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The programme aimed to develop and promote the economic potential of the city of Łódź and the Łódź region is carried out as part of the project entitled "Economic internationalization of enterprises from the Łódź region by means of dedicated promotional activities and territorial economic marketing", which is co-financed by the Regional Operational Programme for Łódzkie Voivodeship 2014-2010.



REPORT BY DELOITTE

# **ŁÓ**DŹ – A GOOD PLACE **FO**R INVESTORS

INTERNATIONALIZATION

WWW.INVEST.LODZ.PL NOVEMBER 2019 Deloitte.



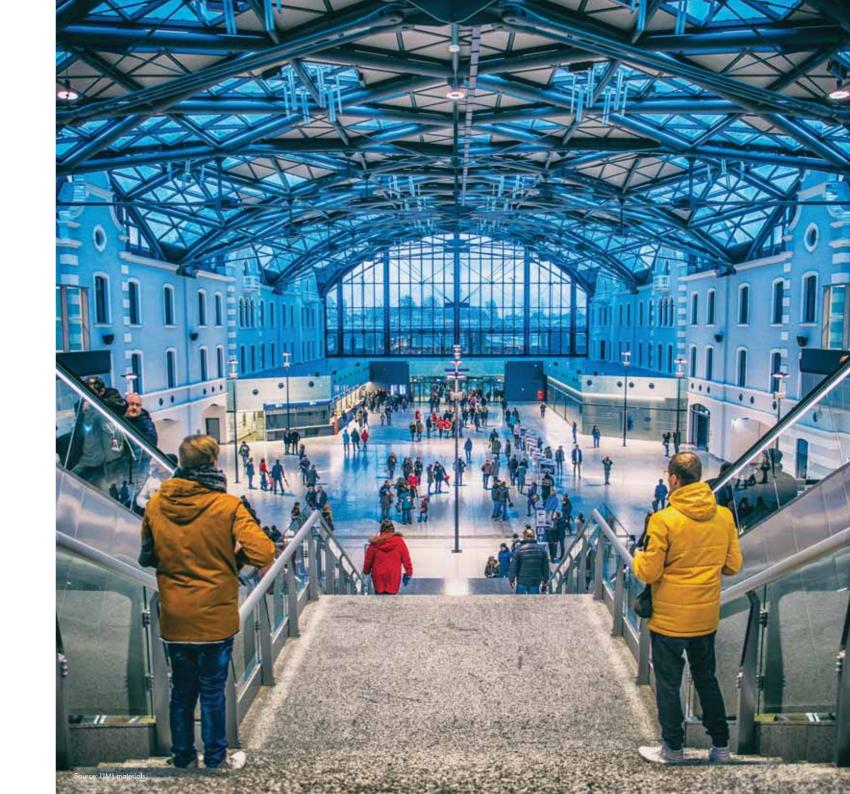


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# **INTRODUCTION**

Investment and economic attractiveness is becoming increasingly important in the context of cities and regions, as opposed to countries or parts of the world. Cities have their own characteristic features that they want to emphasize in order to stand out from the crowd. Łódź. like other major cities, is in a constant race for new investors, entrepreneurs and residents. The city wants to offer these newcomers a better standard of living, higher quality of work, and increased ease of doing business. The efforts to attract these resources, however, take a completely different shape than they did a decade or two ago. Today, synergies between neighboring cities, for example, have become more important. The idea of a so-called duopolis, coexistence and cooperation with Warsaw, has led Łódź to develop a complementary offer with the nation's capital, based on, among others a developed transportation network between the agglomerations.

Apparent changes in the city, both related to ease of running a business and industry structure, as well as the infrastructure itself. are the results of the investments carried out the local authorities in Łódź. The city is now associated with textile factories to a lesser degree than it is with the creative industry and with modern textiles, IT, and new technologies. However, Łódź does not cut itself off from its past. The post-industrial buildings still please the eye, especially for those who need creative spaces. Reformulating the thinking about the development of Łódź and showcasing its greatest assets is also associated with new challenges for cities

specifically, as well as more general macro-trends (e.g. related to climate change, new working habits, use of technology).

The city and the regional authorities want to actively respond to changes. This, however, requires an appropriate diagnosis. Hence, in this report, we ask the following questions:

- What is the potential of Łódź and the region in the context of business development and the internationalization process?
- What are the strengths of the city and the Łódzkie Voivodeship? What constitutes its investment attractiveness, considering the key industries of the region?

Part 1 of the report "Internationalization" presents the general conditions for doing business in Łódż and the region. We present a collection of key conclusions that are developed in subsequent monothematic reports. This is a set of auidelines and recommendations for the "Program for the development and promotion of the economic potential of the city of Łódź and the Łódź region". It is created as part of the project "Economic internationalization of enterprises from the Łódź region through dedicated promotional activities and territorial economic marketing", co-financed from the Regional Operational Program of the Łódź Voivodeship for years 2014-2020."

The report is addressed to entrepreneurs, especially those representing small and medium-sized enterprises, as well as investors.

Hence the presented perspective on the city and the region mainly covers economic issues.



# Key characteristics of Łódź as an investment location:

Łódź is a large labour market - in 2018, almost 690 thousand people were living in the city and more than 900 thousand in the urban area. It had the working-age population of 400 thousand.

The strengths of the city include its central location and well-developed and continuously improved road, rail and air traffic routes.

The city offers numerous and well-prepared investment properties for manufacturing, logistic and warehouse activities (e.g. within the Łódź Special Economic Zone), as well as modern office space, e.g. in the area of the New Centre of Łódź, in the close vicinity of the Łódź Fabryczna Railway Station.

Łódź constitutes an attractive investment location due to the favourable ratio of salaries and other costs of conducting business activity to maintenance costs.

Considering the availability of recreational facilities and areenery, the cultural institutions, continuously improving food services, rising salaries, interesting cultural events and the unique climate of the place, Łódź has a diverse offer for its residents (i.e. potential employees) and enhances the quality of their life - a fact that has been confirmed by studies regularly conducted by the city.

Investments undertaken in Łódź in compliance with the objectives of the Duopolis concept enable access to the resources of the Warsaw market (employees, customers, business contacts) at much lower costs of running business.

Łódź is a major academic center. Some of the key higher education institutions include the University of Łódź, the Łódź University of Technology, the Academy of Fine Arts, the Medical University, and the Public University for Film, Television, and Theatre.

By investing in Łódź, companies gain access to specific incentives offered by the Marshal's Office of Łódzkie Voivoideship, Łódź Special Economic Zone, Łódź Regional Development Office and Voivoideship and Poviat Labor Office.

The perception of Łódź by both its residents and outsiders is gradually improving, and as a result the city is often considered as a potential destination for relocation of employees.

The projects undertaken by large international companies and the development of numerous SMEs testify to the fact that Łódź creates favourable conditions for investments.

Łódź is the third largest city in Poland in terms of population, one of the main economic and cultural centres and a major transit point on the transport map of the

ECONOMIC CONTEXT

The city is an important centre now, and considering its unique features, such as industrial traditions, central location. development of road, railway and air connections as well as the opportunities for cooperation with Warsaw under the Duopolis formula, it also has a growth potential for the future. Łódź is especially attractive to foreign investors because of the advantageous ratio of labour costs to maintenance costs which allows them to offer jobs to qualified specialists at a lower cost than in other large Polish

Below please find the key data on the economy and labour market in Łódź and Łódzkie Voivodeship.

#### Costs of apartments in Łódź (in PLN)

<35 sq. m	35-40 sq. m	40-50 sq. m	50-60 sq. m
4814,99	4516,96	4618,92	4549,13
60-70 sq. m	70-80 sq. m	80-100 sq. m	>100 sq. m
4599,23	4703,02	4268,34	4186,26

Source: "Puls Biznesu" magazine report on properties prices, based on bankier.pl and Cenatorium, Q1 2019.

Łódź		Łódzkie Voivodeship
685 285 (tódź Urban Area 1,073,085)	Population	2 466 300
5,1%	Unemployment rate	5,5%
4920,31	Average pay in the corporate sector	4732,39
137 500	Average number of jobs in the corporate sector	356 200
76 108	Number of students	78 240
20 013	Number of graduates 2017/2018	20 609



32

Number of universities Łódzkie Voivodeship



EUR 12-14

A Class Office **Rental Costs** Łódź¹



Number of companies representing innovative sectors (BPO/SSC/IT/R&D) Łódź<sup>2</sup>



23 200

**Employment** in innovative sectors (BPO/SSC/IT/R&D) Łódź<sup>2</sup>

Source: 1) Report JLL, I Q 2019, 2) Report ABSL, 2019

ECONOMIC CONTEXT

## **Business climate**

The fundamental economic and social transformation experienced in Poland over the last three decades is reflected in a steady increase of GDP and the living standards in Łódź. In addition, skilled labour force, innovative companies and competitive costs have triggered significant direct foreign investments that further contribute to the development of the city and raise its status.

#### Business Łódź is growing dynamically and has already attained the level of other Polish industrial centres.

Statistics	Łódzkie Voivoideship	Dolnośląskie Voivoideship	Pomorskie Voivoideship	Wielkopolskie Voivoideship
GDP per capita in the voivodeship (in PLN) $^{\rm 1}$	45 199	53 659	   46 913 	   52 844 
GDP growth per capita over the last 5 years (2013-2017) $^{\rm 1}$	12,5%	11,4%	13,2%	14,5%
Capital expenditures in companies with foreign participation against total capital expenditures <sup>2</sup>	0,2	   0,3   	   0,2   	   0,5   
Share of net revenues from sales of innovative products in industrial enterprises <sup>2</sup>	   6,46 	   8,83 	   12,63 	   6,94 

Source: 1) GUS (2018), 2) GUS - Yearbook of Foreign Trade Statistics (2018)

# Historical aspects - history, heritage, changes and evolution of the city

The contemporary look of the city and its economic situation are inextricably linked with the unique history of Łódź, characterised by times of great prosperity intertwined with periods of uncertainty and distress. In terms of its population, for many years Łódź ranked 2nd at the same time serving as the most important centre of trade and industry, especially textiles. Now the city is experiencing dynamic development, and has a chance to become once again one of the strongest economic centres in Poland.

Many characteristics of Łódź, such as its attractive architecture and city plan, its unique vibe, numerous monuments from the turn of the 19th and 20th centuries, and its location at the intersection of many communication routes are directly related to the history of the city and its dynamic development since the 1860s as the most important industrial centre in Poland. The pace and scope of Łódź's progress during those years can only be compared with the fastest growing cities in the world, such as Manchester, Chicago, Los Angeles or Yokohama. Many factories and other industrial facilities, villas and palaces built by factory owners, bourgeois tenement houses, cultural and religious buildings, which are considered today to have unique historical value on a global scale, date back to that period. The multicultural heritage and influences of the German,

Russian and Jewish populations of that period are still visible throughout the city.

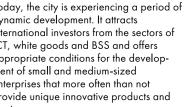
The most important buildings, today perceived as the city symbols, were also built at the turn of the 19th and 20th century - to name but a few, there is Manufaktura shopping and entertainment centre situated in the post-industrial complex, Izrael Poznański Palace, EC1 complex, Steinerts Palace, Scheibler and Grohman factories and above all, the iconic Piotrkowska street serving now as the centre of the city's cultural life with its clubs, cafes, bars and restaurants located in exquisite historic tenement houses.

#### ECONOMIC CONTEXT

The twentieth century marked a period of dramatic events, the World Wars among them, which arrested the city's development and changed its multicultural make-up forever. In the second half of the 20th century Łódź continued to grow as one of the main industrial and cultural centres in Poland, Unfortunately, during the economic transformation of the 1990s the process came to a halt. The image of the city faded and the difficult situation on the local labour market together with the decline in the city's economic significance additionally contributed to the lowering of Łódź's prestige.

However, despite many challenges and the economic crisis, Łódź has not lost its valued attributes, namely industrial traditions, excellent location and strong universities offering new faculties to young

Today, the city is experiencing a period of dynamic development. It attracts international investors from the sectors of ICT, white goods and BSS and offers appropriate conditions for the development of small and medium-sized enterprises that more often than not provide unique innovative products and services.





# **KEY INDUSTRIES AND SME SECTOR**

Polish and foreign companies operating in modern sectors, such as ICT, BSS, white goods, biotechnology and pharmaceuticals, are developing rapidly in the Łódź city area. Over the recent years, they have become the key sectors of the local economy.

