

2022

MotoBarometer

Moods in the automotive industry in Europe

Exact Systems Report



Contents

1

Automotive production

- 10 Forecasts
- 12 Growth factors
- 14 E-production
- 17 3 questions for

2

Employment in the automotive industry

- 20 Forecasts
- 21 HR challenges
- 22 Employees from Ukraine
- 25 HR history lesson
- 27 3 questions for

3

Putin has declared war on Ukraine and... the automotive industry

- 30 The impact of the war on the automotive industry
- 33 Profit and Loss Balance
- 34 War and the pandemic
- 35 3 questions for

4

It won't be the same anymore

- 38 War and pandemic costs
- 40 Something new is coming
- 42 High bill for drivers
- 45 3 questions for

It will be normal yet



PAWEŁ GOS

President of the
Management Board
of Exact Systems

„It will be beautiful yet; it will be normal yet” – these words of the Tilt song from 1989 are known to many. After more than thirty years, they strike with their appropriateness. For dozens of months, we have been fighting abnormality, both pandemic and war, which affect the lives of each of us.

When we handed over last year's report to you, we wanted it to be the first and last time to refer to the pandemic socio-economic environment. Unfortunately, COVID-19 is still with us, albeit in a lighter form. However, the effects of the pandemic from March 2020 will be felt for many years to come in both negative and positive ways. But that is not all ... On February 24th 2022, Russian President Vladimir Putin made a speech with a message to the nation during which he announced the beginning of a military operation in Ukraine. This decision started not only a huge military and social crisis but an economic one as well.

We all lose every day, including the aggressor.

A few months after the outbreak of the war, we checked how strongly it affected the automotive industry. All countries covered in our study, and there are as many as eleven of them, clearly showed the negative impact of the war that Russia declared on Ukraine on moto production in their country. However, the scale of this influence differs from country to country. Plant representatives of the automotive industry in Poland, much more often than in other countries, are convinced that they suffered greater losses because of the war than factories in other countries. We are dealing with a similar opinion only in Germany, however, in the remaining nine countries, most of those questioned say that the war costs them as much as other countries.

After the war, the automotive landscape will look different.

On the one hand, it may turn out to be more beneficial for Poland. Every third automotive representative believes that part of the production from Ukraine, Russia or Belarus can be transferred to our country. On the other hand, four out of ten people fear that in the future we will not be considered when choosing the location of new factories. Unfortunately, the final bill that Russia will expose the world to and the automotive industry at the end of the war can be only this – we will lose more than we will gain.

However, „it will be normal yet”. I wish myself and you that the title prophecy will come true as soon as possible. And with such hope, I invite you to read the sixth edition of MotoBarometer and to the discussion.

2035 We will be ready



JACEK OPALA

Member of the
Management Board
of Exact Systems

2035. This date was welcomed by some with great satisfaction, by others with fear, even scepticism. In just over twelve years, a car with a combustion engine will not leave the production line of any European automotive plant. Such an ambitious revision of the emission reduction targets seems necessary if we are pursuing the goal of achieving climate neutrality in 2050.

Is Poland ready for such a revolution?

We do not have enough infrastructure in the field of electric cars. E-car sales volumes are far behind those of Western countries. We are still facing the geopolitical risks resulting from Russia's attack on Ukraine. Moreover, the Polish automotive industry is focused on production related to internal combustion cars.

But...

For several years now, we have been launching e-production lines in existing plants without any complexes. We have been winning new investments related to the production of batteries and other components for zero-emission cars. We also see it in the structure of orders from our Polish customers, in which electromobility has an increasing share. A complete shift from conventional production vehicles and their parts into their electric equivalents is a process that is already happening. The support of central authorities may set Poland in the rank of other countries – the largest automotive suppliers in Europe.

This opinion is shared by those with a self-interest. 38% of representatives of automotive plants believe that automotive industry in Poland will realistically be ready for a full phasing out of combustion engine vehicle production in 2035. 35% of respondents are even more optimistic because they point to 2030. The best proof that Poland will be ready is the Stellantis factory in Gliwice, which because of a huge investment and expansion, has switched to a completely new segment of vans and ultimately e-vans. This shows that the transition to e-production in Poland is possible. Some „traditional” lines will probably stop producing, some will hold on, because they manufacture the same parts and components that are needed to complete an electric vehicle, new lines will also be created especially for e-production. I'm convinced that in twelve years our factories will be „e”.

In 2035 we will be ready.

Automotive production

44%

representatives of automotive plants in Poland forecasts an **increase in production in the next twelve months**

43%

of automotive plants in Poland run **activities or research in the field of electromobility**

Employment in the automotive industry

50%

of representatives of automotive plants in Poland forecasts **employment growth in the next twelve months**

72%

of automotive plants in Poland **employ Ukrainian citizens**

Putin has declared war on Ukraine and ... the automotive industry

50%

representatives of automotive plants in Poland believe that regarding the war in Ukraine, the situation in the automotive industry **is more difficult than after the outbreak of the COVID-19 pandemic**

35%

of representatives of automotive plants in Poland believe that part of the automotive production from Ukraine **has or may be transferred to Poland**

It won't be the same anymore

61%

of representatives of moto plants in Poland believe that as a result of the war in Ukraine costs of **raw materials needed for moto production increased the most**

68%

of representatives of moto plants in Poland believe that as a result of war in Ukraine more customers **will postpone the exchange of current car for the new one**



Automotive
production



Forecasts

Poland was not among the optimists

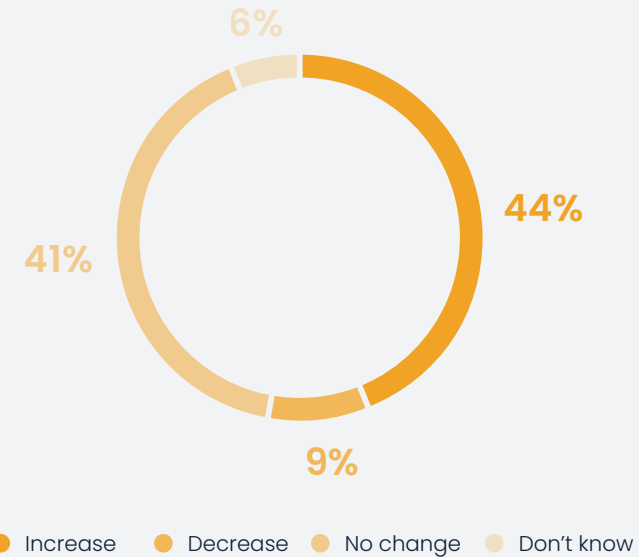
OICA data indicates that in 2021 the automotive industry began to recover from the first pandemic year. World vehicle production increased by 3% compared to 2020, from 77.7 million to 80 million cars. However, this is still a much lower result than that generated in the pre-pandemic 2019 (92 million). The challenge for automotive producers was the sudden and unprecedented fluctuations in the economic situation. In the beginning, the main problem was the supply and demand shock caused by the lockdown, then breaking the supply chains and finally the rising prices of raw materials and energy. These factors are still a risk for growth in 2022 and beyond, compounded by the consequences of the war that Russia has declared against Ukraine.

In this context, the positive news is the fact that in nine out of eleven countries surveyed, more than half of representatives of automotive plants forecasted an increase in production in the next twelve months. However, it is worth noting that Poland is not included in this rate. "Only" 44% of respondents from our country count on an upward trend. The second country with a much more pessimistic attitude is Germany - only 14% indicated an increase in production. At the other extreme are Turkey (83% optimists), the Netherlands (77%), Romania (74%), Slovakia (71%) and the Czech Republic (70%).

