to grid connections and installment of electric lines, including civil engineering". Technical equipment needed for these is also eligible for government financing.

However, the funding has some limitations, including limiting each company or fleet to one funding request of up to 5 million euros, depending on the number of fast chargers. Small companies will receive funding of up to 40% of the cost, and larger, more



established companies will receive up to 20%. The funding ceiling for setting fast chargers with a 50-150 kW capacity is 14,000 euros per station for small and medium companies and up to 7,000 euros per charger for large companies.

For ultra-fast chargers with a maximal charging capacity of over 150 kW, which are still expensive to buy and install, small and medium companies will receive up to 30,000 euros per charger and large companies up to 15,000 euros.

According to the regulations, the charging stations should be made in Germany and be used by the company that receives funding for at least two years before it can sell them. An additional and essential term is that the subsidized stations must use electricity from "Green" sources, i.e., renewable energy sources.

<u>5. UK</u>

British government postpones the deadline for selling ICE cars in the country by five years

Britain is in its third year of separating from the EU (BREXIT). However, its auto industry is still paying the price of separation and, according to the trade agreement signed at the time of separation, starting from January 2024. EVs made in the UK and exported to



the EU will be "punished" with a 10% customs fee unless the source of 45% of the car's value comes from Britain or from the EU.

Customs tax is a burden for the evolving EV industry in the UK since most of its batteries come from the Far East, mainly China and Korea. For that reason, the British government recently submitted a request to the EU to postpone the date of imposing these taxes from 2024 to 2027, claiming that they will hurt British auto manufacturers, bring about price increases of EVs made in the UK, and harm the EU's attempts to accelerate the shift to electricity. This request was joined by a few major auto manufacturers claiming that their production facilities in Britain would lose competitiveness if the customs tax were imposed as planned. It may even cause the shutting of production lines and complete factories.

It seems the EU does not intend to accept the request at the moment. According to the Society of Motor Manufacturers (Traders MT), the EU has reservations regarding the request. However, there is a controversy between leading countries in the EU. Germany leans towards accepting, while France is still debating.

At the same time, the UK PM announced a postponement of 5 years in the "Deadline" for banning the selling of ICE cars in Britain, from 2030, as planned originally by PM Boris Johnson, to 2035. The delay is due to "Unacceptable costs" that the original schedule creates.



The British spokesperson said, "The government remains committed to reaching zero emissions and is even reducing emissions faster than other countries". The British announcement was accepted with dissatisfaction by the auto companies that have already been aligning, operationally and financially, to the 2030 "Deadline".

The British government is expanding funding for electric buses for rural areas

Although Britain is challenging the time frame set by the EU for shifting to electric propulsion (see previous item), it continues with accelerated reform in its territory. The government has allocated almost a billion BP for various projects concerning the advancement of light and heavy EVs in the public and private sectors and announced additional funding of 151 million euros to assist local public transport authorities in entering hundreds of ZE buses into use in September.

All local public transportation authorities can now apply for funding as part of the program. The first 29 million euros of this budget are designated for rural communities.

The program started in November 2021, and up until now, the government subsidized 4,000 electric buses. According to the



British minister of transportation, "Expanding the funding for ZE buses will aid the financial growth in the country... the new investment brings the total investment of the government in subsidizing ZE buses to almost 500 million BP, which helps promote a new generation of British bus manufacturers and creates good jobs".

6. Israel

Government offices are looking into a new green tax outline, including relying on average CO2 emissions and a higher purchasing tax for EVs

The Ministry of Transportation and the Ministry of Energy are looking into a comprehensive reform of the "Green tax" system for cars that has existed since the last decade. Israeli financial media published this month that the new system being examined is similar in broad lines to the one taken in Europe and is based exclusively on calculating the CO2 emissions to determine the car's pollution rating. This system is to replace the current Israeli one that considers a long line of additional pollutants in its formula.

According to the suggested system, the average emission level will be calculated for each importer model line, and a maximum CO2 emission bar will be set similarly to the European one, i.e., 95 grams of CO2/Km. Exceeding the average will result in a "Fine" in the



shape of an increased purchasing tax for each importer's polluting model.

Green taxing has two main goals: encouraging the importers to enhance the importing and selling of low-emission vehicles, in particular EVs, to reduce their average emission levels and avoid fines, and preserving the range of effective purchasing tax, which under the current system is between 50-83%, depending on the emission levels.

The proposed plan also included an outline to increase the purchasing tax for EVs between 2024-2026. Still, this raise will be smaller than the one included in the original outline, which had an increase in 2024 gradually to 40% by 2026 while lowering the tax ceiling progressively.

The meaning is a "Softening" of the existing outline from 2019 to raise taxes on EVs. It is still unclear whether the proposed new outline will be accepted and if the timeline for this new purchasing tax outline, starting from January 2024, is feasible given the recent events.

Hezi Shayb, Ph.D. CEO – I-Via