The significance of the IT sector is rapidly increasing, and firms in this sector are and the developments playing a major role in nearly all parts of our life. Technological advancements and the pressing need for an increased use of modern technologies necessitate significant changes in the production structure, as well as place an additional emphasis on the stages of design and testing. Thus, highly specialized employees are in demand and there is a need for unrestricted access to modern technologies as well as close cooperation with IT sectors.

At the same time, modern industries, including white goods, biotechnology, pharmaceuticals and business services, play a very important role in the modern economy. The availability of qualified employees and networks of suppliers and business partners, which are so well-developed in Łódź and the surrounding region, seem to be crucial for the development of each of the sectors above. For example, in the years 2015-2018, the white goods sector invested PLN 4.2 billion in modern business solutions (Industry 4.0 plants combined with new smart household appliances lines), and the majority of those funds were expended in the Łódź region. The largest investments of Bosch, Whirlpool and Miele took place in Łódź.

The consistently ambitious stance taken by the companies domiciled in Łódź on the international stage effectively promotes the Łódź region among foreign investors as the best suited destination for potential cooperation. As a result of the initiatives undertaken by the Łódź ICT cluster, the companies operating in other sectors of

economy, which also are part of the cluster, have an opportunity to use the existing potential and infrastructure for advanced development of their R&D, IT and e-commerce departments. This allows the companies to better compete within their own sectors and effectively respond to the ever-changing needs of users.

## In addition, 6 sectors of key importance for the development of the region have been identified:

- Modern textile manufacturing and fashion (including design) industry
- Advanced building construction materials
- Medicine, pharma, cosmetics
- Power industry, including renewable energy sources
- Innovative farming and food processing
- Information technology and telecommunication



## White Goods

The white goods industry has strong and long-standing traditions in Poland. especially as far as manufacturina large household appliances, such as washing machines, dryers, dishwashers, cooking appliances, refrigerators, freezers and hoods is concerned. Moreover, with the significant footprint of the leading foreign brands on the Polish market, the Polish white goods industry is characterised by the availability of qualified and experienced staff. Currently, 30 plants belonging to international corporations are located in Poland and they employ nearly 27 thousand people, more than 20 percent of whom are white-collar workers. These factories produce 22 million large household appliances a year, which constitutes over 30 percent of the total EU output, with the total value of white goods production in Poland exceeding PLN 23.5 The white goods sector is a key export sector. Poland exports more than 19 million large household appliances with a value of approx. PLN 17 billion, mainly to Germany, the UK, France and Italy. Import results are less impressive. Currently, about 3 million of large household appliances are imported to Poland, mainly from China.

The Łódź region plays a significant role in the white goods sector as compared with the rest of the country. The plants located in the region of Łódź produce about 37 percent of all large household appliances manufactured in Poland, and employ more than 9 thousand people.

For nearly 25 years, Łódź has been a strategic spot on the map of Europe and Poland for the company BSH. The company opened its first factory in Poland in mid-1990s. The long-term presence of the firm in Łódź, as well as its dynamic growth shows that the city is attractive for investors. Today, BSH is one of the largest employers in the region, utilizing the access and potential of creative employees. In September 2019, the company opened a new intelligent dishwasher production facility (planned employment of around 1500). It is one of the most intelligent white good production facilities in BSH.

As a result of the dynamic growth of production in BSH's factories was the opening a logistical centres in 2018 in the city. The centre is one of the biggest in Poland of its kind. Additionally, one of the most modern R&D centres run by BSH was opened in 2019 in Łódź. The centre deals with dryers and laundry machines. It is an investment that further connects the company and the city.

In the autumn of 2019, production in Miele's new laundry machine production facility. The facility is located in the Łódź Special Economic Zone. The production facility will produce 250 thousand laundry machines annually. In the beginning the facility will employ around 350 employees, however, that number is planned to increase to 1500. A year earlier, a new facility producing tumble dryers was opened by Whirlpool. In 2019, it has already produced over 480 thousand dyers. Its planned production is 1.2 million annually.

These investments confirm the region's strategic location in Poland for the white goods sector. The region has become the biggest cluster for the sector, standing alongside Lower Silesia and Wronki. A large group of suppliers supports this sector. Typically, these are large foreign companies employing above 250 employees.

# BIOTECHNOLOGY

The sector of biotechnology is relatively new in Poland, but many experts count it amona the fastest arowing lines of economy, both in the local and European contexts. This growth can be attributed, among others, to the presence and cooperation of Polish research groups in the most significant and influential biotechnology projects and the strong position of Polish IT specialists in the world, and it translates into an increased interest in the Polish biotechnology market. This, in turn, has a positive impact on the presence of additional entities supporting grants for biotechnology projects. In effect, the number of Polish enterprises specializing in biotechnology is on the rise.

The most reliable indicator of a country's use of biotechnology solutions is the number of biotechnology firms calculated on the basis of the OECD classification . In 2017, 188 companies operated in the field of biotechnology in Poland, and the total expenditures spent on their activity in the sphere of biotechnology amounted to over PLN 825.8 million - an increase by 8.5 percent as compared to the previous

year. In terms of size, the so-called small enterprises (employing up to 49 persons) dominated the scene - about 60 percent, whereas medium-sized enterprises constituted 23.4 percent, and large enterprises - 16.5 percent.

Research and development activity in the area of biotechnology was conducted by circa 240 entities that laid out the total of PLN 900 million - an increase by 40 percent as compared with 2016. The overall headcount in 2017 was 9,500 people, approx. 35 percent of whom were working in the sector of enterprises.

On the question of specialization, a

significant portion of biotechnology firms focused their business activity on health care, with the majority specializing in general production of medicines. The investors' interest in drug production is further driven by the fact that the patents protecting currently popular drugs will soon expire, which is also reflected in the number of start-ups being established in Poland. Recently, a tendency to finance scientific research with a view to producing modern and innovative medicines has been observed. Poland has a strong presence in Europe as regards production of biosimilars.

The pharmaceutical industry in the Łódzkie Voivodeship is already well developed. Many well known and respected pharmaceutical companies have their headquarters here and produce medicine that is used in Poland and through out the world. Also located in the region is one of Poland's fast growing biotechnology companies: Mabion. Mabion has the capacity and competencies to grow in a comprehensive manner, which will allow for drug development from the initial phases all the way to registering the final product. The region is also home to production and research facilities of the Adamed Group, which has over 250 different drugs in its portfolio. The company has locations and representatives through the world. Another firm that

has a long-term relationship with the region is Polfarmex S.A, whose products are available on European and Asian markets.

With the presence of one of the most dynamically developing Polish biotechnology companies, i.e. Mabion, and the region's advanced scientific and technical facilities, Łódź and the surrounding areas constitute a perfect location for further development of this industry in Poland. This development may also be stimulated by the activity of two international pharmaceutical concerns: Novartis and TAKEDA, as well as the establishment of Bionanopark, a modern implementation centre for business with top-class research equipment, a supercomputer and biotechnology labs.



ICT

According to the report entitled: "Growth Perspectives for the Polish ICT sector by 2025", the good condition of the Polish economy, its dynamic development, the availability of well-qualified employees and the low costs of their work are seen as a strong magnet for foreign investors. This, in turn positively impacts the international standing of the Polish ICT sector. Telecommunication is considered the largest segment of Polish ICT in terms of revenues, but the most important Polish ICT specializations include, among others, IT services consisting in software development, shared services centres and creation of computer games. In particular, the strong growth of the last-mentioned line significantly affects the popularity and recognition of the sector in Poland and abroad.

At present, Polish ITC employs approx. 430 people, about 75 percent of whom provide IT services. The employment ratio rises by about 6 percent a year, while the number of newly established companies grows at the rate of 10.1 percent - in 2017, the share of ICT in GDP equalled 8 percent.

Furthermore, the ITC sector leads the ranks when it comes to start-ups in Poland, with more than 50 percent of all newly established start-ups operating in that sector, in particular in such areas as: e-commerce, enterprise software, Internet of Things and Big Data.

Due to the very rapid and increasing involvement of specialists in other fields, one might conclude that the IT sector is among the leading industries in the region. The earnings in IT industry in Łódź are relatively high: depending on the position and experience, the average salaries range from PLN 3,750 (Help Desk) to PLN 15,000 (Security Administrator).

In addition, the companies operating in the sector pay special attention to the working conditions and atmosphere, and offer a wide variety of benefits. Currently, there are about 7000 business entities operating in ICT in the Łódź region.

The growth rate of start-ups in Łódź has slightly decreased in comparison to the previous years, but the City of Łódź. through its initiatives such as SKY HUB, Off-Piotrowska Centre or 'I have a Start-Up Idea' competition organized as part of the Młodzi w Łodzi programme, encourages cooperation of young businesses of various backgrounds with potential contractors or investors. In 2018. 105 start-ups entered the competition and 17 winners were selected. An analysis of IT start-ups founded in Łódź indicates that the activities of many of them are focused around the Internet of Things, fashion and design. In addition, there are 6,000 students specializing in ICT in the region, and 1,000 of them graduate every year.

Furthermore, an ICT cluster has been created in Łódź to facilitate the flow of information between various representatives of the sector (companies, scientific community, start-ups, etc.). The cluster also offers internships and jobs to students and graduates, and organizes events aimed to present the IT industry in Łódź to potential investors

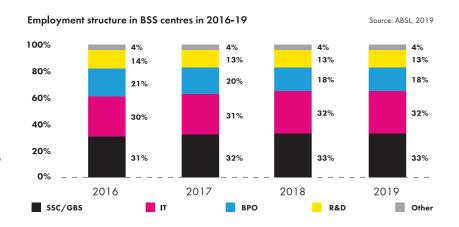
Companies from Łódź are involved in computer games development too. Local universities arrange many IT-related events, such as the National Team Game Development Competition, to create a unique platform for collaboration of university teachers, students and IT companies. Furthermore, Łódź universities are planning to open the Academy of Game Creation that will offer interdisciplinary fields of study prepared in cooperation with the world's largest IT companies, and co-finance the most ambitious student projects. One cannot omit the Łódź Computer Games Centre established to guide future computer game developers.

It is also worthwhile to mention that Łódź intends to take advantage of the presence of global high-tech companies, such as Erickson and Huawei, and become the first Polish city to deploy the 5G network. At present descriptions are being prepared and work is underway to develop the concept for 5G network tests. A pilot system is to be launched on the Campus of the Technical University of Łódź.

## **⋄** BSS in Poland

The Business Shared Services sector is currently one of the most dynamically developing sectors in Poland and throughout the whole Central and Eastern Europe. Q1 2019 saw about 1,400 BPO units, SSCs/GBS centres, IT centres, and R&D centres operate in Poland, employing over 300,000 people in total . 54 of those units employed at least 1,000 people, while over 56,000 were employed in the top ten largest centres. The last years also saw a dynamic increase in the number of employees, with the average growth rate of almost 13 percent YoY. Next year, employment in this sector is expected to grow by almost 10 percent, with the number of employees reaching over 330,000.

The sector has undergone slight changes in the recent years when it comes to the number of people employed in the respective types of units. SSC and GBS centres still employ the largest share of workers in this sector (33 percent) with IT centres coming right behind with 32 percent, a share that continues to grow gradually. The share of people employed in BPOs has fallen to 18 percent in the past years. R&D and other types of centres are at stable levels of 13 percent and 4 percent respectively.



KEY INDUSTRIES AND SME SECTOR

When we take into account the cities where the most BSS centres are located, the employment structure turns out to be quite diverse. SSCs and GBS centres dominate in such cities as Kraków (45 percent) and Warsaw (42 percent), whereas IT centres employ the greatest share of all workers in the sector in Katowice (46 percent) and the Tricity (44 percent). In Łódź, it is the IT centres and BPOs that dominate, with 37 percent and 34 percent of all employees in the sector respectively. At 6 percent, R&D centres have the lowest share of employment.

When it comes to the total number of employees in this sector throughout Poland, the three cities that stand out are Kraków (with 22.8 percent of all employees in this sector), Warsaw (18.3 percent), and Wrocław (15.5 percent). The Tricity (8.7 percent), Katowice (7.7 percent), and Łódź (7.6 percent) are right behind. However, in this respect, the diminishing of the share in the total employment enjoyed by the largest locations (Kraków, Warsaw and Wrocław) can be observed. In turn, the

direct resources (in the Tricity, Upper Silesia Urban Area, Łódź and Poznań) are developed faster and faster.

# SSS in Łódź

In 2019, Łódź had over 23,000 people employed in the BSS sector, working in 85 different centres. Last year (Q1 2018 -Q1 2019), six new centres were set up, and employment in the sector arew by 14 percent. The newest investments include those made by BFF Banking Group, Digital Teammates, Enjama Pattern, Panasonic Electric Works, Philips and Solar Polska. The average employment in a single centre was 273. In this respect, only Kraków and Wrocław achieved higher results, with 321 and 281 employees respectively. There are 11 centres operating in the city and they employ 500 people. The most important investors include Accenture. Atos. Infosys. McCormick and Whirlpool.

