



# Major Automotive Global Trends

April 2023

15.5.2023



**Table of Contents:**

|                            |           |
|----------------------------|-----------|
| <b>1. Global.....</b>      | <b>3</b>  |
| <b>2. USA.....</b>         | <b>4</b>  |
| <b>3. China.....</b>       | <b>9</b>  |
| <b>4. South Korea.....</b> | <b>10</b> |
| <b>5. Japan.....</b>       | <b>12</b> |
| <b>6. Europe.....</b>      | <b>13</b> |
| <b>7. Australia.....</b>   | <b>16</b> |
| <b>8. Turkey.....</b>      | <b>17</b> |
| <b>9. Israel.....</b>      | <b>18</b> |



## 1. Global

**LMC research company: April the strongest sales month, with global sales ending with a 6.2% increase**

Global sales of new cars continued to grow during April, led by “Green” models, so reveals the monthly projection of LMC Automotive research company. According to the LMC’s estimates, global new passenger car sales grew steeply during April by 23.5% compared with April last year, to 6.8 million units. The projected yearly sales rate is currently at 84.9 million units.

However, a large portion of the leap in sales stems from the fact that last year, the Chinese market, the largest auto market in the world, faced COVID lockdowns that almost paralyzed sales. That is also why the projected sales in the Chinese market are expected to leap by 90% compared with last April.

According to the company data, the European market is also expected to present “Solid Growth” of 21.5%, given the supply chain recovery after the chip crisis and the invasion to Ukraine. The analysts write that the growth in production volumes is fueling a growing demand for new cars, and they are clinging to their early projection that the year will end with a 6.2% increase in global sales to 86 million units. The influence of the chip shortage is expected to amount this year to 4 million units, half of what it was in 2022.

## 2. USA

**The US government is starting to implement “Patriotic” tax benefits for EVs: most European, Japanese, and Korean models are expected to lose the benefit**

In the summer of 2022, the US administration declared the IRA (Inflation Reduction Act), which included an initiative to cancel the federal tax benefit for EVs for vehicles not manufactured in the US. This initiative caused turmoil among US trade partners, especially South Korea, Europe, and Japan which faced losing their competitiveness in the EV segment in the large US market.

Following the proposal, several talks were made in the last few months between European and Korean senior government officials and the US administration. It seemed



that the Americans were willing to be flexible. The administration also decided to continue and give partial benefits to “Foreign” EV models bought as part of commercial deals such as leasing.

However, in the core area, i.e., federal tax benefits for private clients buying EVs, the administration is determined to change its policy and give American manufacturers a competitive preference. On April 18<sup>th</sup>, the US treasury published an updated list of EV models eligible for the 7,500\$ federal tax benefit. The list reveals that dozens of EV and PHEV models sold in the US have been excluded from it. The meaning is that all these models will be substantially more expensive than their local competitors unless the manufacturers are willing to absorb some of the price increase.

At the same time, the administration also published “Battery Regulations” aimed at decreasing the reliance of the American auto industry on components and batteries made in China. According to the current regulations, to be eligible for half the federal benefit (3,750\$), 40% of the essential minerals in the battery of the car (especially Lithium and Cobalt) must be produced, processed, or recycled in the US or in a country that the US has a signed free trade agreement with and environmental organizations called for placing even stricter goals than the ones suggested by the EPA. On the other hand, a representative of the American auto manufacturers' lobby said, “Many things have to happen for these goals to be realized. One has to consider external variables such as charging infrastructure, supply chain, stability of the electric grid, and availability of low-carbon fuels and essential minerals. All these will determine whether the goals are realistic”.