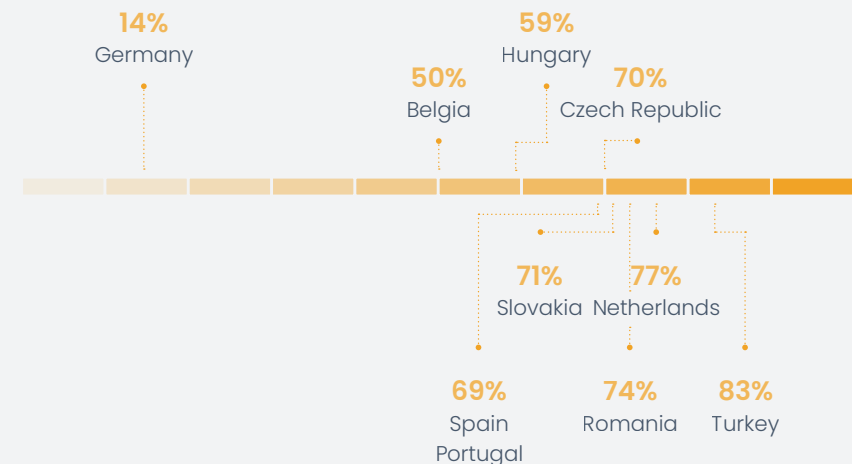
44% of representatives of automotive plants in Poland forecast an increase in production in the next twelve months. Only in Germany there are fewer optimists.

Do you anticipate that in the next twelve months production in the company will increase, decrease, or remain at a similar level?

POLAND



PROJECTED GROWTH (OTHER COUNTRIES)



44%

of representatives of automotive plants in Poland
forecasts an increase in production
in the next 12 months

Only in Germany there are less optimists

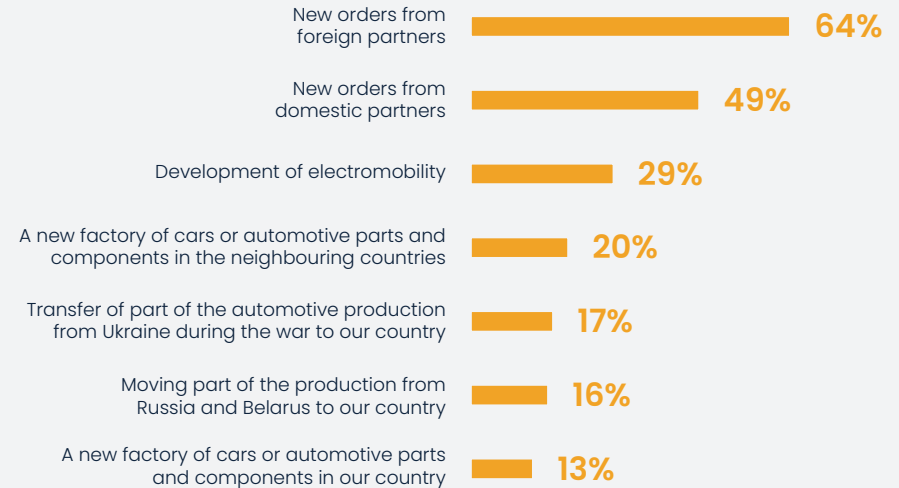
Growth factors

Can you profit from a war??

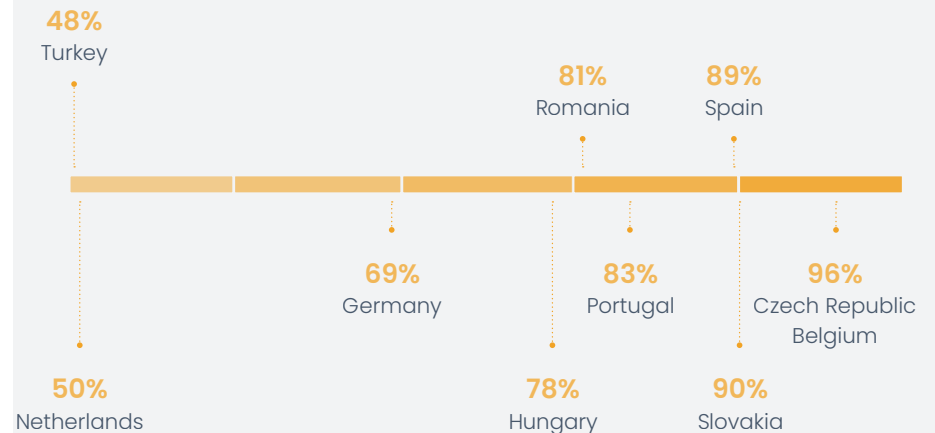
New orders from foreign partners are the most important factor in the growth of automotive production, indicated by representatives of the ten surveyed countries and in Poland. In the opinion of two out of three representatives of Polish automotive plants, the increase in production will be driven by new orders from foreign partners, which is not surprising as most of the vehicles and parts by them are manufactured for export. Nearly every third respondent counts on speeding up with e-cars. There are more e-optimists only in Germany (56%). It is worth noting that every third representative of the Polish automotive industry sees a chance for an increase in production due to the war in Ukraine. Some are counting on taking over contracts from Ukraine and others from Russia and Belarus. Those respondents who showed that some production was transferred from Ukraine, Russia or Belarus are only in Germany (44%).

What factors may influence the growth in your company?

POLAND



IMPACT OF NEW ORDERS FROM ABROAD ON GROWTH (OTHER COUNTRIES)



33%

33%

of representatives of automotive plants in Poland believe that
part of the production from Ukraine, Russia or Belarus can
be transferred to our country

E-production

E-supply

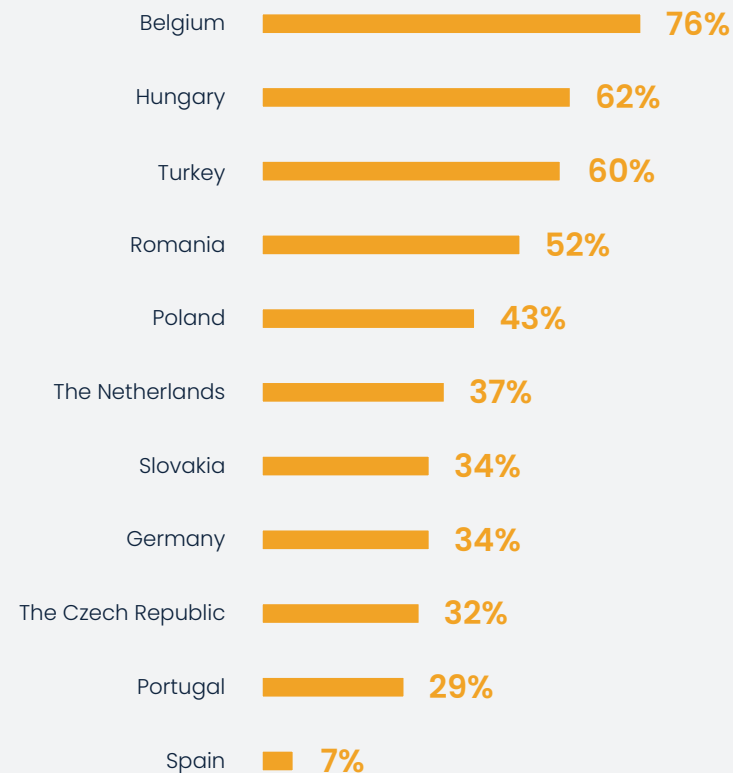
Poland has ambitions to become one of the leaders of electromobility industry in Europe. We are talking about the supply side, i.e., the production of e-vehicles, parts and components for them. Looking back at recent years, a lot has happened in our country in this field. According to data from the Polish Chamber of Enterprise Development, we are responsible for 30% of the European production of components for electric vehicles, and the largest factory of batteries in Europe for cars, LG Energy Solution, which operates near Wrocław. Moreover, Poland is leaving other European countries behind in terms of production (seven plants) and implementation of e-buses for public transport.

So, the chances of being a leader are high, but ...

Polish production plants are not leaders in the surveyed group of eleven countries if we take a closer look at whether they conduct business or research in the field of electromobility. 43% of those questioned declare the relationship of their factories with electromobility, which gives us fifth place. More e-factories are in Romania, Turkey, Hungary and Belgium. The least are on the Iberian Peninsula.

Does your company conduct business or research in the field of electromobility?