Importantly, the new investments notwithstanding, the already existing BSS

businesses are undergoing development. This also involves qualitative development. with the processes handled becoming areater in their number, larger in their scope, and more challenging in their complexity. Among the companies that already operate in the market, 75 percent are planning to increase the number of their employees next year, and 87 percent are planning to broaden the scope of their operations by adding new processes or extending the geographical area for which they provide their services (i.e. involving new countries in the processes already performed). In turn, only 3 percent of companies are planning to reduce their employment, with only 1 percent planning to restrict their operations aeographically.

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Arguably, apart from the sectors that are of key importance for the region as indicated above, one should not neglect the strong presence of small and medium-sized enterprises in the Łódź region. Some of these SMEs operate in the industries listed above and some - in other

#### Key sectors in the region of Łódź

Source: Deloitte's original research

	BSS	ІСТ	White Goods	Biotechnology
Employment	23 200 	IT sector - 8000   (including: 20 percent - IT support, 30   percent - software, 45 percent - computer   network & security, and 5 percent - ERP)   ICT sector - 23 000	9000	700 (employment in biotechnology sector)
Recognizable employers	Accenture, Adaptive, BFF Banking Group, Barry Callebaut, Business Support Solutions, BSH, Clariant, Capita Customer Solutions, Conduent, Flint Group, Fujitsu, DXC Technology, Infosys, McCormick Shared Services, Nordea, Philips, Singify, Orange, T-mobile, PWC, Takeda, Tate&Ltyle, UPS, Whirlpool, Panasonic Electric Works	BSH, ABB, Accenture, Asseco Data Systems, Bluerank, Comarch, Commerz Bank, Cybercom, GFT, Ericsson, Fujitsu, GFT, Harman, Hexagon, Makolab, Idemia, Sii, STX Next, Transition Technologies, Tricentis, Digital Teammates, Digital Workforce, Tom Tom, ZF, Hycom	MIELE, B/S/H, Whirlpool   Wybrani poddostawcy:   PAS Polska sp. z o.o.   XOXO SOLUTIONS   Dradura Polska sp. z o.o.   PIENGINEER Przemysław Piechota   Geplastyk Polska sp. z o.o.   EGO Polska sp. z o.o.   Mecdil Polska sp. z o.o.   Coko-Werk Polska sp. z o.o.	Proteon Pharmaceuticals, Celther Polska, Adamed, Alfofarm, BioGen, EuroFins, Napiferyn BioTech, Sensilab, Ifotam, Ichem, Pelion, Master Pharm, Polfarmex, Polfa Kutno
Investor's country of origin	USA, Poland, UK, Sweden, Finland, Denmark, Norway, France, Germany	Poland, Sweden, France, USA, Germany, Japan	   Germany, USA   	Poland, France

sectors of science or industry. The description and statistics quoted below should lead to definitive conclusions regarding the current standing of the Łódź region against other regions of the country and help make plans for the development of SMEs.

#### **SME SECTOR**

# A small enterprise - a business with fewer than 50 employees and the annual balance sheet total of less than EUR 10 million.

In 2017, nearly 54 thousand small enterprises were registered in Poland which shows a 6 percent decrease when compared with the previous year. Taking into account all groups, small enterprises contributed the least to GDP (8.5 percent in 2016), and if the value of GDP generated by the sector were to represent 100 percent, their share would be 11 percent. Small enterprises also created the fewest jobs - considering the enterprise sector, they generated 12.2% of all jobs (approx. 1.1 million employees in 2017). In 2017, an average small enterprise employed 21 people and the average monthly salary per employee was PLN 3,981 (PLN 260 higher than in the previous year).

Polish small enterprises were more profitable and financially liquid than medium and large enterprises. The revenues of small enterprises increased in 2017 by 4.1 percent. Small firms were also characterized by high export dynamics, with a decrease in exports of goods (by 5.9 percent) and an increase in exports in services (by 7.9 percent) recorded in 2017 as compared to the 2016 results.

# A medium-sized enterprise - a business with fewer than 250 employees and the annual balance sheet total of less than EUR 43 million.

In 2017, nearly 15 thousand medium-sized enterprises were registered in Poland and they accounted for approx. 0.7 percent of the Polish enterprise sector. In 2016, the contribution of medium-sized enterprises to GDP equalled 11 percent. and if the value of GDP generated by the enterprise sector were to represent 100 percent, their share would be at 15 percent. In 2017, medium-sized enterprises created slightly more jobs than small companies - considering the enterprise sector, their headcount accounted for almost 16 percent (about 1.6 million people working for medium-sized enterprises). In 2017, an average medium-sized enterprise employed 105 people and the average monthly salary per employee was PLN 4,662 (PLN 270 more than in the previous year).

Their growth was very dynamic, second only to large enterprises in terms of the value of exports of both goods and services per one enterprise. Nonetheless, the value dynamics among exporters of goods decreased by 2.9% in 2017, while exporters of services fared a little betterhere an increase of 6.3% y/y was noted.

# Situation of the Łódź region in comparison with other regions of Poland

Considering employment statistics, the number of jobs created by the SME sector in the Łódzkie Voivodeship is similar to that created at the national level, and the same is true about average salaries.

In 2017 the Łódzkie Voivodeship ranked second, right behind the Mazowieckie

Voivodeship, in terms of expenditures on innovative initiatives in enterprises, both industrial and service-oriented. Additionally, the enterprises from the Łódzkie Voivodeship are in the lead as far as their innovation and computerisation are concerned.

According to the ranking of small and medium-sized enterprises prepared by the Polish Agency for Enterprise Development (PARP) which takes into account, among others, the following indicators: the number of active enterprises per 1000 inhabitants, the number of people actively working in micro, small and medium-sized enterprises, revenues and financial expenditures per enterprise and per employee and average remuneration, the Łódzkie Voivodeship took the 12th position and its result was close to the national average.

Taking into account the indicator of active SMEs per 1000 inhabitants, the Łódzkie Voivodeship scored 51.13 points and therefore, was ranked above the national average. Moreover, the Łódzkie Voivodeship can also boast of a positive balance of newly registered entities.

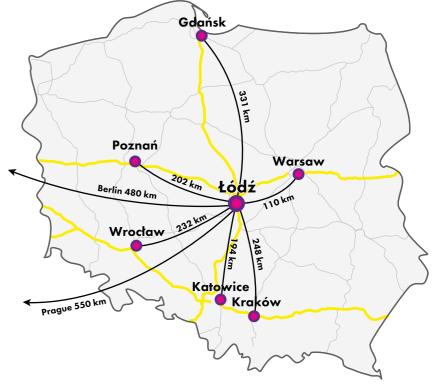


# KEY FACTORS DETERMINING THE ECONOMIC AND INVESTMENT ATTRACTIVENESS OF ŁÓDŹ AND ITS REGION

KEY FACTORS DETERMINING THE ECONOMIC AND INVESTMENT ATTRACTIVENESS

## Location

One may say that Łódź is situated literally in the heart of the country. Its central location enables good transport connections with all the major motorways and railways. In fact, the city is only several kilometres away from the intersection of the A1 and A2 motorways, which are the key transportation routes in Poland running on the north - south and east - west axes, respectively. Additionally, the construction of the modern Łódź Fabryczna Railway Station will ensure that trains will run through the city in the same directions. Even though Łódź has good transport links to the largest in Poland Warsaw Chopin Airport (18 million passengers handled in 2018) and has its own international airport (217,000 passengers handled in 2018), the newly-designed Solidarity Transport Hub with a planned capacity of 100 million passengers will be located within only 25 minutes from Łódź Fabryczna. It is scheduled to be opened in 2027.



# Growing importance of remote work and increased commuting opportunities

Easy availability of various modes of transport, attractive travel times, the number of connections and an integrated ticket tariff As far as attracting the best talent is concerned, Łódź has an obvious advantage over other cities – its central location. Logistically, it is a city with the best transport connections to live and work in Poland. A resident of Łódź may get to Warsaw within an hour, while the journey to Berlin takes five hours. Continuation of infrastructure development projects which are already underway will guarantee an even further improvement of transport connections. Owing to such a well-developed transport infrastructure and its central location Łódź has naturally gained an advantage in attracting the best industry experts to the city.

The extensive public transport network in Łódź facilitates commuting. The use of the modern fleet of trams and buses is not only efficient but also attractive in terms of prices. The Conurbation Travelcard is a special tariff that allows passengers to travel using

different means of transport between Łódź and the towns forming its extended urban area. Despite all these initiatives, the city continues to make endeavours to enhance the mobility of its residents even further. One of the major projects launched to accomplish that objective is the construction of the city tunnel connecting Łódź Fabryczna with Łódź Żabieniec and Łódź Kaliska, with two stops along the way in the city centre. The aim of the infrastructure investment is to streamline the Łódź Railway Junction and the extension of long distance railway lines. The construction of the tunnel will also be of great importance for public transport in Łódź and the agglomeration. Its completion is planned for 2022.

What is more, Łódź has taken steps to promote green transport, by building new bicycle lanes, increasing the number of available city bikes, scooters and motor scooters as well as road lanes dedicated to electric vehicles.

## Costs

Despite its highly-skilled workers, world-class office space and central location, Łódź still offers attractive prices to prospective investors. Rents for offices and flats are relatively cheap, which means lower costs for investors and potential employees alike. What is more, labour costs are still competitive and the average monthly gross pay is considerably lower than in other business hubs in Poland which offer access to comparable human and physical capital.

The benchmark analysis was conducted with regions of the similar economic potential as the Łódzkie Voivodeship.

Conducting business activities in Łódź is associated with significantly lower costs, both for employers (the level of remuneration and rents for renting office space) and employees (above all attractive prices of flats).

Ratio	Source	Łódzkie Voivoideship	Dolnośląskie Voivoideship	Pomorskie Voivoideship	Wielkopolskie Voivoideship
Flat price per square metre — primary market (PLN)	Bankier.pl, 2019	5675 zł /1319 euro	5935 zł   /1379 euro	7757 zł     7803 euro	7359 zł /1710 euro
Average pay in the voivodeship, Statistics Poland (PLN, gross per month)	Statistics Poland, July 2019	4732 zł /1100 euro	5 277 zł / 1226 euro	5317 zł / 1236 euro	4776 zł /1110 euro
Office rents	   JLL, 1st half   of 2019 		58,1-63,6 zł / /13,5-14,8 euro 	   55,9-60,2 zł     /13-14 euro   	

#### **Human resources**

The city of Łódź itself and its entire urban agglomeration give investors access to a huge and well qualified pool of talent. Approximately 70 percent of the population of the city (which is 690 thousand) are in the economically productive age group. In Q1 2019, the unemployment rate in Łódź was 5.1 percent. What is more, the manufacturing history of the city coupled with a strong presence of high-level educational institutions as well as innovative companies spanning the IT, R&D, BPO, SSC and high-tech industries have contributed to the creation of a strong and thriving job market.

#### The Łódzkie Voivodeship offers access to highly-skilled workforce

Ratio	Łódzkie Voivoideship	Dolnośląskie Voivoideship	Pomorskie Voivoideship	Wielkopolskie Voivoideship
Share of population with higher education (aged 25-64) (%) <sup>1</sup>	29	   31, <i>7</i> 	32,8	26,5
Human resources in science and technology (HRST) (HRST)	40,5	45,8	45,4	37,1
Students in natural science and technology fields (excl. foreigners) (%) 1	25,5	35,8	28,5	26,4
Employment rate (aged 20-64) <sup>2</sup>	74,7	72,4	73,6	75
Number of students per 10 thousand inhabitants <sup>3</sup>	287	l   415	358	331
Number of graduates per 10 thousand inhabitants <sup>3</sup>	75	   104	93	88
Number of declarations about entrusting work to a foreigner <sup>4</sup>	71 549	72 509	70 341	65 336

Source: 1) Eurostat (2018), 2) Eurostat (2019), 3) Statistics Poland (2018), 4) Poviat Labor Office (2018)

In a situation of low unemployment on domestic labor market, support of employers in recruiting employees form abroad is very important. Łódź offers help in finding employees, provides information about the city in Ukrainian and also supports learning of Polish by foreigners. As a result more foreigners take jobs in Łódź and the region, what is reflected in statistics on declaration about ensuring work, which put Łódź in the forefront in country.

