

Toruń [Poland], January 2023

Investment attractiveness of Kujawsko-Pomorskie Voivodeship – a synthesis report on the research results

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Authored by a team of Nicolaus Copernicus University in Toruń
under the direction of Professor Małgorzata Jaworek,
commissioned by the Pomeranian Special Economic Zone
(Pomorska Specjalna Strefa Ekonomiczna sp. z o.o.)

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Table of contents

Introduction	9
I. Investment attractiveness – measuring and assessment	11
II. Kujawsko-Pomorskie Voivodeship – selected characteristics	15
III. Investment attractiveness of Kujawsko-Pomorskie Voivodeship compared to the rest of the country in the light of statistical data	36
IV. Assessment of the investment attractiveness of the subregions of Kujawsko-Pomorskie Voivodeship in the light of statistical data	46
V. Investment attractiveness of Kujawsko-Pomorskie Voivodeship – experts’ opinion	48
VI. Investment attractiveness of Kujawsko-Pomorskie Voivodeship – assessment of enterprises with foreign capital	50
VII. Brześć Economic Zone	58
VIII. SWOT Analysis of Kujawsko-Pomorskie Voivodeship	63
Conclusions	66
Research methodology	72

FROM THE PRESIDENT OF THE MANAGEMENT BOARD OF THE POMERANIAN SPECIAL ECONOMIC ZONE



We proudly present to you a synthesis report summarising the results of the research project titled “Investment attractiveness of Kujawsko-Pomorskie Voivodeship”. This project was carried out by a team from Nicolaus Copernicus University in Toruń in cooperation with Kujawsko-Pomorskie Voivodeship Office, the Brześć Kujawski municipality and the Pomeranian Special Economic Zone.

The outcome of the analyses is the result of a study of the location conditions (which are conducive to investment decisions), the technical and social infrastructure, and the land and local resources (being valuable assets), distinguishing Kujawsko-Pomorskie Voivodeship from other regions. An important and unique element of the project was an expert survey, in which companies operating in the voivodeship and those representing the business environment participated.

The report offers important conclusions not only to investors but also to us – institutions aiming to develop entrepreneurship and nurture economic growth. This study is an important step in creating the best investment ambience. Its results enabled defining the region’s strengths, as well as areas for improvement, including the development of innovation. At the Pomeranian Special Economic Zone, we have already made efforts to overcome this barrier by setting up the Industrial Robots Programming Centre (IRPC) in the voivodeship. The centre is a place where youth from different levels of education, as well as employees of companies, can improve their skills and acquire qualifications so that the economy can automate production processes in the future. The IRPC will thus address the shortage of staff with robotics skills.

We are proud to manage this part of the country on behalf of the Polish Investment Zone. Undoubtedly, the opportunities arising from the New Investments Promotion Act provide a great opportunity not only for companies but also the entire region, influencing the quality of life of the inhabitants, inter alia, through new jobs. I believe that together, with the support of local government units, business environment institutions, as well as entrepreneurs and residents of the voivodeship, we will create here the best investment environment in the country.

Przemysław Sztandera

MESSAGE FROM THE GOVERNOR OF KUJAWSKO-POMORSKIE VOIVODESHIP



I am pleased to have been one of the initiators of the work that led to this synthesis report summarising the results of the research project titled “Investment attractiveness of Kujawsko-Pomorskie Voivodeship”. I would like to thank Professor Małgorzata Jaworek and the research team from Nicolaus Copernicus University in Toruń, who, under her guidance, carried out this extensive mission. I would also like to express my gratitude to Mr Przemysław Sztandera, President of the Management Board of the Pomeranian Special Economic Zone, who was the moving spirit behind this report.