Wskazania na tak



2035

In ten out of eleven countries surveyed, most representatives of automotive plants believe that automotive industry in the European Union will be realistically ready for full retirement from the production of vehicles with an internal combustion engine in 2035.

Only in Germany, respondents most often pointed to 2025

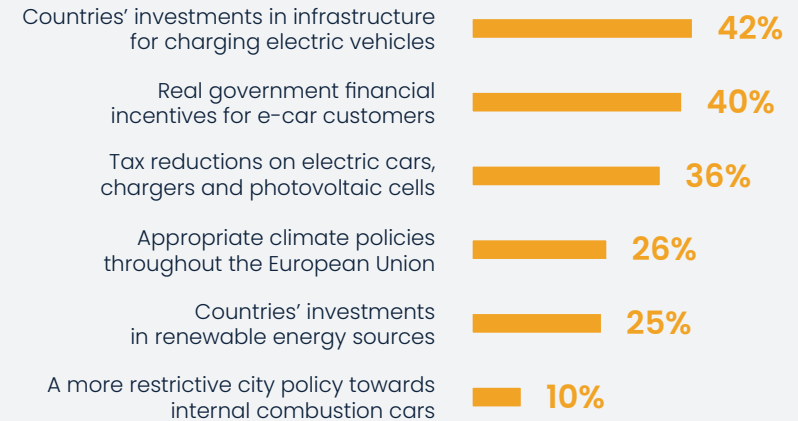
E-production

E-drivers

The ACEA data (June 2022) shows that, given the number of e-vehicle chargers in the European Union, there is a huge gap between the top and bottom countries. In the Netherlands (90,000) and Germany (59,000) there are half of all charging points in the EU, at the other extreme are Cyprus and Malta, where the number of points does not exceed 100. Poland is in the middle of the range with 0.9 % share in the total number of chargers in the EU (12th place).

While there has been a significant increase in the number of recharging points in the EU over the last five years (+ 180%), the total number (over 307,000) is well below what is needed. To meet its CO2 targets, ACEA indicates that up to 6.8 million public charging points are needed by 2030. Therefore, it is not surprising that in most of the countries surveyed, representatives of automotive plants showed government investment in e-infrastructure as the key factor that would most contribute to the development of electromobility. According to respondents from the Netherlands, Spain and Portugal, the best „e-driver“ would be an appropriate climate policy throughout the EU (83%, 80%, and 76% respectively).

What does the automotive industry need most to rebound and dynamically develop in the field of electromobility?



3 questions for



PAWEŁ KOWALCZYK

Director of market
development and strategy
E.ON edis energy

How did the war in Ukraine turn into energy problems in the automotive industry?

The conflict in Ukraine, where part of the production of components for new cars was located, primarily caused numerous stoppages of production lines, especially at German car manufacturers, who largely obtained parts from plants located there. However, other very serious consequences of the conflict cannot be forgotten – sanctions and restriction of supplies of crude oil and natural gas from Russia. The problem with gas availability is particularly acute for production in the automotive industry because gas is used to generate electricity and heat and is used in many technological processes. The German government began talks with major producers to reduce gas consumption, but the effect could be limited without cuts in production plans. The fuels that can theoretically replace gas in a short time frame are coal and heating oil. But due to increased carbon dioxide emissions and the need to obtain permits, they should not be considered as a long-term solution. Further reductions in gas consumption will affect both employees and suppliers – also in Poland, where a large number of suppliers of German plants are located.

Could these problems have been avoided?

We could have avoided the above problems, or at least reduced their impact, if we had had a greater diversification of green energy sources. While this would mean increased energy costs in the short term, it is a long-term solution in which direction we should go. Such sources should be promoted and supported already at the government level to ensure Poland's competitiveness as a supplier of parts to this important sector of the global economy, which is the automotive industry. Moreover, the production of cars is facing challenges to meet the requirements of European Union regulations and to move away from selling cars with combustion engines by 2035 and reduce carbon dioxide emissions. The largest brands have set themselves the goal of achieving neutrality in CO2 emissions in the entire supply chain between 2039 (Daimler) and 2050 (BMW and Volkswagen).

And how do Polish automotive manufacturers find themselves in this situation?

Challenges related to EU targets as well as internal corporate goals to achieve carbon neutrality are also to be faced by industry representatives in Poland. A substantial proportion of both electricity and heat comes from burning coal or gas, which ultimately has to be replaced by green energy. We will also be subject to reporting required emissions, e.g., via Lifetime Cycle Analysis. Some companies have already decided to introduce sustainable energy solutions, but if Poland wants to maintain its position as a significant supplier on the auto parts market, all its domestic industries should decide to introduce significant changes in the coming years.



Employment **in the automotive industry**



Forecasts

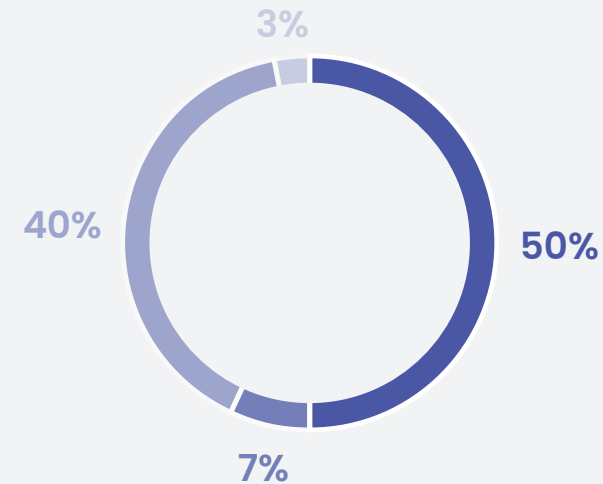
Staffing needs are constantly increasing

Poland is among the three countries with the highest employment in the automotive industry in Europe. According to ACEA data, 916 000 people work directly in the automotive industry in Germany, in France 232 000 people and in our country 224 000 people. The latest data indicates that neither the war in Ukraine nor the pandemic can reduce these numbers. In seven out of eleven countries, the percentage of companies planning to increase employment in the coming months is min. 50%. Moreover, in only two countries the percentage is expecting a decline in employment to be double-digit, i.e., in Germany and the Netherlands.

In Poland, exactly half of those questioned expect employment to increase by 11 pp. more than in 2021. As in previous years, the majority report a need for lower-level production workers (70%), 41% will be looking for middle-level employees and 7% will recruit managerial staff. It is worth noting that in Germany and Turkey more factories are looking for specialists (63% and 69%, respectively) than lower-level employees (30% and 61%, respectively).

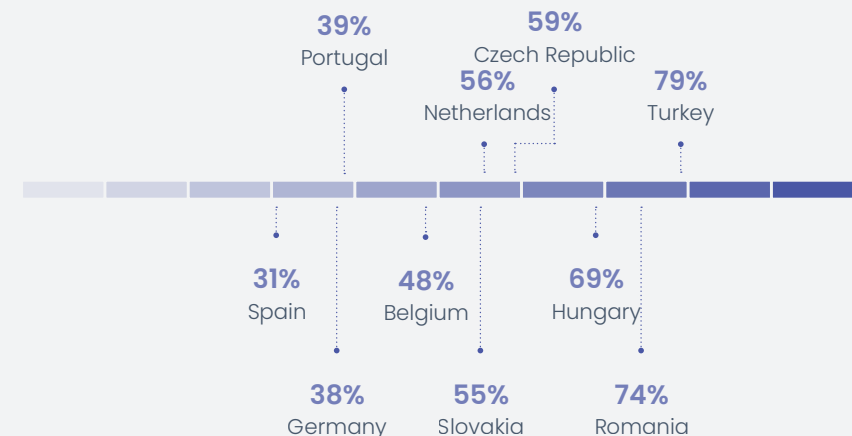
Do you anticipate that in the next twelve months employment in the company will increase, decrease or remain at a similar level?

