Poland's leaders page 32 FOR THE ENTIRE SECTOR in the real estate sector

THE REAL ESTATE MARKET LEADER **ABOUT NEW CHALLENGES**

Interview with Michał Sapota, president of Heritage Real Estate Investments, about the key challenges that are ahead of the market.



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POLES RUSH TO AID **UKRAINIANS**

Russia's invasion of Ukraine has seen a huge influx of refugees into Poland and other neighbouring states. By the March 6, more then I million Ukrainians have fled to Poland since the start of the Russian invasion on 24 February, mainly women and children, but also the elderly. Poles are doing their best. As has been pointed out, there are no refugee camps for Ukrainians in Poland.



Report by Forum Energii

THE END OF ENERGY RESOURCE

IMPORTS FROM RUSSIA?

Forum Energii, a European, interdisciplinary think tank from Poland, has prepared an analysis on what options Poland has to break its energy dependence on Russia. Russia's brutal attack made the ongoing conflict around energy resources all the more obvious. In 2021 alone Russia could have earned PLN 500



billion (or \$120 billion) from the export of energy resources. This revenue funds the Kremlin's military spending. Forum Energii is analysing whether giving up Russian fossil fuels is possible.



Polish cities and regions at MIPIM

Polish cities and regions promote their investment offer at MIPIM, the most prestigious real estate fair trade. Established in 1990, MIPIM is a 4-day real estate event to meet the most influential players from all sectors of the international real estate industry. It brings the entire value chain together and gives unrivalled access to the greatest number of development projects and sources of capital worldwide. Every year organized in the Palais des Festivals in Cannes, the famous venue of film festivals, MIPIM attracts 26,000 participants from over 100

WAREHOUSES - A SPEEDING BLACK HORSE

In Poland:

9,90 PLN / 2,50 EURO

(8% VAT included) Index nr I42199 ISSN 2720-328x



2021 was absolutely record-breaking in terms of the delivered space, and its resources already amount to 24 million sq m. According to Cushman& Wakefield, as much as 7.5 million sq m was leased during the entire last year and this result is over 50%

higher than in the corresponding period of last year. 4.5 million sq m is still under construction, which is almost 130% more than in the same period last year. The vacancy rate is the lowest in history and amounts to only 3.8%.





Katarzyna Braiter Editor in Chief



On February 24, the world changed. One man began to play with the lives of millions of others. The lives of Ukrainian citizens, but also of those who help them. He also plays with the lives of his own citizens. The world will not be the same anymore, but the unity and solidarity of the Western world against the tyrant is encouraging. Poland is at the forefront of humanitarian aid and it has already accepted over 1 million Ukrainians, more than half of those who have already fled the country because of the brutal

Russian attack. I'm proud and moved by how Poles are helping Ukrainian people - starting from the citizens, through NGOs, business and government. All the border crossings with Ukraine and all lanes are open. Even people who don't have valid documents, or no documents at all, are allowed through. Borders are open and so are the Polish people. In this issue you will find stories of people who help without looking at difficulties and their own comfort. This is the only good attitude now. It's not time to calculate. It's time to act.

Quotes of the week



Ursula Von Der Leyen President of the European Commission

"The people of Europe are demonstrating in front of Russian embassies all across our Union. Many of them have opened their homes to Ukrainians - fleeing from Putin's bombs. And let me thank especially Poland. Romania, Slovakia and Hungary for welcoming these

women, men and children".



"I cordially greet all Poles. You were the first to support Ukraine by opening your borders, your hearts and the doors of your homes to Ukrainians fleeing the war. You are generously offering them everything they need so that they can live in dignity, despite the drama of the moment".





"Once again our Polish friends are in the front line as so often in history and I might say I think the Polish government and the Polish people are doing an amazing job, and an inspirational job of coping with the humanitarian crisis".



"In a phone conversation, I thanked Andrzej Duda for his personal leadership in granting Ukraine membership in the EU. The concrete daily assistance of Poland to our country is also invaluable. The Ukrainian and Polish relationship is a common history and, I am sure, a common European



Parents in Poland left their baby strollers in rail road stations for the Ukrainian moms that fled carrying their children.



POLISH PM CALLS FOR EU **BAN ON RUSSIAN COAL**

Mateusz Morawiecki, Poland's Prime Minister, has declared that Poland is ready to stop importing Russian coal immediately and buy more coal from Australia instead. "I can declare we can introduce an embargo on Russian coal even tomorrow. We are ready for it, we just want to get the fastest possible consent from the European Commission," said Morawiecki.

He also called for Europe to stop buying Russian gas and oil "in the next months."

The prime minister held talks on 1 March with Ursula von der Leyen, the head of the European Commission, about how to make Europe independent of Russian coal. "I called for Russian coal not to be imported, to impose an embargo on Russian coal. And in the coming months, also not to buy oil and gas, because this is the means by which Putin is able to finance the war machine," he said.

"We want to stop the war, stop the aggressor. (...) We can only do it through sanctions," said Morawiecki. He added that those already imposed have had the intended effect. "The Russian economy has received a huge blow, huge losses. But there is no need to cheat, every day the same economy is also powered by hard currency through the sale of coal and gas," said Morawiecki.

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Free transport fleet to support distribution of goods for the refugees

InPost, a leader in modern logistics services and creator of a network of Parcel Lockers, offers coordinated collections of food, medicine and clothing. Additionally the company offers its transport fleet to transport the delivered products to the right place. Already dozens of

arranged transports left Warsaw. InPost not only provides cars, but also delegates its employees and sorting offices to help

ter home for many thousands

of children who do not know

our language and suddenly

they are brutally torn from

their environment. In this

situation, it is important to

provide many necessary ben-

efits, which will be long-term

and systemic, "says Kamil

Wyszkowski, Executive

Director of UN Glob-

al Compact Network

Transport for refugees from Ukrainian orphanages

UN Global Compact Network Poland, as part of a specially created team, supported the Happy Kids Foundation in organizing the transport of 770 children from orphanages in Kharkiv and Odessa. It will be a total of 831 people - their guardians left with the children. It is already known that another group of children will go to the border in the coming days.

Happy Kids Foundation in organizing the transport of 770 children from orphanages in Kharkiv and Odessa. It will be a total of 831 people.

"The priority issue at the moment is to protect and ensure the safety of children from war-affected areas. That is why it is so important to mo-

war-affected areas. That is why it is so important to mobilize the private sector and act together. We must be aware that Poland is becoming a fos-



Buses collecting Urainians to Poland

On Sunday, 6 March, Lukasz Wawrzenczyk, CEO of the Profika Group announced the first successful evacuation operation from the territory of Ukraine. The company evacuated a group of women and children from Zhytomyr in Ukraine (450 km from the Polish border). 71 people crossed the Polish border in Profika's coach. "I am proud of our driver and his willingness to continue helping those most exposed to the atrocities of war. Another trip soon and there are plans to buy a second coach." said Wawrzenczyk.



HELP NOW, SUPPORT LONGTERM



Sylwia Ziemacka

Managing Director

There are no words to describe the tragedy in Ukraine that we are witnessing. It's been a few of days since Putin invaded our neighbor and each day of this war started by Russia in Ukraine brings more casualties and destruction. No-one can predict how long the conflict will last; probably much longer that we would hope. After 10 days of the conflict, already more than 700,000 refugees arrived in Poland. Poles are doing their best. As has been pointed out, there are no refugee camps for Ukrain-

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ians in Poland. All who cross the Polish border are finding a safe place and care. Polish citizens are offering them a place in their own homes or apartments. Hotels and fair trade halls have transformed their spaces to accept refugees. Many schools, kindergartens and sports clubs collect food, clothes, toys, cosmetics the Ukrainian

people. Lawyers and notaries offer legal support. Doctors help with medical issues. In just a few days online platforms to help find apartments, transportation and credible fundraising have been created. People give support to those who need to be taken care of here on the spot. But money and equipment are also being collected for those who decided to stay in Ukraine and fight for the freedom of their country. I saw a text message from a Ukrainian woman staying with her husband, both civilians, in the suburbs of Kiev. "We need 7,000 pieces of body armor protection, Kevlar helmets, knee and elbow pads," it reads.

It's not just individuals' actions that bring help, though. The level of business engagement is unprecedented. Financial and material support, employee volunteering – it's just amazing. NGOs, no matter what they've been focusing on earlier, have shifted their focus as well to support the Ukrainians. Poles are showing their best side and that is beautiful. But as time goes by, it's becoming clear that while help here and know is critical, we all need to start thinking how to support those who have come to Poland long-term as they might be staying with us for a long time. How to make them feel a part of our community - at the social, business and economic level? How to help them to set up their lives here?

Let's bear in mind that most of those who have fled had a good life in Ukraine – homes, apartments, good jobs, children in schools, kindergarten or universities. In one day they lost everything in Ukraine. It was sudden, unexpected. They had to pack up their lives in small suitcases and flee. These people are well educated and want

to stand on their own feet. We can already see a lot of Linkedin posts from our Ukrainian friends looking for a job in Polish cites and apparently that strategy is working, for now.

But when the immediate shock passes, we will have to think about more structural support. In the context of the expected up to 3 million Ukrainians in Poland (and some sources

event say 5 million), individual support will not be enough. After several days I can already see that businesses, along with the NGOs, are thinking of initiatives that will support the integration of those who came to Poland. Local authorities and government are as well.

Integrating so many people in such a short time is a challenge. But it's doable. I think that as a society we were able to react fast that we will also be able to respond to the coming challenges because – maybe for the first time ever – we are all convinced that it's simply the right thing to do. What's also important, maybe for the first time ever, we focus on finding solutions (not

problems). And hopefully this

attitude will stay with us.

POLISH BUSINESSES ROLLING OUT SUPPORT PLANS FOR UKRAINIANS

Polish business has reacted rapidly to the refugee crisis in Poland.



Media Maker, Publicon, HyperCrew, TSS, Tagatic and Wolfs associated with the Czysta3.vc fund bought the first ambulance for a hospital in Mościska in Ukraine.

One example is the announcement by Tech To The Rescue, a Polish foundation that connects technology companies with non-profit organizations, that it is launching the #TechForUkraine campaign, over a hundred companies from the IT sector said they would help Ukrainian NGOs.

"The community of IT companies has shown its solidarity many times. Tech leaders have responded to phenomena such as the migration crisis and the Covid 19 epidemic, but many of them regularly support charities. Now Ukrainian nonprofits need support more than ever and Tech To The Rescue is a bridge between those who operate on the spot and those who are ready to serve with their talent and knowledge," said Jacek Siadkowski, director and cofounder of Tech To The Rescue. CD Projekt, the largest Polish producer of video games, also said it would help. On 25 February it announced on social media that as part of Solidarity with Ukraine and will donate

99

Mobile operators: Play,
Orange, Plus and T-Mobile
also extended a helping
hand to refugees from
Ukraine, significantly
reducing the costs of
telephone calls to the
most important Ukrainian
operators, Kyivstar,
Vodafone, Lifecell.

I million zlotys to Polish Humanitarian Action.

In turn, Maciej Panek, CEO of Panek, announced he had donated 1,000 Panek cars to transport people in need on the Polish-Ukrainian border.

The "Aid for Ukraine" package has also been prepared by Luxmed. It includes urgent medical assistance for people coming from Ukraine, support in the relocation of employees'



PAH – Polish Humanitarin Action distribute basic necessities, like food, drinks, blankets, hygiene items at the border point in Zosin

families from Ukraine to Poland, material and equipment support for hospitals in this country and the creation of jobs for war refugees.

Pomagam.pl – the organizer of the official fundraiser #SolidarniZUkraina, in which it has already collected over 7 million zlotys – has launched a new functionality that allows users to set up a corporate "virtual can" as part of its main campaign.

At pomagam.pl firmydlaukrainy, each organization can set up an online fundraiser to help and quickly start collecting funds in a verified place. The website also has ready-made collection promotion tools: convenient options for sharing on social media and an automatically created widget-code to be placed on a website or blog. All costs are covered by the Pomagam.pl portal – 100% of the amount paid goes to humanitarian aid.

Mobile operators: Play, Orange, Plus and T-Mobile also extended a helping hand to refugees from Ukraine, significantly reducing the costs of telephone calls to the most important Ukrainian operators, Kyivstar, Vodafone, Lifecell.

Rafał Brzoska, one of the richest Poles and head of InPosta, said his company has coordinated collections of food, medicine and clothing and that his company will make available its transport fleet to transport the delivered products to the right place.

The seed producer Legutko, on the other hand, plans to donate all the income from Sunday's online store to help Ukraine.

LPP intends to write off the value of assets in Ukraine, in total about 270 million zlotys. The company has suspended its operations on the Ukrainian market for an indefinite period. The management of the Biedronka retail network said it will provide support to employees from Ukraine. Non-returnable random grants will be paid under the program "You can count on Biedronka." Almost 80,000 people work in Biedronka stores, as well as offices and distribution centers. people, of which 1,800 employees are from Ukraine.

PZU said it will support the families of its Ukrainian employees, providing them with accommodation, medical care, support from psychologists and jobs. The company expects 700 families to come, the PZU Group announced.

Ukrainians fleeing from the war-torn area can also count on the help of many law and notary offices, which will not receive remuneration for help in completing the necessary formalities.

Free rides for volunteers helping Ukrainians

Panek, a leading car sharing company, announced that during the weekend 1000 cars will be excluded from the fleet so that they can travel to the border for free (although the ride must first be paid, the return will come within 5 days). Drivers will be able to refuel for free at Circle K stations. There were more volunteers than cars just a few hours after the campaign was announced.



PKP Intercity introduced free travel for Ukrainian refugees

Ukrainian citizens, after crossing the Polish border, can travel in the 2nd class on PKP Intercity trains of the economic categories TLK and IC free of charge in Poland, including transfers to subsequent domestic connections of the carrier of the indicated categories.

- Poland stands in solidarity with the Ukrainian nation, which resists Russian aggression with great determination. It is our moral duty to help Ukrainians fleeing the war, which is why we are introducing free travel for Ukrainian citizens on PKP Intercity trains. Thanks to this, it will be possible to reach selected cities and towns covered by



the carrier's network of connections" - said Andrzej Adamczyk, Minister of Infrastructure.

Also Flixbus, one of Europe's leading coach companies, provided refugees with free buses on routes leading from the border into the country.

Co-work Ukraine

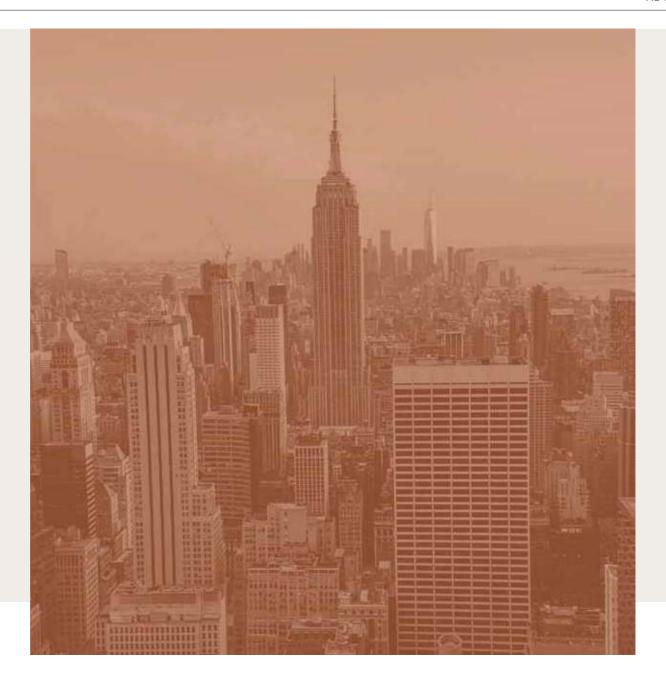
The Polish Investment and Trade Agency organizes support for companies from Ukraine and provides them with office space in a tenement house in Warsaw downtown. Development and Technology Minister Piotr Nowak said: "It is very important to support Ukrainian entrepreneurs in keeping their businesses run-

ning. We believe that in this way we will help them limit the losses caused by the Russian aggression on their country. Stronger Ukrainian business will be one of the foundations for the reconstruction of the local economy."

The program is planned for a period of 3 months, depending on how the situation develops.







We going to be at MIPIM 2022 which will take place from March 15th to March 18th, 2022.

Palais des Festivals, Cannes, France. Location: Stand number R9.A

HRE Investments is an independent holding company operating as a private equity fund for its own account and for the account of third-party private and institutional investors in the area of real estate on both European and global markets, with particular emphasis on the Polish market. It allocates funds in selected assets and companies from the real estate and related sectors, with a dominant share of housing projects. The gross value of assets currently managed by HRE Investments exceeded PLN 8.3 billion and is steadily growing. Our goal is to achieve the highest possible rate of return while maintaining the highest possible level of security.

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BEYOND IMAGINATION

When Chad Willis and Michael Mauerer, business partners at Teamwork Commerce, the US software firm that has branches in Kijow and Kharkov heard about the Russian invasion of Ukraine they immediately decided to act. Their aim was to take people safely outside Ukraine and support them in setting up in new locations. And that's not the end.



Chad Willis

What happened when you heard that Russia invaded Ukraine?

C.W: From the moment I heard this tragic news, within 15 hours I was on a flight to Poland. Michael stayed in the US to coordinate all the activities – getting in touch with the employees, discussing who is willing to leave Ukraine, with families, kids, parents.

M.M: We immediately set up a team to try to start tracking where people were and maintain a stable point of contact with them. We have Russian and Ukrainian speaking speakers both outside of the other countries. So we were able, even from Florida, to arrange communications with our people and help organize kind of a road.

Was it difficult decision?

M.M: You know, a company is made up of its people. A company is nothing more than the sum of its individual people. And these are our people. So we want to protect our people. We want to protect our company.

What happened when you landed in Poland? How to organize and how to know what to organize in such circumstances?

C.W: We definitely did not have a roadmap. The beginning was a little frustrating - we wanted to help so passionately and to get people to safety. But then we faced all the individual stories of our employees. So at first we started trying to direct traffic and we realized that that was We started learning more about the borders, the environment and the ecosystem that was created as a result of the invasion. And so we finally made the decision here in Warsaw to create a safe haven and make sure all our Ukrainian employees knew about it.

not going to work because of the 250 different personalities and their families. So it took us another 48 hours to reorganize, define needs and navigate help. Also our people's approach was changing in time. In the beginning, really, I think it was beyond any imagination that it would go that far with the war. In the first moment not everyone wanted to leave Ukraine. But this was changing over time. But then martial law in Ukraine was imposed, men couldn't leave the country. You had the bombing that you thought was at one level. But they got more and more intense as time went on. We started learning more about the borders, the environment and the ecosystem that was created as a result of the invasion. And so we finally made the decision here in Warsaw to create a safe haven and make sure all our Ukrainian employees knew about it.

Who is supporting you here on the ground as you didn't have your operations in Poland?

C.W: We were introduced to some great families from day one - just by word of mouth and on social media. We had some great contacts in the south of Poland, as well as in Warsaw through these efforts of just reaching out to anybody and everybody that could help us and the Polish people received us. It's beyond comprehension. You would literally think that they had a family member in our tribe. That was the amount of dedication and support - 24 hours a day that we've had from the Polish people here. It's been it's been heartwarming and overwhelming.

Michael, how does it all look from the distance, at least physical distance?

M.M: It's close. We have a continuous chat going on and we are monitoring everything in real time. We know if there's an air raid going on or if there's a bomb, I mean, we're tracking all of this. And so we're actually much closer than one might think because of the technology. It's incredible to believe that something like this is happening in the 21st century. It's just beyond imagination. It's like something out of a movie and but it is real and it is very tangible. We have to confront it and see it for what it is and do the best we can. And so we're using every resource we have to make sure every single one of our employees and their families are brought to a safe location

I really want to thank the people of Poland, because their support has been unbelievable. We couldn't do it alone. We are not familiar with the terrain, and we've asked people to help us. The stories are amazing. You know, buying vehicles and offering help. And they just say, you know, send us a wire, take the cars. You know, I'm going to the pharmacy to buy, I don't know, thousands of euros on medical supplies and not having to pay anything or pay a fraction of the cost. This kind of support is amazing, as well as people directly helping our people who can come across.