# Growing importance of staff competence and availability of specific skills

Availability of qualified workforce based on universities and educational institutions in the region, in addition to workers who have acquired professional skills thanks to the development of the household appliance, ICT, BSS and biotech industries over the past few years

The innovative sectors have been changing the set of skills that employers look for on the job market. Accelerating innovation and technology changes require access to workers with new capabilities. As far as hard skills are concerned, an increasing number of companies are looking for specialist IT professionals. But hard skills is not everything. Considering that a number of professions that will be practiced in 2030 do not exist today, employers pay special attention also to soft skills, such as critical thinking, problem solving or emotional intelligence, in addition to prior professional experience.

There are two indicators showing whether or not such skills may be found on local job markets. First, the presence of universities ensures the required quality of educational programmes. Second, the size of innovative sectors in the region may tell a lot about the quality of available workforce. What is more, companies which have already launched their operations in such industries are a guarantee that the required human capital is present on the job market. As for soft skills, an increase in the flow of employees among different sectors shows that companies are willing to provide the required training to those who they believe already have the relevant soft skills and professional experience.

From employers' perspective it is reasonable to search for and attract the best talent to Łódź. The city has well-qualified and still slightly cheaper workers than other cities across Poland, and they change their workplace less often.

What is more, effective partnerships and alliances between business entities and higher-level educational institutions in Łódź allow the latter to tailor their curricula to the needs of prospective students and the constantly evolving industry. On the other hand, companies are presented with opportunities to find the most talented students to join their teams. Additional initiatives, such as the Łódź IT Days, facilitate career planning in the IT industry as early as in secondary school, which makes it easier to respond quickly to the current demand for specialists in the region.

Today, Łódź is home to 18 high-level educational institutions teaching approximately 72 thousand students. The University of Łódź and the Łódź University of Technology are the leading universities in the city. Both of them have established partnerships with employers on a large scale. While companies are open to organize recruitment events, universities are also capable of modifying their curricula to maximize their students' chances for employment. Also, one of the city's strategic objectives defined in the City of Łódź Education Development Policy 2020+ was to facilitate partnerships between secondary schools and employers so as to prepare students for the in-demand professions, in addition to encouraging life-long learning.

The manufacturing cluster in Łódź, which is constantly expanding, exerts a positive effect on development along the value chains. Increased production has been accompanied by a rise in the number of BPO/SSC, IT and R&D centres established across the city and in the neighbouring region . Employers entering the market

have been very satisfied with the available workforce. They have also noticed that hiring staff from other sectors is an effective solution to overcome talent shortages experienced by various market segments, thus confirming the high qualifications of specialists available on the regional job market.

Growing importance of the ability to attract talent from other locations and the necessity to compete for workers

Łódź as a city which is frequently considered by employees in the context of relocation – access to additional human resources other than those already available in the city

In order to be able to compete for the best talent on the increasingly globalized job market, both employers and cities need to offer appropriate transport connections and flexible working arrangements. Flexibility and stress-free commuting have recently become the focus of workers. The IWG Global Workspace Survey 2019 reveals that nearly half of workers worldwide consider their journey to work to be the worst part of their day. Stressful commutes are among the key factors that act as a deterrent for those looking for a job - approximately 54 percent of the survey respondents said that in the selection of a new employer, the location played a more important role than the company's prestige.

Apart from the location, workers place a special emphasis on flexibility, both as regards the working hours and the place of work. Research shows that flexible working arrangements enable the reduction of both the commute time and traffic in the city, in addition to alleviating tiredness. It is not surprising that

KEY FACTORS DETERMINING THE ECONOMIC AND INVESTMENT ATTRACTIVENESS

KEY FACTORS DETERMINING THE ECONOMIC AND INVESTMENT ATTRACTIVENESS

a growing number of employers around the world have introduced flexible workspace solutions.

In the battle to attract the best talent cities and local governments also need to come up with an attractive offering in order to retain the existing staff and encourage new employees to select a specific location.

As the number of younger workers (aged 18-34) that have a car is lower than in other age groups, they are more willing to use public transport.

Trends also show that it is a priority for this age group to live in urban areas that offer attractive cultural and entertainment events to choose from. It is no wonder then that companies around the world have begun to relocate their offices to cities that offer a huge number of transport connections, in addition to pedestrian zones and a wide spectrum of cultural activities.

According to the Wall Street Journal, the second most important factor at play that determines international companies' decisions to relocate their operations, just after highly-skilled workers, is a "pleasant place where their employees would like to live". This demonstrates the importance of the amenities offered by the city, specifically its public transport, transport infrastructure as well as leisure and cultural space in attracting the best talent.

Łódź is increasingly considered by employees as a potential relocation destination. According to data provided by Antal in 2018, in the BSS industry, 25% of employees were willing to consider relocating to Łódź if they received an attractive job offer.

This was a significantly better result than in Poznań (13%) and Katowice (15%), and very close to such locations as Wrocław and the Tri-city of Gdańsk, Sopot, and Gdynia (both 27%), and only slightly lower than Warsaw (30%).

## Innovativeness

Since the industrial revolution in the 19th century, Łódź has had innovativeness and entrepreneurship in its DNA. Today, a relatively strong presence of companies which operate in innovative industries, combined with large research universities create an environment that supports innovativeness and the development of start-ups. This has manifested itself in a growing number of patents, innovative companies and R&D spending in the city over the past decade.

#### The Łódzkie Voivodeship has a strong entrepreneurial spirit

Statistics	Source	Łódzkie Voivodeship	Dolnośląskie Voivodeship	Pomorskie Voivodeship	Wielkopolskie Voivodeship
Internal R&D spending/GDP per capita (%)	Statistics Poland,	0,62	0,69	   1,14 	0,59
Number of new patents per 100 thousand inhabitants	Polish Patent Office's Annual Report 2018	11,4	14,6	1 10   10	13,3   
Innovative industrial companies/total industrial companies (%)	Statistics Poland  — Innovative Businesses 2015-2017	17,3	20,4 	20,2   	19,4 
Trademark applications — Regional Innovation Index 2019 (%)	Eurostat, 2019	148,56	58,20	   78,57   	97,06   

## Infrastructure

Łódź offers exceptional office space. There are distinctive red-brick industrial buildings in the city which have been designed to provide business amenities, in addition to state-of-the-art offices which are capable of satisfying the needs of the most demanding companies. "A" Class buildings represent as much as 52 percent of office space (i.e. 275 thousand square metres) in Łódź. For the first time the share of top class offices exceeded the 50 percent threshold in 2018 and it continues to grow.

In addition to urban revitalization projects which are aimed to restore exceptional real properties to life and a usable condition, Łódź has also seen a higher demand for new business infrastructure. This is confirmed by a growing number of industrial facility renovation projects as well as greenfield investments. This year, Łódź has crossed the threshold of half a million square metres of office space. With such a large supply, the city will surely be in the Top 5 on the market, ahead of both Poznań and Katowice and reducing its distance to Tricity.

# More demanding investors' requirements as to business infrastructure quality

- "A" Class office space
- Investment land with good transport connections and utilities

#### Łódź is becoming one of the major office markets in Poland offering top class space

Statistic	Łódzkie (Łódź) Voivodeship	Dolnośląskie (Wrocław) Voivodeship	Pomorskie (Gdańsk) Voivodeship	Wielkopolskie (Poznań) Voivodeship
Office market supply (square metres)	496 700 (525,000 according to the latest figures for Q3 2019)		792 400	554 200
Office market demand (square metres)	32 200	45 000	35 200	17 100
Vacancy rate (%)	12,1	9,3	6,1	12,2
New office supply (square metres)	27 800	45 000	17 4000	77 400

Availability of appropriate business infrastructure understood as high quality office space and well-prepared investment land is a major factor at play in the investment decision-making process. In particular, large international investors require the fulfilment of high and constantly growing requirements as to the standard of the available office space. The following aspects are becoming increasingly more important:

- Access to public transport and bike infrastructure.
- High energy efficiency.
- Ergonomics and space brought into line with the needs of employees.
- Quiet and relaxation zones.
- Ability to adjust the layout to suit the needs of individual lessees.
- Services and catering.
- Interesting architecture and inspiring interiors.

As far as industrial investment is concerned, the following factors have become crucial:

- Access to investment land with good transport connections and utilities.
- Ability to design and build warehousing and logistics facilities to suit the needs of individual investors.

Private investment projects which are underway or which have been implemented over the past few years, to include new office buildings as well as warehousing and logistics parks, provide prospective lessees with access to the business infrastructure they seek. The office market in Łódź is one of the most rapidly growing markets in Poland. It is estimated that the modern office space segment offers more than 0.5 million square metres of space at present, and a further 100 thousand square metres or so is under construction. New office development projects attract the interest of investors. In recent years, their demand for such space was approx. 60 thousand square metres a year.

It is important that new offices are situated mainly in the inner city, with good access to public transport, often in interesting historic buildings which have been renovated, such as the Monopolis complex, which is set to open in 2019. As far as warehousing and logistics facilities are concerned, the region of Łódź offers more than 2.5 million square metres of space, which makes it one of the major markets in the country, just after Warsaw and Upper Silesia. The attractive geographical location of the city, a short travel time to Warsaw, access to a network of motorways and expressways (A1, A2, S8 and S14) as well as a direct train connection with Chengdu are the major factors at play. What is more, further improvements to the railway infrastructure, including the construction of the city tunnel or the container ports in

Łódź Olechów and Zduńska Wola, have had a positive impact on the investment attractiveness of Łódź and the entire region.

The newly renovated post-industrial facilities, specifically the distinctive monumental red-brick buildings, create incredible office space that is unrivalled on a global scale. What is more, Łódź offers top quality leisure and cultural facilities, such as the new EC1 Centre for Science and Technology, in addition to recently renovated community centres, not to mention Manufaktura, which is a former factory transformed into recreational and commercial space. This, combined with the city's sports infrastructure, to include two new stadiums, one of the largest grengs in Poland and a variety of smaller sports facilities, will not let residents get bored in Łódź.



## A city to live in

#### Growing importance of the quality of life as a factor determining the selection of a job

- The city has an attractive cultural offering, in addition to the availability of green space as well as leisure, sports and educational options to choose from
- Łódź is home to the British International School, a certified international educational institution combining a kindergarten, primary school and secondary school for children of foreigners living in the city

The major factors that influence the decision to accept a job offer include the quality of life offered by the city as well as its reputation. It is not only the terms of employment but the city itself that employees may compare with others. The housing market, availability of public services, cultural and sports offering, green spaces, quality of healthcare services or safety create the big picture of the city. The largest conurbations and the most developed cities are regularly ranked in terms of their residents' quality of life.

The current changes in the city are having a profound effect on the attractiveness of Łódź as a place to work and live. The number of residents who consider this city to be a good or a very good place to live has gone up considerably in recent years, which has been accompanied by a sharp drop in the number of those expressing negative opinions. Respondents appreciate specifically such aspects as the city's broad cultural and entertainment offering, climate, geographical location and transport connections with other cities and regions, clubs and cafes, availability of bicycle lanes as well as green space. They also draw attention to the relatively short distance from Warsaw and the possibility to use the opportunities offered by the capital.

#### Łódź is the host of numerous events which are immensely popular, such as:

- The Light.Move.Festival.
- > The Transatlantic Film Festival
- > The Cinergia Festival a festival of the European film industry.
- > The Photo Festival.
- > The Łódź Design Festival.
- Soundedit the International Music Producer Festival.
- > The Łódź Disco Fest.
- > The Cartoons and Games Festival.

As far as foreigners working in Łódź are concerned, access to appropriate educational services for children is of crucial importance. This is guaranteed by the British International School, which combines an international primary school, secondary school and kindergarten, and is run in partnership with the University of Łódź.

Also the offering for seniors continues to be expanded through such initiatives as the Senior City Card (attractive restaurant, sports facility, leisure and recreational centre or healthcare offers), in addition to micro-grants for senior groups, sports events or Active Senior Centres. Łódź has a lot to offer to its residents – whether young people, students, families with children, workers, including foreigners, or seniors.

# Growing importance of sustainable development

- Plenty of green space and protected sites, forests, parks and inner lawns, housing revitalization programmes
- Modernization and extension of low-emission public transport infrastructure

The issues of climate change, environmental protection and sustainable development have become an inseparable part of business cases and investment analyses. These factors are becoming increasingly important to investors, who have begun to place a special focus on energy efficiency and reduced consumption of power or natural resources, and to workers, who want to live in innovative and sustainable cities. Excellent examples of sustainable cities are London, Stockholm, Edinburgh and Vienna.