POLAND



● Increase ● Decrease ● Not change ● Don't know

PROJECTED INCREASE (OTHER COUNTRIES)



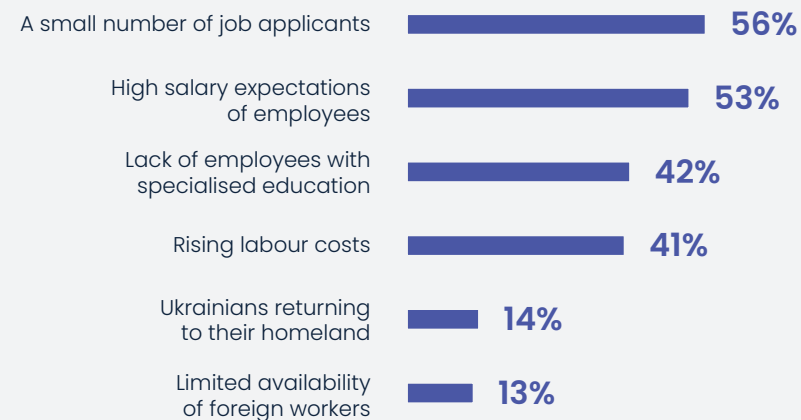
HR challenges

A smaller pool of employees

Almost from the beginning of the study, the first two HR challenges remain unchanged, they only exchanged places. In 2021, the largest number of automotive representatives indicated high salary expectations (55%) and a small number of job candidates (51%). This year it is the other way round, although the percentage of responses to both answers is at a similar level. In the context of the war that has been taking place on the territory of Ukraine since February, it is worth paying attention to two other challenges - the return of Ukrainians employed in Poland to their homeland and the lower availability of foreign workers. In total, they are indicated by 27% of respondents, which means that the pool of employees interested in working has decreased by more than a quarter. Considering that every second automotive plant wants to employ more, this is a major problem for the industry.

What are main employment problems in the automotive industry today?

POLAND



Employees from Ukraine

More and more Ukrainians in the automotive industry

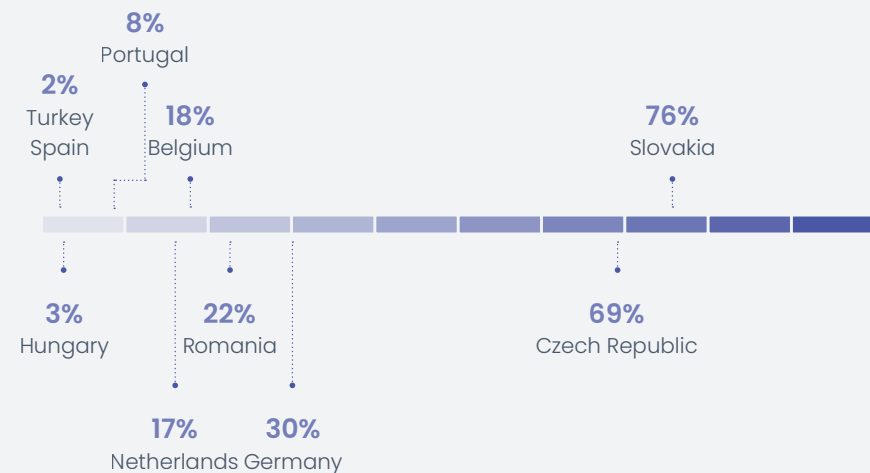
Automotive plants in Poland are very eager to fill the staffing gaps with employees from Ukraine. Close to three out of four employers do so. That's about 14 pp. more than in 2021. The growing interest in staff from the east is confirmed by data of the Ministry of Family and Social Policy for 2021. In the second pandemic year, employment offices registered almost 2 000 000 declarations, which enable work for up to six months in Poland (30% more y/y). The number of work permits issued to foreigners for up to three years increased by a quarter to over 504,000. Two out of three of them concerned Ukrainians. The automotive industry in Poland fights for candidates from the east primarily with its southern neighbours. In Slovakia, 76% of automotive plants employ Ukrainians (+30 pp y/y), and 69% in the Czech Republic. Interestingly, during the year the number of German plants that support themselves with Ukrainian citizens doubled from 15% to 30%.

Do you employ or have employed
workers from Ukraine?

POLAND



EMPLOYING UKRAINIAN CITIZENS (OTHER COUNTRIES)



72%

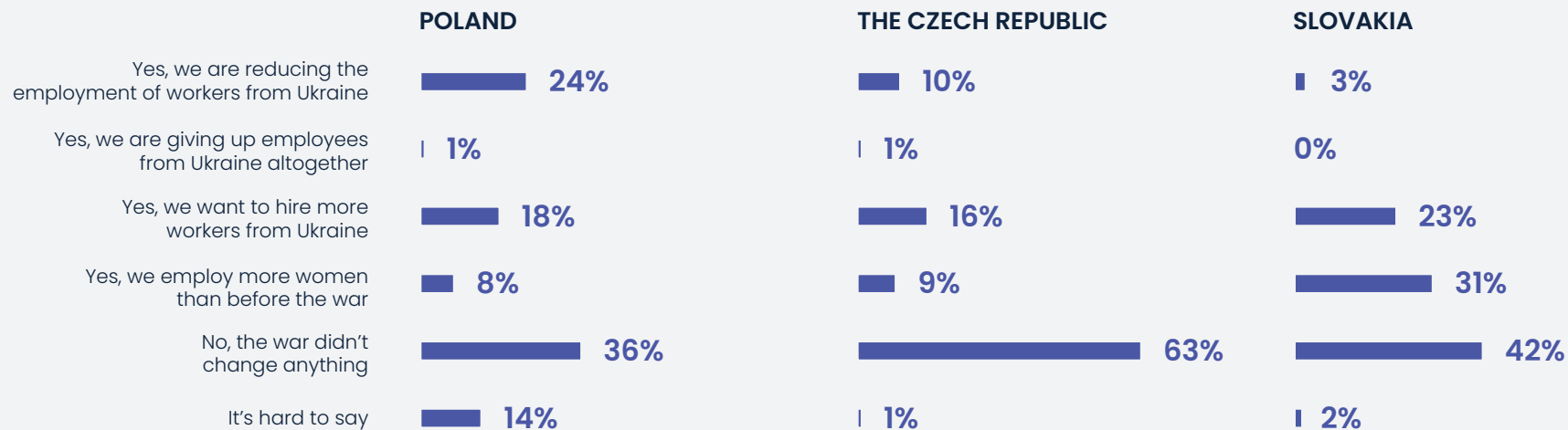
of automotive plants in Poland
employs Ukrainian citizens

Employees from Ukraine

War brings changes

Ukrainians are an especially important part of the Polish economy, including the automotive industry. Already three out of four representatives of automotive plants report that they employ citizens from beyond the eastern border. Therefore, the declaration of war by Russia had to affect this area. It is especially visible in Poland. In our country, the largest number of respondents – compared to the Czech Republic and Slovakia, i.e., countries which also in most factories supplement their staff with Ukrainians – indicated that their employment was reduced due to the war. Moreover, in Poland the fewest respondents said that the war did not change anything. It is worth noting however, that a comparable percentage of automotive representatives reduces and increases the employment of Ukrainians. In the Czech Republic and Slovakia, these proportions are much different. Slovakia is ready to accept more Ukrainians – more than half want to hire more people.

Has the war in Ukraine changed your company's approach to employing Ukrainians?