The complete description of the study results, with which I am acquainted, includes an extensive theoretical basis, the socio-economic characteristics of our region and, principally an assessment of the attractiveness of Kuyavia and Pomerania for investment opportunities. The case study constitutes a very interesting part of the report – an analysis of the investment attractiveness of Brześć Kujawski, one of the cities in our voivodeship. I would also like to thank Mr Tomasz Chymkowski, Mayor of Brześć Kujawski, for his fruitful cooperation with the UMK team.

It is no exaggeration to say that the results of the study are an invaluable source of information for potential investors, especially in the current difficult and volatile times, which require participants in the investment process to be not only experts but also able to cooperate.

I believe that using the results of the study will contribute to the economic development of our region.

Mikołaj Bogdanowicz

FROM THE MAYOR OF BRZEŚĆ KUJAWSKI



The synthesis report on the results of the research project “Investment attractiveness of Kujawsko-Pomorskie Voivodeship” captures the specificity and developmental conditions of the region. I am deeply convinced that the analysis presented, by raising the level of knowledge on the investment attractiveness factors of the voivodeship, will provide an effective impetus for its further development.

I would like to thank the Governor of Kujawsko-Pomorskie Voivodeship, Mr Mikołaj Bogdanowicz, and the President of the Management Board of the Pomeranian Special Economic Zone, Mr Przemysław Sztandera, for taking the initiative for this research project, as well as the authors of the report – the team from Nicolaus Copernicus University in Toruń and its head, Professor Małgorzata Jaworek for their dedicated efforts in conducting the research.

Investment attractiveness is a crucial element in shaping economic activity and determining the competitiveness of the area.

It is indeed a great honour for us that the Brześć Economic Zone was accepted and presented as a case study. The success of the investors who have already trusted us is the best recommendation for anyone looking for a place to locate their business.

Tomasz Chymkowski



Introduction

The report summarises the results of the scientific research project titled *Investment Attractiveness of Kujawsko-Pomorskie Voivodeship* [Polish: *Atrakcyjność inwestycyjna województwa kujawsko-pomorskiego*], conducted in 2022 by a team from Nicolaus Copernicus University in Toruń, commissioned by the Pomerania Special Economic Zone (Pomorska Specjalna Strefa Ekonomiczna sp. z o.o.) in Gdańsk. This report is essentially limited to presenting the main factors of investment attractiveness. Other factors and their barriers are presented extensively in the final report on the research results.

The investment attractiveness of a region (understood as a state) is due to the interaction of numerous factors and barriers. Their identification, together with the recognition of their impact on investors' decisions, is essential in formulating action programmes for the region's economic and social development. The authors of the research, while hoping that the results will be useful in this regard, point out that the variability of the attractiveness factors over time implies the need for continuous research, the results of which should be considered by organisations involved in supporting entrepreneurship and, above all, by institutions responsible for formulating economic policy instruments.

In conducting the research, the results of which are presented in this report, the authors received significant support from the ordering party. We would like to thank Mr Przemysław Sztandera, President of the Management Board of the Pomeranian Special Economic Zone, and Ms Joanna Gasek, Deputy Director of the Zone Investment Department, as well as other employees of the Zone involved in the project. Our gratitude is due particularly to Mr Maciej Kazienko, Vice-President, for his valuable comments on both the research procedure and the wording of the draft final report on the research results.

At every stage of the project, the team experienced exemplary kindness and assistance from Mr Mikołaj Bogdanowicz, the Governor of Kujawsko-Pomorskie Voivodeship, for which we are deeply grateful. We would like to thank Mr Tomasz Chymkowski, Mayor of Brześć Kujawski, for sharing with us his rich experience in the creation of the Brześć Economic Zone and his remarks on its activities. Our thanks are also due to the participating experts and, above all, to the companies that accepted the invitation to participate in the survey. We thank them for the assessments and insights given. These formed the basis for the conclusions drawn regarding the real investment attractiveness of the voivodeship.