The wide spectrum of projects that have been launched in Łódź and its region address the needs of contemporary cities, in addition to the expectations of their residents and prospective investors. This applies to transport projects aimed to raise the importance of low-emission public transport:

- railway projects, to include the Łódź Fabryczna Railway Station, the city tunnel or the development of Łódzka Kolej Aglomeracyjna;
- tram line repairs and rolling stock modernization;
- urban bicycle system improvement;
- Park&Ride system development;

as well as revitalization initiatives, such as:

- Łódź City Centre Revitalization Programme;
- EXPO 2024 Horticultural:
- The New Centre of Łódź:
- Zielone Polesie;
- Księży Młyn Renewal;
- Mia100 Kamienic;



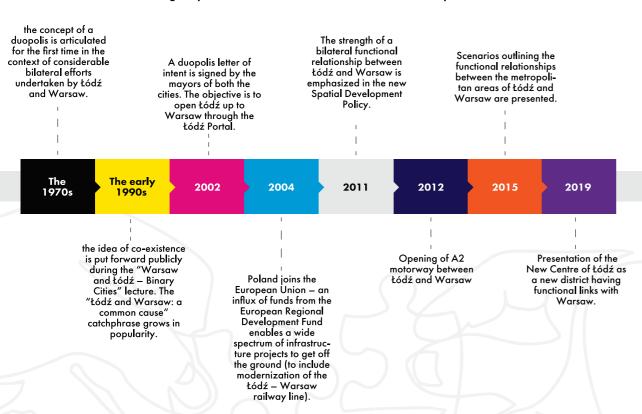
DUOPOLIS

# **DUOPOLIS**

Owing to its location, Łódź is naturally becoming the capital's partner in joint development initiatives based on the duopolis model, which is defined as an "integration of two neighbouring cities with different or similar functions and origin".

Combined efforts of both the cities in the duopolis formula would facilitate complementary innovative industry development, in addition to enhancing their attractiveness as potential relocation destinations. Thanks to the transport infrastructure investment projects launched in recent years and the development of Łódź, the concept of a duopolis has begun to be perceived as an increasingly more attractive solution to ensure the cities' growth.

#### Fostering cooperation between Warsaw and Łódź in the duopolis model:



# Together, more is possible

DUOPOLIS

The Łódź-Warsaw duopolis has developed the most comprehensive value proposition for investors in Poland. The large number of recognized SSC/BPO centres has confirmed this. The complementary relationship between the cities allows them to fulfil the needs of business entities, both as regards in-demand skills and availability of real estate. Companies looking for lower costs but similar quality and availability of highly-skilled workers as well as world-class office space may consider relocation of some or most of their operations to Łódź, without resigning from Warsaw entirely.

	Ratio	Source	Łódź-Warsaw Duopolis	Poznań	Wrodaw	Tricity
potential	Number of BPO, SSC, IT, and R&D centres	ABSL, Q1 2019	323 (85 + 238)	102	169	1146
	Number of sector workers ('000)	ABSL, Q1 2019	79.8 (23.2 + 56.3)	16.8	47.5	25.5
BPO/SS	Average number of BPO/SSC jobs ('000)	ABSL, Q1 2019	273 (Łódź) I 236 (Warsaw)	163   	281	174 
pects	New office supply in 2018	JJL, I. kw 2019r	225 000 (23 000 + 202 000)	46 100	11 200	15 000
	Population in the economically productive age group	Statistics Poland	1 439 060 (405 800 + 1 033 260)	323 850   	386 140	443 980 

## **Duopolises** around the world

There are a number of cities which have ioined forces in the duopolis formula around the world. Such partnership may be based on a variety of structures and priorities, depending on the expected benefits. Examples of benefits enjoyed by conurbations which have already put the idea of a duopolis into practice:

- > Overcoming talent shortages thanks to access to the other city's workforce. Complementary skills brought to the job
- > Combined efforts to develop the infrastructure and communication network.
- > Cost reduction through the exploitation of the economic potential of the other city without major relocation of the main seat.
- > A more attractive cultural, sports and entertainment offering.
- > Promotion of tourism through the ease, speed and availability of transport connections between the cities.

#### Bratislava – Vienna







1 hour

approx. 1 hour

#### Key partnership characteristics and benefits for the cities:

- Excellent transport connections between the cities 30 trains running in both directions every day.
- Market complementarity German and Slovak language classes and professional training support to develop the skills in demand in the other city.
- Launch of high-tech, transport, healthcare and education projects, Between 2010 and 2017, 100 projects were implemented in Vienna versus 200 in Bratislava.

#### Plans for the future:

- Fostering cooperation by means of the Interreg EU Programme aimed to support research, sustainable management initiatives as well as protection of natural resources.
- Plans to build a high-speed commuter rail system to connect the two cities by 2023. The project will reduce the journey from one city to the other by train to 45 minutes.
- The cities have made endeavours to integrate their public transport systems, launch student exchange programmes and a dual education system or improve the language skills of their residents. This is especially true of the younger inhabitants of the capital of Austria so as to enable them to seize the employment opportunities afforded by the rapidly growing job market in Bratislava, which has been striving to overcome talent shortages. It also appears crucial for the partnering cities to improve the transport links between Vienna and Bratislava. There are plans to build an underground rail system with trains running every 20 minutes, which would reduce the commute time to half an hour.

#### Guidelines for the duopolis:

- Recognition of differences in the cost of living (by workers) and in labour costs (by employers) with a view to
- · Combined efforts to develop the job market, specifically through training and development of skills required by employers in both the cities.
- Gradual elimination of pay differences between the cities.

DUOPOLIS

## Glasgow – Edinburgh















#### Key partnership characteristics and benefits for the cities:

- The conurbation accounts for one-third of Scotland's GDP
- · Historical complementarity Glasgow is famous for its history as an industrial city, while Edinburgh is the capital and the seat of government institutions.
- · A joint and complementary business offering. Edinburgh is the seat of a large number of financial industry companies, with a strong representation of the technology and IT sectors as well. The services, creative and biotech industries are of key importance to Glasgow.

#### Plans for the future:

• Construction and modernization of the railway infrastructure between 2011 and 2020: the "Edinburgh Glasgow Improvement Programme EGIP", worth approx. 858 million pounds.

#### Guidelines for the duopolis:

• Complementary economic structures – a common value proposition for investors from other industries, drawing on the strengths of local markets.

## Baltimore - Washington\_\_\_\_\_\_







minutes



approx.

#### Key partnership characteristics and benefits for the cities:

- The relatively short distance from the capital makes Baltimore the second largest seat of government agencies.
- The elite Johns Hopkins University has its main campus in the city but the School of Advanced International Studies is situated in
- It is one of the largest conurbations in the country in terms of the number of IT jobs. With such global companies as Lockheed Martin or General Dynamics, Washington is the defence industry hub. An abundance of talent and attractive employment terms are invaluable assets of Baltimore, which has become the capital's technology and IT base.

#### Plans for the future:

• Plans to build the BWRR - Baltimore-Washington Rapid Rail, a superconducting magnetic levitation system (SCMAGLEV), which is expected to reduce the commute time to 15 minutes. However, the cost of the project necessary to build approx. 60 kilometres of the rail (sufficient to connect the cities) and estimated initially at 15 billion dollars, is a key issue. As a comparable amount would suffice to build approx. 2,400 kilometres of a four-lane motorway, the reasonableness of the project has been questioned.

#### Guidelines for the duopolis:

- Possible relocation of some central offices and agencies due to lower labour costs and office rents.
- Use of the shared central airport serving both the urban agglomerations.
- Complementary offering of high-level educational institutions.

DUOPOLIS

### Birmingham – London









# 80

#### Key partnership characteristics and benefits for the cities:

• A well-developed transport infrastructure and an excellent location of Birmingham make it possible for 90 percent of business entities and the population of England to reach the city within 4 hours. The extensive transport infrastructure, including the construction of the London-Birmingham railway line, is becoming the key driving force behind the city's strong economic growth. In 2018, HSBC Bank transferred a significant part of its offices to the city from London. The decision was motivated by a lower cost of living and labour costs.

#### Plans for the future:

• The transport infrastructure projects which have been completed thus far have contributed to the shortening of the commute time to 1 hour and 20 minutes on average. This has encouraged HSBC Bank to relocate one of its main offices from London to Birmingham with a view to generating cost efficiencies, while maintaining its head office in the capital.

#### Guidelines for the duopolis:

- Some back office operations could be transferred to Łódź, while the front office functions could remain in Warsaw transport connections as a chance to relocate the operations of companies, in whole or in part, to cities with lower overheads.
- Taking advantage of the central location of Łódź and the locations on the routes connecting it with other major Polish cities (Poznań, Wrocław, Katowice).

## Copenhagen – Malmö



50

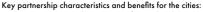
minutes











- The cities are a model example of cross-border cooperation between two countries. On the national stage, they promote the idea of a Great Copenhagen area, in order to increase visibility.
- It is based on a well-developed transport infrastructure (the bridge combining a motorway bridge and a railway tunnel, which was made available in 1999, being the key investment).

#### Plans for the future:

• Plans to construct an underwater train tunnel of 22.1 kilometres to connect the two capital cities. The investment is expected to reduce the commute time to just 20 minutes. The estimated cost of the project is approx. 4 billion euros and it should get off the ground in 2028.

#### Guidelines for the duopolis:

• Use of the smaller Malmö airport as complementary to the one located in Copenhagen.

## Helsinki – Tampere\_











2 hour

#### Key partnership characteristics and benefits for the cities:

- Tampere has been the industrial base of Finland and mainly famous for electricity production.
- · Cooperation between the cities is based on the innovative sectors, especially the telecom industry. An example of this is the industrial Park Kolmenkulma Tampere. For many companies in the ICT sektor, this location serves as a second hub next to Helsinki. This is true for both international corporations, such as Microsoft and Nokia, as well as Finnish firms, such as Tieto.

• Construction of a high-speed rail system connecting Helsinki with the neighbouring urban areas (Greater Helsinki) is planned by 2020. The cost of the project is approx. 300 million euros.

#### Guidelines for the duopolis:

- Complementarity of the local economies, location of specific sectors in one city and creation of synergies that support innovativeness.
- Partnerships and alliances between universities and businesses located in both the cities with a view to developing cutting-edge technologies.

# BELT AND ROAD INITIATIVE

# The Belt and Road Initiative — Łódź's additional opportunity for growth

Łódź may benefit considerably from the synergies created by the duopolis as well as from the opportunities offered by the Belt and Road Initiative (also referred to as the New Silk Road). Łódź's participation in the Belt and Road Initiative (infrastructural links between Poland and China) brings the city a range of advantages which emphasize its significance and economic potential even further. The Initiative is a unique opportunity for Łódź to increase exports, expand its industrial zones and create new jobs.

When the leader of the People's Republic of China, Xi Jinping, announced the strategy to revive the historical Silk Road, many commentators pointed to the vast scale of the project. The land ("belt") and sea routes ("road") are slated for completion in 2049. Once finished, the initiative will cover an area which now includes 65 percent of the world's population, three quarters of global energy resources and nearly half of the global GDP.

Six years after the ambitious plans were announced by Xi Jinping, we are seeing that the infrastructure in Asia, Africa and in Europe has rapidly developed. The value of the projects carried out under the Initiative has already exceeded the value of the Marshall Plan aid provided to the European countries after World War II. It is estimated that by 2027 the costs to revive the Silk Road will reach 1.3 trillion dollars.

So far, there have been over 50 new-build railway lines between China and Europe. One of the significant points on the map of the growing rail network is Łódź. The first cargo link between Chengdu and Łódź, via Kazakhstan, Russia and Belarus, was launched in 2013. During the first two years, there were 150 services between Łódź and Chengdu. In 2015, the line was extended to reach Xiamen, China's important port city and a trading hub as well as a gate to the markets in Southeast Asia.

Łódź

525

From the perspective of companies, the new railway route will significantly lower costs when compared to air cargo (around 30 percent). The transport time will also be significantly lower than through sea transport (from 11 to 14 days by train, as opposed to around 40 by sea)

The expansion and operation of the Łódź — Xiamen line involves a number of entities, both in Poland and in China. In China, since 2015 there has been e.g. New Silk Railway (NSR) Europe Hub which operates the train service to Europe . Its counterpart in Poland is Łódź Hatrans Logistics, which not only manages transport of goods, but also provides customs and warehouse services. The containers arriving from China as well as those departing from Łódź are handled by terminal owner Spedcont, which continues to expand the terminal's capacity due to the growing number of train connections

under the Road and Belt Initiative. In 2016 there were 250 services, but a year later this figure doubled. In 2018 r. there were 525 train connections. Every train carries 40 containers filled with electronics, white goods and textiles (those arriving at Łódź) and foodstuffs (those arriving at China). The transit time is approximately two weeks, i.e. much shorter than sea freight . The rail freight service is also much cheaper than air freight.