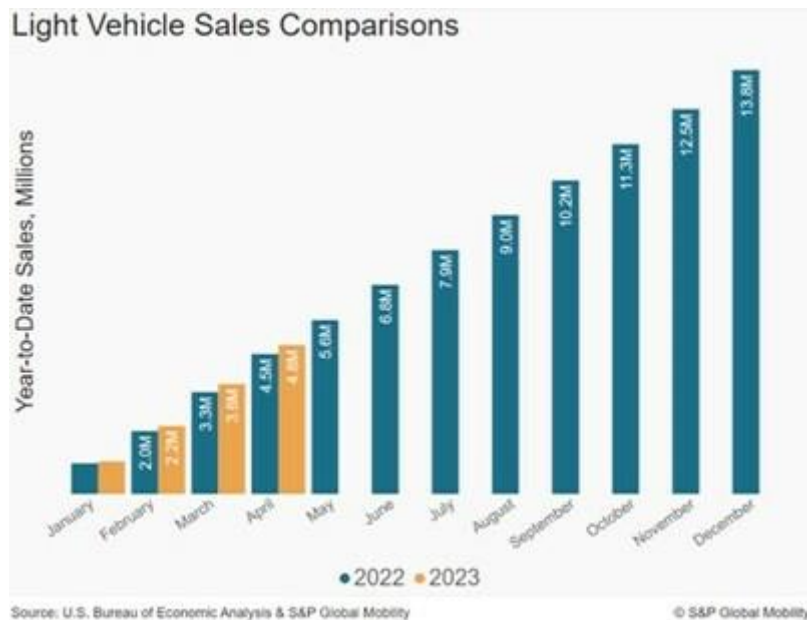
#### **American auto market keeps recovering in April but at a slow pace**

The US passenger car market is expected to continue its recovery trend in April thanks to an improvement in production and inventory volumes and the fading away of the “Chip crisis”, so reveals the monthly forecast published by S&P Global Mobility research firm at the end of March.

According to the forecast, 1.29 million cars will be delivered in April, an increase of 4% compared with last April. This is the ninth month in a row of growth in sales. The expected yearly sales rate is currently at 15.2 million vehicles.



Company analysts say that car sales are still “Stuck” on a lower level than pre-COVID era since the improvement in production volumes, inventory, and discounts, on the one hand, is offset by customers’ lack of confidence, credit limitations, and high prices on the other hand. They estimate that car sales will continue to be influenced over the next few months by the general instability felt in the market. They also estimate that the growth trend in BEV sales, which registered an increase of 7% in the first quarter, will continue in the following months, although it may be affected by market turbulence, such as Tesla’s frequent price changes.



J.D Power’s research division projects that car sales in April, including fleets, will total 1.31 million cars, an increase of 9.8% compared with last year. In its monthly projection, the division estimated that inventory levels are around 1.2 million cars, an increase of 45% compared with April 2022. Average car prices continue to rise, and the average deal cost in April was around 46,000\$, 2% more than in April 2022. The dealer’s average profit in April was 3,755\$ - almost 25% less than last year but still nearly double what it was in pre-COVID April 2019.

**Analysts warn: the entire American auto market may suffer from the “Price War” initiated by Tesla’s price slashes**

The American auto market is continually moving toward a “Price War” as a result of Tesla’s strategic price slashes, and this war may expand to the entire market, including



ICE vehicles, so warned the analysts of J.P Morgan in a review of the American auto manufacturers financial performance during the first quarter of the year.

According to analysts, the weakness of EV prices is spreading today from Tesla to other competing brands and from there to the entire market. Since Tesla began its' discount plan, the average EV price in the US has dropped by almost 10%, dragging down the stock prices of all the companies operating in the field, including GM, Ford, and Tesla itself. Some manufacturers warned that their EV divisions might incur heavy losses, even though the first quarter was highly profitable.

At the same time, sizeable American auto manufacturers are operating to implement plans for substantial production cost reductions and for adopting a more flexible pricing policy, similar to Tesla. On April 4<sup>th</sup>, Ford CEO Jim Farley said that Tesla's ability to adjust prices and focus on cost reduction swiftly is a competitive advantage that rival manufacturers will have to adopt in the future. He also said that he doesn't understand why it is surprising. Companies these days must adapt quickly, similar to the strategy taken by Tesla when price wars wage everywhere. He added that auto manufacturers thought prices should be updated only once a year, which belongs to the past.