The help, the support and care from people in Poland has been



Michael Mauerer

It's incredible to believe that something like this is happening in the 21st century. It's just beyond

century. It's just beyond imagination. It's like something out of a movie and but it is real and it is very tangible.

absolutely incredible. We're so appreciative. You have to understand, we don't know this area of the world, we didn't have that many resources and I think within just a day or two, we were completely mobilized and receiving help from all sides.

As I understand the first step was to make sure that your people are safe. But then your plan is to actually help to set up those people in Poland or other countries where they are moved? You are planning to move your company operations and give them a chance that they can work, live and actually continue their life. Is that the case? C.W: We're obviously driven otherwise we wouldn't be entrepreneurs. Safety was first and foremost. But then a lot of these people have children, wives, husbands, even parents. Making sure we extended assistance to their families, not only to employees, was equally important. Secondly, we don't know how long this will last. This may be a new normal. And so we wanted to invest into

something that people could just not spend their days worrying about what's going back in their home country. Also, from a professional standpoint, it's in our best interest to keep business going. We decided to set up our operations in Warsaw to give our people a chance to work and live. We still have plenty of challenges with our remaining people in Ukraine. They still are very much in the thick of what's going on. And that's still a grave concern to us. But for those that are beyond that now, it's protecting our resources. That way we continue to fight for everybody else and ourself. And so that's what's kind of happened is we've dynamically found ourself fully committed to Warsaw right now. Fortunately for us, they've embraced us very well. So it made it a very easy path for us.

Do you think about tomorrow or just focus on the here and now?

Michael: Our job right now isn't to worry about what we can't control and just try to help our employees and then also help the Ukraine people. I just want to add to that, that the Ukrainian people are extremely strong, resilient people, tough people. Even some of our developers, with no obligation for this right now, have elected themselves to continue writing some code or fixing some bugs or testing software from their basements and their showers. It helps them keep their mind off of what's going on around them. But it's amazing to see how tough these people are.



A NOTE FROM A DIPLOMAT

One thing is for sure,

we all are entering

a completely new world.

We should realize that

from this moment on,

our professional, cultural

and social life will be

completely different.

Russia, a global military power, has suffered setbacks in many fields in Ukraine, but at the same time is learning from its mistakes. The Russian invasion forces suffer from food shortages due to serious supply problems. The offensive has slowed down but continues. Russian soldiers are generally malnourished and are eating out-of-date food, if they have any at all, and are out of ammunition, which is obviously a good thing. These setbacks unfortunately resulted in a policy of scaring the world with nuclear weapons. The Russian president has put the Russian nuclear forces in a state of heightened combat readiness. We all wonder the extent to which this threat is real and try to comprehend it mentally.

According to most observers, a nuclear war is unlikely, but it is impossible not to think about it and take it into account after the Empire attacked Ukraine, something most of us did not believe would happen.

Like everyone else, I am experiencing sorrow and pain when watching what is happening now around us and in particular what is happening in Ukraine. Many of us talk at home with family and friends about the situation in Ukraine, the country that was attacked in such a barbaric

way. We see on TV every day terrible images of the fighting and humanitarian disaster and as consequence our voices are on mute. It would seem easier to write about Ukraine, but even this is difficult. I don't know how this story of resistance and fighting, heroism and the love of peace will end, but I believe that the love of freedom will prevail. We are surrounded by depressing images on the screens, while the Ukrainians are surrounded by a brutal reality and an enemy who seems not to know what

it is doing there, why it came and who wants to return home to its mother, as can be seen in the statements of young Russian prisoners of war.

I try to think rationally and analyze the events, but this puzzle sometimes breaks down and I get lost in it. One thing is for sure, we all are entering a completely new world. We should realize that from this moment on, our professional, cultural and social life will be completely different. Completely different because we are entering regardless of the results of the war waged against Ukraine, which the Russian leader has denied the right to exist, in a new Cold War. It will be a war where the enemy will be clearly defined, there will be various restrictions and the need to sacrifice and tighten the proverbial belt, and maybe some civil liberties and rights will be sacrificed. Poland could very soon be obliged to sacrifice some of its freedoms for its own safety. Our lives certainly change radically when we face aggression and its deplorable consequences and we will have to give up many things that we are used to and love.

In a word, we will have to look more realistically and take off the rose-tinted spectacles.

The explosion of Polish Solidarity, the most beautiful gesture I have seen in years, makes us proud. We do it as Poles, we help as much as we can, we do what was not done for us in September 1939. There is no doubt that Europe and us will face

a difficult period. The next winter in particular will be the most unique in every way for decades. Let's be aware that we have to face the inevitable situation, we will have to save fuel, gas and coal. But we'll do it if we have to.

Surviving this next winter will require a lot of imagination on the part of ordinary people and governments and, above all, a change in approach to life. It is simply impossible to maintain the requirements of "green politics" in the long run, a return to coal and to nuclear energy for some countries will be the only chance in the absence of other alternatives. Let's say openly there is a complete absence of alternatives. We will have to deal with Iran and improve relations in order to have access to its oil. There will be

The beautiful attitude of Poles and our nation as well as the resilient organization on the part of the government unites us at the moment, despite our deep political differences, which we are putting aside at the moment, it is important to maintain this spirit of the Brotherhood of Humanity for as

long as possible, and it is obvious that it will get tired over time. Burnout, especially when overwhelmed by challenges that may be even greater than right now, may kick in.

Since the outbreak of the war, we all stand as one in the same line, thinking of our neighbors who are being attacked from the air, sea and land and on each side of the border about the fate of their children in shelters or hospitals.

Even the military strategy has changed enormously. A country that was considered weak,

unprepared for war, is effectively defending itself against the imperial army whose soldiers do not really want to fight.

It is a real test of humanity for us Europeans.

The unity of the free world has been strengthened and the unity of leaders and nations against tyranny. Personally, I am full of admiration and respect for the attitude not only of the Ukrainian soldiers, but of the entire nation that has faced the invasion and senseless terror.

The economic future of the world will now be built in a completely different way, without Putin's Russia. There will inevitably be huge changes to trade routes, air routes, supply chains, trade, finance and marketing systems.

The eastern market ceases to exist and the new Cold War that will come after this conflict will last as long as the Russian authorities do not change their policies. This will affect the economies of countries in different ways by changing production profiles, but also bringing measurable losses to our economies that will have to adapt to the new realities. However, there is no freedom without austerity. Western leadership has been consolidated and such consolidation is unprecedented.



photo credit: PAP/Ralf Ibing

"Everything beautiful about sport is contrary to what war brings. For all people who value freedom and peace, this is a time of solidarity with the victims of military aggression against Ukraine".

Robert Lewandowski, Polish footballer

"The conclusion is one: there are no refugee camps in Poland. Everyone finds their place. Poles lend a hand to every person from Ukraine, everyone who crosses our border has protection and concern. This is a phenomenon that has never been anywhere

in the world. This is a big deal. I am smiling at you because everyone who can and can shake hands. We pass the exam of life when hell is going on "around the corner".

Patrycja Piekutowska, PhD, The Virtuosa Foundation's **CEO**, violinist-soloist

"We welcome the leading role of Poland. You are opening your borders to the hundreds of thousands of refugees fleeing the conflict. And I thank Poland for its support and strength at this dangerous time for Europe." Jens Stoltenberg, NATO Secretary General.

"I repeat my words: I would like to bow low to the Ukrainians men and women, brutally attacked by the Moscow regime, and although there are no words for such barbarism, I want to express

my - our - solidarity, support and encouragement. An

> attack on a free Ukraine is an attack on Europe for me."

> > Olga Tokarczuk, Polish writer, awarded the **Nobel Prize in** Literature.

THE END OF ENERGY RESOURCE IMPORTS

FROM RUSSIA?

On February 24, Russia started the Ukrainian war. Nothing will be the same again. Russia's brutal attack made the ongoing conflict around energy resources all the more obvious.



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In 2021 alone Russia could have earned PLN 500 billion (or \$120 billion). from the export of energy resources1. This revenue funds the Kremlin's military spending. Now we are considering whether giving up Russian fossil fuels is possible. Undoubtedly, this would be a radical solution with far-reaching and not entirely known consequences. If this were to happen, solidarity and close cooperation within the EU would be more important than ever before. In this article, we analyze what options Poland has to break its energy dependence on Russia.

The temptation to take advantage of relatively cheap oil, coal and gas is great. The global economy was built on these resources. Poland and other European Union countries were slow to decarbonize, diversify supply and introduce renewables. Europe and Russia have developed an energy interdependence over the years and the West deluded itself into believing that by doing business with Putin it was buying peace. This was done with public support because price was important factor to the consumer. Russia has been a supplier of cheap energy resources for years, while reaping great benefits - revenues from fossil fuels account for as much as a third of Russia's budget.

In such a dynamically changing situation we see necessity in preparing for any of the following scenarios:

- 1. The European Union, including Poland, will give up imports of Russian raw materials.
- 2. Putin will make a decision to stop the supply of energy resources to the West.
- 3. Blocking SWIFT will make it more difficult to buy raw materials.
- 4. Rising commodity prices will limit the opportunities to use

Even in the event of de-escalation or a quick end to the war, the continuation of the current energy policy will no longer be possible. Poland will not act alone. Sanctions are being introduced by the entire EU, so the repercussions

will affect the entire EU economy. In this article, we focus only on Poland - being aware that it is only a piece of EU's security of energy supply puzzle.

While hoping for a better tomorrow, we must prepare for the worst.

How energy-dependent are we on Russia?

Over the past 20 years, Poland has paid over PLN 900 billion for imports of energy resources from Russia. In recent years, we have recorded one of the largest increases in fossil fuel imports among the EU-27 countries. However, while the total costs and volumes of imported raw materials have been growing, our import dependence on Russia has been decreasing. For over a dozen years, Poland has been pursuing a strategy of diversification of gas and oil supplies. Investments in the LNG terminal and Baltic Pipe pipeline have significantly strengthened our position. Over the last few years, coal imports have increased the most. We write in detail about long-term trends in fuel imports in this article.

Currently just under half, 46%, of our energy needs are met by imported energy resources. Poland produces 3% of oil, 20% of gas and 80% of coal it consumes2.

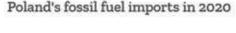
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As domestic production and imports have fluctuated in recent years due to economic and supply factors, Poland imports about one-fifth of the coal it consumes. Domestic coal is used in power plants to produce electricity and in district heating. Therefore, blocking coal imports should have no impact on maintaining the stability of electricity supply. The dominant supplier of coal to Poland is Russia, whose share in 2020 was 75%.



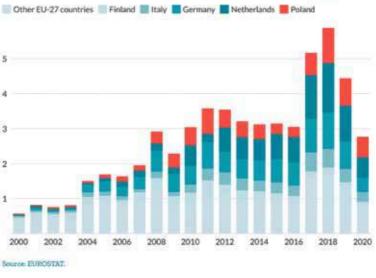
photo credit: PAP/Wang Jianwei

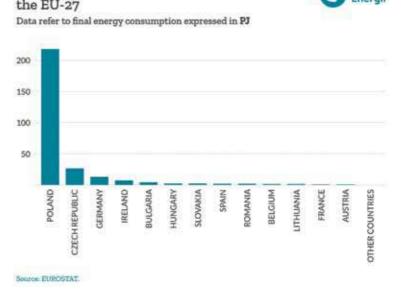


Raw material	Domestic consumption	Total imports	Imports from Russia (volume)	Share of deliveries from Russia in total imports (%)
Natural gas	20.6 bcm	17.9 bcm	9.6 bcm	55%
Crude oil	26.1 mln t	25.4 mln t	16.8 mln t	66%
Hard coal	62.6 mln t	12.9 min t	9.4 min t	75%

Value of coal imports from Russia in the EU-27 Forum Energii Value of imports expressed in billion EUR Other EU-27 countries Finland III Italy Germany Netherlands Poland 2004 2006 2008 2010 2012 2014 2016

Household consumption of solid fossil fuels in





Most of the imported resource is used for local heating purposes. As much as 60% goes to households. Another 15% is supplied to small heating plants - mainly in eastern Poland. 22% is purchased by coking³ plants. The main reason for importing coal is its high quality parameters and competitive pricing.

In terms of total consumption of Russian coal, Poland is not the largest importer of this raw material in the EU, as shown in Fig. However, Poland is EU's leader in using coal for household heating. And it is those households that consume mainly Russian coal.

Elimination of Russian coal from Poland, if properly prepared, would probably not jeopardize the security of heat supply, let alone electricity supply. It can be assumed that most households have coal reserves. Heating plants have a statutory obligation to maintain stocks for at least 30 days. Temperatures are mild, the heating season is about to end. The bigger challenge will be to ensure a stable supply of heat and electricity next winter. In the final section of this article, we make recommendations on how to mitigate the potential negative effects of sudden interruption of Russian coal supplies.

Poland extracted nearly 5 bcm of natural gas in 2020, much of it nitrogenous gas. However, domestic production consists of only one fourth of our gas consumption. The rest is imported. Currently, 55% of gas imported to Poland comes from Russia. The main consumers of gas are industry, households and the heating sector.

Poland currently consumes approximately 20 bcm of natural gas. The capacity of gas storage facilities in Poland is 2.9 bcm4. The LNG terminal was commissioned in 2016 and its capacity reaches 5 bcm. It is currently undergoing expansion, which will increase the terminal's capacity to 7.5 bcm.

The construction of the Baltic Pipe gas pipeline is underway and is expected to be completed by the end of 2022. Thus, Russian supplies will be replaced with gas imported from the Norwegian Continental Shelf. The capacity of this connection will amount up to 10 bcm, which is as much as our current annual supply from Gazprom. Overnight interruption of gas supplies from the Russian direction may be a great challenge for industry, the power sector and households. However, it is worth remembering that in connection with the expiry of the Yamal contract at the end of this year, we will stop importing gas from the East.

Crude oil

Oil is the primary petrochemical product used to produce gasoline, kerosene, gas oils, paraffin, petroleum jelly, asphalt, and mazut.

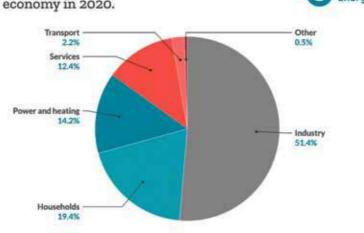
More than 70% of petroleum products are consumed by transport (mainly road transport), with the rest going to households and to industry for non-energy purposes. In 2000, Poland was dependent on Russian oil supplies in 93% currently it is 65%. The volume of imported oil from Russia has hardly changed and, despite diversification, still amounts to over 16 million tonnes annually. For several years, we have signed contracts with other oil suppliers - Saudi Arabia, the United States, Norway. Polish refineries are already technically adapted to process crude oil other than Russian. Again, as in the case of gas and coal, diversification is possible by sea. Naftoport in Gdańsk is prepared to take in large volumes. But this does not mean that it will be easy to move away from Russian oil. The oil market is dominated by the OPEC cartel, which in the OPEC+ format, i.e. with Russia, is able to exert more active pressure on prices than ever before. A short-term shift away from oil is impossible without triggering a major economic and social shock. But the world already dealt with a similar challenge in the 1970s.

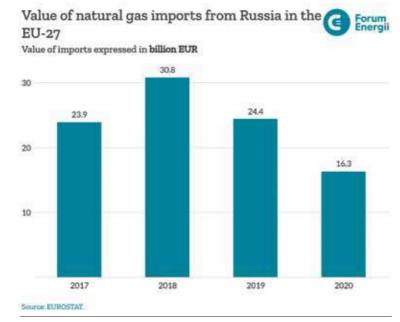
Summary and Recommendations

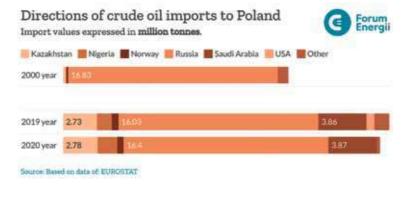
Urgent action and mobilization of society, the energy sector and industry is necessary to minimize the negative effects of the energy crisis on Poland. Russian attack on Ukraine completely changed the context and conditions for the functioning of the economy - we will all have to bear the costs of the war in Ukraine. Winning with Russia in Ukraine significantly reduces the risk of escalation of the conflict to whole of Europe and the rest of the world. Actions need to be taken now - some will have

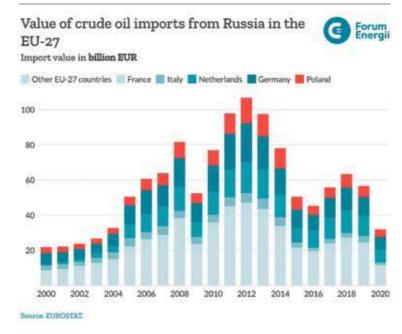
Gas consumption in sectors of the Polish economy in 2020.

ed on data of GUS, URE









a short-term impact, some will have an effect further on.

Campaigning on energy efficiency

• A nationwide campaign to promote energy and fuel savings: aimed at the public⁶, dealing with heat, electricity and transport fuel. A sense of solidarity, cooperation and positive mobilization of the public is important.

 Preventing misinformation: regular input of reliable data on the stocks of energy resources, the functioning of the national electricity system and heating plants. Informing about the directions of supply and value of resources contracts. It is necessary to prevent the outbreak of panic, which will contribute to the disruption of supply and demand.

• Energy efficiency in buildings: e.g. replacement of windows with energy efficient ones, led light bulbs, support for the purchase of efficient equipment - e.g. energy-efficient refrigerators, thermo-modernisation (combined with replacement of heat sources) financed through dedicated grants.

Security of supply

- Conduct stress tests of critical EU energy infrastructure.
- Close coordination on operational security of the electricity and gas system with EU operators.
- Reliable and systematic review and planning for replenishment of energy resources.
- Preventive actions: preparing power companies to take energy curtailment actions: e.g., lowering the temperature in the district heating network by 2 degrees, activating DSR in case of an emergency, preparing power rationing and temporary reduction in power supply.

Market transparency

- Preventing chaos in the fuel market: preparing a plan to limit sales of fuel, gas, coal.
- Urgently deal with ETS market manipulation: limit the role of financial institutions to being intermediaries between the ETS market and covered installations.

Closing the generation gap and accelerating fossil fuel substitution

- Prioritizing the development of renewable energy: the more RES in the system, the less coal and gas consumption. It is necessary to urgently unblock the development of wind energy and continue to support PV. This is key to improving Poland's energy security. Mobilise DSOs to improve RES integration in the grid.
- Accelerate the development of heat pumps: increasing subsidies before the next heating season will bring quick and concrete results - reducing household coal consumption.
- Accelerate the development of electromobility to reduce future demand for petroleum products; develop charging infrastructure for electric cars.

Strategies

- Urgently prepare an industrial decarbonization strategy and implement it within a specific timeframe. Support energy efficiency and deployment of hydrogen technologies.
- Continue and accelerate the diversification of natural gas and oil supplies.
- Prepare a Polish gas strategy:

aimed at systemic limitation of the role of natural gas in key sectors of the Polish economy.

• Make a decision on nuclear power in Poland.

International cooperation

- Take the initiative of regional working groups composed of representatives of neighbouring countries to monitor and cooperate on the security of supply at a Ministerial level with the participation of the EC and ACER and ENTSO-E and ENTSO-G. Use EU legislation to enhance resilience and solidarity in gas supply.
- Close cooperation between Poland and international institutions in order to normalize the situation on the global oil market; strengthening of the International Energy Agency reserve system.
- Convening, by Poland's initiative, a European Union conference to begin a strategic discussion on restricting imports from Russia by all EU countries. A sudden cessation of fuel supplies will shock the European economy and threaten the stability of supply. However, Russia has declared war on Ukraine, deliberately confronting the West. In the background is, among other things, an attempt to maintain Russia's position as a supplier of fossil fuels to Europe.

