

New temptations in the auto world in post-covid era

Nataša Tomić-Petrović,
University of Belgrade, Serbia,
e-mail: natasa@sf.bg.ac.rs

Abstract: *Misfortunes bring people together. Wars, the Covid pandemic, pollution of the environment in which we live. According to a report from "Lancet", nine million people die from pollution every year. The number of deaths from air pollution and chemical pollution has increased by 60% over the past two decades. Climate change took its toll in 2022 as well (floods, fires, earthquakes, drought and heat, melting glaciers). Uncontrolled urbanization and population growth are also causes. The number of people killed and injured in traffic accidents has also increased. It doesn't have to be driven faster than life.*

The war in Ukraine has been going on for a long time. The Russian auto industry will develop without Western partners ("Lada" model). Several of the largest German car manufacturers have decided to padlock their plants in Russia.

During September 2022, a rally was held in Serbia through four cities, Arandjelovac, Topola, Mladenovac and Belgrade. About 50 timeless vehicles visited these cities. There is also a small museum in Arandjelovac where the oldest car is a "Dodge" from 1924, a "Willys" from 1927, a "Chevrolet" from 1928, a "Pontiac" from 1929 and a "Mercedes" from 1934. Passing the Law on Old-timers will contribute to the preservation and increase of this cultural treasure, and it will make registration and acquisition easier for the owners.

In the new 2023. year, representatives of the Independent Trade Union of the "Fiat Chrysler Cars" factory (FCA) in Kragujevac announced on January 9th that they expect preparations for the start of electric vehicle production to continue with greater intensity in the new year. At the same time, the well-known "Tesla" company was fined about 2.2 million dollars, because it did not inform its customers of electric vehicles about the shorter driving range of their electric vehicles at low temperatures. The American electric vehicle maker's cold-weather driving range drops up to 50.5% compared to how they are advertised online (no mention of range loss in sub-zero temperatures).

KEY WORDS: POLLUTION, CLIMATE CHANGE, ACCIDENT, AUTO INDUSTRY, OLD-TIMERS, ELECTRIC VEHICLES, WORLD.

"At the meeting point of two rivers, the water is never calm".

Introduction

We must find solutions to wars and conflicts.

And in Vienna, the capital of Austria, fossil fuels for heating rooms will be a thing of the past, because it is intended to completely stop the emission of harmful gases by 2040. In mid-April of this year, 2023, Germany shut down the last three active nuclear reactors, (although plans for the gradual abolition of nuclear energy were adopted in 2011). Climate neutrality plans are underway.

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Also, from the space agency NASA and the company "Boeing" in order to protect the environment, in the next five years, it is planned to create a prototype generation of aircraft, which emits significantly less harmful gases, and that: in the next decade, commercial flights with a new class of aircraft can begin. By developing new technology, the US administration's plan to achieve zero CO₂/carbon dioxide emissions in aviation by 2050 would be realized.

New trends in auto world

Many international environmental agreements have been signed, so many companies in the world are racing to improve their products. Thus, in 2022, "Rolls-Royce"¹ and "Easy-jet" tested a hydrogen-powered aircraft engine. It is no longer terra incognita.

The public has learned that car manufacturers have been fined, namely in South Korea, three German car manufacturers have been fined a total of 33.5 million dollars and the reason given is "manipulation of emissions data". The German companies refused to admit responsibility and "Mercedes"² claims that they cooperated with all regulatory bodies.

And during 2021, in the procedure of the European Commission, "Volkswagen" and "BMW" were fined as much as 875 million euros due to the agreement on the use of technology for cleaner gas emissions.

In Spain, the new fifth generation of fully hybrid electric technology is installed in the "Corolla". This is a new power control unit /PCU/ which helps to reduce the level of electrical losses in the

system and maintain fuel efficiency. A new "Espas" is also being produced in Spain, now as a hybrid, and sales will begin in the summer of 2023. It is the sixth generation of the legendary model.

In 2019, the factory from Shanghai, China first showed the electric SUV "HiPhi X" and then the electric sedan "HiPhi Z". The third new model belonging to this Chinese group ("Human Horizons") will arrive in April 2023. It is a new model "Hi Phi Y", a light SUV with a length of 4.938 mm and a height of 1.658 mm. It is known that has 331 hp.

The Japanese company "Mitsuoka" presented an interesting version of the new "Toyota Jaris" in a retro style called "View Story". The model is inspired by Jaguar lines from the sixties of the last century. The advanced technique is noticeable.

"Peugeot" has refreshed the 508 model in all three body versions.

In Serbia, there are 418 vehicles registered per 1000 people. While in the European Union the average is 567 per 1000 people. In Romania there are as many as 398...

Traffic safety with old and new vehicles

However, since the beginning of the new year 2023, 45 people have died in traffic in Serbia. The Ministry of Internal Affairs of Serbia appealed for compliance with traffic regulations.