### 3. China

#### **Following pressure from manufacturers and dealers: the Chinese government postponing new green car regulations**

The Chinese government decided in April to postpone by at least six months the strict new fuel consumption and emissions regulations, supposed to take effect at the beginning of June according to the government's yearly plan.

The regulations, called China VI B, forbid the marketing of gasoline and diesel that don't meet the new requirements after June 2023. The postponement was decided upon following pressure from the auto manufacturers and dealers' unions that claimed that due to the economic slowdown in China and the price wars, hundreds of thousands of new unsold vehicles accumulated all across China, which could not be marketed by June. The unions also claimed that many dealers would not be able to endure and would go bankrupt. It should be noted that although China is still a global leader in EV sales,



still two out of three new cars sold in China is an ICE car, most of them with high emission values, that cannot be marketed once the new regulations take effect.

**Deutsche Bank: the effect of the “Price War” in China will be felt at least until the beginning of 2024**

Prices of new cars sold in China will continue to be low, and the fierce competition will continue at least until the beginning of 2024, so reveals a review by Deutsche Bank’s Chinese division review published in April before the Shanghai auto show.

The bank’s analysts estimate that the price war the Chinese auto market has been experiencing in the past months will also continue in the next few months. They claim that auto manufacturers will adhere to an aggressive price policy since most of them prioritize securing their market share over profitability. The review states that local Chinese brands continue the accelerated improvement in production quality, not least due to investments in recruiting manpower from the Western auto industry and purchasing Western technology. The analysts note that with the gradual advantages accumulated in R&D and production quality, the export of Chinese cars to the world is a natural expansion of the strategy of many companies.

As for the ultra-high-speed charging infrastructure in China, the analysts note that manufacturers are in the early stages of building such capacities and establishing an ultra-high-speed charging network “In the Real World” also demands synchronization with the car’s systems, the chargers, and the grid, as Tesla does. Therefore, despite the recent announcements made by quite a few manufacturers that they intend to place 500 kW chargers that can add hundreds of kilometers to the range in just a few minutes, analysts are skeptical about whether the grid is up to it.

#### **4. South-Korea**

**The South-Korean auto industry is putting the chip crisis behind. Production in the country reached over a million units in the first quarter for the first time in six years**



the Korean auto industry was overshadowed in the past two years by the chip shortage that damaged car production and sales in the country due to long waiting times for critical models. However, it seems that the bottleneck is starting to set free and has clear indications.

The first is a 27% leap in new car deliveries in Korea during March compared with March last year. The increase is attributed mostly to larger dealer inventories, thanks to improved chip supply for the local manufacturers after a prolonged shortage. In the first quarter of 2023, new car deliveries in Korea grew by 22%, amounting to 366,000 units. Export from the country has also grown significantly, and the five biggest exporters increased their export in March by 20% compared with last March and by 14% in the first quarter.

An additional indication is provided by car production figures in South Korea in the first quarter – more than a million units for the first time in six years. This is, in fact, a return to pre-COVID and pre-chip-crisis production volumes. According to the Korean auto manufacturers association data, in the first quarter of 2023, 1.065 million cars were manufactured, an increase of 27.2% compared with last year, out of which 980,000 are passenger cars and the rest are commercial vehicles.

### **South-Korean auto Manufacturers concerned with the EU's "Raw Materials" Act**

In the past few months, the "Trade Wars" between the large production blocks in the auto industry have escalated, under and above the surface. In March, the EU published a draft for what it calls the "Critical Raw Materials Act". In its midst is a proposal to restrict vital raw material purchasing, particularly materials used for EV batteries, so that no more than 65% of the annual European purchasing of any raw material will come from one third-party country.