No one doubts that under normal circumstances policy redefinition and energy transition should take place in a planned manner. But today, with the war in Ukraine, the stakes are at an all-time high.

Stopping coal imports from Russia is possible, for gas we need several months. Oil it will be the most difficult, but it is already necessary to take measures that will bring results in the long term.

No matter what, we are facing many months - if not years - of very high commodity prices. Therefore, we need to significantly accelerate the energy transformation towards renewable sources. While we write about Poland, this discussion must take place throughout the whole of the EU. In the midst of the crisis, in the face of the war in Ukraine, a new, courageous energy strategy of the European Union must be forged.

1. Reuters, https://www.reuters.com/markets/europe/russias-oil-gas-revenue-windfall-2022-01-21/

2. Based on CSO data, 2021: import dependency = imports/domestic consumption; https://stat.gov.pl/obszary-tematyczne/srodowisko-energia/energia/energia-2021-folder,1,9.html

er,1,9.ntml
3. Based on IDA data, 2021, https://polskirynekwegla.pl/sites/default/files/ StPu/01/2021.09_import%20i%20 przyw%C3%B3z%20(acquisition%20 inin%C4%85trzunijne)%20on%20the%20 area%20of%20Poland%20.pdf

4. Ukraine has diversified its gas supply directions in 2 years. After the annexation of Crimea in 2014, it has not bought Russian gas since 2016.

5. Forum Energii, https://www.forum-energii. eu/en/blog/import-paliw-kopalnych

6. For example, reduce the temperature at home, take the streetcar, bus, train, bike to work, turn off unnecessary appliances.

GREEN OPTIMIZATION AT AUCHAN AWARDED

The Auchan Retail Polska chain has been awarded the first Lean & Green star - a certificate that is part of the international program to reduce CO2 emissions in the logistics sector.

effects of improvements introduced by the company in 2017-2020 as part of the reorganization of the distribution network and the use of warehouses in Wolbórz and Mszczonów. The conducted optimization processes translated into a reduction of CO2 emissions by 20.48%. Thus, the network measurably reaffirms its commitment to achieving sustainable development goals, in particular reduc-

ing its carbon footprint.

It was granted

in recognition of the

Lean & Green is a program recognized in Europe, present in 14 countries, in which nearly 600 companies share their experience, paving the way to sustainable logistics. In Auchan, work on the project started in November 2020 - the network presented the process of improvements introduced in the Wolbórz and Mszczonów warehouses. Optimizations carried out in them have brought measurable effects: shortening total distances traveled by 1.6 million km (-14.5%) with a simultaneous increase in the volume (+ 6.5%) and a decrease in electricity consumption in the Wolbórz warehouse by 848,000 kWh (-37 %) and a decrease in heating oil consumption by 41 m3 (-27.5%). Total CO2 emissions 2020 vs. 2017 decreased by 15.32%, which in terms

of the volume transported means a reduction of the carbon footprint by 20.48%. The results achieved in 2020 were compared with the base year 2017.

Optimization works included the process of picking goods on pallets, reducing transfers between warehouses, reducing the collection of empty packaging from stores, and extensive optimization work in the process of route planning and filling the cargo space. The plan also included the replacement of lighting with LED in the Wolbórz warehouse. The control audit in the Wolbórz warehouse ended with the award of the first Lean & Green star to Auchan, which was carried out on December 8, 2021.

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This is the best confirmation of our environmental efforts. Auchan is constantly developing the structure of Transport and Logistics, introducing modern solutions that translate into measurable economic and environmental benefits, says Piotr Dopierała, Supply Chain & Logistics Director at Auchan Retail Polska.

Our activities perfectly fit into the philosophy of the Lean & Green program - by streamlining the company, we simultaneously reduce costs and increase its efficiency, and at the same time reduce our carbon footprint. This is a win-win situation, which is why Auchan is already fighting for the second star with conviction," says Piotr Dopierała, Supply Chain & Logistics Director at Auchan Retail Polska.

As part of the improvements planned for the second Lean & Green star, the relocation of warehouses from Żabia Wola

and Wolbórz to the new Auchan warehouse in GLP Park Ledziny, built in accordance with the requirements of the BREEAM ecological certification at a very high level, is planned. The new warehouse, apart from high energy efficiency, will serve to further optimize the company's distribution network, focusing on market proximity and cooperation with local suppliers. As a result, it will reduce distances by at least 1.6 million kilometers and reduce annual emissions from transport by around 10%, which is 2,387 tonnes less CO2 each year.

European NGOs call for embargo on Russian oil and gas to stop financing the war against Ukraine

A coalition of NGOs from all over Europe, including Poland, has urged the European Commission and Member State governments to stop importing Russian oil and gas.

"Europe's dependence on fossil fuels is a question of Europe's security and of our morals. We cannot allow the money from imported oil and gas to kill people in Ukraine. Today everything speaks in favor of a definite end to the import of fossil fuels from Russia - we must stop financing the war against Ukraine and we must move away from Europe's dangerous dependence on unpredictable Russia," says Marcin Korolec, president of the Institute of Green Economy, signatory of the appeal to the European Commission.

While the world looks on in horror at Putin's invasion of Ukraine, Europe is facing its worst crisis in decades. The outbreak of solidarity and compassion for Ukraine in Europe is reassuring, but humanitarian and military aid is not enough. The rockets devastating Ukrainian cities were bought with the money Putin and his colleagues earned by selling gasoline and diesel fuel to European drivers. European oil money - that's \$4

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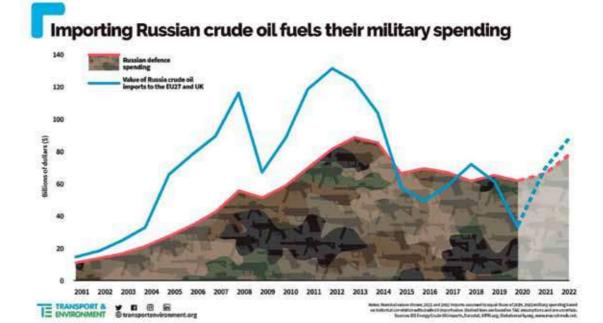
out of every \$5 earned on Russian oil and gas exports - has been the backbone of Putin's military spending for more than two decades. Ending our dependence on fossil fuels, starting

with Russian oil, gas and coal, is no longer just a climate goal, but an urgent moral imperative, the NGOs' statement reads.

The coalition is also demanding that the country of origin for oil products be made clear at petrol stations to ensure consumers do not inadvertently fund the Putin regime.

"The answer to the current crisis

is the transition to electromobility and RES energy production. This is the only realistic scenario for the Polish economy to become independent from fuel imports from Russia. Today it is clearly visible that it is important for health, climate, but also for safety," says Rafal Bajczuk from the Foundation for the Promotion of Electric Vehicles.



Turbine supplier selected for Baltyk II and III projects in Poland

Equinor and partner Polenergia have selected Siemens Gamesa as the preferred supplier of wind turbine generators for the MFW Bałtyk II and MFW Bałtyk III projects, two of the largest and most advanced offshore wind farms being developed in Poland, with a total installed capacity of 1,440 MW.

The signing of the preferred supplier agreement is a key milestone for the MFW Baltyk II and MFW Baltyk III projects. It is an important step towards delivering on the projects' goal of providing offshore wind energy as a significant part of the Polish energy transformation.

"Selecting the preferred turbine supplier, we reach another milestone, moving our projects forward and bringing the best technologies into the Polish market and its offshore wind industry development. Our goal is to execute these projects in a way that brings this competitive source of clean and renewable energy to Poland, based on leading solutions. We believe this cooperation with Siemens Gamesa will accelerate further the progress of our projects that can bring several opportunities for the Polish market and Polish companies to be included in the local supply chain," says Michał Kołodziejczyk, country manager of Equinor in Poland.

Under the announced deal Siemens Gamesa will deliver its flagship model SG 14-236 DD offshore wind turbine to cover the maximum combined capacity of both projects. The turbine has 14 MW nominal power and can reach up to 15 MW capacity with Power Boost.

This is Siemens Gamesa's largest direct drive offshore wind turbine and it will have been running commercially for a couple of years when installed on Equinor and Polenergia's projects. The exact number of machines remains to be determined at a later phase of the development upon completing the final turbine supply agreement and service and warranty agreements.

"We are very pleased to select the turbine supplier for two of Poland's first offshore wind power projects. The delivery of wind turbine generators is the largest contract for the projects, and we have secured an experienced supplier with a proven track record of deliveries to Equinor. We have selected a wind turbine that is the best solution for the overall business case and we look forward to further maturing the projects in collaboration with Siemens Gamesa," says Mette H. Ottøy, Equinor's chief procurement officer.

With the large modern wind turbines selected for the Equinor and Polenergia projects, one rotation of the rotor at full load will supply enough electricity for one average household in Poland for 4 days. When one turbine is running at full load, it will only take 10 minutes to produce the electricity needed to power one average Polish household for one year.

"We effectively secure the supply of key products and services required to implement Baltic investments. We develop our projects on the basis of the best practices known from other European countries and draw on the experience of other offshore energy investments. This allows for a smooth process of obtaining the



photo credit: Polenergia



The projects are located in the Baltic Sea, approximately 27 and 40 kilometers from the port of Łeba where Equinor has acquired a plot for its future operations and maintenance (O&M) base port.

necessary permits and significantly increases the degree of advancement of these projects. We believe that our offshore wind farms will provide clean, green energy for millions of Polish households by 2027," says Michal Michalski, Ph.D., president of the Management Board of Polenergia.

The combined capacity of both projects adds up to 1,440 MW which is a substantial part of the

first phase of Polish offshore wind industry development scheme with a total capacity of 5900 MW. MFW Bałtyk II and III were awarded Contracts for Difference (CfDs) in May 2021 by Poland's Energy Regulatory Office (ERO). The projects are located in the Baltic Sea, approximately 27 and 40 kilometers from the port of Leba where Equinor has acquired a plot for its future operations and maintenance (O&M) base port. The final investment decision for both projects is subject to

The final investment decision for both projects is subject to obtaining the necessary permits and is planned for 2024 with the first power delivered to the grid in 2027.



Michał Kołodziejczyk (left), country manager of Equinor in Poland, Mette H. Ottøy, Equinor's chief procurement officer, and Michał Michalski, Ph.D., President of the Management Board of Polenergia.

INVESTING IN BIOGAS PLANTS

According to the "Biogas Magazine," there are only 109 agricultural biogas plants in Poland, very few compared to the European leader, Germany, which has over 9,000.

Looking at the agricultural conditions in Poland and the need to shift away from a carbon-dependent energy policy, the outlook for the biogas plants look positive and the room to grow is huge.

In Poland, animal and agricultural breeding afford a huge potential for biogas production – the use of slurry, waste from vegetable and fruit processing, slaughter waste, beet pomace

and expired food.

There are several reasons Poland has only 109 plants. First of all, the large financial outlays on the construction of a biogas plant. The complicated law on the support system for biogas is another. The situation is also not improved by the protests of local communities. Still many of them are afraid of biogas plants in their neighborhood. Biogas plants stimulate rural development.



Above all, they manage agricultural and food processing waste. What used to be a problem can

now be fuel for a biogas plant. Secondly, they produce "green" energy and heat that can be used in production processes, resold to the grid or local enterprises. Thirdly, they drive distributed energy, which is particularly important in rural areas.

Fourthly, they activate local comwaste less food, to reduce the use of energy and the resources needed to produce it. This entails changes, for example, in the obligation to inform customers on the packaging of food products about carbon footprint, or – in short – about its impact on the environment resulting from greenhouse gas emissions. This would mean that another additional element would have to be included on the label, but it would also force producers to take action towards more sustainable and naturefriendly production.

FINANCING SOLUTIONS FOR SMES IN THE CEE REGION

How small and medium sized enterprises in Poland and other CEE countries can finance growth or business reorganization in 2022 and beyond?



Magdalena Śniegocka
Investment Director, CVI

Over the last two years - since the pandemic officially broke out – the global economies have been experiencing elevated uncertainty and recent geopolitical developments certainly add to the overall complexity. The recurring Covid-19 waves and disruptions in global supply chains triggered a quick stimulus response, which resulted in dynamic economic recovery in 2021. Given global interconnections, the situation also impacted the CEE countries, which in 2021 demonstrated strong economic recovery with the region's GDP growing at 5.2%1.

2021 bounce-back in CEE economic activity

In Poland the first 9 months of 2021 brought record financial results for medium and large enterprises. Aggregated net income for the first 3 quarters of 2021 reached over PLN 162bn (over EUR 35bn), which represents the highest ever result, and almost 90% higher than the aggregated net income for 12 months of 2020. These results were achieved with healthy margins, again higher than ever before in the recent 10-year history. The companies were able to successfully capitalize on strong demand pressures, effectively passing the inflationary effects in costs onto the final customers. In addition, in the first 9 months of 2021, Polish medium and large firms increased their investment activity by 12% versus the full year of 20202. If we compare this uptick in investment activity to the y-o-y increase in loans granted by the banking sector to large enterprises in Poland the picture looks quite consistent. The value of such

Aggregated net income for the first 3 quarters of 2021 reached over **PLN 162bn** (over EUR 35bn), which represents the highest ever result, and almost **90**% higher than the aggregated net income for 12 months of 2020.

investment loans increased in December 2021 by 12% compared to December 2020 levels³.

SME financing on the sidelines?

However, the situation looks entirely different when we analyse the investment loans provided by banks to Polish small and medium sized enterprises. It is a y-o-y decrease of 11%, in spite of positive financial results. Historically, banks have been cautious with SME financing, scaling down their activity at the time of economic uncertainty. There is a clear funding gap between the needs of SMEs and the actual funding provided by the traditional financial institutions. CVI has been trying to address this gap, by providing financing solutions for SMEs in the CEE region. Such financing, called private debt, encompasses mainly bilateral, private transactions with financing terms tailored to the specific needs of a company. As a leading private debt player in CEE, CVI estimates that the overall demand for such financing across the region is more than EUR 10bn.

Since 2012, CVI has been actively investing across the CEE countries, including Poland, Romania, Czech Republic, Slovakia, the Baltics and Hungary. Since then, we've completed over 670 private debt investments and allocated over EUR 2.5bn in capital to the region's SMEs. In 2021 alone, CVI deployed over EUR 270m in private debt financing, investing in 67 companies. We were also early on to restart investments after initial covidrelated shocks, and included financing for companies from sectors which were perceived as badly hit, like hospitality or fitness chains. It is natural for the CVI team to be in regular interactions with our portfolio companies, which at the start of the pandemic proved to be the right strategy and helped to address potential risks early on.

Promising outlook for 2022, yet increasing challenges on the horizon

Although 2022 still presents a positive outlook, challenges are mounting, including high raw material and energy prices, a labor shortage, wage increases or uncertainty in the regulatory environment in some sectors. Interest rate hikes became a natural response to counter inflation in many countries. In Poland, the 3m Wibor rate at the end of February 2022 was close to 3.5% while only a few months earlier, in July 2021, it was at 0.21%. This obviously has



an impact on the overall cost of financing, which makes the SMEs situation even more complex. In order to address challenges with increasing interest rates, companies can consider interest rate hedging (full or partial) or financing with an appropriate currency mix, adding where relevant a EUR-denominated financing where currently interest rates are not under such pressure (in particular in case of exporters or companies with EUR-denominated revenue).

CVI is ready to provide bespoke financing solutions for SMEs in CEE

CVI currently manages EUR 1bn in assets, and invests between EUR 2-20m equivalent per company. Investment tickets of EUR

20m and above can also be considered by the team thanks to the existing cooperation with our trusted international partners. CVI's financing can be used for multiple purposes, including working capital, capex investments, refinancing, M&A, business reorganization, shareholder buyouts and dividend payments. We can finance companies with an asset-light business model or at the holding structures. We can arrange financing that pushes amortization closer to debt maturity or alleviates debt service costs thanks to partial capitalization of interest. Higher risk structures do not always require equity financing, hence private debt allows entrepreneurs to raise capital without the need to sell shares in the business. We offer fast execution,

that is key for many companies running competitive M&A processes or in need of bridge financing. It usually takes between 6-8 weeks from the start of the analysis to actual funds' deployment. In addition to real estate and financial services, where we see a consistent, regular deal flow, examples of high activity sectors also include renewable energy, logistics, e-commerce driven services, industrial production, consumer goods or healthcare. We expect that in 2022 alone we will be able to invest over EUR 300m across the CEE region.

1. As per the EBRD forecasts, as of Nov 2021 2. Pekao SA Research, Barometr sektorowy 2022, Kluczowe trendy i przewidywania dla wybranych branż polskiej gospodarki styczeń 2022

3. As per the Polish FSA statistics

SMEs see an opportunity to improve their situation

EFL (Europejski Fundusz Leasingowy SA) in the COVID-19 barometer survey asked entrepreneurs from the SME sector in Poland for the tenth time whether, in the context of the next wave of the coronavirus pandemic, the situation in their industry will improve, deteriorate or remain unchanged in the next 6 months. Compared to the measurement from the fourth quarter of 2021 (carried out at the end of September 2020), at the beginning of this year, greater optimism is visible. Some 33% of entrepreneurs believe that the situation will improve, 42% that it will remain the same and every fifth respondent thinks it will worsen. At the end of last year, the size of the optimists and pessimists groups was the opposite - 36% said



the situation in the industry would worsen and every fifth forecast its improvement.

Interestingly, the larger the company, the less optimism. Some 34% of micro and 38% of small enterprises believe the situation will improve in the

next 6 months, while among medium-sized entities this is 23%. A deterioration is mentioned by 23%, 19% and 19% of companies, respectively. In each segment, the largest group of people indicated no change.



WARSAW ONE OF TOP EUROPEAN CITIES WITH **GREATEST ECONOMIC POTENTIAL**

FDI Intelligence, providers of services related to foreign direct investment, has released the results of its report "European Cities and Regions of the Future 2022/23" - and Warsaw has been recognized among "the best and the brightest Europe's investment destinations." Warsaw took 7th place in the overall ranking and 2nd in terms of business friendliness.

This is not the only ranking in which Poland's capital has been recognized for its openness to investors after winning the Prime Property Prize 2021 for creating conditions for greater investor activity and quality of service provided to entrepreneurs.

The Polish capital was also ranked high in the report prepared by the Saint-Gobain Group and the Polish Society for Future Studies "The Polish cities of the future".

"Warsaw is already playing in the European league," the report notes. Investors are more likely to use multi-criteria certification, reflecting the toughness of the competition on the local

In terms of transport, Warsaw is also a leader in many categories, including as the first city in Poland to project zero-emission vehicles in public transport, now envisaged by law for 2023. "We are pleased about these recognitions. They prove that our Strategy Warsaw 2030 is built on the appropriate fundaments and works well," says Rafał Trzaskowski, Mayor of Warsaw. The strategy includes programs that support the city's economic and social development (attracting talents and leaders, generating innovation, operating in business-friendly conditions), PPP, quality of life and its improvement, as well as investor service.