As can be seen, goods are transported both ways amplifying the benefits to be gained by the parties involved. Yet the ambitions are far greater. Both  $\dot{t}$ ód $\dot{z}$ 's and China's Xiamen's authorities expect that such commercial collaboration will bring high profits not only to the cities themselves, but also to their regions through the expansion of industrial zones or technological exchange .

There are a number of reasons why the revival of the Silk Road may accelerate the economic growth of Łódź area. It is here that Poland's and Europe's routes from East to West and from North to South intersect. However, one should not forget that Łódź's offering is much more than just the central location. Good infrastructure and access to qualified and relatively cheap labour will undoubtedly attract investors, e-commerce projects as well as help create new jobs necessary to process and distribute goods from the Far East.



The rapid increase in the number of services on the route of the New Silk Road offers excellent opportunities to the domestic and foreign investors. The demand for comprehensive logistic services is set to increase, opening up opportunities in the area of deliveries, storage and distribution. There will also be benefits to be gained by companies offering customs services. A wide range of possibilities will open up to investors operating in various industries (home electronics, white goods, etc.) which - if located in the area of Łódź — would gain easy access to subassemblies and components arriving straight from China. Producers operating in the cosmetics, food, biotechnological or medical industries, interested in expansion into Asian markets, could ship their goods to China, Japan, Korea or Southeast Asia fast and at a relatively cheaper price.

#### Considering the scale of this Chinese initiative, the profits to be gained by Łódź and the entire region are enormous.

However, to reap them, one must make strategic decisions and take a broader perspective. The decisions to be made should boost the appeal of Łódź as a major point on the new Silk Road. The key tasks include the expansion of the terminal's capacity as well as continuous improvement of the quality of customs or logistics services. An asset which should not be overlooked is Łódź's location at the intersection of the East — West and North South transport corridors. Large benefits could be obtained from a skilful combination of the New Silk Road and the Amber Road stretching from the Baltic Sea to the Mediterranean Sea. There are also advantages to be gained from strengthening the cooperation with countries on the route from Łódź to Xiamen: Belarus, Russia and Kazakhstan. Finally, China may provide access to its neighbouring markets: Taiwan, South Korea, Japan as

well as Southeast Asian countries. Those are markets which have recently been gaining importance, to a certain extent due to the protectionist tendencies in the commercial policy of the United States. The European Union signed a free trade agreement with South Korea as far back as in 2010.

In February 2019 a similar agreement concluded with Japan entered into force. Its importance cannot be overstated. Japan is the second largest EU commercial partner in Asia, right after China.

Considering the current "trade war" between China and the US, one may expect that China will also strengthen its relations with Europe and put in more efforts to expand the New Silk Road. There will be more goods going through Łódź, opening up opportunities for various economic benefits, starting from individual investors, through the city, the region to end with the entire country.

The City offers investors attractive infrastructure, i.e. high-standard office space in new buildings erected by private investors and developed investment properties with good transport connections.

Development of sports infrastructure and cultural facilities adds to the city's appeal and increases the range of possibilities of spending free time.

In cooperation with the local government of the region, Łódź has been investing heavily to improve the public transport system and roads, and to develop favourable tariff solutions (the aim being to improve roads & tram lines, introduce combined ticket solutions and purchase more rolling stock).

**EFFECTIVE CITY POLICY** 

AND UNDERTAKINGS

Organizing EXPO 2024 Horticultural fits in with the sustainability trends and the increasingly important role of green areas in modern cities.

The projects aimed at regeneration and development of the city areas, primarily the Urban Revitalization Programme that covers 20 quarters in the city centre (including 8 priority ones), continuously improve the standard of life by enhancing the investment appeal of the city centre and extending the residential market offer.







## KEY DEVELOPMENT PROJECTS CURRENTLY CARRIED OUT OR RECENTLY COMPLETED IN ŁÓDŹ

# **TRANSPORT**

Project name	Characteristics	Implementation period
City tunnel	Railway tunnel joining Łódź Fabryczna, Łódź Kaliska and Łódź Żabieniec Railway Stations. This investment is of key importance for the urban area and the region as well as the entire national railway system.	2019 - 2022
Łódź Fabryczna Railway Station	Construction of the new Łódź Fabryczna Railway Station - one of the largest railway facilities in Europe, together with road infrastructure.	2010 - 2017
Łódzka Kolej Aglomeracyjna   	Development of a network of connections within the framework of ŁKA - the regional railway carrier providing carriage of passengers over routes connecting Łódź with other towns in the region.	Since 2010
Expressways and motorways	Łódź is the first Polish city to have a motorway ring around it. A1, A2, S8 and S14 roads are now connected with Łódź (Expressway S14 is expected to be completed in 2022). Łódź-Warsaw section of A2 is to be extended to three lanes.	2006 - 2022
East-West route	Construction of the east-west city thoroughfare, including modernization of the tram route.	2013 - 2015
Purchase of new rolling stock for the City  Transport Company	The City Transport Company (MPK) plans to expand its fleet of low-floor trams and electric buses within the next few years.	Since 2002
	E-mobility has become part of the green investments undertaken in Łódź – the initiatives include, inter alia, allowing electric cars to use bus lanes and the purchase of low-emission cars by municipal institutions.	Since 2019
Development of city bike hire	Beginning from 2016, Łódź residents can use the city bike hire system (Łódzki Rower Publiczny) which is continuously developed and extended. The network of bicycle paths is currently almost 200 km long and is to be extended further. Currently, there are 157 city bike parking stations and 1584 bikes.	Since 2016

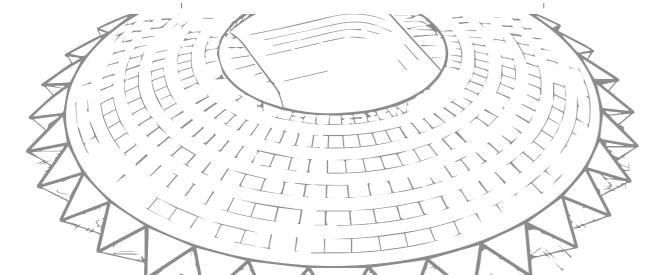


# **REVITALIZATION**

Project name	Characteristics	Implementation period
Łódź City Centre Revitalization Programme	A wide-ranging project for comprehensive renewal of 20 quarters (including 8 priority ones) in the city centre which will involve social regeneration as well as improvement of buildings and infrastructure.	2017 - 2022
Miasto Kamienic	The first pilot programme focused on introducing comprehensive improvements in tenement houses located in Łódź urban zone – a campaign preceding the Urban Revitalization Programme	Since 2011
Księży Młyn	Programme aimed at comprehensive improvement of historic buildings and public spaces, including revitalisation of the historic Księży Młyn quarter – the old working-class district of the Karol Scheibler factory.	2018 - 2020
Art Inkubator	Business incubator for new companies from the creative industries sector, headquartered in the revitalised factory, in Tymienieckiego Street.	Since 2007
Steinerts Palace	Comprehensive renovation of one of the most impressive palaces in the centre of Łódź, to be adapted for the needs of office, hotel and food services.	2017 - 2019
Izrael Poznański Palace	Comprehensive renovation of one of the most important monuments, the seat of the Museum of the City of Łódź, which complements the projects undertaken in the immediate vicinity (concerning Manufaktura, Hotel Puro, Ogrodowa Office building and the quarters subject to urban renewal).	2017 - 2020
Dom Wielopokoleniowy	Renovation and improvement of the historic building in Wólczańska Street to adapt it for housing purposes; the building is intended for various types of tenants - senior citizens, young people, families with children and the disabled.	2018 - 2019

# CULTURE, RECREATION, AND SPORT

Project name	Characteristics	Implementation period
EC1 Łódź — City of Culture   	The following projects are undertaken as part of the wide-ranging regeneration of the former CHP Plant, inter alia:  • EC1 Science and Technology Centre,  • National Centre for Film Culture,  • EC1 Planetarium, and  • Centre for Comics and Interactive Narration.  • A Kids' Zone is planned to be built as well.	2008 - 2019
Upgrading local cultural centres	Renovation, improvement and extension of five local cultural centres operating in the districts of Widzew, Górna and Polesie. One of the key aspects of the project is to make the centres accessible to the disabled.	2018 - 2020
Museum of the Tradition of Independence	It is the oldest historical museum in Łódź, with several branches scattered across the city. One of the key aspects of the project is to make the museum accessible to the disabled.	2017-2019
Film Museum	Comprehensive renovation of the Scheibler Palace now housing the Film Museum, located in the Źródliska Park.	2019 - 2020
Central Museum of Textiles	Renovation of the White Factory building that houses the Central Museum of Textiles (historically, Łódź's core industry); this is also where the International Triennial of Tapestry and the Geyer Music Factory concerts are held.	2018 - 2019
Municipal sports infrastructure	Municipal Sports Centre "Zatoka Sportu"  City stadiums - construction of tKS and Widzew Łódź stadiums  Lodzianka and other training facilities at Minerska Street  Construction of a sports hall at Unii Lubelskiej Avenue (volleyball)  Motorsports Centre  Football training pitch and swimming pool projects	2006 - 2022
Orientarium	The largest ever project of the city zoological garden. The new areas will function as a fauna of Southeast Asia. The Łódź Orientarium will be one of a few such places in Europe, and is expected to bring in 2 million visitors per year.	2017 - 2021



# **GREEN AREAS**

Project name	Characteristics	I I	Implementation period
Expo Horticultural 2024	International thematic exhibition focused around the issues of green areas in cities, regeneration and design of friendly urban environments. The expo will be organized as part of investment-related efforts aimed to improve the standards of public areas, enhance the image of the city and promote Łódź abroad. The event should also boost the city's appeal to tourists.		2024
Investments in green areas	<ul> <li>Zielone Polesie - a campaign to build more green areas in the Polesie district, among others, by building woonerfs; a social participation initiative.</li> <li>Garden streets</li> <li>Woonerfs (among others, Traugutta, 6 sierpnia, Wólczańska, Strzelców Kaniowskich and Zacisze Streets)</li> <li>Pocket parks and squares</li> <li>Restoration of city parks carried out as part of the urban area revitalization:         <ul> <li>Park Moniuszki</li> <li>Park Sienkiewicza</li> <li>Park Staromiejski</li> </ul> </li> </ul>		Since 2014
Clean Air Programme	Programme aimed at modernisation and increase of the energy efficiency of residential buildings, reduction of pollutant emissions and the consequent improvement of air quality	 	Since 2018

# **PRIVATE INVESTMENTS**

Project name	Characteristics	Implementation period
Office construction projects	The New Centre of Łódź: Brama Miasta, Nowa Fabryczna, Przystanek mBank, Nowe Soho Łódź, HB Reavis, Centrum Biurowe Fabryczna  Off-Piotrkowska development – redesign of the Sepia Office building for office purposes and construction of a new office building (Teal Office)  Ogrodowa Office  P22  Imagine  Hi Piotrkowska  Jaracza 62  Skrzywana Factory  Centrum Biurowe Zenit  Monopolis  Ogrody Geyera  Łódź.Work	Since 2017
Industrial investments	Investment properties available in the area of Łódzka Special Economic Zone  Lódź Olechów Intermodal Terminal  Zduńska Wola Railway Port  Logistic and warehouse investments  New industrial district - Jędrzejów Przemysłowy	1997 — establishment of £SSE 2013 — establishment of a direct connection with Chengdu in China

# ANALYSIS OF KEY PROJECTS CARRIED OUT IN ŁÓDŹ

## City tunnel

The construction of the city tunnel will radically change the system of public transport in Łódź and the region. Considering its links with the ongoing projects of the High Speed Rail network and Solidarity Transport Hub, it will also significantly affect the nationwide transportation grid.

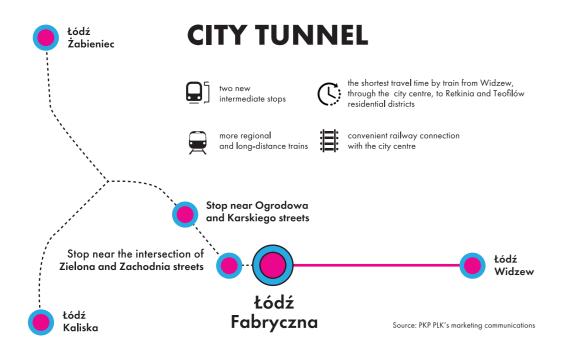
The city tunnel from Łódź Fabryczna to Łódź Kaliska and Łódź Żabieniec, with two stops along the way, is sure to transform the city's transport network. The project is set to cost approximately PLN 1.3 billion and be ready by 2022.