According to the proposal, large corporations must review their supply chain strategy for raw materials and adjust it to the EU demands. This will present quite a problem to auto and battery manufacturers that export to different countries in the EU, especially for Chinese and Korean manufacturers. These two countries are the world's largest consumers and laboratories for lithium batteries. The new act may force them to diversify their battery raw material sources and all the associated costs.





## 5. Japan

### **The Japanese auto industry is trying to adjust to the American subsidies policy that favors US local EV industry**

The decision of the US administration to carry on as planned with subsidy plans that favor American EVs, despite urges from its allies, started to take effect at the beginning of April when almost all the Japanese-made EV and PHEV models were filtered out from the list of models eligible for a subsidy, sending the Japanese to re-organize their global supply chain.

The immediate response is to allocate assembly lines of future EV models to the USA. Toyota responded first and announced that it intends to manufacture an electric SUV in the USA starting in 2025. It will be the first Toyota EV that will be manufactured outside of Japan or China. Honda also announced that it will begin manufacturing EVs in the US in 2026, and to do so; it intends to “Freshen up” one of its existing assembly plants in Ohio. This step will be taken parallel to continuing US petrol and hybrid model manufacturing.

It should be noted that the Japanese have to close significant gaps in the EV market. Data from LMC Automotive research company shows that the market share of Japanese manufacturers in the US is just under 30%, but from that, only 0.4% are EVs.

According to the statements of the five leading Japanese manufacturers, they intend to produce in the US 950,000 EVs by 2029, six times what they produced in 2022. At the same time, European and American manufacturers (including Tesla) are expected to produce that year in North America 2.69 million EVs, almost three times the Japanese amount.

Meanwhile, Japanese manufacturers in the US are facing a few problematic years in which local competitors will grab market share. In addition, they will have to disengage from their traditional suppliers in Japan and look for local American suppliers, especially for batteries.



## 6. Europe

### **The European and Japanese auto industries to collaborate to block down the Chinese auto industry on the background of the EU's "Battery Regulation"**

A few decades ago, the European and Japanese auto industries were bitter rivals. At the peak of their rivalry, the Europeans even imposed quotas on importing cars from Japan to protect local manufacturers. But times have changed. These days, the Japanese have production facilities within the EU, and the Chinese auto industry threatens the two sides.

An expression of this approach can be found in the words of the commissioner of environmental policy in the EU, interviewed in April, towards the meeting between the energy and environment ministers of the EU and Japan. According to him, the two states need to examine collaboration on the technical level to bridge the regulation gap in the EV area between Japan and Europe and agree upon shared rules and regulations. The commissioner said such a move would decrease the administrative pressure on auto and battery manufacturers from both sides.

This call for collaboration is made parallel to the new battery regulation the EU is promoting. The regulation seems to delay the consolidation of Chinese auto and battery manufacturers, but it may also harm Japanese manufacturers operating in Europe.

As recalled, earlier this year, the EU published a draft for a long-term regulation aimed at reducing the environmental footprint of EV batteries starting in 2024. Among other things, the regulation is expected to mandate the manufacturers to disclose the CO<sub>2</sub> emission values attributed to the batteries throughout their lifespan, from mining and manufacturing to the recycling phase. Later on, according to these values, maximum values will be determined, forcing manufacturers to make their production more efficient or incur fines. Also, a mechanism for taxing batteries will be put in place. For manufacturers outside the EU, this may cause a substantial regulatory obstacle that may force them to establish two separate supply chains for EVs.



**Euro 7 turmoil: VW group asks the EU to postpone new regulations entry date. If not, it may cause severe production disruptions. Criticism also comes from the heavy vehicle sector**

The turmoil in Europe over the new emissions regulations EURO 7 is not subsiding, and new voices are calling for the EU to postpone the entry date each month. This month, the VW group threw all of its weight into the dispute and called the EU to postpone the new regulations by two years, from July 2025 to the autumn of 2026 at least (2027 MY), to allow the European auto manufacturers to align properly.