We would like to thank Mr Michał Kraszewski, who runs a business named "Całkiem Wysokie Loty" in Gołaszewo Kujawskie, for providing the rights to his photographs. They not only enriched this study, but also showed Kujawsko-Pomorskie Voivodeship as a place with special qualities in a broad spectrum of attractiveness.

On behalf of the authors
Małgorzata Jaworek
Project Manager



I.

Investment attractiveness – measuring and assessment

The investment attractiveness of a region is a set of factors considered in its selection as a place to make an investment - both by investors based outside its area and by entities doing business in its area. The primary considerations for investors' decisions are assessments of location benefits.

The investment attractiveness of a region can be assessed as potential and real. The former is the result of an assessment of the factors that could potentially be considered in the choice of an area as an investment location and the importance of a particular factor for investors, while the latter is the result of a retrospective assessment of their decision to choose a region as a business location.

The measurement of investment attractiveness can be carried out at different levels of aggregation of the analysed spatial division units. At the national level, attractiveness is usually measured for individual voivodeships, poviats and municipalities. This report presents the potential investment attractiveness of Kujawsko-Pomorskie Voivodeship, compared to other Polish voivodeships and the potential investment attractiveness of its individual sub-regions – poviats.

The assessment of investment attractiveness is always individual. Investors tend to consider the configuration of location factors, but also the occurrence of a specific factor when guided by the expected benefits. In the study, the results of which are presented in this report, the key factors of investment attractiveness were located in eight pillars:

- ..→ entrepreneurship,
- ..→ innovation,
- ..→ social infrastructure,
- ..→ technical infrastructure,
- ..→ environment protection,
- ..→ land and housing stock,
- ..→ market absorption,
- ..→ labour market.

Entrepreneurship and innovation characterise the economic environment. For many investors, it is important to operate in centres characterised by not only developed entrepreneurship but also certain characteristics, the principal among them being innovation. This is because it opens up opportunities to benefit from the effects of both vertical and horizontal integration, as well as spatial integration. An economic environment with an adequate level of technical development facilitates access to potential co-operators, being an important factor identified in the location decisions of foreign investors. In the economic environment, institutions of the business environment occupy an important place, among them Special Economic Zones (SEZs). The economic environment is also created by institutions established by local authorities (often operating within their structures) whose statutory objective is to support entrepreneurship. These include business incubators, economic development agencies, investor service centres, business support centres, etc. A major role is played by

scientific and research centres, whose presence, profile of activities, level of work carried out and services provided can be a decisive factor in the choice of location, especially by enterprises in the innovation sector. Besides these institutions, mention should be made of consultancies, chambers of commerce, etc.

In many cases, the **state of the social infrastructure**, consisting of educational, health care, social, cultural, physical culture, sports, tourism and recreation centres, is a decisive issue in the choice of business location. The first testify to education, its structure and level, as well as the scientific and research environment. Their assessment provides information about potential access to particularly important resources, which are labour resources with the expected characteristics (qualifications) or the possibility of using scientific facilities. It is very important to assess the accessibility to health care units and the quality of health care services provided. The cultural, leisure and recreational infrastructure and the state of the environment are also of significance.

The assessment of **technical infrastructure** relates to several characteristics, ranging from communication and transport accessibility, the ability to meet electricity demand, the conditions for obtaining energy from renewable sources, and the state of equipment for waste recovery or disposal. For many investors, the basic prerequisite for site selection is that the region's transport infrastructure is adequate. This considers its location national and international road links, its proximity to seaports, airports, etc. The requirements in this area are increasing because communication and transport accessibility are important for obtaining resources, contacts with customers, co-operators and suppliers, and are also a factor in the efficiency of the business through their impact on costs.