"We know that in order to successfully compete with other cities in Europe and the world and to maintain the title of a leader, Warsaw must adapt its offer to the rapidly changing reality. Therefore, the provisions of the #Warsaw 2030 Strategy include a diverse office offer, available apartments, investments in "free time" facilities and the development of zero-emission transport," says Karolina Zdrodowska, director and coordinator for entrepreneurship and social dialogue in the City of Warsaw. Attracting talents and leaders In December 2021, Trzaskowski launched the "We attract talents

and leaders" program, which is

Vistula Boulevards

"We know that in order to successfully compete with other cities in Europe and the world and to maintain the title of a leader, Warsaw must adapt its offer to the rapidly changing reality. Therefore, the provisions of the #Warsaw 2030 Strategy include a diverse office offer, available apartments, investments in "free time" facilities and the development of zeroemission transport," says Karolina Zdrodowska, director and coordinator for entrepreneurship and social dialogue in the City

of Warsaw.

aimed at helping create the best conditions in Warsaw to attract people, investments, ventures and events from Poland and abroad and hence enriching the creative potential of the city. It intends to encourage talented individuals and leaders to work, study and settle in the capital. "The strength of Warsaw is the people, enterprising, creative and educated Varsovians. However, for our city to continue to develop dynamically, we want to use not only their capabilities, but also attract the best and brightest in their fields to the capital, both from Poland and abroad. Both people and companies," Trzaskowski says.

The increasing attractiveness of Warsaw as a city to live in is aimed at attracting investors, which is why quality of life is another important part of Warsaw's strategy.

Quality of life

According to the report "Warsaw, Your Place to: invest, study,



Vistula Boulevards



Elektrownia Powiśle



Modern playground in Ujazdowski Park

live" prepared by the Warsaw authorities together with leading agencies: BNP Paribas Real Estate, Colliers, Cushman & Wakefield, JLL, Knight Frank, Randstad and Savills, the capital is moving closer to becoming a Smart City.

Warsaw is an attractive place to live not only in terms of the results of various comparative rankings of cities, but primarily in the opinions of residents on the quality of life in Warsaw.

Warsaw ranks first among the top 5 largest Polish cities in terms of green areas (which cover more than 40% of its surface). In Warsaw, business infrastructure is very well developed. Some 125 hotels operate here, as well as many conference centers. Warsaw hosts the country's largest cultural events and the city itself has also became a home to world-class performers. The quality of the urban infrastructure used every day by its inhabitants and tourists alike is improving all of the time. It is worth adding that Warsaw has excellent internal transport and



"Warsaw is an open, friendly and dynamically developing metropolis. We are happy to welcome all new residents. I would like the capital city to be a place where you can find not only business partners, talented and qualified employees, clients, but also friends," says Rafał Trzaskowski Mayor of Warsaw.

in accordance with the principles of sustainable development. Trzaskowski admits that climate change remains the biggest challenge for the capital, which is why the city authorities have created the Green City Action Plan. "It is a document setting out a list of actions needed to be implemented to rapidly reduce greenhouse gas emissions in both the short and long term. This means a decisive transition of the city to green energy. We also do not forget about waste management, street lighting and transport. We are already carrying out many activities: rolling stock replacement and building an ecological waste disposal plant," Trzaskowski says.

Economic and business powerhouse

Warsaw is an economic power-house, not just nationally but also across Europe. In 2021, Warsaw's GDP was estimated at 413 billion złotys (900 million euros), which ranked it as one of the wealthiest locations in the EU. The city also contributes approximately one-sixth of the total GDP of Poland (17.7%).

Business shared services is the largest sector in Warsaw when it comes to employment and has seen steady growth since 2000. Business services employment increased by 87% between 2016 and 2021 to a total of 33,000 employees – 88% of which are employed by foreign companies.

"Despite the pandemic and related difficulties, the growth dynamics of modern business services centers still remain high. The number of entities in Warsaw was 279 in 2019 and rose to 321 in 2021. Notable new investments launched over the past two years include: Amazon, Bayer IT Hub, Moderna International Business Services and UPS," says Zdrodowska.

Zdrodowska also notes that Warsaw is successful in attracting young people from all over the world to study in the city. There are 80 public and private universities in Warsaw, including the Polish Academy of Sciences, the Warsaw University of Technology and the University of Warsaw. With approximately 218,000 students studying in Warsaw, 53,000 graduates enter the workforce annually. "Nearly 30% of all foreign students studying in Poland choose Warsaw's institutions of higher education," says Zdrodowska, adding that the Warsaw 2030 strategy aims to attract both Polish and foreign students in a bid to bring talent and future entrepreneurs into the city.

Warsaw's population is increasing at a steady pace. According to the Central Statistical Office, nearly 1.78 million people live in Warsaw. Meanwhile, according to the data of the Polish Academy of Sciences and Orange Polska, almost 2.3 million stay in Warsaw. "Warsaw is an open, friendly and dynamically developing metropolis. We are happy to welcome all new residents. I would like the capital city to be a place where you can find not only business partners, talented and qualified employees, clients, but also friends," says Trzaskowski.



Outdoor cinema

POZNAŃ - THE MOST BUSINESS-FRIENDLY CITY IN EUROPE

Poznań has once again hit top 5 in the independent fDi Intelligence ranking "European Cities and Regions of the Future 2022/2023," in which the investment potential of European and Polish cities was analyzed. In the general classification of medium-sized cities, the capital of Greater Poland came 5th.

The latest edition of the report "European Cities and Regions of the Future 2022/2023" was prepared by experts from "fDi Intelligence" - an industry magazine belonging to the Financial Times. In this year's ranking, as many as 356 cities were examined, divided in terms of population into five categories (Poznań was among the medium-sized cities). They were then assessed in five subcategories: economic potential, business friendliness, communication links, human capital and lifestyle, and cost-effectiveness.

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The city of Poznań was ranked 5th in the general classification of mediumsized cities and was the second Polish city, next to Wrocław, in the ranking.

The city of Poznań was ranked 5th in the general classification of medium-sized cities and was the second Polish city, next to Wrocław, in the ranking. According to experts, Poznań is the second most business-friendly city in Europe in its category. In the category of the best strategies for acquiring direct foreign investments, Poznań drew with the English Newcastle Upon Tyne, taking 4th place. Analysts from "fDi Intelligence" also distinguished the economic potential of Poznań (8th place in this category).

"We are extremely pleased with this year's fDi ranking, as it confirms the excellent business results of last year. As the Investor Relations Office, we are very proud of the 4th place in the category of the best investor acquisition strategies. In the category of business-friendly cities, Poznań beat cities such as Vilnius, Edinburgh and Zurich. Analyses by independent institutions such as "fDi Intelligence" are particularly valuable and prove the favorable investment climate that we have created in Poznań," says Katja Lożina, Head of the Investor Relations Department of City of Poznań.



photo credit: Przemysław Turlej

Focus on the quality of life, ecology and people

Sylwia Ziemacka talks to Katja Lożina, Head of the Investor Relations Department of City of Poznań.

How would you describe Poznań today to the international community?

Poznań is one of Poland's most important economical hubs, known as a strong academic, business, and trade fair center. With approximately 532,000 residents, Poznań is the 5th largest Polish city. The agglomeration of Poznań has around 1 million inhabitants.

For many years, international business has been developing strongly in Poznań, thanks to the 100-year history of the Poznań International Fair. Foreign capital comes mainly from Germany, France, Japan, the UK and US. Thanks to cooperation with foreign chambers of commerce (like BPCC, AHK, DWK) and many joint projects, foreign business in Poznań can develop and grow.

Poznań is an open, modern and diverse city. Foreigners, both from Europe and around the world are an essential part of its community. Employers are open to employing foreigners (often even without knowledge

Poznań is an open, modern and diverse city. Foreigners, both from Europe and around the world are an essential part of its community. Employers are open to employing foreigners (often even without knowledge of the Polish language).





Thanks to the local spatial development, tall office buildings will be able to stand next to the Rataje roundabout.

of the Polish language).

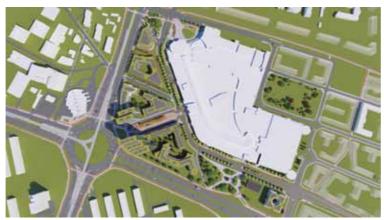
On the other hand, the authorities of the City of Poznań care about the high quality of life for all its residents. The priority now is ecology - the development of modern public transport (several large tram investments), limiting car traffic in the city center, and caring for green areas by the Warta river.

What is currently encouraging investors to develop and invest in Poznań?

Poznań is located in the Western part of Poland, more precisely halfway between Berlin and Warsaw. Thanks to its location, the city is an important

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Currently, due to the global pandemic and the shortening of the supply chain, the warehouse and logistics market is also dynamically growing.



Rataje roundabout is an important communication junction of Poznań, in which numerous tram and bus lines intersect.

rail, road, and air hub.

Poznań can also boast excellent infrastructure and an extensive business community.

Both new operators and those already operating in the city are supported at every step by the Investor Relations Department team.

However, the greatest advantage of Poznań is its people! Both students and graduates, as well as professionals with experience. Employers appreciate the talent pool in Poznań primarily for the knowledge of foreign languages.

In which business areas are foreign investors the most active

and which are the ones chosen by domestic investors?

Poznań is known for its diversified economy. The priority sectors of Poznań's economy are technologically advanced production, Business Process Outsourcing (BPO), Shared Services Centre (SSC), Research and Development (R&D), conferences and exhibitions, and recreation and leisure. Currently, due to the global pandemic and the shortening of the supply chain, the warehouse and logistics market is also dynamically growing.

The largest volume of foreign investment capital has been in-

vested in industrial production, above all in the automotive, food, and pharmaceutical sector, trade, and real estate (including office, commercial, hotel, and residential properties). International companies such as Volkswagen, GSK, or Bridgestone have found space for de-

velopment in Poznań, expanding their range of competencies with accounting and IT projects. Poznań is also a city with a strong startup community and creative sector (for example game development and marketing), in which mainly local companies operate.



In Poznań everyone can find something interesting to do.

The "City attractiveness and office market 2021" report published by Knight Frank and Michael Page indicates Poznań initiatives aimed at improving the quality of life in the city.

ATTRACTING NEW INHABITANTS

Poznań's response to demographic challenges and migration trends has been to retain inhabitants and attract new ones through a consistent implementation of its open city strategy and taking actions to improve the quality of life by: developing infrastructure, city centre renovation, housing, the improving natural environment, improving the city's aesthetics and promoting cultural events.

CREATING ATTRACTIVE JOBS

Poznań is an example of a city where the most advanced processes are performed in modern services centers. Companies like GSK, McKinsey and Franklin Templeton are constantly developing and increasing employment rates. Poznań provides human capital for innovative companies in the modern services sector by ensuring quality of education at all levels.

MOBILITY - ECOLOGICAL SOLUTIONS FOR TRANSPORT

15-minutes city, car-sharing, city bikes infrastructure, scooter-sharing.

PROJEKT CENTRUM (PROJECT CENTER)

Infrastructure modernisation, car traffic limiting and other activities undertaken in the city center aimed to "give it back" to the inhabitants.

OPENNESS – PROMOTING DIVERSITY, TOLERANCE AND RESPECT:

My Poznań 36.6 campaign – the slogan of the campaign: "Tolerance towards people is not enough, they deserve respect." The key is openness to foreigners, including migrants from Ukraine.

SMART CITY

Strengthening the innovative character of the economy and implementing new technology, development of the creative entrepreneurship and start-up sector, putting emphasis on education at all levels and active support for universities.



Poznań is a modern city with a lot of greenery.



The City of Poznań invests in the development of public transport.

ŁÓDŹ – A CITY OF MIXED-USE PROJECTS

The numerous revitalizations of neglected post-industrial areas, most often located in the city centre, with historic post-factory buildings, are certainly a distinctive feature of Łódź in comparison to other Polish cities. Thanks to such investments, unique places with original architectural concepts are appearing across the city map.

These are city-building projects which, by combining different functions, best meet the changing expectations of citizens today. The key in mixed-use projects is not placing buildings with different functions next to each other, but to create a leisure space that is "alive", i.e. services and cultural centres drawing on the character of the place and its surroundings. In Łódź, successive developers are rising to the challenge of creating extraordinary investments, distinguished by a unique sense of place and interesting architecture.

"We focus on developing Łódź as a green, modern city with a sustainable economy and infrastructure, managed - which is worth emphasizing here - based on the cooperation of local communities, institutions and the administration. We believe that the synergy born pf cooperation based on a variety of points of view and experiences - properly planned and managed - will

be spur for the further development of the city," says Adam Pustelnik, the Deputy Mayor of Łódź.

"Numerous revitalizations of neglected post-industrial



In Łódź, new developers take up the challenge of creating extraordinary investments, which are distinguished by the unique atmosphere of the place and interesting architecture," says Elżbieta Czerpak, Head of Research at Knight Frank.

city center, with historic postindustrial buildings, is definitely a feature that distinguishes Łódź from other cities in Poland. Due to such investments, unique place with an original architectural

concept here appeared on the city map. These are the city-forming projects which, thanks to a combination of various functions, best meet the changing



Monopolis

mixed-use projects is not to place buildings with different functions next to each other, but to create a space for spending time that is vibrant with life, i.e. services and cultural centers, taking into account the specificity of the place and surroundings. In Łódź, new developers take up the challenge

ments, which are distinguished by the unique atmosphere of the place and interesting architecture," says Elżbieta Czerpak, Head of Research at Knight Frank.

REVITALISATION - MIXED-USE PROJECTS **GEYER GARDENS**

areas, most often located in the expectations of locals. The key in of creating extraordinary invest-The revitalization of the former

Wi-Ma Widzewska Manufaktura

Ludwik Geyer factory buildings from the beginning of the 19th century, is the work of MON-NARI TRADE S.A. Capital Group. Geyer Gardens, with an area of 10.5 ha, are located in the quarter around Piotrkowska, Wólczańska, Czerwona and Sieradzka streets. The complex will soon combine a residential with business, culture, food and drink functions. In additiion, due to the extensive park across the street, there will also be ample opportunities for relaxation and recreation. The unique atmosphere of the place is enhanced by the numerous events hosted there, such as summer cinema, open-air exhibitions, concerts, fairs and markets, along with the nearby Textile Museum. The investment has been included in the Łódź Municipal Revitalisation Programme. About 10,000 m² of the renovated space has been designated for commercial functions, inclufing, offices, shops, a gym, and restaurants. The plans also include the Museum of Printing in one of the revitalised buildings and an educational path.

PIOTRKOWSKA ZONE 217 & PROGRESS ZONE

Piotrkowska Zone 217 is a revitalisation of 19th century buildings of Józef John's iron foundry, car-

ried out by OKAM Capital. The complex, located in the centre of Łódź at 217 Piotrkowska Street and 132 Kościuszki Avenue, is another unique mixed-use project on the map of Łódź, where business is intertwined with culture and entertainment.

The renovated buildings offer approx. $4,000 \text{ m}^2$ of office space, along with retail, service and food and drink units with unique interiors. Regular events, including breakfast markets, Christmas markets and culinary festivals, give the place a unique character, creating an urban space that

As part of the next phase of the development, the residential function, PROGRESS Zone, was launched. The construction of 276 flats, together with commercial premises, with a total area of 11,400 m² was begun in December 2021. Both zones are mutually complementary places. The PROGRESS zone includes a green courtyard, a gym, and a coworking space. Very close by, the Piotrkowska 217 Zone will offer entertainment, culture, food and drink, and a sandy beach.

OFF PIOTRKOWSKA

As part of the revitalisation of the former Franciszek Ramisch textile factory on Piotrkowska Street, a unique mix of office, retail and leisure functions was created. Over the years, the complex developed by OPG Property Professionals has become one of the most recognisable points on the Łódź map, attracting visitors with its unique blend of retail, services and eateries. The crowning achievement for OFF Piotrkowska was taking first place in the National Geographic Traveller magazine's 7 New Wonders of Poland list. The historic red brick buildings are complemented by new facilities, including the Teal building and the thoroughly renovated historic Sepia building. The Fern building, with Łódź's first public roof garden, hosting a relaxation zone and deckchairs, a summer cinema and viewing



terrace, is at the planning stage.

MONOPOLIS

MONOPOLIS is a unique project, based on a combination of historical and modern architecture and combining the business and culture arenas. The project is addressed towards the business environment, as well as to the local community. In the revitalized buildings of the former Vodka Monopoly concern dating back to 1902, a space was created for cultural events, leisure activities and relaxation. Guests can enjoy a wide range of cultural and recreational activities, music events, exhibitions and theatre performances. The young can find a place for development and fun in the children's club. Monopolis is a place filled with a variety of

cuisines from all corners of the world. The project was voted best mixed-use development at the MIPIM Awards 2020.

WI-MA WIDZEWSKA **MANUFAKTURA**

The revitalization of the 140-yearold historical buildings at 135 old historical buildings at 135 Pilsudskiego Street will be carried out by Cavatina. The 4 ha plot contains four buildings listed on the register of monuments as a post-industrial urban complex. The investment envisages the development of a diversified space of about 55,000 m², offering offices, flats for rent, and retail and service units. As part of the revitalization of the complex the revitalization of the complex, elements of the former factory buildings will be preserved and the original urban layout of the





Geyer Gardens





area will be maintained. The project also includes an open space for rest and recreation, including food and drink and cultural zones. A distinctive element of the investment will be a 100-yearold park with a fountain, renovated by the investor.

A complex of historical buildings located in the city centre at 13 Tymienieckiego Street, which is being revitalised by Echo Investment. The project is being developed in the historic buildings of the former Karol Scheibler textile factory on an 8 ha plot. The complex, open to the city, will comprise 20 buildings with a total usable area of 90,000 m². 14 of the buildings are historical structures and they will be given new functions. The project will combine office, retail and service, catering and residential buildings, along with a new city square (Anna's Gardens) located next to the historic Scheibler power plant. There will also be publicly accessible, green spaces totalling nearly 4 ha.

TEXTORIAL PARK II

St. Paul's Developments Polska will revitalise a 2 ha post-industrial plot on the site of the former Karol Wilhelm Scheibler textile factory in Księży Młyn. As part of the investment, the developer will thoroughly renovate two 8,000 sq. m. historic cotton warehouses and construct modern 5-storey buildings. The complex will have commercial, office and residential functions. The total area of Textorial Park II will be 40,000 m², of which 9,000 m² will be for attractive public space with a square and green areas.

SUSTAINABLE REVITILISATION ZIELONY BY SYNERGY

The Synergia Business Centre is an office complex consisting of revitalized, post-factory buildings harmonized with modern office buildings, located in the very centre of Łódź. The revitalization of the only modernist factory in Łódź, and construction of the first sustainable office building on Wólczańska Street, is a project being led by the family-owned Synergia Hub Marzec.

The first passive office building in Łódź - Zielony by Synergia - proves that it is possible to build in harmony with nature. The building filled with and surrounded by greenery that is an integral part of the architecture, combines the needs of the city, its residents, tenants and the investor. Applied ideas and features, such as a windowless south wall, photovoltaic roof panels, a system of intelligent roller blinds, a water retention system, a teaching and "feeding" bee yard, and green terraces on the north side, make the office building a leading example of sustainable architecture in Łódź.

Source: Łódź with an idea for the future report, Knight Frank & City of Łódź.

KATOWICE - WHAT'S THE KEY TO SUCCESS

Surely, many specialists in economic marketing wonder what factors have a decisive influence on the choice of a specific location by an investor. All Polish cities are constantly competing with each other, trying to maximally promote their advantages and to optimally select arguments emphasizing the qualities which for an investor may be the most important factor influencing investment decisions.

Certainly, in every investor's decision process, influencing the choice of location in which to locate the investment, such factors as geographical location, communication accessibility, modern office space and rental costs, human resources and salaries on the local labour market, etc. play an important role. But apart from strictly technical or economic factors, an increasing number of investors also pay attention to other advantages of the city, influencing the quality of life, such as the level of air pollution, availability of recreational areas, or the diversity and artistic level of the city's cultural offer.

Therefore, it is certainly worth pointing out the most important advantages of Katowice, a city which, among the largest Polish agglomerations, can boast the highest dynamics of investment growth in certain sectors of economy, more and more often placing on top positions in various rankings and in many respects clearly dominating over the competition.