The tunnel will open the Łódź Fabryczna Railway Station, which will be transformed from a mainto an en-route station. The construction of the tunnel will create new opportunities for the Łódź transport hub and for the railway system in Poland. Both regional and long-distance trains will begin to run through, or in fact near,

the centre of the city on the East-West (Łódź Widzew, Łódź Fabryczna and Łódź Kaliska stations) and the North-South (Łódź Widzew, Łódź Fabryczna and Łódź Żabieniec stations) axes, which will considerably reduce the travel time between Łódź and other large Polish cities.

EFFECTIVE CITY POLICY AND UNDERTAKINGS

There will be two intermediate stops in the tunnel for local depots which will significantly improve public transport.



# Łódź Fabryczna Railway Station

Łódź Fabryczna is the main railway station in the city. Today it is not only the largest and the most modern railway station in Poland but also the third largest in Europe. In fact, it is a state-of-the-art hub which integrates railway, bus, tram, bicycle and car transport. The total cost of the investment was 1.76 billion zlotys and a major part was sponsored by EU funds. The usable area of the railway station is 44 thousand square metres and the facility comprises three concourses with the total area of 36 thousand square metres. There are four underground platforms, three of which are 400 and one 300 metres long. The station is an integral part of and a gateway to the New Centre of Łódź, the newly established office and cultural

The station is designed to support the planned high-speed rail route (HSR), which will provide a connection to the new Solidarity Transport Hub and Warsaw, improve the transport grid as such, and significantly reduce travel time to other large cities in Poland and abroad.

# Urban area revitalization

The urban revitalization programme is a strategic scheme and an impulse for major changes in the city. Currently, large-scale investment activities are being carried out in the city centre, embracing both infrastructure investments (road repairs, modernization of network infrastructure, renovation of tenement houses) and social initiatives aimed at improving the quality of life in the city centre.





The New Centre of Łódź is a project carried out in the very heart of the city near Łódź Fabryczna railway station. The objective is to create a new business centre, also with the help of projects undertaken by individual investors.

The New Centre of Łódź combines business, commercial, transport, residential and cultural functions. The focal point is the underground railway station Łódź Fabryczna which is ultimately set to become a national multimodal transport node, combining rail and road transport, including buses, cars and city transport.

The New Centre of Łódź, as the city's emerging business district, may offer high quality premises, easy access and comfortable work space. The projects carried out with the quality of space in mind include: "Brama Miasta", "Nowa Fabryczna", Kobro Square, investment projects planned by HB Reavis and Ghelamco and the OFF Piotrkowska Centre in Piotrkowska Street. Each of the new facilities employs modern (smart building) and environmentally-friendly (LEED and BREEAM certificates, rooftop gardens and green walls, EV charging points, bike docking stations, etc.) solutions which improve the quality of the

# Łódź Horticultural Expo 2024

Łódź is currently preparing an international event - Horticultural Expo 2024. The Expo's theme: "Nature of the City", covers green urban regeneration, modern urban design, and urban landscape formation which preserves green space and develops its potential. The theme also pertains to such matters as sustainable development, circular economy, renewable energy sources, smart city, conscious management of urbanisation processes, supporting the entrepreneurial and innovative activities of residents, and preserving the cultural heritage.

The preparations for the Expo are closely linked with the revitalisation projects carried out in the city and will favourably affect the standards of living, availability of infrastructure and services as well as the attractiveness of public spaces.

The organisation of Horticultural Expo is to have a positive impact on the perception of Łódź and Poland worldwide, and will also be associated with many other social benefits experienced locally and nationally, such as:

- Impact on the image and international partnerships
- Introduction of ecological and pro-environmental solutions
- Tourism promotion
- New solutions in infrastructure and transport
- Stimulation of the local and national economy
- Know-how in organising large events.



# EC1 Łódź - City of Culture

EC1 Łódź – City of Culture is the key cultural institution in Łódź and a fine example of successful renewal of old industrial facilities. The modern complex combining the functions of several specialized cultural institutions is located in the building of the former heat and power plant, in the very centre of the city. After its refurbishment and complete reinvention, Łódź now has an interesting architectural structure and attractive public space woven into the very fabric and identity of the city, a perfect venue for unique cultural and educational initiatives.



### EC1 Łódź – the City of Culture consists of:

- Centre for Science and Technology
- National Centre for Film Culture
- Centre for Comics and Interactive Narration
- Planetarium.

# The city's investment support initiatives

Łódź has actively been supporting investors, offering them comprehensive assistance throughout the whole period of their operation in the city. This guarantees top quality of public services. The business accolades awarded to the city confirm that Łódź is investor-friendly.



#### **CEE Shared Services** And Outsourcing Awards

"Dynamically Developing City - Poland", topping the list in 2019.



#### Investment Awards

"City", bestowed by EuropaProperty.com in 2017.



and 2014.



#### **Prime Property** Prize

- "Investor-Friendly City" in 2019, 2018, 2017



#### Ranking **Prologis**

"TOP 100 Logistics Locations in Europe 2017" for the best locations in Europe - Central Poland -Łódź: the most desired non-Western European location in 2017.



#### Eurobuild Investor's Friendly City

Friendly City Award in 2017, 2016 and 2014.



#### **Prime Property** Prize

"Architecture - Brama Miasta" 2019.



Polish Association of Developers, Ranking of Polish Cities

1st place in 2016 and 2014, 2nd place in 2019, 2018, 2017 and 2015.



**fDi STRATEGY AWARD** in fDi Polish Cities of the Future 2015/2016



#### **Eurobuild The Real Estate Personality** of the Year 2016

Award for Ms. Hanna Zdanowska, mayor of Łódź, in 2016.



#### Report ABSL

recognition for a significant contribution to the development of the modern business services sector in Poland 2017, 1st place in "Cooperation with Local Authorities" and "Modern Business Services Sector in Poland" categories in 2017 and 2016.

Łódź is highly rated in terms of its construction and architecture administration. This management aspect is very important for new construction investments.

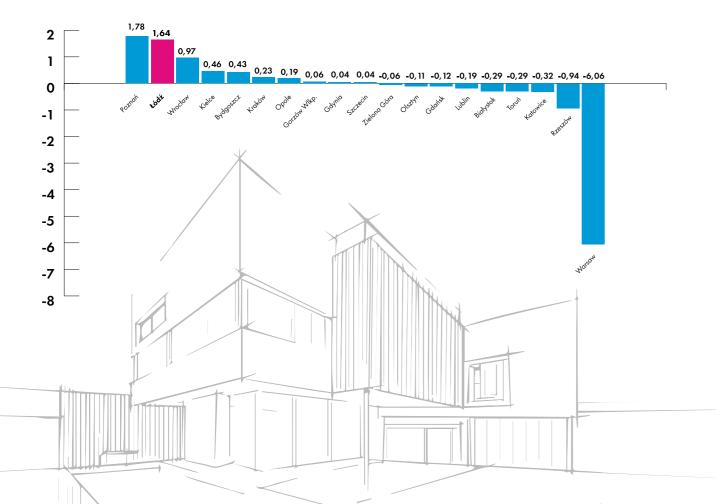
EFFECTIVE CITY POLICY AND UNDERTAKINGS

The ranking takes into account the following criteria:

- Waiting time for decisions on building and land development conditions.

- Waiting time for building permit decisions
   Share of decisions issued in specific time intervals
   Percentage of city with spatial development (zoning) plans

In the City Ranking prepared by the Polish Association of Construction Companies Łódź was classified in second place, just behind Poznań and directly before Wrocław.



## EFFECTIVE CITY POLICY AND UNDERTAKINGS

## Timely delivery of Development Conditions decision

	łódź	Białystok	Bydgoszcz	Gdańsk	Gdynia	Poznań	Katowice	Kie <b>l</b> ce	Olsztyn	Opo <b>l</b> e	Rzeszów	Szczecin	Toruń	Wrocław	Zie <b>l</b> ona Góra	Kraków	Warsaw
Percentage of city's Master Plan coverage	21%	55%	37%	65%	31%	46%	1 1 1 26% 1	23%	58%	29%	1 1 1 17% 1	54%	56%	58%	17%	63%	37%
up to 60 days	50%	22%	1 16%	0%	11%	3%	0%	36%	0%	45%	0%	0%	0%	5%	0%	0%	7%
61-180 days	40%	44%	52%	28%	64%	76%	65%	59%	1 1 79%	45%	50%	67%	50%	72%	100%	13%	36%
181-365 days	10%	22%	32%	72%	18%	21%	30%	5%	21%	10%	40%	33%	20%	23%	0%	32%	32%
above 365 days	0%	12%	0%	0%	7%	0%	5%	0%	0%	0%	10%	0%	30%	0%	0%	55%	25%

In regards to waiting time for a decision regarding the conditions necessary to build, Łódź ranks as one of the best in the country.

### **Timely delivery of Building Permits**

		łódź	Biały	/stok	Bydgoszcz	Gdańsk	Gdynia	Poznań	Katowice	Kielce	Olsztyn	Opole	Rzeszów	Szczecin	Toruń	Wrocław	Zie <b>l</b> ona Góra	Kraków	Warsaw
up to 65 days		100%	13	3%	100%	40%	100%	100%	40%	94%	58%	100%	58%	63%	10%	95%	31%	100%	27%
66-180 days	1	0%	66	1 1 5% 1 1	0%	34%	0%	0%	52%	6%	42%	0%	29%	33%	80%	1 1 5% 1	1 1 31%	0%	39%
above 180 days	1	0%	21	1%	0%	26%	0%	0%	8%	2%	0%	0%	13%	4%	10%	0%	38%	0%	344 1

Furthermore, in regards to waiting time for building permits, Łódź is also at the top of the qualification, with all decisions being provided up to 65 days after filling.

The data provided above indicators that investors can count on Łódź to deliver all the necessary decision in a manner that is so timely that it is the fastest in the country.

# Business activity forms

Forms of doing business in Poland are similar to those existing in other countries of The European Union.

# Forms of business activity in the SME segment:

- Sole proprietorship
- Civil law partnership
- Registered partnership

/ Professional partnership

- Limited liability company
- Joint-stock company

/ Partnerships

- General partnership
- A partnership
- Limited partnership
- Partnership Limited by shares

Tax	   Entities subject to the given tax
PIT	- Sole proprietorship  - Civil law partnerships  - Partnerships (general partnership, limited partnership, limited partnership and limited joint-stock partnerships)
CIT	- Limited liability companies - Joint-stock companies - Capital groups
VAT	All businesses, regardless of legal form, whose sales exceeded 200 tys. zt annualy.
Excise tax	Producers and importers of excise goods, in particular energy and electricity products, alcoholic beverages, tobacco products and liquid for electronic cigarettes
PCC	The tax applies to specific civil law activities that may relate to activities related to conducting business activities.  The Act of 9 September 2000 on tax on civil law transactions indicates activities subject to taxation and activities that are not subject to taxation, including articles of

(Article 2 point 6 letter a) of the abovementioned Act.

association and their amendments related to mergers of limited liability companies

Source: Journal of Laws.

## Labour costs

Running a business is associated with the following labour costs. The costs below are calculated as the percentage of gross earnings.

Insurance	   Employer contributions	   Employee contributions
Retirement	9,76 %	9,76 %
Pension	6,50 %	1,50 %
Accident	1,67 %	
Sick-leave	 	2,45 %
Health	I I	9,00 %
Labor Fund	2,45 %	 
Guaranteed Employee Benefits Fund	0,1 %	 

Source: The Social Insurance Institution

# Offering of the Economic Development and International Cooperation Office

Providing investor assistance in Łódź is the task of the Economic Development and International Cooperation Office. The responsibilities of the Office include preparing and disseminating information on opportunities and conditions for investment in the city; preparing value propositions, including those concerning human resources or the real estate market; supporting local businesses and foreign investors; offering assistance for them; and undertaking economic initiatives. The (www.invest.lodz.pl) website is designed for investors and entities operating in the city and the region. It contains information on the city, possibilities for cooperation, and the assistance offered. The website is available in two language versions (PL / EN).

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# • Universities

- Career offices
- Recruitment agencies
- Employment Offices

# Organization of meetings and cooperation with the City of Łódź

- Organization of site visits
- Meetings with the mayor
- Meetings with representatives of the City of Łódź
- Support at each phase of the investment process

#### Assistance in PR activities

- Press conferences
- · Latest news published at www.invest.lodz.pl and in the newsletter
- "Łódź Creates New Jobs" Campaign
- "Młodzi w Łodzi" Programme
- Information in the city's economic promotion publications.