In a position paper published by VW, the company claims it will take at least three years to adjust its complete fleet to the new regulations, especially the requirement to decrease NOX levels from passenger cars, LCVs, trucks, etc., and buses.

This is a more moderate request than those of central players such as Stellantis, Renault, and others, demanding a complete cancelation of the new regulation. They claim that the regulations will be very expensive to implement, cause significant price increases to the customers, and delay the EU's final goal, which is to "Electrify" all new cars sold in Europe by 2035. VW estimates that if the regulations take effect as planned on the original date, they will cause immediate stoppage of many car models across Europe for many months, and the production of some of them may stop completely.

The heavy vehicle sector is also becoming more and more critical regarding the new regulations. One of the voices heard is that of Gerrit Marx, Iveco's CEO, who called the regulations "Simply Stupid". According to him, regulations are virtually impossible to implement technology in heavy vehicles, and the costs needed to reach the goals, especially the NOX quotas, are "Enormous" with no worthy return. Marx believes that the EU is making a mistake when it discusses parallel and un-synchronized routes over EURO 7, the reduction of CO2, and the shift to electric drive. According to him, the truck and bus industry is now facing a hard and irreversible decision, whether to continue and invest in ICE or abandon it completely and concentrate on electric propulsion. He believes that Hydrogen technology is the only way to ensure the minimization of carbon emissions in the future since it is more worthwhile and efficient than BEV.



**Car sales in Europe surged in March 2023, not least due to improved chip supply.**

**EVs are leading the recovery**

March was one of the most vital months in the European auto market in years, led by EV sales. According to the figures provided by the ACEA, BEV sales were 13.9% of all sales in the EU, an increase of 2.5% in market share compared with last March, led by the large countries in the union. The market rose 26%, which is attributed to improvement in chip supply and production rate as well as inventory growth.

In France, almost 49,000 EVs and PHEVs were delivered, most of them to private customers. This represents a 48% leap compared with last March and a market share of 25.4% compared with only 21.4% last year. Out of these, BEV deliveries in France totaled 30,600 units, an increase of 54%. Overall, car sales in France rose 24% in March and 15% in the first quarter of 2023. In the first quarter, 65,000 BEVs were delivered in France – an increase of 49%.

The market for BEVs took off in Germany as well during March, with 44,124 units and a 16% market share. That, despite a significant decrease in governmental subsidies for EVs that took effect this year. The subsidy for private EVs priced at less than 40,000 Euros in Germany is currently 4,500 Euros only, compared with 7,000 Euros at the peak

In Britain, EV sales leaped by 19% to 47,000 units in March and captured a 16% market share. That, with an overall increase of 18% in sales compared with last March.

**ACEA: without incentives, EVs are becoming the privilege of rich countries**

The European automobile manufacturers association warns that new EVs are becoming less accessible to low-income customers. This trend may delay the EU's goals for moving from ICE to EVs. According to a new report published by the ACEA, there is a substantial difference in EV penetration rate between "Affluent" and "Less Affluent" countries in the EU.

Data shows that in the less affluent countries that compose more than half of the countries in the EU, mainly in eastern, central, and southern Europe, and where the average monthly salary is below 13,000 Euros, the penetration rate of EVs is only 9%, whereas in the five more affluent countries in north and western Europe, where the average yearly salary is more than 32,000 Euros the penetration rate reaches 30%.



These differences stem not only from EV's high prices but also from the lack of incentives in the less affluent countries and from substantial differences in charging infrastructure development in these countries. The ACEA calls for the EU to take steps that will make EVs and charging infrastructure accessible equally to all the countries in the union.

## 7. Australia

### **The southern continent is determined to fill in the dozens of years gap in environmental vehicle policy**

Australia didn't rush in the past to adopt advanced environmental vehicle policies, and Australian customers still like big cars with large, un-economical petrol and diesel engines. Current data shows that, on average, private passenger cars in Australia consume 40% more fuel than in Europe and 20% more than in the US. On the other hand, the market share of EVs in Australia is only 3.8%.