These assets we can confidently call the keys to success with which Katowice is opening its doors more and more widely to new investors who seek and find in this city completely new development opportunities tailored to their needs.



photo credit: J. Astaszow/ Katowice City Hall

The first key – Katowice is one of the biggest business hubs in Poland. The strength of Kato-

wice's economic potential is noticed by a growing number of investors from diverse sectors



photo credit: J. Astaszow/ Katowice City Hall

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Katowice is one of the biggest business hubs in Poland. The strength of Katowice's economic potential is noticed by a growing number of investors from diverse sectors within the whole economy. Katowice is known to be business-friendly mainly due to its history and tradition.

within the whole economy. Katowice is known to be business-friendly mainly due to its history and tradition. Heavy industry and coal mining have been replaced by sectors such as information technology, automotive industry, high technology, and food processing. The strength of

Katowice's economic potential is noticed by an increasing number of investors, from the business services, office and hotel developers, to entities related to business tourism.

Let's focus on the office space, business services sector and growth sector - gaming & e-sport. Local modern office space - current supply exceeds 603,000 sqm, and this resource will increase by another 210,000 sqm being under construction. It has been growing as our city is one of the largest beneficiaries of the development of the business services sector, noting an increase in the number of such specialized centers from 92 in 2019 to 120 in 2021, accompanied by a corresponding increase in employment from 20,000 employees in 2019 to 28,900 projected for the Q1 2022.

Moreover, we are supporting development of creative industry branches such as e-sports and gaming which are clearly



photo credit: J. Astaszow/ Katowice City Hall

present in Katowice's economic landscape not only in the context of the annual Intel Extreme Masters tournament, as the city is home to companies such as ESL Poland, a world leader in esports and related innovations, or Keywords Studios providing international services to developers and publishers of computer games, and companies like Anshar Studios S.A, Code Horizon Sp. z o.o., Crazy Goat Games, Dev Hero.es, Incuvo, Jujubee S.A., etc. What is more, Katowice city has just started megaproject "The New Technologies District" - an initiative to create the Katowice Gaming and Technology Hub. The planned office and technology complex is to serve as an educational place and a design centre for technological needs. In practice, it will become the main office of high technology companies, in particular the computer games and e-sports industry. For the purposes of the project, the area around the Pułaski Shaft, which is part of the shutdown

The current unemployment rate in Katowice is 1.8%, which is one of the lowest in the whole country,

insignificant considering the

city's population.

"Wieczorek" mine, will be developed. The investment will be the next stage in the revitalization of the Nikiszowiec district. The second key - human resources. Katowice alone is a rapidly growing city of 300,000 inhabitants but at the same time is the most important center of the over 2.2 million Metropolis (inhabitants available within the range of 25 km from the city). The current unemployment rate in Katowice is 1.8%, which is one of the lowest in the whole country, insignificant considering the city's population. At the same

time Katowice and Metropolis can be proud of a very rich pool of highly qualified specialists, which is augmented every year by almost 23,000 graduates of the Upper Silesian universities, whose educational profile meets the needs of companies providing IT, telecommunications, financial, banking, legal and tax, accounting and HR management services.

The third key – the city at the center of events. Katowice is also

the venue of many important events of international scope in the form of congresses, conferences and festivals, among which the global event planned for 2022 is worth mentioning: World Urban Forum by UN-Habitat or Intel Extreme Masters tournament attracting crowds of E-sport enthusiasts from all over the world. Katowice's aspirations to host the most prestigious international events are fully justified by the excellent conditions the city provides for hosting top-notch events, which was fully demonstrated in 2015, with Katowice being awarded the title of "City of Music" by UNESCO, as well as on the occasion of one of the biggest international events held annually - the European Economic Forum.

The last key – quality of life. According to a ranking published in May 2021 by "Newsweek" covering 89 cities in Poland, Katowice was ranked 6th among cities with more than 100,000 inhabitants in terms of quality of life. Every year the city undertakes many different initiatives to improve the quality of life in Katowice, from development of ecological public transport and a network of city bikes, construction of the city stadium to revitalization of green or postindustrial areas. The campaign to shape Katowice's new image, which has been successfully conducted for several years, is complemented by the promotion of the city's natural assets in various forms, mainly in the context of recreation and leisure activities as Katowice is one of the greenest agglomerations in Poland with green areas and reservoirs accounting for as much as 51.8% of the city's total area. These symbolic five keys to Katowice's business and image success are only a part of a solid metaphorical "bundle" as the number of equally significant assets of the city favouring development and new investments is much longer...

project: AMC - Andrzej M. Chołdzyński





The New Technologies District

The New Technologies District

"The growing interest of global investors in Katowice was an impulse, due to which the New Technologies District, including the Katowice Gaming and Technology Hub originate in our city. For many residents the areas of former Wieczorek mine, the Poniatowski Shaft, and the Pulaski Shaft are an extraordinary symbol of hard working

and reliability, which now will gain new functions and life. I am convinced that the transformation of those places into a space for the innovative technologies sector will allow us to shift into sixth gear and will become an important point on the axis of transformation, which Katowice experience" - says Marcin Krupa, Mayor of Katowice.

POMORSKIE - ONE OF THE FASTEST GROWING REGIONS IN POLAND AND EUROPE

Pomerania is developing exponentially. Strategic location, world-class infrastructure, transport accessibility, diversified economy, major investments by the Fortune 500 companies and availability of talent - makes the region one of the most fastest-growing regions in Poland and Europe. In September 2021 the Pomorskie Voivodeship has started a collaboration with the World Bank to assess how foreign direct investment (FDI) attracted by Invest in Pomerania supports local development and to formulate a new strategy for economic promotion and FDI attraction for the region for the years 2021-2027. Worth to mention that since the launch of "Invest in Pomerania" as the one-stop-shop for all investor-related services, the agency successfully completed 135 projects and helped generate nearly 20000 jobs.

Sylwia Ziemacka talks to Mieczysław Struk, Marshal of the Pomorskie Voivodeship

What makes Pomerania attractive for Investors?

The investment attractiveness of Pomerania is manifold. Pomerania is a dynamically thriving, multi-sector economy that blends together the best of traditional and modern economic sectors. Pomerania is open, diverse and tolerant and that can be seen in the sustainable development goals and policies that are beneficial to residents, entrepreneurs and businesses.

Our coastal location, along with ice-proof ports, a deep sea container terminal and well developed road and rail infrastructure offer access and opportunities. The Tricity offers more than I million sq. metres of premium office real estate and more than

99

Our coastal location, along with ice-proof ports, a deep sea container terminal and well developed road and rail infrastructure offer access and opportunities. The Tricity offers more than 1 million sq. metres of premium office real estate and more than 1 million sqm of warehousing space.



City of Gdańsk

I million sqm of warehousing space. The research universities and other centres of higher education supply the market with talented graduates. Our ethos of being open and diverse along with a fantastic work life balance, a very well connected air-



Mieczysław Struk, Marshal of the Pomorskie Voivodeship

port and a fantastic quality of life attracts not only investors but also talent from across the world. Just last year, we attracted more than 30 investment projects into the region that will generate more than 3,000 jobs.

According to several international ratings, Pomerania is one of the best places on the map of Poland and Europe when it comes to quality of life. We can observe a growing number of people who settle in the region - both from Poland and abroad. What attracts talent to Pomerania?

Building on our Hanseatic, port-city heritage, we have continued to be open and welcoming to everyone who would like to come and live, work or study here. Hence we have a thriving multinational community.

The region offers fantastic educational opportunities supported by a thriving and competitive job market. Due to the work put in by the regional authorities, the region is an investment magnet for international companies as well as domestic companies and startups. This in turn gives people an opportunity to work on the latest products and technologies.

Added to that the fantastic quality of life vs the low cost of living, connections to the rest of Poland and Europe and of course not being more than 15 mins away from a beach, work in our favour!



Alan Aleksandrowicz Deputy Mayor, City of Gdansk

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"We believe that this is the right time to further showcase the potential of our region and Gdańsk in particular, given the growing need of a safe business port for all those who want to expand their business and live in a friendly environment. We are glad that after 2 years of absence due to the pandemic, we can return to Cannes to look for investors, and inspiration for new projects to be implemented in Gdańsk."



Jacek Karnowski Mayor of Sopot

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"Finding accommodation in Sopot in summer is not easy, so I am convinced that the last plots that can be used as hotel facilities are real gems. The offer includes both the very centre of the city, as well as areas located near the Sopot Hippodrome and ERGO ARENA. Sopot is a health resort and we would like to make the most of this potential, hence the unique offer to build a health facility located by the sea."

DOKI

DOKI Office consist of two buildings DI and D2. DOKI Office are part of the DOKI project carried out in cooperation with Euro Styl. The investment, thanks to its significant scale and multi-functionality, will have the character of a small district with diversified buildings. DOKI will provide an office function in the DOKI Office part (TORUS), residential and service facilities in DOKI Living and hotel (Euro Styl).

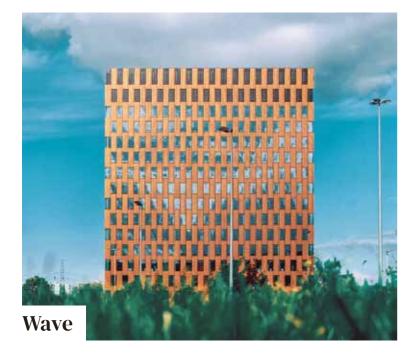




Sugar Factory

In the centre of Pruszcz Gdański there is a historical Sugar Factory, associated with the city since 1881. It has great potential to create an open estate that will become a new, multi-functional and easily accessible center, attracting new residents and entrepreneurs.

The constructed recreational, commercial, services, hospitality and cultural spaces will provide the opportunity of a diversified way of spending free time, which will be conducive to building bonds that create the social identity of the "sugar city".



Wave offers nearly 25,000 sqm of sustainable office space, which through the use of innovative solutions and technology is able to significantly reduce resource consumption. Certifications include LEED Core & Shell, WELL Core & Shell Gold and the WELL Health-Safety Rating certificates. This means that Wave meets the highest safety standards to create

healthy and safe workplaces. It is located on the main artery of Gdansk, Aleja Grunwaldzka, so perfectly connected with other parts of the Tricity. The first shared mobility centre in the region – City Hub – was established near the building. It is a space where everyone can rent electric scooters and cars. Wave is powered by100% renewable energy.



Waterfront in Gdynia

Waterfront, a mixed-use project, will create a fragment of the living urban tissue that is part of the cultural landscape of Gdynia. This space will be friendly both for the residents of the buildings, people working here, as well as Gdynia's residents and tourists visiting the city throughout the year. The public yet cosy nature of the investment will be

characterised by human-scale architecture, conducive to creating a good atmosphere and "life between the buildings". This is to be one of the most attractive corners of the city, implemented with care characteristic both for the investor - Vastint Poland, and for the designers themselves, the Warsaw-based JEMS Architekci studio.



IMPERIAL SHIPYARD (STOCZNIA CESARSKA)

The Imperial Shipyard constitutes 16ha of the most historic part of the former Gdańsk Shipyard area, where we envision an exciting combination of adaptive re-use projects and new, contemporary architecture with a development potential of at least 300.000 sqm. To date we've implemented many placemaking activi-

ties and delivered two refurbished buildings. The Dyrekcja building offers 4.000 sqm of office spaces, shared amenities and the first ever coworking space in the shipyard. For the adapted, historic Fire Station building we have attracted with Mielżyński Wine & Spirits, a highly renowned brand in the wine and gastronomy business.



Katarzyna Gruszecka-SpychałaDeputy Mayor, City of Gdynia

"Gdynia has massively improved its FDI strategy in recent years, as evidenced by the fDi Intelligence European Cities and Regions of the Future 2022/2023 ranking. The rise in new investment opportunities is clearly visible in this year's investment offer of the

City of Gdynia."



Janusz Wróbel Mayor of Pruszcz Gdański

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"Pruszcz Gdański is a well-connected city nearby the regional highway with access to the Tricity talent pool. Our main goal is to have an attractive offer that will include the entire package of amenities for the investor, in particular infrastructure that will allow for quick and convenient development of the purchased land. Currently, an EU project is being implemented to build a rainwater retention reservoir and a drainage system. Thanks to the actions taken by us, the investment potential of this region will be much greater."

Poland supports fast tracking Ukraine's EU membership



photo credit: PAP/AA/ABACA

Candidate status should be granted immediately to Ukraine and membership interviews started immediately thereafter, while Ukraine should also have access to EU funds for reconstruction, Polish President Andrzej Duda and Prime Minister Mateusz Morawiecki said. Ukraine President Volodymyr Zelensky signed an application to join the EU on Monday, February 28. "Our goal is to be with all Europeans and, most importantly, to be equal...I am sure we deserve it," he said.

Zelensky has repeatedly said that Ukraine deserves EU membership and that such a decision would be a vital element of support against Russian aggression. Poland's government spokesman Piotr Müller said this would be an important geopolitical signal for Russia that the EU is on the side of Ukraine.

On Thursday, March 3, the Sejm passed a resolution supporting Ukraine's membership in the European Union.

Ukraine's relations with the EU were established in 1994, when the Partnership and Cooperation Agreement was signed. They were then implemented under the European Neighborhood Policy and the Eastern Partnership. At the 7th EU-Ukraine summit in Yalta in October 2003, while the EU was awaiting its first enlargement to the East, Brussels did not offer Kyiv membership in the EU, but suggested sanctioning the status

of a country belonging to the European Neighborhood Policy program. Then the Orange Revolution broke out, again reigniting Ukrainian aspirations to join the EU.

In 2014, both parts of the association agreement between Ukraine and the EU were signed. "We have a process with Ukraine, which involves, for example, the integration of the Ukrainian market with the single European market. We work closely together on energy networks. There are many themes where we collaborate closely and indeed, over time, (they) belong to us. They are one of us and we want them to join us, said the head of the European Commission, Ursula von der Leyen.

By country" Poland 6 Mar 2022 1.027.603 183,688 Other European countries 6 Mar 2022 10.6% Hungary 6 Mar 2022 180,163 6 Mar 2022 128,169 4.8% Republic of Moldova 6 Mar 2022 82,762 6 Mar 2022 4.6% 78,977 53,300 Russian Federation 3 Mar 2022 3:1% 4 Mar 2022

By the March 6, more then 1 million Ukrainians have fled to Poland since the start of the Russian invasion on 24 February.

"We are opening schools" for Ukraine



opening schools" campaign, the first Ukrainian school for children who had to flee the war is being established in Warsaw. IMMOFINANZ, one of the largest investors on the Warsaw office market, has put an entire floor (1,200 m2) in its myhive Mokotów Two office building at its disposal on a temporary basis. Architects from the XYstudio studio are working on adapting the space. The project is joined by construction companies that will provide

As part of the "We are

materials and contractors, and companies that will help equip the school. "We act for the sake of all children. We want children from Ukraine to return to the minimum daily routine as soon as possible," - says Magda Garncarek, the initiator of the campaign. "The last days are a big test for all of us - empathy, care and showing solidarity with those who suddenly find themselves in an extremely difficult moment in their lives," -commens Jarosław Retmaniak from IMMOFINANZ.



The EU should create a fund enabling refugees to exchange hryvnia for euro

Zbigniew Jagiełło, former president of PKO BP, the largest bank in Poland, argues that the European Union should, with the help of the ECB and the EBRD, create a European fund enabling each refugee (holding a document of crossing the EU border) to exchange a defined small amount of hryvnia into euros, for example, 250 euros. To do this,



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Hundreds of thousands of Ukrainian citizens crossing the border of the European Union are faced with a situation in which their money (hryvnia) is worth next to nothing. each of the refugees concerned would be able to set up a free bank account in the country where they crossed the border of the EU.

Hundreds of thousands of Ukrainian citizens crossing the border of the European Union are faced with a situation in which their money (hryvnia) is worth next to nothing. As a result of the war, it is no longer possible to exchange hryvnia for any currency in the country where they first found refuge (Poland, Slovakia, Romania, Hungary).

POLANDWeekly WAKEFIELD Partner: CUSHMAN & WAKEFIELD WAKEFIELD Partner: Par

- a speeding black horse



2021 was absolutely record-breaking in terms of the delivered space, and its resources already amount to 24 million sq m. According to Cushman& Wakefield, as much as 7.5 million sq m was leased during the entire last year and this result is over 50% higher than in

the corresponding period of last year. 4.5 million sq m is still under construction, which is almost 130% more than in the same period last year. The vacancy rate is the lowest in history and amounts to only 3.8%.







Segro Logistics Park Warsaw

WAREHOUSE MARKET GROWTH SHOWS NO SIGN OF SLOWING

The boom in demand in Poland's warehouse market continues, recording new records. In Q3 2021, new supply exceeded 1 million sq. m., bringing the total warehouse market stock to over 24 million sq. m. The continuing boom in the sector is also attracting new players to Poland.

Warehouses have become an indispensable element of the urban landscape not only in large agglomerations but also in smaller towns. Thanks to the development of the warehouse sector, many new locations have also been given a boost and thousands of new jobs created. The warehouse market is also considered to be the big winner in the battle against the pandemic. The sector has proved to be exceptionally resistant to cyclical changes, for example due to the dynamic development of the e-commerce sector.

Developers in the Polish warehouse market are therefore trying to keep up with the growing demand for space. According to Cushman & Wakefield, in 2021 it increased by as much as 40% y/y, reaching a record 7.2 million sq. m. In addition, 3.7 million sq. m. is currently under construction, nearly 150% more than in the same period of the previous year. Despite such a large number of new investments, there is still no shortage of people willing to rent warehouses, which is why last year the vacancy rate did not exceed 5%. Currently, the demand for space in this sector is generated primarily by retail chains, logistics operators and manufacturers, mainly from the food and FMCG sectors.

3.7 million sq. m.
is currently under
construction, nearly
150 percent more than in
the same period last year.

New locations in focus

Only five years ago the warehouse sector's stock amounted to slightly more than 11 million sq. m., and such facilities were built mainly in the vicinity of major According to developers, towns such as Legnica, Głogów, Częstochowa or Kielce have great potential in the warehouse sector.

agglomerations. Today, however, developers are launching a record number of new investments also in smaller towns. Their targets include new locations with good road connections and access to human resources. According to developers, towns such as Legnica, Głogów, Częstochowa or Kielce have great potential in the warehouse sector.

According to Damian Kolata, Partner, Head of Industrial & Logistics Agency Poland, Head of E-Commerce CEE at Cushman & Wakefield, the growing activity of developers means that by the end of this year, the stock of warehouse space is expected to have increased by more than 5 million sq. m. This means that the total supply in the warehouse sector at the end of this year will amount to nearly 30 million sq. m.

If the market continues to develop at the current pace, Cushman & Wakefield estimates that in the first quarter of 2023 it may already be nearly three times larger than in March 2016.

Warehouse has more than one name

At the same time, the functions of warehouses are changing more and more. Large distribution centers, as well as city warehouses and courier hubs are appearing in the landscape of Polish cities. Increasingly, warehouse space is also located in the vicinity of shopping malls and even next to stores.

A novelty is also the so-called dark stores - small warehouse spaces which appear for example in the place of former small stores in housing estates. Another trend are mixed-use projects which combine office, retail, residential



7r City Flex Warsaw Targówek

and warehouse functions.

Warehouse facilities themselves also combine several functions. They often house offices, research laboratories, as well as showrooms and pop up stores. The growing importance of the e-commerce segment also affects the development of courier and express services. Consequently, the interest in small urban warehouses, so-called quick commerce, is also growing rapidly. These types of facilities are built for the needs of the e-commerce sector and mainly enable quick deliveries in cities.

For the same reason, last mile logistics warehouses are also growing in importance.

Warehouse facilities that serve the e-commerce sector are also one of the fastest growing segments of the market today. Such warehouses are fully automated and enable delivery of goods even within a few hours of placing an order.