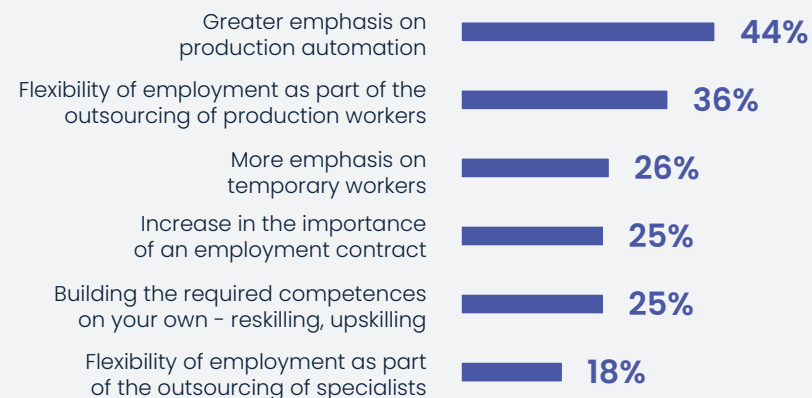
HR history lesson

The planner will no longer sleep well

Every country has a different HR history lesson. This is what it looks like at first glance. There is no single dominant conclusion drawn from the pandemic and the war in Ukraine. Greater emphasis on production automation was most often indicated by automotive representatives in Poland (44%), Belgium (44%) and Turkey (68%). Outsourcing of production workers is number one in the Czech Republic and specialists in Spain, Romania and Slovakia. Portugal, on the other hand, wants to put more emphasis on temporary workers. However, all these solutions address one problem that has been faced by production plants in recent months – the problem with people when it is necessary to stop or reduce production. Depending on the degree to which automation is developed in each country, production plants plan to protect themselves against further events that may surprise them in the future. Because we can forget about the quiet life of planners.

What conclusions in the area of employment did your company learn from the pandemic and the war in Ukraine?

POLAND



KEY INDICATIONS (OTHER COUNTRIES)

Belgium: Greater emphasis on production automation, greater emphasis on temporary workers	44%
The Czech Republic: Building flexibility of employment as part of the outsourcing of production workers	50%
Spain: Building flexibility of employment as part of outsourcing specialists	89%
The Netherlands: Building the required competencies on your own – reskilling, upskilling	65%
Germany: Increase in the importance of an employment contract	29%
Portugal: Greater emphasis on temporary workers	78%
Romania: Building flexibility of employment as part of outsourcing specialists	54%
Slovakia: Building flexibility of employment as part of outsourcing specialists	63%
Turkey: Greater emphasis on production automation	68%
Hungary: Building the required competencies on your own – reskilling, upskilling	67%

44%

of automotive plants in Poland plan to put more emphasis on the automation of production

3 questions for



ARTUR MIGOŃ

Vice President
Antal

The staffing needs in the automotive industry are still enormous, and there are no candidates. How should moto plants deal with this?

Moto plants should, above all, pay attention to three aspects. First, strong emphasis is needed on digital transformation. This will reduce the impact of staff shortages on the company and the people whose responsibilities will remain digitized, they can be transferred to other, more ambitious tasks. Pay attention to the quality of the candidates. Along with the market situation, where there is a shortage of staff for specialist positions, programs and training courses are created which are aimed at encouraging a larger group of candidates to choose a specific employer, as well as accelerating employee implementation in the company. Third, companies must fight to retain the best talent. The Antal report „Activity of Specialists and Managers in the Labour Market” shows that one of the most common reasons given as a reason for changing jobs is more attractive career opportunities (38% of respondents) and a proposal of a higher salary (32% of respondents). Finally, in the growing age of inflation, companies need to bear in mind wage increases.

Do we replace employees from Ukraine with employees from other countries?

Production, construction and logistics suffered the most from the outflow of Ukrainian personnel. A solution that can be applied ad hoc, it is to adapt some of the tasks for women and the elderly. Many of them will be added to the HORECA industry. In logistics it is possible to train women to be drivers and to work in production, where high manual skills are the key competences and work does not include moving heavier components. However, there is still the issue of staff for harder work. It's worth to open up to employment of workers of other nationalities, e.g., from Georgia and Moldova. Unfortunately, the migration of workers from these countries will not fill the demand gap in the labour market and it is also worth reaching for employees from Indonesia and Vietnam.

What history lesson should the Polish HR industry learn?

Post-pandemic business acceleration in many industries, which has produced record results, is not guaranteed forever – good economic conditions do not last forever, and companies should have prepared crisis plans or can create them quickly and efficiently. The managerial staff should prove themselves both in prosperity and in times of crisis. You can take care of it through appropriate training, competence audits and the process of equalizing knowledge in organizations. Also, the concept of skilful diversity management in the company is important. This is a recipe for winning with the demographic decline which, according to analyses, in 2050 will bring black statistics for younger generations. In a short time, Poland had the opportunity to face two crises, however, our entrepreneurship made us react efficiently in both cases.



Putin has declared war on Ukraine
**and... the automotive
industry**



Putin has declared war on Ukraine
and... the automotive industry

The impact of the war on the automotive industry

War only brings losses

All countries clearly indicated the negative impact of the war that Russia declared against Ukraine on automotive production in their country. However, the scale of this impact in some countries is greater than in others. In Belgium, the Czech Republic, Spain, the Netherlands and Slovakia, more than 90% of respondents indicated negative or very negative impacts, while in Germany and Turkey less than half. Poland, with the result of 71%, is in the middle of the analysed rate.

However, representatives of automotive plants in Poland, to a large extent, are convinced that due to the war they suffered greater losses than the factories in other countries. Nearly half of the respondents (49% - the most common answer) indicated that the automotive industry in their country suffered more than in the rest EU countries. The belief of greater losses is still prevalent only in Germany, where most say that their companies have suffered more than in other countries (62%). In nine countries, most of those questioned say that the war costs them as much as other countries.

What is the impact of the war in Ukraine on your company?

	POLAND	BELGIUM	THE CZECH REPUBLIC	SPAIN	THE NETHERLANDS	GERMANY	PORTUGAL	ROMANIA	SLOVAKIA	TURKEY	HUNGARY
Very unfavourable	24%	6%	6%	0%	8%	30%	14%	4%	4%	5%	5%
Unfavourable	47%	86%	87%	98%	83%	17%	73%	68%	88%	43%	79%
Neutral	20%	6%	6%	2%	8%	30%	12%	26%	8%	47%	13%
Beneficial	0%	0%	0%	0%	0%	4%	0%	0%	0%	1%	0%
Very beneficially	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%
It's hard to say	9%	2%	1%	0%	2%	17%	2%	2%	0%	4%	2%

Putin has declared war on Ukraine
and... the automotive industry

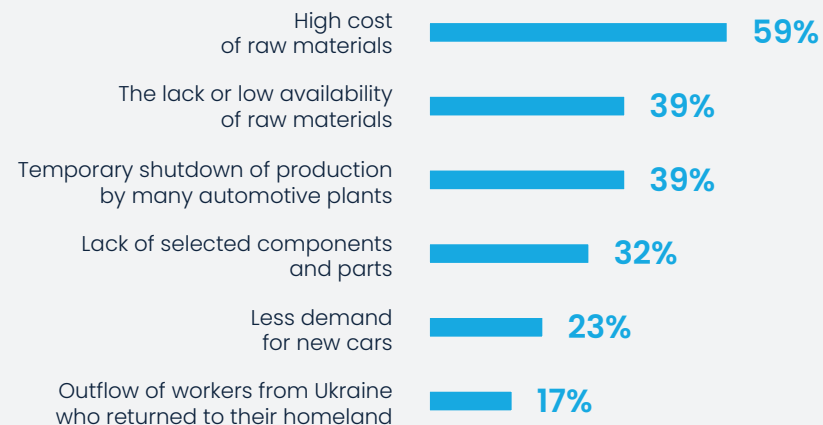
The impact of the war on the automotive industry

The high cost of the war

The Polish automotive industry – like the entire economy – started 2022 with a wave of rising prices, and the war only increased them. The sharp increases are reflected in the survey results. The biggest concern of over half of the respondents in Poland is the high cost of raw materials necessary to produce car parts and components. The research shows that Poles are not alone in this aspect. In nine other countries, most representatives of automotive plants also indicated that the rising prices of raw materials had the greatest impact on their operations. Only Germany broke away – here the largest group of respondents (36%) indicated the lack of selected parts and components as the most painful blow to their automotive business. Poland and Germany, unlike other countries, felt many more problems with the staff because of the war. 17% of Polish representatives and 21% of German automotive plants are struggling with the outflow of Ukrainian workers who have decided to return to their homeland. In other countries, this percentage is less than 5%.

What has affected the automotive industry in your country
the most in connection with the war in Ukraine?