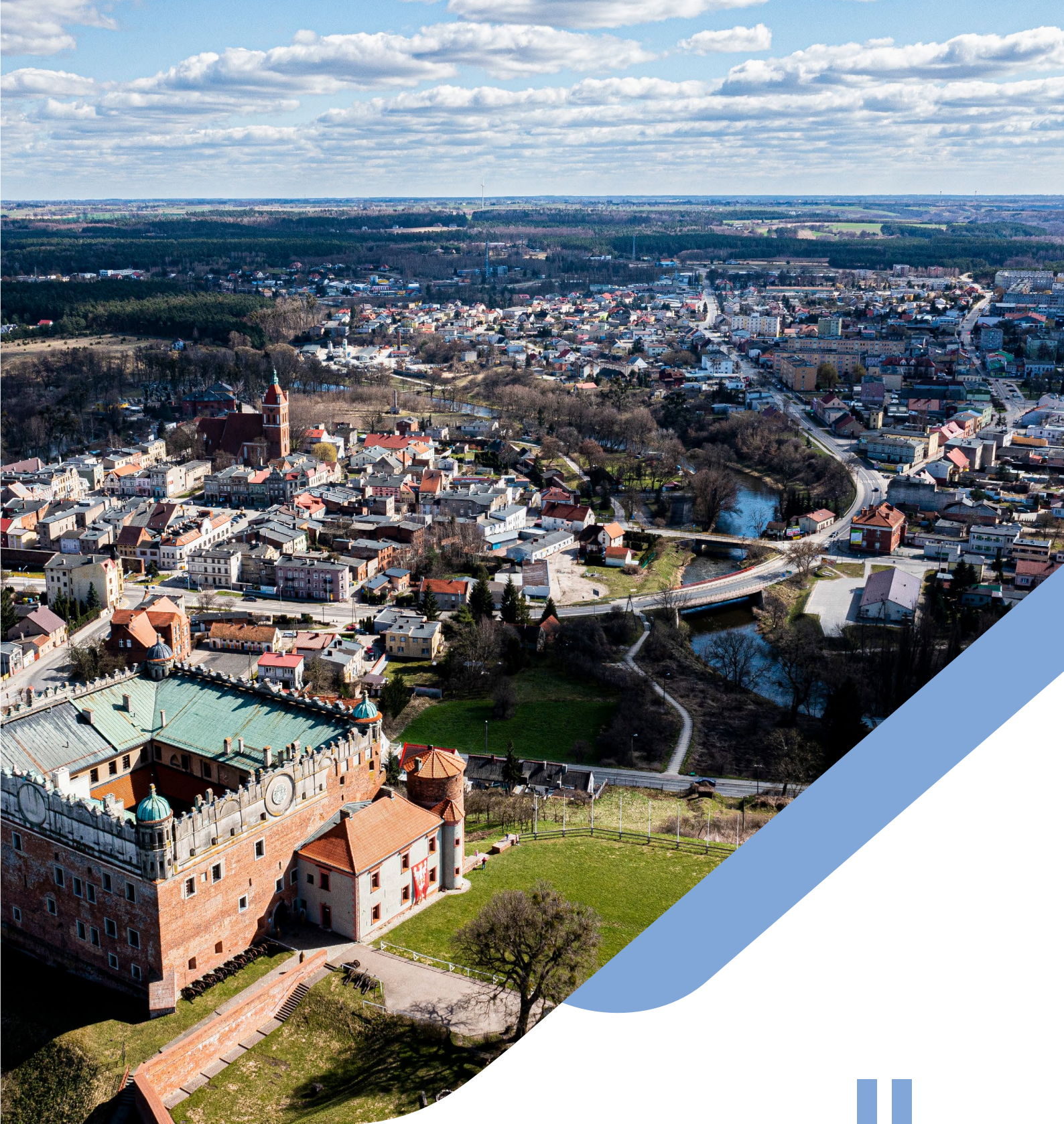
The growing awareness of the importance of the **state of the environment** and, relatively, the necessity to take measures aimed at its protection, means that investors are increasingly considering the existing state of affairs and the directions of the region's development set out in the adopted strategies, particularly the provisions of the **environmental** protection programmes in force, in their location decisions. Notably, for an increasing number of potential investors, care for the environment is a factor prompting the choice of a region as an investment location and may even be a condition for the location of their business. Examples are the state of groundwater resources for water quality-sensitive industries, such as the food and beverage industry and high-tech industries. However, there are investors with the opposite perception of the drive to improve the environment, who are encouraged by less restrictive environmental conditions. This applies to the so-called dirty technologies.