Warehouses are growing upwards

It is not only office buildings that are sprouting up in Polish cities, but warehouses are also on the rise. This trend is gaining in importance, for among other reasons, due to the lack of available land in suitable locations. According to experts, in 2022 there will be more warehouses built in the new standard, which is about 12 sq. m. These are the so-called high bay facilities, which are increasingly popular among investors and tenants. As a result, they gain more storage space, but calculated in cubic meters, because they do not increase the area calculated in square meters.

An example of a facility built in this standard, which additionally uses green technologies and automated systems, is the warehouse center developed by 7R for Żabka in Radzymin near Warsaw. Its construction began in January 2021 and will last until the end of 2022.

The new warehouse will not only be automated, but also energy efficient. The investor wanted to reduce the impact on the environment to a minimum. The building in the high bay part will be four times higher than a standard warehouse.

Robots and drones in a new role

The warehouse and logistics market is also characterized by in-



MDC² in Gliwice





creasing automation. Warehouse space tenants are increasingly opting for automation to streamline delivery and order picking. Modern warehouses are also being equipped with technologies controlling for example water consumption, or energy-efficient air conditioning and ventilation as well as lighting and heating/ cooling systems. Progressive robotization also means that some processes in warehouses are increasingly taking place without human intervention.

This is made possible both by the development of the Internet of Things and Artificial Intelligence. As a result, automated warehouse racks and forklifts, material handling systems and virtual assistants, among others, are used in warehouses today.

There are also automatic sorters that scan products using QR codes, or cobots, so-called cooperating robots, that pick packages. They are replacing humans and at the same time minimizing

and at the same time minimizing the need to employ, for example, people to work night shifts. Warehouse managers are also increasingly using advanced BMS systems (building management systems) to constantly monitor power and water consumption. Tools to help protect the facility, such as an advanced industrial monitoring system or REID tags monitoring system or RFID tags for reading car license plates, are also increasingly used.

Warehouse owners and tenants are also increasingly using drones, which can both patrol the area and monitor the technical condition of roofs, including, for example, the weight of snow cover on the roof.

Proximity and ecology count

According to experts, the warehouse market is today also the main beneficiary of so-called nearshoring. That is moving production from distant regions (mainly from China and South-East Asia) to Europe. The pandemic caused some of the supply chains to be disrupted, resulting in problems with the availability of many goods. The result of this trend today is a revolution in global supply chains.

As a result, proximity to markets is what matters most today. Many entrepreneurs try to min-



Panattoni Europe is an industrial space developer. As of the beginning of its activity in Poland in 2005, we have completed projects totalling more than 9 million square meters.

imize the risk of such a situation

recurring, hence the growing popularity of nearshoring.

More and more emphasis is also placed on ecological solutions in warehouses. However, today photovoltaic panels on the roof, beehives on the roof of warehouse halls or green certificates are definitely not enough.

Developers and investors of warehouse facilities must go a step further. As a result, today the green approach is much more standardized. It has a new name ESG (Environmental, Social and Governance). However, it is not only environmental factors, but also legal and, above all, financial changes.

Experts have no doubts that for companies it is also a chance to increase their competitiveness and most of all, to save money. They point out that the entire warehouse investment should be viewed holistically.

As a result, what matters today in warehouse facilities are factors such as better insulation of walls and roof, installation of LED lighting and intelligent lighting control systems. Warehouse investments are often complemented with the installation of an energy consumption system, as a result of which energy consumption in the building can fall by up to 50%. Photovoltaic panels and electric car chargers as well as planting plants are becoming a standard in warehouse facilities. Not ard in warehouse facilities. Not only green roofs, but also flower meadows, are appearing, which also has an impact on reducing carbon dioxide emissions.

According to experts, today ESG is not just an addon to the business strategy of developers, investors, or tenants, but simply a necessity. It is not only about new reporting requirements, but thanks to this companies can also gain a competitive advantage.

Damian Kołata, Partner, Head of Industrial & Logistics Agency and Head of E-Commerce in Poland, points out that today it is necessary, because the goal of the EC is to reduce emissions by at least 55% by 2030. In the following decades the greenhouse gas emissions are to be gradually

reduced, so that in 2050 the EU can achieve climate neutrality.

Poland as Europe's hub? According to experts, the boom in the warehouse market will con-tinue this year. The development of the e-commerce sector has also presented Poland with a new opportunity. They say that Poland may become one of the main beneficiaries of nearshoring.

This is confirmed by Joanna Sinkiewicz, Head of Industrial and Logistics Department at Cushman & Wakefield, who believes that Poland may gain in importance as a manufacturing and logistics hub for Western Europe.

According to the expert, companies already present on the Polish market, as well as those planning investments in the region of Central and Eastern Europe, will secure additional space to prepare for the risk of potential disruptions to the supply chain in the future.

What are our most important assets? We have well-developed road infrastructure, while another advantage is the proximity to Germany, the largest economy in the EU. This induces many brands to locate their distribution centers here today. Moreover, many of the planned distribution centers will serve not only Poland, but

a large part of Europe. The prosperity of the warehouse market in Poland also attracts new investors and developers. The Scandinavian fund NREP has begun its expansion in Poland's warehouse sector by finalizing the purchase of a 130,000 sq. m. logistics portfolio. The investor plans further activities in the warehouse segment. LCube, in turn, after starting an investment in Jasionka near Rzeszów, has recently launched its second warehouse project near Wrocław. The new investor has ambitious plans to acquire four more locations this year. One of them, a 60-hectare plot, has been reserved by the company in the western environs of Poznań. The developer is betting on diversification and diversified facilities, both medium-sized warehouses and traditional big boxes in the park.

However, this is not the end of new entries into this market. According to experts, this year we can also expect an increased interest in warehouses among entities that have to date been involved in other sectors of the commercial real estate market. Experts also agree that demand for warehouses in Poland and throughout Europe will continue to grow. This will be facilitated, among other things, by the forecast of further growth of online sales and the development of the e-commerce market, as

well as the expansion of tenants

from the manufacturing sector.

SELECTED SALE TRANSACTIONS Q4 2021								
PROPERTY	REGION	SELLER	BUYER	SIZE (sq m)				
EQT Exeter European Value Venture III	Multiple locations EQT Exeter		GIC	320,000				
Nexus	Bydgoszcz Sosnowiec Krakow Łódź Poznań Warsaw	ELI (European Logistics Investment)	CBRE IM	211,700				
7R Beskid Park II (phase I)	Upper Silesia	7R & VRE	Savills IM	54,800				

KEY LEASE TRANSACTIONS Q4 2021

PROPERTY	REGION	TENANT	SIZE (sq m)	ТҮРЕ
Panattoni BTS Będzin	Silesia	Carrefour	50,000	New lease (pre-let)
GLP Wrocław V Logistics Centre	Lower Silesia	CEVA	44,288	New lease (pre-let)
7R Park Łódź East	Łódzkie	Castorama	36,070	New lease
Hillwood Rokitno	Lubuskie	4PX	35,288	New lease

source: Cushman & Wakefield.

RENTS IN POLAND HAVE TO RISE

In 2021, construction costs in Poland rose 20% year-on-year and land prices by 30-50%. The market is also facing rising inflation.



Pawel Sapek
Senior Vice President and
Regional Head of Prologis
Central Europe

In response to these challenges, rental rates are growing and we see revenues balancing out replacement costs. According to the Prologis Logistics Rent Index, warehouse rents are rising across the whole of Europe. In 2021 there was record net effective rent growth of 7.2%. Everywhere ... except Poland. For over six years Prologis has been collecting, analysing and sharing data on rental rates. Reports prepared by the Prologis Research Department depict the reality of the international, European and Polish industrial real estate markets. These reports make it possible for us and our customers to identify trends and detect anomalies. They provide a valuable tool for consulting firms, logistics companies and investors.

This year the Index shows that the industrial real estate market in Europe is buoyant: demand, construction costs, land values, property values and rents are all increasing. In 2021, effective rents (net of concessions) rose 7.2% year-on-year, which is an alltime record. The only country to witness a reverse trend is Poland. where rental rates fell by 0.5% year-on-year. The difference between Poland and other countries becomes clearer when we analyse real rent growth (nominal rents minus inflation). Polish real rents are more than 30% lower than in 2007 and this gap will soon grow wider as a result of anticipated high inflation. The highest net effective rents observed in the main Polish markets averaged €32 per sq. m., much lower than the average for the rest of Europe at €57 per sq. m.

Last year we noted an enormous increase in costs in Poland. For 2022 we forecast a spike in rental rates that will counter-balance continuously growing replacement costs and the effect of inflation; this will, in turn, allow the market to maintain its growth-rate, catching up with the Western European markets and even

our southern neighbours. Rents are growing in all European countries, and in some at a double-digit pace. This stems from

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Polish markets averaged €32 per sq. m., much lower than the average for the rest of Europe at €57 per sq. m.



an increase in costs, on the one hand, and from limited supply combined with strong demand for warehouses, on the other In Poland we are dealing with a lack of transparency in rent structure. Side-letters are a common practice. In reality, this means that clients rent a warehouse at the specified price but receive additional financial incentives which are not disclosed in the primary lease agreement.

Non-transparent rental contract structures can bring unwelcome surprises when renewal discussions begin. Concessions undisclosed in the lease agreement lead to the risk of artificially inflated nominal rents and inaccurate project valuations. Understanding the true value of Poland's logistics real estate market and the inevitable rental growth is essential for its further development on a sound economic basis. It is also beneficial to clients and investors who need accurate information in order to make good business decisions.

Poland has immense potential to attract investors and deliver high yields. But if the Polish logistics real estate market is to maintain its dynamic growth, common standards of business ethics and fair competition must be adopted sooner rather than later.

WAREHOUSE SECTOR AS ASSET CLASS KEEPS GROWING

The growth of the warehouse sector in Poland is accelerating, breaking new records in both supply and demand.



Robert Dobrzycki
CEO and co-owner of Panattoni

It is benefiting from the e-commerce boom and the desire to locate distribution centers as close to the consumer as possible, as well as the trend for nearshoring and the increasing production activity throughout Europe. This made 2021 a breakthrough year for Panattoni and the sector. In 2021 we signed approximately 300 lease agreements for more than 3.2 million sq. m. of space - 1 million sq. m. more than the previous year. Panattoni's facilities were chosen by such companies as Zalando, LPP, Media Expert, Carrefour, DHL, DB Schenker, InPost, Solaris and Action. In total, the developer completed 1.85 million

sq. m. of BREEAM certified space last year, while another 2.8 million sq. m. is under construction. What pleases me the most is that the importance of this asset class is obviously growing. It is a matter of time when it is going to be one of the largest asset classes. It is also becoming more diverse in terms of different types of users, different sizes, different countries, different locations and new locations.

This is right for the whole of Europe, but Poland has several advantages over other countries on the continent. Its location, the fact that it is still a cheaper and more cost-effective market, and that it is still easier to find land here, to implement development projects.

Poland itself is a large market in need of warehouses, with a still low share of e-commerce. E-commerce needs three times as much space as traditional commerce, so the potential is considerable. Tenants are interested both in warehouses located in five major Polish regions and in emerging markets.

It should also be remembered that the warehouses built at our place, especially on the western wall, serve foreign markets - both production companies and ecommerce.

I would expect that in the coming years the supply of warehouses in Poland will continue to increase at a rate of 20%. We continue to see a huge shift in capital towards this asset class. Even in the context of inflation, the potential risk of interest rates going up, capital inflow and tenant demand are such they will keep yields at very low levels with the potential to compress further.

In total, the developer completed **1.85 million sq. m.** of BREEAM certified space last year, while another **2.8 million sq. m.** is under construction.



Even though we expect the rise in rents, rents in Poland are still attractive, lower than in neighboring countries. Unfortunately, this year the burden on tenants will be much higher than in the previous year, also due to the increase in utility costs and property maintenance costs.

As the leading developer in Europe we are on a wave of green transformation. 2021 was an extremely effective period for us in terms of the challenges of sustainable development and the green transformation of the commercial real estate sector. We announced our goal of achieving carbon neutrality by 2025. All our investments last year were notable for their minimal negative environmental impact, reduced CO2 emissions, reduced operating costs and the care taken for the wellbeing of the people working in them. Since the beginning of last year all of its new projects have been subjected to BREEAM certification to at least a 'Very Good' level. This confirms the quality of a building in terms of environmental protection, its comfort of use and its performance. Of course, our ESG strategy 'Go Earthwise with Panattoni' sets a new standard not only for buildings with solutions friendly to the environment, but we don't forget about "S" and "G" - employees and the local community.

E-COMMERCE, ESG AND AUTOMATION

Agnieszka Bulus-Trando talks to Damian Kołata, Partner, Head of Industrial & Logistics Agency Poland, Head of E-Commerce CEE,

Cushman & Wakefield

Let's start with logistics, which is currently very dynamic and changing under the influence of online sales. How does e-commerce affect logistics and warehouses?

The growing role of our country as a European logistics hub, as well as the further development of e-commerce, as well as turbulence in global supply chains mean that warehouse space enjoys and will continue to enjoy great interest. The most optimistic data show that in the US in the first three months of the pandemic, the e-commerce logistics market made a leap that could be achieved in 10 years of standard development. The warehouse is no longer a place where old men move around on forklifts, moving pallets from the frame to the pallet rack. A modern warehouse, primarily to support the electronic sales channel, is a place of many and varied processes, the existence of which is necessary to achieve and maintain a decent market position, on the one hand, and on the other hand, the implementation of which requires several times larger warehouse space. Experts say that modern omni-channel processes require threefold more warehouse space than standard pallet manipulations. We must be aware that the warehouse space is a picking place in the fragmentation of one item, and not as it used to be, just one pallet or at most a cardboard box. In addition, returns management and other value-added services have specific requirements that developers meet, and we advise on this in advance. The warehouse becomes a place of innovative processes, the coexistence of manual work and automation, as well as a comfortable social space where employees prepare for work, rest, eat a meal in a neat canteen, or wait for a transfer home, which is often covered by the employer. The new reality makes us look at the warehouse differently than before. This is what we do, and external conditions motivate us even more, bringing new challenges.

Staying with e-commerce. According to your report, parcel lockers drive this market. What is behind the growing popularity of parcel machines among Poles?

Delivery of a parcel to a parcel machine is the most frequently chosen form of delivery in Po-



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According to the report "E-Commerce in Poland 2021," prepared by Gemius, as many as 77% of online buyers use this form of delivery, which means an increase compared to the corresponding survey from 2020 by as much as 16%.

land. The domestic market is an absolute exception in this field in Europe. According to the report "E-Commerce in Poland 2021," prepared by Gemius, as many as 77% of online buyers use this form of delivery, which means an increase compared to the corresponding survey from 2020 by as much as 16%. In second place (50%) was courier delivery directly to home or work. As many as 81% of Poles who buy online, the form of delivery to a parcel machine is an element that motivates them to place an order. For obvious reasons, we don't always have time to wait for the courier at home. In the workplace, the possibility of collecting a package is also not a matter of course. Telephone contact with the courier in order to arrange a re-delivery is also often difficult. Certainly, not only for me, the adventure with courier delivery often ended with a visit to the far suburbs of the city in order to pick up a package from the courier's warehouse. For this reason, parcel machines have become the number 1 collection point in Poland.

It cannot be denied that the increasing popularity of parcel machines on our market is associated with ecology and care for the environment. According to the information provided by the largest operator of such devices in Poland, InPost, as many as 37% of respondents reach Parcel Lockers on foot. In addition, 61% of people using InPost services admit that they use Paczkomaty only when dealing with other matters. Moreover, 93% of respondents do not make a long way or drive a maximum of 5 km to reach the pickup point.

Research carried out by scientists from the AGH University of Science and Technology in Krakow has shown that by delivering many parcels to one place,

carbon dioxide is reduced by up to 95% and annual fuel consumption by over 20 million liters. A special calculator developed by InPost indicates that if traditional home deliveries were replaced with delivery to a parcel locker, CO2 emissions could be reduced by up to 75%.

The Polish parcel apparatus market is the largest in Europe. There are almost 20,000 points in our country. Undoubtedly, the biggest player is InPost, whose network already has 16,000 parcel machines. Many parcel machines are also located in smaller towns, which makes the company's offer available to many consumers.

The growing importance of e--commerce is one of the key trends in the warehouse and logistics industry. Automation is the second. However, as with everything, you also have to be somewhat wary here, because an automatic solution will not always turn out to be the best. So what solutions would you now indicate as the best, and which would you still consider? When discussing the automation of logistics processes, we should be aware that it is an indispensable element of today's logistics. Logistics which cannot be a cost center for companies and should not be seen as a place where the profit and loss account can be easily optimized in case of problems, but logistics as a place where a competitive advantage is achieved. Regardless of how clichéd this slogan is and how easy it is to fit it into many activities within the organization, logistics has certainly become a field that has proved, like no other in recent times, that its earlier depreciation can be disastrous.

A forklift, pallet, high storage rack, and even a warehouse management computer system is not enough to provide modern logistics services. Of course, we don't have to move to modern and fully automated centers straight from movies showing the outsides of Chinese internet giants. We should also remember that the implementation of automation will not be a magic wand that will quickly solve all sorts of ills. Also, not always will only automatic solutions be the best. However, it is worth bearing in mind that by fighting for better and better efficiency, eliminating bottlenecks in the sequence of processes, wanting to maintain greater precision and taking into account problems

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The growing importance of e-commerce is one of the key trends in the warehouse and logistics industry.

Automation is the second.

with access to human resources and increasing labor costs, automation will be an increasingly common solution.

If we add to this the saving of space (for example, the AutoStore system allows you to quadruple storage space without having to move to a new building, and at the same time improve the throughput of order fulfilment up to tenfold without hiring additional staff) and low energy consumption (completing robots do not use more energy than a domestic vacuum cleaner), as well as the invaluable help of automatic solutions in the case of occupational health and safety and the handling of hazardous materials, it seems that soon every warehouse will be equipped with at least partially automated processes. It is worth remembering that a warehouse worker spends up to 50% of his or her working time moving from one location to another, and the costs of picking constitute up to 50% of all warehouse costs. So each optimization in this area will be a significant saving.

Other trends that I would like to talk about are e-grocery, q--commerce, dark stores and dark warehouses. Please tell me about these trends and what is their development in the West and in Poland?

Another noticeable trend that connects last and this year is the boom in e-grocery and quick grocery shopping, which we became interested in in 2020, starting with the outbreak of the pandemic. Back then, the name q-commerce was an unclear cipher, now quick commerce is an increasingly frequent element of e-commerce, which consists of fast, even 10-15-minute - delivery of groceries ordered online, to the door of our apartment. Certainly, you have the opportunity to notice many times in the streets characteristically dressed cyclists and motorcyclists who carry their shopping in square bags. Readers

who are passionate about logistics will probably ask where these purchases come from. While in the initial phase they were simply made in stores, recently, in the largest Polish cities, they are being created like mushrooms after rain. Dark stores can be of various sizes - local stationary stores, but also large fulfilment warehouses with an area of several dozen thousand sq. m. (especially in the US, where dark stores are created in the place of liquidated shopping malls, as described above, and are called 'dark warehouses'). They are usually located in cities or right next to communication routes. In Poland, the concept of smaller dark stores is currently developing, which often take up places in commercial premises of housing associations and do not exceed 200-250 sq. m., with about 1,500 SKUs in their offer. Companies such as Lisek and Jokr have already launched over a dozen such surfaces that resemble a grocery store from the outside (see the photo below) and from which they fulfill orders within a radius of about 2 km from a given location. Bolt, Glovo, Wolt, Gorillas and such big names as Żabka and Biedronka (in cooperation with Glovo, as BIEK, i.e. Biedronka Ekspress) are also preparing to open similar concepts in the near future.

Importantly, q-commerce is also becoming more and more popular not only among customers, but also investors and venture capital funds. This year alone, these funds invested more than \$1.5 billion in express grocery companies, while over the previous year it was almost three-times lower (\$687 million).