POLAND



59%

of moto plants in Poland experienced higher costs
of the raw materials needed to produce the parts

Putin has declared war on Ukraine
and... the automotive industry

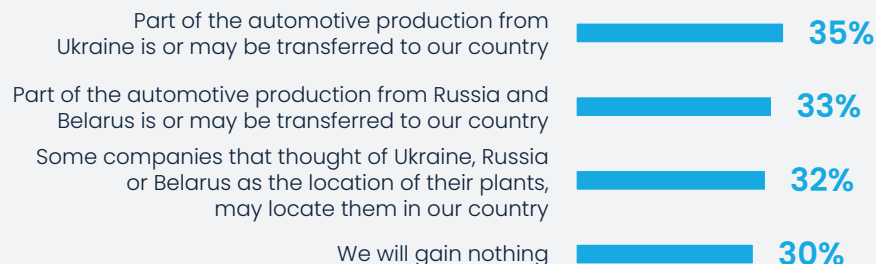
Profit and Loss Balance

Losses greater than gains

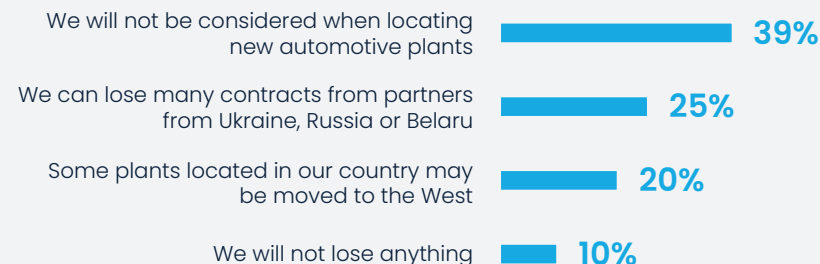
The Russian invasion of Ukraine is a huge tragedy, the consequences of which are also felt by the automotive industry. In Ukraine, there were factories supplying components to other plants, in the supply chain this country is one of the largest European producers of electric harnesses and cables for cars. In Russia, on the other hand, there are many plants producing cars that belong to large European concerns and investors from Western Europe. After the war, the automotive landscape may look different. On the one hand, it may turn out to be more beneficial for Poland. Every third automotive representative believes that part of the production from Ukraine may be transferred to our country, a similar percentage indicates the relocation of activities conducted so far in Russia or Belarus. On the other hand, four out of ten respondents are afraid that in the future we will not be considered when choosing the location of new factories, and every fifth believes that we will lose some of the production lines that are already in operation. Overall, there are three times as many people who think we will gain nothing than those who say we will not lose anything.

What can the automotive industry in your country gain/lose (in terms of business) in connection with the war in Ukraine?

PROFIT BALANCE (POLAND)



LOSS BALANCE (POLAND)



Putin has declared war on Ukraine
and... the automotive industry

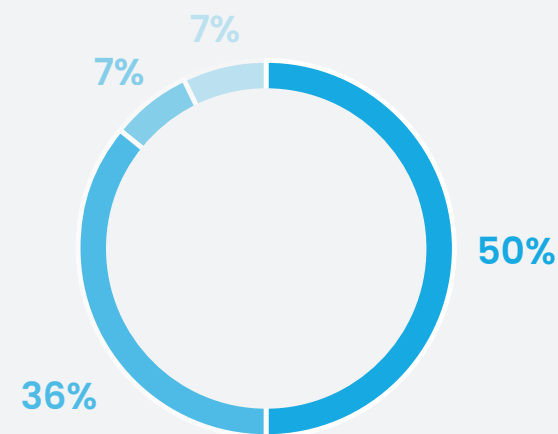
War and the pandemic

A war equal to a pandemic?

Nobody expected the COVID-19 pandemic or the war in Ukraine. Or at least such an escalation of both events. Representatives of automotive plants were asked to compare the automotive situation in their country at the beginning of the pandemic and after the outbreak of the war. In nine countries, in their opinion, the situation today is comparable to that of the first half of 2020. The representatives of Poland and Germany are of a different opinion. Exactly 50% in our country and 55% of our western neighbours, say that today we are dealing with a more difficult situation than after the outbreak of the pandemic. In Poland especially in the first weeks of the war, there was a risk that, as a frontier country, we might become involved in a conflict. Moreover, there was an outflow of some Ukrainian workers returning to their homeland. Poland is also the largest importer of goods manufactured in Ukraine. Germany, on the other hand, is one of the largest countries exporting products beyond our eastern border. Furthermore, as the largest automotive economy in Europe, it is very dependent on parts and components produced in Ukraine. Hence, so many judge so badly what Putin is doing.

Is the situation in the automotive industry in your country, in connection with the war in Ukraine, more difficult, comparable or better compared to the first months of the pandemic?

POLAND



● More difficult ● Comparable ● Better ● It's hard to say

	BELGIUM	THE CZECH REPUBLIC	SPAIN	THE NETHERLANDS	GERMANY	PORTUGAL	ROMANIA	SLOVAKIA	TURKEY	HUNGARY
More difficult	10%	4%	4%	6%	55%	25%	34%	4%	7%	14%
Comparable	82%	93%	96%	87%	26%	69%	44%	88%	53%	66%
Better	8%	2%	0%	2%	1%	6%	10%	6%	6%	3%
It's hard to say	0%	1%	0%	6%	18%	0%	12%	2%	34%	17%

Putin has declared war on Ukraine
and... the automotive industry

3 questions for



KRZYSZTOF INGLOT

Founder of Pesronnel
Service S.A

Why do Poles believe that we suffered greater losses than other EU countries in connection with the war?

MotoBarometer results show that half of the representatives of automotive plants in Poland are convinced that in connection to the war they suffered greater losses than factories in other countries. I think the answer to why this is so quite straight enough. We got involved in helping our eastern neighbours like no other country. Let me just remind you that since the war broke out, almost 6 000 000 people crossed the border with Poland, 1 300 000 Ukrainians obtained a PESEL number, and 420,000 refugees found work here. Both private individuals and businesses got involved in the help, which is appreciated all over the world but also has its socio-economic consequences. Hence, Poles may be convinced that we suffered greater losses than others in connection with the war.

What is the scale of relocation of moto businesses from Ukraine, Russia and Belarus to Poland?

Volkswagen, Volvo Cars, Aston Martin, Jaguar Land Rover, BMW, Daimler and Magna – are just examples of companies from the automotive sector, which have decided to withdraw or limit their activities in Russia. Because of this, more jobs were created in Poland which we as a company have already observed at the turn of March and April, when two thousand additional jobs in this industry appeared. Every third representative of the automotive industry indicates that part of the production from Ukraine may be transferred to our country, a similar percentage indicates the relocation of activities conducted so far in Russia or Belarus. I think they are right and of course, this is good news for our market, also from the point of view of the inflow of women refugees to Poland and the willingness to provide them with jobs. Poland has a great reputation in the international arena, and we have already proved the efficiency of business operations in difficult conditions in a pandemic. Polish enterprises coped well in the face of the crisis caused by COVID-19, production increased and unemployment decreased. We were able to adapt to the prevailing conditions more efficiently than other countries, which now definitely works to our advantage.

When was the automotive industry in a more difficult situation? After the outbreak of the pandemic or the war?

In fact, the pandemic problems have been extended to include the challenges of war. We continually face interrupted supply chains, which stem from the pandemic. By the way, the automotive industry felt this aspect with redoubled strength. Similarly, as problems with the availability of semi-finished components. In addition, there are currently issues related to sanctions, rising gas costs, electricity, and raging inflation. For over two years, entrepreneurs have been operating in conditions of great uncertainty, which is not favourable for investments or taking risks. However, it seems that the solid foundations of our economy will keep us going through the upcoming crisis quite smoothly, although of course its various consequences will affect the automotive industry.