# Investment incentives offered by local units

Incentives offered by:	Programme description	Beneficiaries	   Budget	Application	Conditions to be met in order to receive support	Time horizon
The Marshall's Office – Łódzkie Voivodeship Contact: Main information office in Łódź +48 (42) 663 31 07	Programme for Łódzkie Voivodeship 2014-2020  -Measure II.2. Internationalization of enterprises (SMEs)  - The sub-measure support is aimed to facilitate international expansion of enterprises with a view to increasing foreign trade.  -Sub-Measure II.3.1. Innovations in SMEs  - Support for innovations in enterprises, implementation of new technologies and purchases of innovative machinery and equipment.  - Sub-Measure II.3.2 Financial instruments for SMEs — Support in the form of loans for product launch.	Micro, small and medium-sized enterprises  Partnerships, including industrial consortia and public-private partnerships  Entities which pursue public goals	Sub-measure I.2.2.  - 25 000 000 euro (approx.106 946 000 zt) (2019) 7 500 000 euro  Measure II.2  - 11 000 000 euro (47 047 000 zt) (2019) 2 800 000 euro (12 265 000 zt) (2020)  Measure II.3  - 8 000 000 euro (34 223 000 zt) (2019)	Competition, in which the number of points depends on the specific criteria of individual competitions	I.2.2. – Support is provided for conducting industrial research and experimental development or for the purchase of a research service regarding the development of a new or improved product.  II.2 Support is provided primarily for investments related to the preparation of companies to enter the foreign market.  III.3. – Support is provided primarily	Until the end of 2020
The Regional Development Agency of Łódź  Contact: The Regional Development Agency o Łódź +48 (42) 208 92 01	JEREMIE2 - Loand for fixed assets expenses, intangible assets and legal, eg. construction works, machine purchases, equipment, means of transport, software.  JEREMIE REAL ESTATE - Loan for property modernization	SMEs	Net worth of JEREMIE2 46 730 000 zł	Comptetion, loan application submitted to specific program.	Support is provided as part of:  - transfer of start-up capital  - business expansion - strengthening the core business  - implementation of new projects  - modernization of real estate	Until funds run out

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Incentives offered by:	Programme description	Beneficiaries	Budget	Application	Conditions to be met in order to receive support	Time horizon
The Łódz Special Economic Zone Contact: The Łódź Special Economic Zone +48 (42) 676 27	State aid in the form of exemption of sole proprietors from CIT or PIT on business activity carried on under support decisions for Central Poland.  Availability of investment-ready locations at competitive prices.  Free-of-charge assistance with investment-related formalities.  "Strefa RozwoYou 2" Project  Development Vouchers for SMEs	Both SMEs and large enterprises     Supported activities:     Manufacturing BPO/SSC/IT R&D	"Strefa RozwoYou2" Project: PLN 33,000,000  * Budget issues are calculated only for encouragement imn the form of programmes. Not calculated for each individual concessions, including tax concessions.	individual assessed.   	A tax relief may be provided for:  • Creating a new enterprise.  • Increasing the production capacity of an existing enterprise.  • Diversifying production through the launch of new products.  Introducing a major change to the manufacturing process of an existing enterprise.  • Quantitive criterion:  • Unemployment rate in the poviat  • Size of enterprise  • Type of project	N/A
The Poviat Employment Office Contactt: The Poviat Employment Office +48 (42) 251 65 00	Help in searching job candidates:  Job center  Help in choosing candidates for work  Assistance in processional development of employees  Raising competences and qualifications of employees and job candidates:  National Training Fund Internships and vouchers for internships Adults professional training Labor Fund refund of juvenile remuneration  Support in creation of work places: help offered by Customer Advisor Intervention works Public works Public works Refund of costs of job position  Employment of disabled people: Refunds of employment costs, trainings and equipment and adaptation Foreigners' employment Support in preparation of necessary documents	Employers and entrepreneurs willing to hire the disabled and/or foreigners, broaden the skills of their existing employees or undertake initiatives to create new jobs.	Undefined  I I I I I I I I I I I I I I I I I I	Filling in the applications for the prelevant programmes. Approval depends on satisfaction of criteria defined for each form of support.	Depends on the form of support	N/A

Incentives offered by:	   Programme description	Beneficiaries	Budget	   Application	Conditions to be met in order to receive support	Time horizon
The Voivodeship Employment Office Contact:  EFS Information Point — Voivodeship Employment Office (42) 638 91 30/39	The Voivodeship Employment Office awards grants from the European Social Fund aimed to promote labour market participation and social inclusion under Operational Programme Knowledge Education Development (OP KED).  Programmes designed for entrepreneurs and employers: - Axis VIII Employment - Sub-Measure VIII 2.1 Supporting labour market participation of people aged 29+ - Sub-Measure VIII 3.1 Non-refundable support instruments for entrepreneurs - Axis IX Social inclusion - Sub-Measure IX.1.1 Promoting social and professional activity of people at risk of poverty or social exclusion	Enterprises planning to introduce labour market instruments and services aimed to address OP KED Axis VIII and IX measures	Axis VIII Employment  VIII.2.1: EUR  13,000,000 (PLN  55,612,000) (2019)  VIII.3.1.  EUR 6,800,000 (approx. PLN  23,706,000) EUR 688,235 (approx. PLN  3,015,000) (2020)  Axis IX Social inclusion  VIX.1.1.  EUR 14,961,410 (approx. PLN  72,557,000) (2019) EUR 2,900,000 (approx. PLN  12,704,000) (2020)	Approval depends on satisfaction of criteria defined for each form of support	N/A	Until the end of 2020

#### BIBLIOGRAPHY:

REAS (JLL) Q4 2018, link: https://www.reas.pl/komentarze/ladz-gwiazda-rynku-deweloperskiego-2018-r

Raport "Potencjał Inwestycyjny Łodzi", edycja 2 - 2019, Antal. dr hab. Robert Krzysztofik, Katedra Geografii Ekonomicznej w Katowicach, Uniwersytet Śląski

Wg danych Eurostat, na dzień T stycznia 2019 https://www.wien.gv.at/statistik/pdf/viennainfigures-2018.pdf

https://spectator.sme.sk/c/22006i36/high-speed-train-takes-passengers-from-bratislava-straight-to-zurich.html
Dane wg Statistical Office of the Slovak Republic za rok 2018 dla powiatów Bratysława I-V

Sprawdzone, https://www.numbeo.com/cost-of-living/compare\_cities.jsp?co-untry1 \*Slovakia&city1 \*Bratislava&country2 \*Austria&city2 \*Vienna

https://www.numbeo.com/cost-of-living/compare\_cities.jsp?country1=Slovakia&city1=Bratislava&country2=Austria&city2=Vienna
https://www.advantageaustria.org/sk/oesterreich-in-slovakia/news/local/VIE\_BTS\_wiiw\_english.pdf

https://spectator.sme.sk/c/20033406/austrian-investors-see-apportunities.html

s/2015/07/investing-in-the-twin-capitals-eu-adopts-new-cooperation-programme-between-slovakia-and-austria https://newsnow.tasr.sk/economy/holzer-people-from-vienna-will-soon-go-to-work-in-bratislava/

https://www.thetrainline.com/train-times/glasgow-queen-street-ta-edinburgh-waverley https://www.gov.scot > documents > govscot:document

https://sp-bpr-en-prod-cdnep.azureedge.net/published/2018/2/23/A-Guide-to-Gross-Value-Added--GVA--in-Scotland/S8%2018-15.pdf Wg danych Eurostat, 2018

https://www.nomisweb.co.uk/query/construct/summary.asp?menuopt=200&subcomp= https://www.scotsman.com/news-2-15012/edinburgh-named-second-best-place-to-live-in-uk-1-3149764

https://www.namisweb.co.uk/auery/construct/summary.asp@menuapt=200&subcomp=

ttps://tickets.amtrak.com/itd/amtrak

Sources: baltimorewashingtonscmaglevproject.com/index.php/faqs; www.artba.org/about/faq

https://www.bls.gov/regians/west/news-release/countyemplaymentandwages\_washington.htm https://www.numbeo.com/cost-of-living/compare\_cities.jsp?co-

untry 1=United+States&country2=United+States&city 1=Washington%2C+DC&city2=Baltimore%2C+MD

https://www.forbes.com/pictures/edgl45edji/no-5-baltimore-towson-md/#58a633982a6a

Maryland State Highway Mobility Report National Aquarium Mission Impact Report

BIS UK Business: Activity, size and Location 2018

https://www.spottedbylocals.com/blog/alpha-beta-and-gamma-cities/

imps.// www.apumouthyocox.com/ ungry upino-unu-unu-graininu-unlery hisps.// www.apumouthyocox.com/ ungry upino-unu-unu-graininu-unlery hisps.// www.apumouth.bic.co.uik/ newa-ord-nedia/new-green-labe-uk-liming/ham-fiq-opens-lis-doors hitps://www.numbea.com/ cast-of-living/compare\_clies.pp?co-unty-le-linied-kf-rigadom&chiy-la-of-abocounty-g-lu-linied-krigadom&chiy-g-Birmingham https://inzynieria.com/wpii-branzy/wiadomosci/5/56667.kto-obejmie-nadzor-nad-budowa-s14

https://www.stat.fi/tup/suoluk/suoluk vaesto en.html

https://przyczepymarter.pl/blog/pl/news-lodz.transport.kolejowy.tunel.centrum.miasta.tunel.srednicowy-498.html https://lka.lodzkie.pl/\_data/Komunikaty%20prasowe/%C5%81KA%20-%20padsumowanie%202018r.%20-%20Inf.%20Pras..pdf

Kierunki rozwoju Łódzkiego Węzła Kolejowego, Jan Raczyński, Tomasz Bużałek, 2017, s-6

-75c2dbd5-56d2-4260-ac2f-36f46487e8dd/c/Raczynski\_\_BuzalekTT\$1-2.pdf

http://www.inzynierbudownictwa.pl/inwestycje,inwestycje,artykul,nowe\_linie\_kolejowe\_warszawa\_wroclaw\_lodz\_plany,12089

EFFECTIVE CITY POLICY AND UNDERTAKINGS

https://www.rynek-kolejowy.pl/wiadomosci/lka-przez-tunel-seednicowy-jeszcze-czesciej-niz-planowano-85060.html, stan z dnia 10.09.2019 https://www.rynek-kolejowy.pl/mobile/rekordowy-2018-rok-lka-ponad-20-wiecej-pasazerow-90055.html

https://www.transport-publiczny.pl/wiadamasci/warszawa-transport-zynowy-to-polowa-tomunikacji-miejskiej-55998.html http://pl.globalcityholdings.com/a/1713,ruszyla-budowa-najwiekszego-w-europie-sradkowo-wschodniej-parku-wodnego

https://dzienniklodzki.pl/nowe-centrum-lodzi-najdrazsza-dzialka-sprzedana-zdjecia/ar/11612862 https://www.bryla.pl/bryla/7,85301,24590561,off-piotrkowska-w-lodzi-biurowiec-z-publicznym-agradem-na-dachu.html

https://dzienniklodzki.pl/raport-firmy-jll-rynek-mieszkan-w-lodzi-bedzie-rosl-a-ceny-razem-z-nim/ar/c9-14467741

https://businessinsider.com.pl/finanse/makroekonomia/nowy-jedwabny-szlak-najwazniejsza-inicjatywa-ekonomiczna-chin/2xstct6http://dspace.uni.ladz.pl/xmlui/bitstream/han-

dle/11089/23188/%5B1%5D-300\_Swieszczak\_Potencjal%20innowacyjny.pdf%sequence=1&isAllowed=y Potencjał innowacyjny firm z sektora małych i średnich przedsiębiorstw- przykład województwa łódzkiego, Marika Świeszczak, Łódź,

https://www.mbank.pl/en/investor-relations/shares/shareholders.html

https://www.gowork.pl/blog/przystanek-mbank-zatrudnia-pracownikow-w-lodzi

https://uml.lodz.pl/files/public/dla\_biznesu/investlodz/Human\_capital\_in\_lodzkie\_region\_.pdf https://dziendobry.tvn.pl/a/back-office--manager-specialist-kim-jest-ta-osoba

https://www.pb.pl/polska-zaglebiem-bankowosci-872066 https://uml.lodz.pl/dla-biznesu/dla-inwestora/zachety-dla-inwestora/