Soon dark stores will appear not only in the supply of groceries, but also clothing. In addition, together with a warehouse in shopping centers and the FFS (fulfilment from store) system, they will create a new last mile supply network, which is much more efficient and effective. It is worth considering that, according to many industry experts, last mile costs range from 40% to even 55% of the total cost of supply chains. Hence, there are so many initiatives to optimize logistics and expenses for it in the field of city and last mile logistics, and to reorganize deliveries.

Let's talk about specific figures. How did the previous year close in terms of supply and demand, transactions and warehouse lease? Last year was an absolutely record-breaking year in terms of delivered space and its resources already amount to 24 million sq. m. It is also worth mentioning that as much as 7.5 million sq. m.

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were leased during the whole of last year, which is over 50% better than in the same period of the previous year.

In addition, 4.5 million sq. m. are still under construction, almost 130% more than in the same period of last year. All these record levels have not contributed to an increase in the vacancy rate. On the contrary - their level is the lowest in history and amounts to only 3.8%, which is 3 percentage points less than a year ago.

When talking about trends, we cannot forget about ESG, and in particular, care for the environment. In the past, people talked about photovoltaics in this respect. Now there are many more of these solutions. Please tell me what ecological solutions are used in warehouses and what are the benefits for the environment and savings for companies?

Last year, we noticed a real and ever-increasing emphasis on sustainable solutions. The European Commission climate target is to reduce emissions by at least 55% by 2030. In the decades to come, greenhouse gas emissions are expected to decline gradually so that the EU can become climate neutral by 2050.

It is important that ecology means huge savings. According to the calculations of various developers operating on the Polish market, with the use of photovoltaic panels, increased wall and roof insulation, LED lighting and an energy management system, energy consumption in the building drops by up to 50%. LED lighting consumes 90% less energy than a standard bulb. In turn, the intelligent lighting control system DALI (Digital Addressable Lightning Interface) adjusts the light intensity to changing environmental conditions. It uses motion sensors and activity diagrams, ensuring optimal working conditions and effective energy management. Electric car chargers, planting of vegetation, flower meadows or green roofs, in turn, allow for the reduction of carbon dioxide emissions by about 381 tons per year for a medium-sized warehouse. From the tenants' point of view, it is also important that green solutions affect

the well-being of their employees. The greenery around the building, relaxation zones, street furniture and bicycle infrastructure increase the efficiency of people satisfied with their workplace.

The last question is about the future of the industry. Do you see here rather a development towards last mile warehouses or rather large cross-border hubs focused mainly on export and import abroad?

E-Commerce and the pandemic have changed the supply chain tremendously. Many new types of warehouses have been created, both the last mile hubs mentioned by you, or areas targeted at cross-border e-commerce, but also sorting plants, return centers or locations that support only recommerce. The narrow structure of the traditional supply chain with only a central warehouse and possibly a few regional warehouses is a thing of the past. Nowadays, logistics chains have to cross at every order, pick-up, delivery and return point, which significantly extends the types of warehouses and their locations. So I am convinced that the coming months will bring the development of not only large hubs, but also smaller locations related to the CEP industry and the widely understood omni-channel phenomenon.

Space
has no boundaries

ADVENTIONS

ADVEN

POLAND'S LEADERS IN THE REAL ESTATE SECTOR

Gazeta Finansowa (Financial Newspaper), number 1 among economic weeklies on the Polish market and published since 1998, has recently published a report presenting real estate leaders with the biggest impact on the quality

of the Polish real estate market. The editorial team took into account how the companies they manage are perceived on the market, what their approach to innovation and trends (even those related to ecology) is and how they perceive the urban-creating role of developers. It was not about the number of square meters sold or leased or the number of delivered space. The Gazeta Finansowa team was interested in the human dimension of development activities. We present the first part of the rating (alphabetical order).



Managing Director at CBRE



working with CBRE in June 2010. Initially, he held the position of Office Director of CBRE, where he was responsible for conducting negotiations on the part of clients. Previously, he worked at CA Immo as a marketing and leasing manager. He also worked at Perfect Properties as head of the commercial real estate department. Since August 2015, Daniel Bienias has been the Managing Director of CBRE Polska, where he manages a team of almost 500 people.

Under his leadership, CBRE has gained the position of a market leader and the largest, most dynamically developing advisory agency on the Polish real estate market. He graduated from the University of Szczecin, Faculty of Marketing and Management. He also graduated from the Warsaw University of Technology in the field of real estate valuation and Postgraduate Studies in Construction and Real Estate at Sheffield Hallam University. He has a real estate agent license, a CCIM license - Certified Commercial Investment Member. He is also a Fellow of The Royal Institution of Chartered Surveyors.

Mateusz Bonca

CEO Poland at JLL

Mateusz Bonca ny on the Polish market. the Middle East and Af-

is an expert in strategic management. Since November 2020, he has been the Managing Director of JLL in Poland. He is the head of the team responsible for business and transaction consulting, managing the entire operations of the compa-Bonca also oversees the activities of customer support teams in Europe, rica and carrying out projects for other JLL units in the EMEA region. Prior to joining JLL, he was the President of the Management Board of Grupa LOTOS S.A., a leading fuel company in Poland. Previously, he worked at Deutsche Bank AG in Frankfurt, Peppers and Rogers Group Middle East in the United Arab Emirates, as well as at McKinsey & Company in Poland. Bonca gained experience in customeroriented environments, international B2B strategic consulting, responsible for designing and implementing changes in several countries on four continents and in various sectors: from banking and finance to energy.

Michał Ćwikliński

MRICS Principal, Managing Director – Poland at Avison Young



enhancing firm's performance and with these contributions to AY, he was invited recently to become a member of the Global Executive Committee.



Robert Dobrzycki

CEO and co-owner Panattoni Europe

Robert Dobrzycki has been leading Panattoni, the European arm of one of the largest industrial developers in the world, since 2005. Prior to joining Panattoni, he was employed by Menard Doswell & Co, where he started in 1999 as an accountant. In just a few years he was promoted to Managing Director. He is a Member of the Royal Institution of Chartered Surveyors and holds a Master's degree in Management from the University of Warsaw.

During Dobrzycki's 16 years of dynamic leadership, Panattoni has built over 14 million sq. m. of space across Europe, becoming the main development company on the continent. The company is active in many markets, including the UK, France, Italy, Germany, Po-



land, the Netherlands, Spain, Sweden, Austria, the Czech Republic and Slovakia.

For the past 5 years, Panattoni has been annually recognized by PropertyEU magazine as the best logistics developer in Europe, thanks to the commissioning of the largest amount of industrial space.

Władysław Grochowski

President and co-owner of the ARCHE Group

President of the Management Board and co-owner of Arche, a hotel and development company. A graduate of film school, a born optimist who loves people and the world. Arche has created

a Polish chain of hotels, mainly in historic buildings. There is a different idea for each of them. Combining old and modern elements creates a new value, a new life for the object, and the guest feels these positive emotions. Grochowski tries to make what he does make sense and

give him pleasure in his work. Grochowski undertakes difficult projects, which evokes strength, but also teaches humility. He says he's very lucky in everything. In life, in the company, in relationships, trust helps him. Employees and customers of the company trust

him, and he tries not to disappoint anyone. Grochowski thinks all people are honest, that's how he perceives them and they are like that. His motto, which he also introduced to Arche,

is: we connect contradictions, we trust everyone, we change ourselves. Together with his wife, Lena, they founded the Lena Grochowska Foundation, which provides housing and work for repatriates from Kazakhstan. The Foundation also organizes non-professional art competitions - "We are looking for Nikifor", open-air paintings and exhibitions, camps for children from Ukraine and work for people with disabilities in ceramic and tailoring workshops. Winner of many awards and distinctions for individuals and for the activities of Arche.



Krzysztof Misiak

Head of Cushman & Wakefield Poland

Krzysztof Misiak has worked for global real estate services firm Cushman & Wakefield for almost 15 years. He was appointed Head of Regional Cities in the Office Agency team in 2012 and successfully launched the Cushman & Wakefield brand in Poland's core regional markets. In 2018, he became Head of the Office Agency. In April 2020, he took on the role of Head of Cushman & Wakefield Poland. One of the best-known professionals in the Polish commercial real estate market, Krzysztof has acted on close to 400 leas-

es for more than 700,000 sq m. Despite market challenges during the pandemic, his strategic decisions helped to maintain and improve business profitability. With his energy and innovative management approach, he inspires not only clients and partners, but also his employees whom he treats as equals irrespective of their position within the organisation. He takes other people's opinions seriously, but he has a clear vision of the future he would like to materialize shortly to bring a brand new quality to the Polish commercial property market.

Kinga Nowakowska

Board Member, Operations Director at Capital Park Group

Since 2007, Nowakowska has been associated with the Capital Park Group, where she is a member of the Management Board and serves as the Chief Operating Officer. She is involved in the largest projects carried out by the group, inter alia Royal Wilanów. Since 2009, she has been responsible for the implementation of the prestigious revitalization project of the Norblin Factory in Warsaw. Nowakowska is responsible for managing the company's projects in the field of asset management. She is the author of

the Biuro Plus concept, according to which individual solutions are implemented in each of the Capital Park Group's projects to support the needs of tenants. They are based on high-quality architecture, ecology and sustainable development, greenery and quality of the environment, promotion of sport and physical activity, art and culture in common spaces, a wide range of services and a creative approach to asset management.

Nowakowska founded and runs a network of Business Angels – the Black Swan Fund – investing in

start-ups managed by women. She is a member of its Management Board. The fund invests in start-ups from various industries. One of its most interesting investments is BioBazar – the first market in Poland with organic, certified food, which has been operating on the Warsaw market for 10 years.



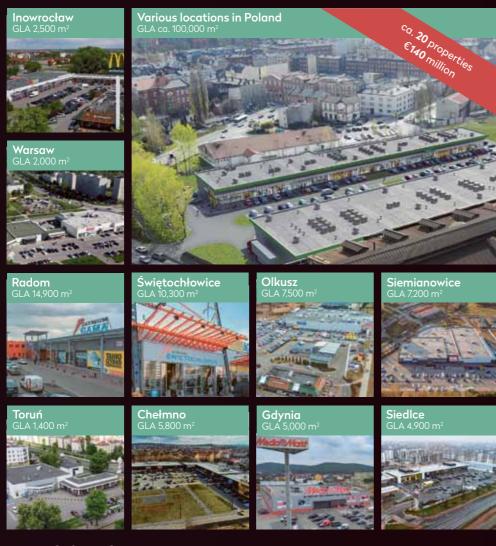
Renata Osiecka

Managing Partner at AXI IMMO Group

Founder and owner of AXI IMMO, a company specializing in comprehensive advisory services on the commercial real estate market in the warehouse, land, office and investment sectors. She has many years of experience in the commercial real estate market, managing teams and advising investors on real estate acquisition and sale projects. Osiecka headed the department responsible for the growth of de-

velopment projects in the CEE region and managed the real estate portfolio of one of the largest global warehouse developers. Osiecka's firm conducts active international activity cooperating with European and global real estate organizations. She herself has served as European Chapter President of SIOR and is a member of MRICS. In addition, AXI IMMO is the only Polish partner of Gerald Eve International.

ADVERT



AVISON YOUNG

Leading advisory agency in terms of retail park transactions volume in 2020-2021.



ca. 162,500 m² total GLA



> **€200** million total volume

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Adam Białas

THE REAL ESTATE MARKET LEADER ABOUT NEW CHALLENGES FOR THE ENTIRE SECTOR

Adam Białas talks to Michał Sapota, president of Heritage Real Estate Investments, about the key challenges that are ahead of the market.

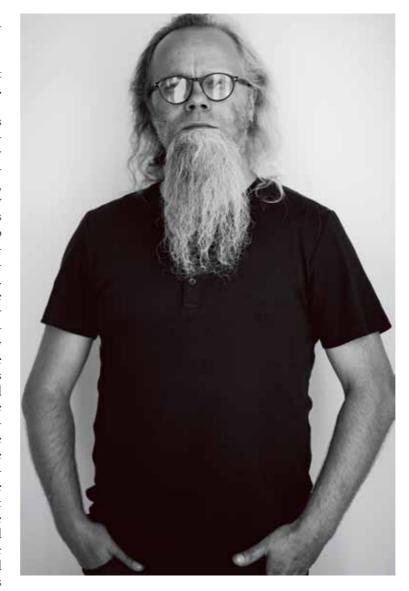
Heritage Real Estate Investments is one of the largest players on the residential real estate market in Poland. The company is not a classic developer, but a type of modern investment fund that is active in various business fields, hence its portfolio includes a prefabrication factory, developing the investment market in the real estate sector, HRE Investments, as well as the country's leading analytical team HRE Think Tank. The gross value of assets managed by this independent holding company operating as a private equity fund already exceeds EUR 1.3 billion (PLN 6.3 billion) and is growing. The innovative approach to the real estate sector is not a coincidence, but the result of extensive market experience. The head of Heritage Real Estate Investments is Michał Sapota, who had previously built another giant in the development sector from scratch. Two years later, he returned to the game, and in a big way, as Forbes Polska magazine described - "with a plan to build 10,000 apartments per year."

The key to the current success was a different approach to building housing. Most companies in this industry put aside capital for years and every year increase their production capacity by several percent, not being able to build 1,000 apartments a year from scratch, unlike HRE Investments. The company's structure also provided new operational possibilities, allowing for a quick response to market needs.

According to the National Bank of Poland, the value of flats on the Polish market increased by 13.5% in the year and in total amounts to almost PLN 5 trillion. Eurostat data place Poland among the European countries with the highest share of the primary market in the total value of real estate sold. The biggest obstacles to development companies in Poland include the aforementioned lack of investment land, slow administrative processes lasting for years, extending the investment cycle up to 7 years, and rising prices of building materials and labor. The last factor strongly stimulates the development of prefabrication and modular solutions.

Currently, the most important topic is the war in Ukraine. How do you rate the situation? It is an unlawful, thoughtless and senseless Russian aggression against Ukraine. This is our war, just not in our area. As estimated by the United Nations, up to five million people may flee the country. Mostly mothers with young children who had to suddenly leave their homes before the hell of war. Their husbands fight bravely in the war. Many foreigners work in the construction sector, so the war affects some investments in Poland due to the sudden outflow of Ukrainian workers who have to defend their homeland. This deserves special respect and solidarity. Heritage Real Estate Investments immediately undertook a number of assistance activities, from shipping the most necessary items to preparing a long-term assistance strategy. We certainly will not leave our friends in need. The situation our friends have found themselves in requires specific and decisive action. We extend a helping hand to our neighbors in solidarity. We decided to provide financial support, realizing that this is a drop in the ocean of needs. Europe is not yet aware of the enormity of the pain, suffering and the scale of the devastation. Such enormous solidarity and unification of our peoples is positive. I hope that Ukraine will join the structures of the European Union and NATO as soon as possible.

The construction industry is a measure of the health of a strong economy. Without a doubt, the words "war", "crisis", "inflation" and "challenge" will remain the most popular of this year. Exactly a hundred years ago the world was recovering from the worst Spanish flu epidemic in history and in the next decade the worst economic crisis in the history of capitalism took place. Virtually all countries and sectors of the economy were hit and that led



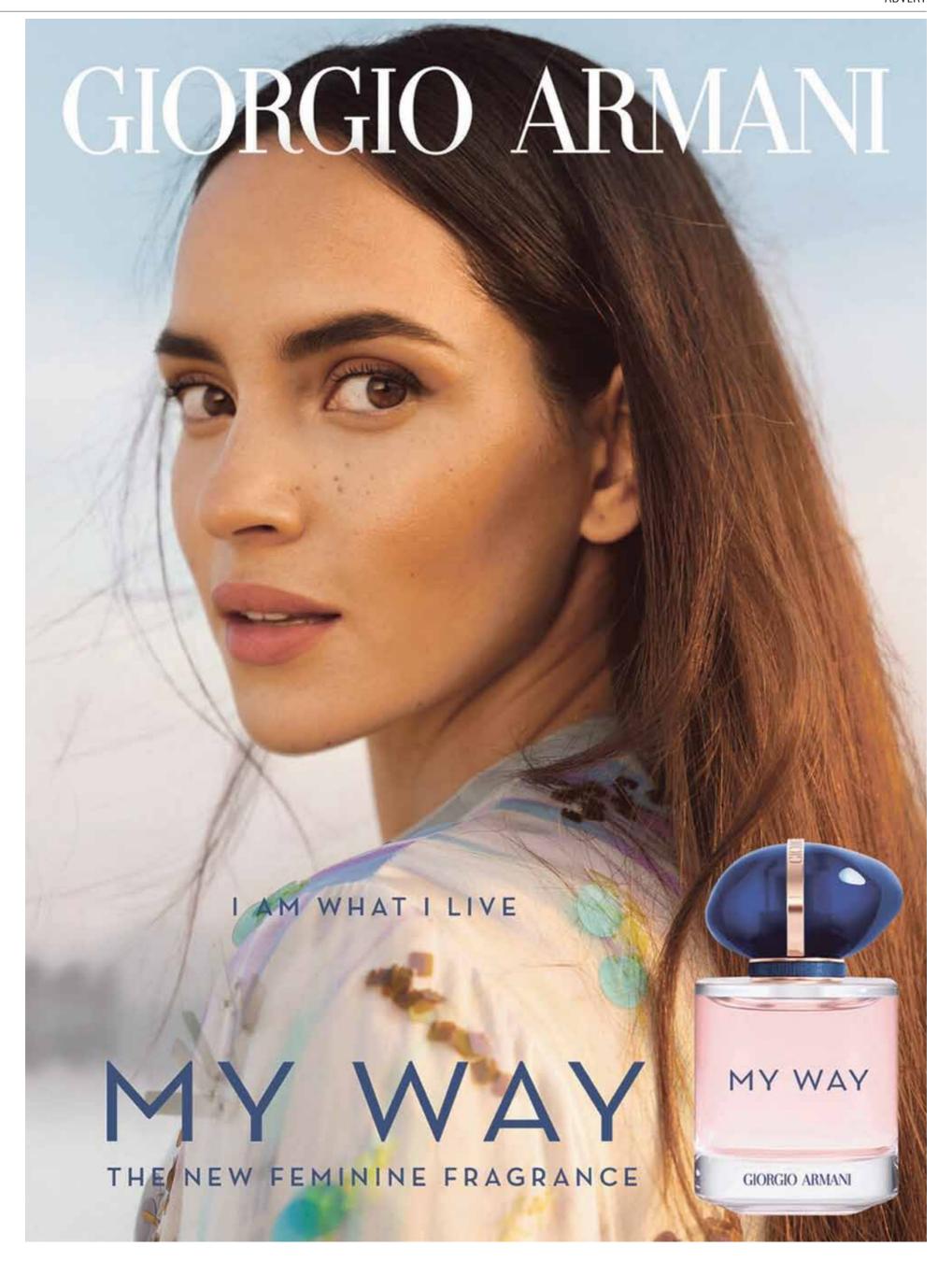
to the outbreak of World War II. How do you assess the prospects for this sector in Poland? In the last decade, the real estate market, both commercial and residential, has gone through a phase of rapid growth. Poland has one of the lowest housing availability rates in Europe, with an estimated 2 million shortages, and one of the lowest average number of rooms per person. Last year, almost 235,000 sq m was commissioned of new houses and flats in Poland. This is the highest result in over 4 decades. It is important to stimulate growth, e.g. by funds from the EU budget for 2021-2027, as well as from the Reconstruction Fund, and this is a total of PLN 770 billion. The situation is very dynamic and multi-factorial. Nobody can estimate the scale of the increase in costs and the decrease in the availability of construction workers yet. We

Last year, almost 235,000 sq m was commissioned of new houses and flats in Poland. This is the highest result in over 4 decades. It is important to stimulate growth, e.g. by funds from the EU budget for 2021-2027, as well as from the Reconstruction Fund, and this is a total of PLN 770 billion. The situation is very dynamic and multi-factorial.

have different scenarios prepared. I think that the situation requires the development of new solutions that will quickly give permanent shelter to the refugees and at the same time allow for the reconstruction of a war-torn country as soon as possible. This will be the biggest challenge of the next decade and we must be ready for it.