It won't be

the same anymore



It won't be the same anymore

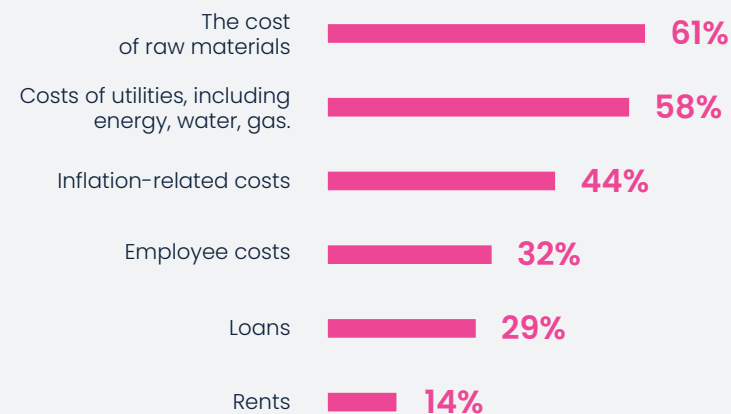
Costs of war and pandemic

Raw materials and inflation

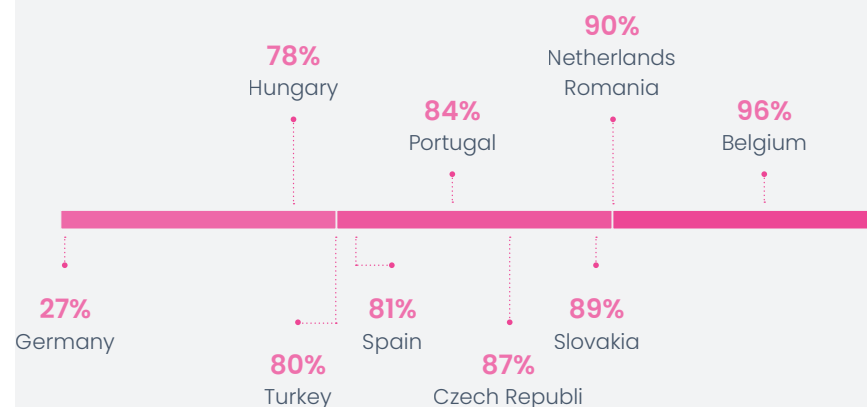
Representatives of the automotive industry most often point the rising costs of raw materials necessary to manufacture parts or components and the costs associated with inflation. In ten out of eleven countries surveyed, both elements were included in the top three responses. The pandemic has had a heavy impact on the market of energy resources and metals, causing the purchase prices of goods to rise. The automotive industry was hit it hard in the second half of 2020 and the first half of 2021, but after a significant slowdown the anticipated rebound has arrived. It did not last long however – the outbreak of war in Ukraine complicated everything again and the issue is visible in every country surveyed. Only representatives of the German automotive industry, who most often pointed to the costs of employees and media, have a different view on the growing costs of running a business. This may be related to the level of inflation in our western neighbour's country. Eurostat data shows that in June 2022 it got to 8.2% and was one of the five lowest rates in the entire European Union. For comparison, in Poland and the Czech Republic, inflation was about twice as high at 14.2% and 16.6% respectively.

Which costs of doing business in the automotive industry increased the most as a result of the pandemic and the outbreak of war in Ukraine?

POLAND



RAW MATERIAL COSTS (OTHER COUNTRIES)



In response to the rising costs of doing business
automotive plants in Poland

57%

raise or plan to increase the prices
of manufactured vehicles
and their parts

25%

put or plan to put more
emphasis on outsourcing
employees

Something new is coming

More expensive, closer, more ecological

Again, in the context of the COVID-19 pandemic and the ongoing war in the territory of Ukraine, a price increase factor has appeared. In as many as seven out of eleven countries surveyed, including Poland, representatives of automotive plants most often indicated that the vehicles produced would be more expensive. In the opinion of the interviewees, the most lasting effect of the recent events on the Iberian Peninsula will be the transition from „just in time” to „just in case” production.

It is worth noting that only in Belgium and the Netherlands - a large group of respondents indicated that the electromobility revolution would take place faster as a result of the pandemic and war (60% and 71% respectively). In other countries, this element was noticed by a dozen or so percent of people. Spain, Germany, Portugal and the Netherlands most often believe that the greater regionalisation of production will be a permanent change. The European market can benefit a lot from reducing the distance between the customer and the supplier. Manufacturers with factories in Europe will be more likely to look for partners in closer locations, instead of using Asian suppliers. However, the same principle will probably work the other way round, i.e., factories located far from Europe may be more willing to establish cooperation with local companies.

How has the pandemic and the war in Ukraine changed permanently in the automotive industry?

	POLSKA	BELGIUM	THE CZECH REPUBLIC	SPAIN	THE NETHERLANDS	GERMANY	PORTUGAL	ROMANIA	SLOVAKIA	TURKEY	HUNGARY
Higher cost of vehicle production and consequently, more expensive vehicles for customers	62%	92%	69%	15%	67%	25%	20%	73%	84%	84%	91%
Less dependence on one supplier	32%	12%	7%	19%	4%	23%	14%	8%	46%	27%	25%
Transition from production in the „just in time” system to „just in case”	28%	18%	60%	80%	29%	18%	61%	53%	28%	47%	32%
Faster transition from the production of combustion vehicles to electric and hydrogen vehicles	18%	60%	2%	9%	71%	14%	14%	6%	10%	5%	4%
Consolidation of the automotive industry	12%	8%	8%	4%	2%	8%	4%	4%	38%	3%	8%
Greater regionalisation of production	11%	12%	31%	70%	33%	36%	53%	26%	4%	5%	2%
Greater emphasis on carbon neutrality at every stage of moto production	11%	14%	4%	6%	10%	5%	10%	4%	6%	4%	7%

„The pandemic and the war accelerated the end of the traditional automotive industry that we have known for several decades and introduced into our industry processes, that so far, most players have been very resistant to. We live in a VUCA world, which is Volatility, Uncertainty, Complex and Ambiguous and only those who adapt to changes and are ready for new solutions will survive.”



PAWEŁ GOS

President of the Management
Board of Exact Systemss

It won't be the same anymore

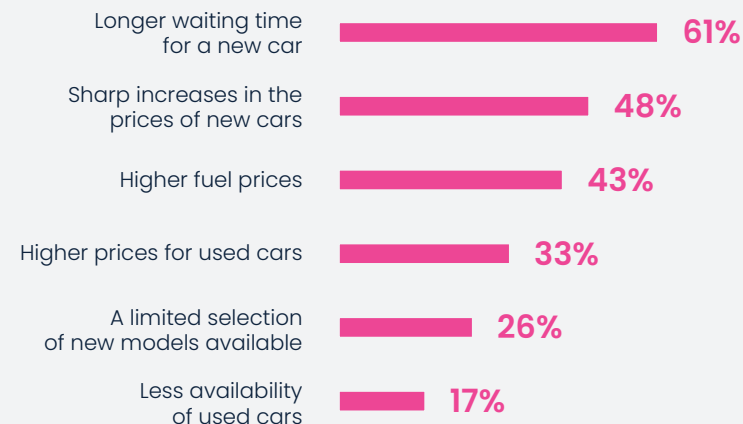
High bill for drivers

More expensive

An hour stoppage of a production line costs about EUR 600 000 and a week stoppage costs up to EUR 100 000 000 – according to Exact Systems' estimates. Such amounts must be reckoned with by many automotive plants that stop or reduce production, switch to a one or two-shift systems, produce vehicles „to stock” for later picking or make unplanned stops even for missing parts or components. The industry's problems have an impact on end customers. Representatives of moto plants in Poland when asked about the most important consequences, most often pointed to the long waiting time for a car (in 2021 in Poland it was up to nine months), an increase in the prices of cars and fuel for them. A similar set of effects was indicated by respondents in other countries covered by the study, except that in seven of them higher fuel prices were number one, in Belgium and Turkey long waiting times for a new car and in Germany higher prices of used cars.

What affected consumers-users of manufactured cars the most in connection with the pandemic and the war in Ukraine?