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In the new 2023 year, representatives of the Independent Trade Union of the "Fiat Chrysler Cars" factory (FCA) in Kragujevac announced on January 9th that they expect preparations for the start of electric vehicle production to continue with greater intensity in the new year. In April, the president of the factory union in Kragujevac announced that at the end of the year, trial series production of an electric vehicle should begin at the "Stellantis" factory in Kragujevac, Serbia. It is not yet known which model it will be. Full production is expected to start in 2024. For now, modern equipment is being intensively installed in two factory bodies.

The largest number of electric vehicles was sold in China, and China announced 80 new models of electric vehicles. At the same time, the well-known "Tesla" company was fined about 2.2 million dollars, because it did not inform its customers of electric vehicles

¹ The test was carried out on the ground and represented the world's first ride of a hydrogen-powered aircraft engine.

² And during the last year 2022 in South Korea, "Mercedes" was fined 11.5 million euros for false advertising related to the emission of diesel cars.

about the shorter driving range of their electric vehicles at low temperatures. The American electric vehicle maker's cold-weather driving range drops up to 50.5% compared to how they are advertised online (no mention of range loss in sub-zero temperatures).

What is the future of traffic signaling in the era of smart roads and autonomous vehicles? The development and improvement of traffic signals [see: 1] accompany and in a certain sense cause innovations and attained achievements. With the more frequent use of autonomous vehicles, various issues have been raised, among which the place and importance of sensors [2] and traffic signaling is discussed in particular. However, some of the predicted benefits of AVs may not eventuate until a lengthy transition period is complete. [3]

There will be one hundred chargers for electric cars on Serbian roads next year. The plan is also to introduce a legal obligation for every third parking space in new buildings to have an electric charger. It is being considered to reduce the amount of tolls for owners of electric and possibly hybrid vehicles. As of January 2021, there are three ultra-fast electric chargers with a maximum output of 175 kilowatts on the main roads. Two chargers are located on the plateau of the former toll station "Niš" and one at the toll station "Belgrade". Currently, 8 chargers for electric cars are installed at key points on the main road routes in our country. Electric chargers with a power of 22-50 kilowatts are located on the plateaus of the toll stations "Preševo", "Šid", "Dimitrovgrad", "Subotica", "Boljkovci" - on the highway "Miloš Veliki", near the toll station "Ljig".

Otherwise, in the world, in Germany and the USA, the problem is the lack and unavailability of charging stations, so the European Commission allowed Germany to finance the construction of 8,500 chargers for fast charging of electric vehicles and gave a huge subsidy. EU member states must seek approval from Brussels for their subsidies. From the European Commission, F. Timerans, in charge of the "Green Deal", reminded that all vehicles on the soil of the European Union will have zero carbon dioxide emissions by 2035.

How to facilitate cargo transportation in the European Union?

The member states of the European Union do not have transport permits, because they belong to the single market, and our country Serbia is trying to achieve identical conditions. There are three types of transport permits: - a bilateral permit enables transport between Serbia and another country and between that country and Serbia, - transit permits enable the transport of Serbian carriers across the territory of another country, - permits to and from a third country allow a Serbian carrier to transport cargo from a certain country to a third country, which is not Serbia.

Serbia has agreed on the liberalization of all or certain types of international freight transport with the former Yugoslav republics, Bulgaria, Romania, Switzerland, Great Britain, the Czech Republic, Hungary, Slovakia, Lithuania, Estonia, Kazakhstan and the Russian Federation. Liberalization was agreed with 16 countries, nine of which are EU member states.

German licenses are in great demand, as important destinations and crossroads to other European countries.

Stricter rules for driving licenses in the EU are also being introduced. During 2022, young people participated in two out of five traffic accidents with fatal outcomes. The new rules include the introduction of zero tolerance for driving under the influence of alcohol. Urban mobility is also being pushed more and more in the EU. [4] The Commission wants to introduce a digital driver's license. The legislative procedure of the European Parliament and the Council is now underway, and the plan is to expand the list of offenses that risk lives in traffic (failure to maintain sufficient distance between vehicles, dangerous passing and parking, crossing the solid white line, driving in the wrong direction).

Conclusion

The new European law on cars predicts that after 2035 it will no longer be possible to produce and register internal combustion vehicles. In order for the law to be adopted, a majority of 55% of countries representing 65% of the population of the European Union is required.

We are going to start with the construction of electric vehicles in the factory in Kragujevac. Fires, droughts, floods and devastating earthquakes (in New Guinea, Mexico, Afghanistan and Turkey) along with the melting of glaciers did not pass by us. And war operations in Ukraine continue while these lines are written. And in Turkey, the construction of the newest generation nuclear power plant "Akuj" has started.

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