In the current situation, we need strong leaders, including business leaders, who will ensure that companies continue to provide jobs and generate budget revenues. After looking at your portfolio several times, you were the first to see what others have not seen. Where do you see the field for activity in the current situation and what are its most important directions?

As I said before, it is important to prepare a few flexible variants. Surely everyone should fully commit to helping Ukraine, there is no time to wait! Two years ago, due to the outbreak of the Covid 19 pandemic, we canceled our presence at MIPIM, our sector's most important event in Cannes, held in mid-March. Our plan was to present new models of cooperation and the possibility of their implementation in other markets. We will work together to develop this sector, offering investors attractive and diversified real estate-based products. For example, the continued lack of REITs in Poland entails considerable restrictions for potential investors. This business model, which has been working in the United States, United Kingdom and Germany for many years, won't exist in Poland for a long time. The main problem is the legislative background. It is a pity, because this is a great opportunity to invest in real estate without the need for large savings. This year we decided that we would go to Cannes to support also Ukraine and that the business world, outside of our country, would remember and join in offering much needed aid and charity campaigns. Colleagues from other companies from all over Europe can also help in many ways!





RIGHTEOUS ANGER

While Ukraine is fighting, all eyes turn to its courageous people who are now relentlessly standing up not only for their freedom, but also for the key values that are the foundation of our Western world. Anastasia is a 22-year-old university graduate, who for the past few years has been working and building her future in the city of Lviv. Even though she has a family and friends in Poland, she decided to stay in Ukraine and wouldn't have it any other way.

Thursday, February 24th. Tell me about this day - what did you think? What did you feel?

Terror. It was so overwhelming! I did not expect that to happen - I was quite naive, actually. I though that there is no way that in the civilized world like ours there could be war at any day. It was just stupid to think. But right now it's different. Today it is mostly anger - righteous anger - that keeps me going.

This anger is something we can see in the news everyday - right next to the incredible bravery of Ukrainians...

It is all connected. You have your freedom and consider it your birthright – a basic human right. Then suddenly you have it taken away from you by someone you don't even know. It definitely makes you angry. And this is probably what makes our army so powerful and all of us so powerful. When we heard how our army is protecting us we felt even stronger urge to go outside, do the work, to volunteer, to donate blood, to make camouflage netting, to collect and prepare bottles for Molotov cocktails. Even the smallest of tasks to do gives us strong motivation.

At the moment of our conversation the situation in Lviv is quite stable.

Yes. We had relatively peaceful few days. Everyday we hear sirens but thankfully the alarms pass quite quickly and we can get back to our tasks. The first siren we heard in Lviv was the

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The first siren we heard in Lviv was the first morning of the war. It was completely terrifying and my first thought was of course to flee the city and stay with my family which is far West, very near to Polish border.





first morning of the war. It was completely terrifying and my first thought was of course to flee the city and stay with my family which is far West, very near to Polish border. I also got calls from my family and friends in Poland offering place to stay, urging me to come.

But you refused...

I couldn't do it. I thought - if everyone goes, who is going to do the work? How can I really protect my family? Everyone I love is in my home village but all I can do if I go, is just sit in one place and probably go crazy feeling helpless. I needed to act.

I cannot imagine it any other way. The work we're doing here is exhausting, both physically and mentally. But we do it not because someone told us to, but because it's the only way to win this battle. Unfortunately many people, not only Ukrainians, who live in safe regions or outside the country have this 'survivor's guilt' for not doing the most they can to help. And my heart breaks for every person who feels like that. It's so important to know that even a simple message with kind words or re-posting information on social media does make the difference. I want to thank everyone for that.

What do you do now, how does your day look like?

There is a kitchen here where we prepare food for soldiers and refugees. One time we spent all day just cutting onions. Everyone who can comes here and do whatever needs to be done at the moment. You don't expect it but people keep coming and they keep doing the job. It is so important because there is so much to do on every level you can imagine. And you can feel how much stronger we are together. Then we give out food to the refugees - there are a lot of them in Lviv. Me and my friend spend around 7-8 hours outside doing it. And then there are multiple other things to do depending on the current needs. Everyone is doing their best, staying focused.

The train station in Lviv is constantly filled with refugees. Can you tell me what is the situation there?

We are working there with women and children. We give away food, hot beverages and organize place to stay while they are waiting for the trains. We talk to them and comfort them. It is hard to see so many people with babies as young as few months or even few weeks. Elderly mother and daughter who were trying to flee to Poland but the mother suddenly felt sick and couldn't get on the train. Pregnant women with young kids. A family who was

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begging us to find shelter for their beloved dog they couldn't take with them. It's tough. But it is still amazing to be able to make these kids laugh and forget about what's going on. A lot of emotions here - I cannot even put it into words.

At the moment we speak, over 670 thousand refugees from Ukraine are already in Poland and more are on the way. Do they trust they will find here what they need the most right now?

I would say that the main feeling that rules any railway station in Ukraine nowadays is anxiety and horror of being displaced from your home, taking the bare minimum of your stuff and going into the complete unknown. Thankfully I've heard so many uplifting stories about amazing Polish volunteers and thousands of regular people who are willing to help each and every one of our citizens. People feel much better knowing that there is peace and safety waiting for them and their children ahead. There is hope in their eyes.

Your president, Volodymyr Zelensky impressed the entire world with his strength of character and leadership in this darkest of hours.

We are so grateful for him! Nobody actually expected this kind of resistance. He stood up for us and he keeps fighting and this is so inspiring. We need him very much and Ukraine will fight till the end.



Katarzyna Braiter
Editor in Chief

I wanted to do a short interview with you, learn about your passions, travels and work with foreigners. It would fit in very well with the policy of our newspaper. Unfortunately, times have changed and the concept of the interview had to change as well. We live in a new world that you have entered wonderfully into. Therefore, the concept of the interview remained, but the topic is unfortunately different. Mariusz, what has given you almost sleepless from the first day of the war in Ukraine organizing multiple help for Ukrainian citizens?

I got to know Ukraine in 2005, also in a turning point for the country. After the Orange Revolution, this was the first time I really found my way to a country that I fell in love with. There I met wonderful people with whom I am in touch every day

Q&A WITH A FRIEND

Kasia Braiter, our editor in chief, talks to Mariusz Markiewicz, a lawyer from the Catholic University of Lublin and owner of a work agency, traveler, lover of good cuisine and a good man.



and I just try to help as best I can. I know that you work with Ukrainian citizens, so you know them very well. You know the good and not so good sides that each of us has. And still help? Now we put everything aside, both the good and the bad. For

Poles always unite around tragedy.

I hope it will change us for the better.

the past week, Ukrainians have shown the world their determination in the fight for freedom. It is a great and heroic nation

You have organized a help center in your hotel in Raszyn (close to Warsaw). You are looking for housing, you collect the necessary things. Action all the time. How long will you have enough strength?

I do not think about how much strength I have. When I feel tired, I think about all the people who are defending themselves in Kijow who need our help. I think about them and what they are going through right now.

You know Ukraine very well. What are your hopes for an end to this war?

I hope for a quick end to the war and for Ukraine to win. President Zelenskiy is able to defend his country effectively with his attitude and thanks to the help of the West he can win this war.

Poles still show great solidarity with Ukraine. They rush to help. Where do you think this comes from?

Certainly because you have to help everyone in need and Ukraine is in need. People die and lose their homes, all their belongings. No good person can see this tragedy indifferently. We, Poles, went through a lot of bad experiences, we were also helped. A heart is - simply - what is needed. And we, Poles, have beautiful hearts, which we are showing now. Also foreigners living in Poland are trying to help. Within days, we will receive material aid from various embassies to pass it on. In this situation, anyone who can help.

How do you think this open Polish heart will change us for the better as a result of this human suffering?

Poles always unite around tragedy. I hope it will change us for the better.

What else would you like to tell your Ukrainian friends?

I talk to my friends on the phone every day. They know that I am with them and tell me not to come back to the war because I can help them more from Poland. I think about them every day. Ukrainians are great and courageous and have the historical leadership of President Zelensky. I hope someday I'll have a chance to meet him.

WE DON'T WAIT - WE ACT!

Over half a million people have had to flee from the unlawful, thoughtless and senseless Russian aggression against Ukraine. The vast majority of mothers with children seeking shelter ended up in Poland. The Arche Group has opened all its hotels for them, with 5,000 free rooms and meals.



Adam Białas

Arche decided to open

16 facilities all over Poland and its Ecoboxes, i.e. Siedliska Arche comfortably adapted and equipped sea containers. The company has also prepared for refugees in need of help at two other shelters in buildings not belonging to the company and is looking for more. The appointed crisis team coordinates and supports the activities of individual facilities, which include the help of the local community and all people of good will. The owner of Arche, Władysław Grochowski, is known for his charity work at the Lena Grochowska Foundation.

"We don't wait, we act! Frsinceom Saturday we have already accommodated 2,000 people in free accommodation with meals and we are prepared to receive 3,000 refugees. The situation is very dynamic, we are adapting and retrofitting conference rooms and looking for more premises that can be adapted to the current needs. We have secured PLN 5 million from our financial reserve to cover the related costs, and

we will worry about rest later. We understand that this is a gigantic challenge and we will need your support," says Władysław Grochowski, President of the Arche Group.

The Lena Grochowska Foundation supports the activities of the Arche Group by organizing collections and logistics. In just a few days of work, they organized several dozen thousand non-stop places, placing

refugees in hotels, as well as in places of collective accommodation. They also launched the procedure of relocating people to private houses and apartments. Currently, the Foundation needs our support. Data for payment of individuals and companies. Lena Grochowska Foundation, account number

Foundation, account number 68 1240 2685 1111 0010 5805 1659 with the line "Ukraine".

"We appeal to companies to provide material gifts, we need mattresses, beds, bedding, duvets, towels, as well as food, hygiene and chemical products in bulk. Contact for producers and wholesalers of the above-men-



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tioned materials by e-mail (ukraina@fundacjalenygrochowskiej. pl). I am convinced that joint actions will contribute to the improvement of the situation of our sisters and brothers who are leaving Ukraine at war, whose current fate is in our hands. Companies that provide donations apply to the foundation today, but the needs are so huge that any help is extremely valuable. However, we must prepare for long-term actions and solving further problems resulting from the greatest humanitarian crisis in Europe in the 21st century," says Aneta ŻoIn. The company often calls for joint relief efforts.



photo credit: Adam Białas

POLISH GAMING INDUSTRY CONQUERING THE WORLD

There are few business sectors in Poland which are developing as dynamically as the gaming industry. The domestic gaming market is growing so rapidly that it has already become a leading player on European and global markets and all indicates that this position will continue to grow.

Record revenues and the role on the Warsaw Stock Exchange

The might of the Polish gaming industry is proven by the numbers and statistics. The Gaming Industry of Poland 2021 report, prepared by the Polish Agency for Enterprise Development and Indie Games Poland (in cooperation with the Ministry of Development and Technology), shows that in 2020 the revenue of the domestic gaming industry amounted to as much as 969 million euros (4.5 billion zlotys). Year-on-year, this is an increase of nearly 30%. Significant growth has been recorded for three years running.

The Polish gaming market also has a strong position on Europe-

According to various sources, in 2021 there was at least 470 gaming companies in Poland, employing 12,100 people, which is a 24% increase in comparison to 2020.

an and global markets. In 2020 it was valued at \$924 million (an increase of 17% year-on-year), which placed Poland in a very good 19th place in the world. This can be seen, among other things, in the number of Polish language versions of Western games. The Polish games market looks even better in the global ranking in terms of the number of gaming companies on the stock exchange. There are as many as 39 (11 and 28 respectively) companies from the industry listed on the Warsaw Stock Exchange, on the main market and on New Connect. This ranks Poland second in the world, just behind Japan. It is also worth stressing that in 2020 Poland achieved higher exports of games than imports; over 600 productions are developed annually in Poland. Furthermore, Poland is already the third largest exporter of video games (annual export value amounts to \$1.5 billion), behind Japan (\$2.7 billion) and China (\$10 billion).

Growing employment

Employment in the domestic gaming sector is on the rise and the structure of the workforce flow is changing. According to various sources, in 2021 there

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was at least 470 gaming companies in Poland, employing 12,100 people, which is a 24% increase in comparison to 2020. As the authors of the report "The Game Industry of Poland 2021" point out, the largest increase in employment was recorded in Ten Square Games, People Can Fly and Flying Wild Hog. Out of 470 studios, 19 employ more than 100 persons. Women constitutes every fourth employee in this industry, which positions Poland as a world leader. Only the UK has a greater percentage in that category.

Interestingly, Poland ceases to be an exporter of specialized gaming professionals and increasingly attracts experienced workers from abroad. More than ,000 foreigners work in the domestic gaming sector.

Influx of players and consumers The development of the domestic games industry is strongly influenced by the changing needs and preferences of consumers. Poles are already spending more

Polish e-sports sponsorship market in 2021 was about PLN 32 million, which constitutes 3% of the total sports sponsorship market. on games than on cinema, books or VOD platforms. This stems from the fact that more and more people are seeking entertainment in the virtual world and this trend will continue to grow, along with continuing digitalization. According to the report "The Game Industry of Poland 2021" there are more than 20 million gamers in Poland, of which 49% are women and 80% are adults.

The Steam platform results show that Poles are one of the largest groups of gamers world-wide. Poland, on the other hand, occupies 9th place (with 30.28%) in terms of localization. Only German, French, Spanish, Italian, Russian, Chinese, Portuguese and Japanese are higher. However, according to a Forbes study based on a Newzoo study, in 2020 mobile games were most prevalent among Polish gamers (50%), followed by PC and social media games (ex aequo 31%), browser games (24%) and console games (22%).

List of leaders

The list of the biggest Polish game developers is interesting. For many years CD Projekt with its headquarters in Warsaw and branches in Kraków, Wrocław and Los Angeles, was the undisputed leader. The value of the company, which obtains over 96% of its revenues from foreign sales, is estimated at around PLN 40 billion. The worldwide fame and recognition of CD Projekt was ensured primarily by "The Witcher" computer and mobile game series. It is worth noting that on 2nd April 2020, the Polish gaming giant became the highest valued company on the WSE, surpassing such giants as PKO BP, Orlen and PGNiG. Other brands which are also included in the domestic top group are: 11 bit studios with its headquarters in Warsaw, Wrocławbased Ten Square Games, Kraków-based All in! Games, as well as PlayWay, Flying Wild Hog and People Can Fly.

E-sport on topThe Polish gaming industry is



Grzegorz Słomkowski Member of the Board, Polish Investment and Trade Agency

PAIH has worked with a number of Polish game developers, mainly supporting the promotion of their games. Among others, CD Projekt Red cooperated with the Tokyo office and 11bit Studios worked with the offices in South Korea and Vietnam, with regard to contacts to marketing agencies, social media influencers, streamers and local game developers. It is important to note, that the gaming industry's access to markets is through world-wide platforms like GOG, Steam or Epic Games. PAIH's usual role of finding distributors, connecting to business partners and ensuring smooth communication isn't as needed there as it is in other sectors. PAIH does however have unique knowledge of the foreign markets, relationships with local companies as well as an understanding of the culture and trends, which the gaming industry can use to assess the best approach to marketing their products. Additionally, as the world of fintech becomes intertwined with the gaming industry, through various play-to-earn and tokenization mechanics, PAIH is looking to explore new avenues of support.





largely driven by e-sport, which is slowly ceasing to be simple entertainment and becoming a way to spend free time. This is evidenced, among other things, by the creation of the Polish E-sport League (PLE) in 2017, organizing professional games and tournaments for professional players. Interestingly, such competitions are very popular among fans, as evidenced by audiences filling the largest halls in Poland.

The recently published PLE summary report shows that the value of the Polish e-sports sponsorship market in 2021 was about PLN 32 million, which constitutes 3% of the total sports

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"The Game Industry of Poland 2021" there are more than 20 million gamers in Poland, of which 49% are women and 80% are adults.

sponsorship market.

The fact that e-sports has a bright future in Poland is also confirmed by investments in this sector made by well-known and influential entrepreneurs and athletes, such as Bogusław Leśniodorski, Jakub Szumlewicz, Dariusz Mioduski, Robert Lewandowski and Marcin Gortat.

New trends and challenges

The success of the Polish gaming industry would not be possible without the creativity and flexibility of game developers. Since this is an extremely dynamic market, both qualities are required in this business need to be at the highest, global level. In order to satisfy the tastes of domestic and international consumers, Polish games are becoming more and more expanded and refined every year, both

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in visual and story layers. Changes are also enforced by new trends and needs, such as a greater interest of women in games and the growing spending of Poles on games. It is also evident that interest in mobile games has significantly increased. However, according to analysts this does not mean that they are going to replace PCs, consoles or games on social media. Most likely we will see a greater diversification - more and more titles will be released for different platforms.

A bright future

Taking into consideration the dynamic development of the Polish games industry to date, the plans and investments already made by companies and the growing interest of Poles in games and gaming as a lifestyle, we should expect even greater prosperity in the coming years. It is estimated (based on "The Game Industry of Poland 2021" report) that the total value of the consumer games market in Poland will reach over \$1.2 billion in 2022.

Analysts of the games market indicate yet another foundation for the development of this in-

game industry, launched a new specialization in the 2020/2021 academic year - Video Game Management. We work with the best practitioners in areas directly and indirectly related to video games, who transfer not only knowledge, but primarily teach practical skills. The studies combine selected elements of the fields of study: management, project management, HR, marketing and PR and production. They are characterized by a strong emphasis on learning foreign languages, in particular English, which is used by the gaming industry in Poland and around the world. In the course of the studies, participants will acquire leadership and production skills that will enable students to find employment in game production companies. In addition, students will have the opportunity to learn and understand the latest trends in game technology.

Dr. Martin Dahl

University

dean of the Faculty of Economics and Management at the Lazarski

The video game industry in Poland is growing at a rate of 30% annually and more than 12,000 people have already found work in it. Many Polish students are interested in this sector and their professional future is connected with it. That is why the Łazarski University, in cooperation with the leaders of the video



Łukasz Mach CEO, Imagine Power S.A.

The Polish gaming industry has come a really long way in the last two decades. From the legendary times, the so-called 'demo scene' created by avid amateurs in the 90s, to the first business successes of

The Witcher series and Techland games in the early 2000s, you could feel its potential. 10 years ago Poland was associated primarily with the success of CD Projekt. And although this company has an obvious impact on the reception of our industry to this day, it is no longer a lonely island. Many Polish companies were incredibly successful in the global gaming market in the last few years. Dying Light, Frostpunk, Superhot, Sniper: Ghost Warrior, Car Mechanic Simulator - these are just a few successful games from Poland and we could find similar success stories in nearly any gaming genre.

The Polish game dev professionals and industry veterans are now spread all around the world in top global companies like Blizzard, Riot

Games, Naughty Dog (and many more!) both in core development, but also in the publishing business. These people were responsible for many Polish success gaming stories and now they fuel the global industry. It is worth underlining that the Polish gaming industry's success is absolutely beyond any comparisons when it comes to the Polish economy - if you look at it from the right perspective there's no surprise we have so many companies for the industry listed on WSE and NewConnect. Poland is now widely considered as the gaming industry leader by many media and industry professionals worldwide and it is a result of amazing work put into their games by passionate developers from our

dustry. Currently, Polish universities offer 60 faculties related to the computer games industry and over half of them educate programmers (e.g. Wrocław University of Technology, University of Gdańsk, Warsaw University of Technology). The increasing gaming community, combined with the dynamic development of exports and the expansion of 5G networks, may increase interest among young people in education related to the development of games.