However, in light of the commitments for emission reductions Australia has made to international forums, the new government is now taking steps to close the gap rapidly. On April 19<sup>th</sup>, the government announced that it intends to present a new emission standard and promote EV purchasing by slashing taxes. The goal is to reach a two-digit penetration rate for EVs. The further steps will force the manufacturers to reduce average fuel consumption in the models sold in Australia and examine them in emission and consumption tests that are closer to realistic usage conditions.

The Australian PM presented the move as a "Win-Win" for the consumers and estimated that the new regulation would force auto manufacturers to export more economical models and cheaper EVs to Australia.

Environmental organizations in Australia congratulated the initiative and said that without such a policy, "Australia will continue to be a waste disposal dump for obsolete models with high emissions". It should be noted that Australia is among the countries that suffer the most from global warming, with record-breaking temperatures and waves of giant fires.



## 8. Turkey

**The Turkish auto industry is formulating an “Environmental” plan that will enable it to remain competitive as a base for manufacturing and exporting cars to Europe**

The Turkish auto industry, which has become an essential base for many European manufacturers in recent years, is “Awakening” in light of the need to adjust to the accelerated changes in environmental vehicle policy. On April 7<sup>th</sup>, the association of Turkish auto exporters representing the Turkish auto and auto parts industries in Turkey presented a new environmental program that will enable the industry to align with the EU’s current environmental regulations called the “Green Deal”.

The program was made with the encouragement of the Turkish government, among other reasons, since the auto industry is one of the country’s most important export and income sources. In the first quarter of 2023, car export from Turkey rose by 15% to 8.5 billion US\$, and it is projected that the full year will amount to 34 billion US\$.

There is a concern that if Turkey doesn’t adhere to the EU’s requirements regarding clean energy production, plant emission reduction, recycling, etc., car manufacturers might seek alternative places for production. The program includes six sections, among them “Allocating funding for green transformation”, “shift to environmentally friendly vehicles, mostly EVs”, and “Sustainable social means”.

As of today, no EVs made by foreign manufacturers are produced in Turkey, even though the market share of petrol vehicles in Europe dropped to 36%. According to the head of the organization, “For the Turkish auto industry to remain competitive, we must become part of the shift to a green economy. We believe that Turkey can become a center for manufacturing and an attractive market for low-emissions cars in the middle time range”. The program states that Turkey has natural resources, such as hydroelectric energy, which may aid her in this task. However, the local market for EVs is still minute, and the charging infrastructure in the state is small compared with Europe.



## 9. Israel

**Ministry of Transportation figures: the distribution of EVs in Israel is far from balanced. Tel-Aviv metropolitan area and the financially strong towns and cities lead, the penetration rate in the periphery is minimal**

The penetration of EVs to the Israeli periphery is minimal. Most of the registered EVs come from the Tel-Aviv metropolitan area and the Sharon district, as revealed in a report published by the Ministry of Transportation in April.

According to data gathered in the last week of March, there are 60,173 active EVs in Israel; 54% of them come from the central and Sharon districts, including the city of Hader. An additional 17.6% come from the three largest cities of Haifa, Beer-Sheva, and Jerusalem.

In small cities, the periphery, and Golan and Kinneret districts, there are less than 6% of EVs. It should be noted that the data is based on the city in which the car is registered, and in the case of large fleets that buy significant amounts of EVs, the car is registered with the leasing company and not where the actual driver lives. However, the bias towards affluent towns and cities is still evident.

According to estimates, one of the reasons for this is EV's high prices, and so is the affordability index about the average salary compared with many other Western countries and also China. Therefore, EVs are accessible only to relatively restricted social-economic layers of society. This situation will be worsened and aggravated once purchasing tax on EVs grows by an additional 15% at the beginning of 2024.

Hezi Shayb – Ph.D  
CEO – I-Via