POLAND



1% to 20%

price increase up to 5% – 33% of responses
price increase from 6% do 10% – 20% of responses
price increase from 11% do 20% – 28% of responses

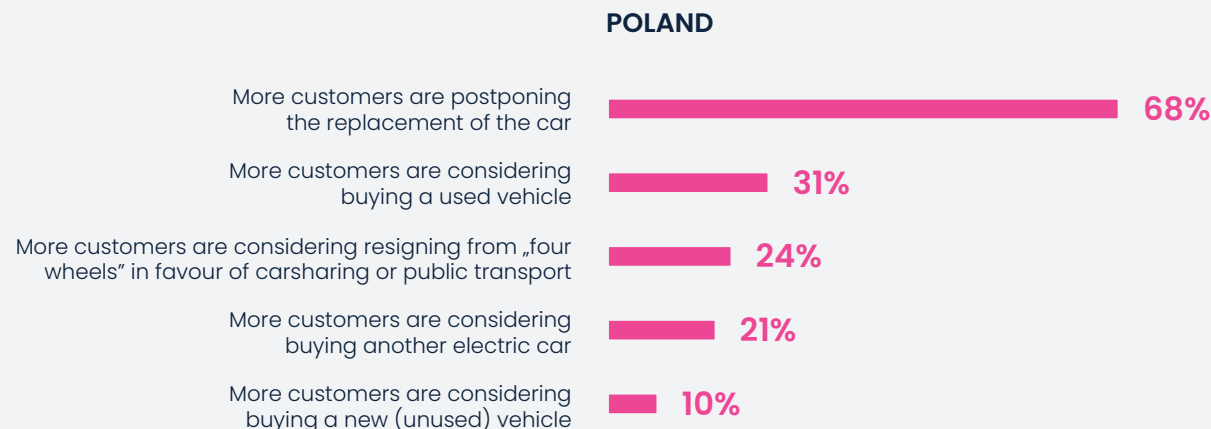
the prices of new passenger cars will increase
by this amount in Poland by 2023, according
to 81% of representatives of motor plants

High bill for drivers

Polish roads will get old

The ACEA data from 2021 shows that the average age of a passenger car in Poland is slightly over fourteen years. With this result, we are at the bottom of the EU i.e., seventh from the bottom. Analysing Poles' "moto behaviour" caused by a pandemic or war, this picture may only change for the worse in the coming years. Two out of three representatives of automotive plants interviewed believe that currently more customers are postponing the replacement of their vehicle with a new model and one in three believes that Poles will now buy second-hand vehicles more often. Every fifth respondent indicated that because of the current socio-economic events, more people would consider buying an e-car. Unfortunately, in our country there is still low awareness of the need to switch to an e-vehicle and there is a lack of such financial and non-financial incentives that would allow a larger group of customers to choose an electric car instead of an internal combustion one.

To what „moto behaviour“ the consumers were prompted by the pandemic and the war in Ukraine?



From the Experts' perspective



PAWEŁ BORYS

President of the Board
Polish Development Fund

The economy has been undergoing a series of serious shocks in the last two years. First, the pandemic and lockdown that caused a deep recession. Then a dynamic rebound that met broken supply chains, causing problems in many industries and the first increase in prices. In a situation where it seemed that Europe was slowly recovering from the crisis, Putin caused a powerful destabilisation of the gas market, which resulted in many increases in the price of this resource on the stock market. After a few months, this hybrid war turned into a full-scale aggression by Russia against Ukraine. Before the war, we underestimated the importance of this economy for supply chains in many industries, such as steel, rare raw materials or agricultural products. Despite many challenges, the Polish economy has one of the highest GDP growth rates in the EU, a strong labour market and a healthy enterprise sector. In 2022, the dynamics of GDP growth should reach 4.5%, and in 2023, despite the slowdown and the risk of recession in Germany, it should achieve a positive dynamic growth of around 2%.

The automotive industry is classified as a business cycle sensitive sector and it is no wonder that it is strongly affected by these economic shocks. The supply side remains a greater challenge than the demand side. This could mean a shift in demand from new to used cars, excluding premium cars for wealthy customers. Broken supply chains, rising transport and component prices are driving the prices of new cars up. This is in line with MotoBarometer, which shows a price increase of 5-20%. It is becoming common to stock parts and move away from just-in-time supply chain management. The availability of employees and the wage pressures are no less challenging. If we add the technological revolution and the goals of the EU climate policy, the car industry will be a real rollercoaster in the coming years.



PAWEŁ WIDEL

President
Association of Automotive and
Industrial Articles Employers

Predicting the future is the hardest. The lengthy period of stability, growth and predictability seems to be behind us. Now black swans and the Horsemen of the Apocalypse have entered the game and we generally have interesting times. But some people are gifted with special skills. I had the honour of talking to Professor Hausner a long before the pandemic. I convinced the professor that the times of linear growth are long over. Currently we are dealing with network growth, where with the use of new technologies we can develop with unprecedented dynamics without the old limitations. As an example, I have an enormous shoal of fish that consists of millions of individuals capable of retaining the shape of a community despite changes in direction. Sometimes to find food, sometimes to run away from the enemy. The professor looked at me and I finished my story with a gentle smile: meanwhile, near a perfectly constructed shoal, a huge fishing boat appears with a giant net that catches the entire shoal, ending the era of network development. This is perhaps the most important lesson from the pandemic, semiconductor and war crises. Both organizations and governments need to be ready for the unpredictable. Flexible, agile, resilient and able to learn quickly and change course. I see this not only as a threat to the automotive industry in Poland, but also an opportunity, resulting from our ability to adapt and inventiveness, often resulting from a difficult history and location. Will we take advantage of these opportunities? I do not know, but I hope that we will pass this difficult test, with solidarity and wisdom.

Research methodology

The study „MotoBarometer 2022. Moods in automotive industry in Europe“ was conducted by Exact Systems on a deliberate sample of representatives of companies from the automotive sector. Among them, there are car manufacturers, sub-suppliers of Tier I and Tier II automotive parts and components, such as wipers, car windows, roofs, steering columns and safety elements. The sample size was 989 respondents from 11 countries (Poland, Belgium, the Czech Republic, Spain, the Netherlands, Germany, Portugal, Romania, Slovakia, Turkey and Hungary). The respondents were representatives of automotive plants, including OEM and Tier, in particular quality engineers, plant directors and quality and production managers.

The survey was conducted by telephone interviews (CATI), online surveys and individual surveys from May to July 2022.

The number of respondents:

COUNTRY	POLSKA	BELGIUM	THE CZECH REPUBLIC	SPAIN	THE NETHERLANDS	GERMANY	PORTUGAL	ROMANIA	SLOVAKIA	TURKEY	HUNGARY	SUM
COMPANIES	202	50	101	54	52	115	51	50	113	102	99	989

Exact Systems is an international group that has been providing flexible solutions in the field of production, quality and logistics since 2004. The company's offer is available in thirteen countries where the group has its representative offices: Poland, the Czech Republic, Germany, Slovakia, Turkey, Romania, Great Britain, Hungary, Belgium, the Netherlands, Portugal, Spain and China. The group's clients include companies from the automotive, electronics, electrical and household appliances, medical and cosmetic industries, as well as logistics centres, including those operating in the e-commerce arena. Cooperation with Exact Systems allows clients to achieve the highest standards of quality and safety. Through outsourcing services, including quality control (selection, repair and sorting of parts and finished products), representation at the client's location (residency) or audits; we help to avoid potential consequences due to quality non-conformities. More information: www.exactsystems.com.

MotoBarometer 2022. Moods in the automotive industry in Europe

© 2022 Exact Systems Sp. z o.o. All rights reserved.

Data quoting from: „MotoBarometer 2022. Report by Exact Systems Sp. z o.o.”

Editing and graphic design: www.PrezStudio.pl

For more information, please contact:

Jacek Opala

Member of the Management Board of Exact Systems

m.: +48 515 137 719

e.: jacek.opala@exactsystems.com



Were The # MotoBarometr2022 results interesting? Share them with others!

You can find the online report and country-specific results at www.motobarometer.com