An important factor in the region's investment attractiveness is the **availability of land and housing stock** and their prices. Restrictions on the availability of land may be related to its specific use, as defined in the local development plan or nature conservation. However, it is not the status of the area as a protected area per se, but the proximity to such areas that can significantly limit the location of investments related to industrial activities, as opposed to investments for tourism activities. Regions with land of the desired size and state of readiness for development have an advantage. The region's potential housing stock is reflected in a set of categories describing the housing market conditions and the housing conditions of the population. It indicates to an extent the level of socio-economic development already achieved.

The increasing internationalisation of the global economy means that many companies are operating internationally, with a global perception of demand. However, this does not rule out **the absorption capacity of the local market** as not a significant determinant of a region's investment attractiveness. For companies targeting the local market, due to the specific nature of the production or services provided, the absorptive capacity of this market (household demand, institutional demand) is of fundamental importance, as it determines the potential scale and structure of sales in this market.

Labour resources, their condition, qualitative characteristics and price, are undoubtedly among the key factors considered in assessing a region's investment attractiveness. The ability to recruit workers with the right qualifications, professional skills and experience is a prerequisite for starting a business in the area. Of course, the needs in this area vary, depending on the type of activity. Manufacturing activities are conditioned to a greater extent by the ability to employ workers with vocational training than service activities, where there is a greater need for workers highly qualified in various fields of education. One parameter indicating the availability of labour resources is the unemployment rate. Its high level indicates that the labour market is characterised by a large scale of supply, followed by competitive prices. However, in numerous cases, high unemployment is not indicative of the ability to meet the hiring needs of workers with specific skills (especially high skills). Thus, the assessment of the labour market is multifaceted.

In assessing the region's investment attractiveness to formulate measures to improve it, it is particularly important to consider the indications of investors who have chosen a voivodeship as a place to do (develop) business or the people (institutions) involved in making that choice. They are particularly valuable in identifying factors and barriers to a voivodeship's investment attractiveness, as they show the state in its actual form. Ascertaining the views of entrepreneurs is very difficult, mainly due to their increasing aversion to sharing their experiences, especially on issues of operational strategy. The need to identify these assessments was pointed out by researchers of investment attractiveness of Polish regions, but due to the difficulty in accessing primary data, the research was limited to potential attractiveness. Thus, the results presented in the report are original and unique.



II.

Kujawsko-Pomorskie Voivodeship – selected characteristics



Share of national population: 5.3%



Share of national area: 5.7%



Share of gross domestic product: 4.4%



Share of agricultural land in the country's agricultural area: 7.3%



Share of country's agricultural production: 7.5%



Share of country's industry: 4.2% (sold production of industry)

Administrative division

- 23 poviats, including 4 township poviats (Bydgoszcz, Toruń, Włocławek, Grudziądz) and 19 rural poviats,
- 144 municipalities.

Main urban centres	Population
Bydgoszcz	337,666
Toruń	198,273
Włocławek	104,705
Grudziądz	90,890
Inowrocław	69,576

Location



Kujawsko-Pomorskie Voivodeship is formed mainly by two historical districts – Kujawy and Ziemia Chełmińska. The voivodeship is located in the central-northern part of Poland and at the same time in the centre of Europe, within an attractive distance from the most important European business centres. It borders five Polish voivodeships directly: Mazowieckie (Warsaw), Warmińsko-Mazurskie (Olsztyn), Wielkopolskie (Poznań), Pomorskie (Gdańsk) and Łódzkie (Łódź).

Distances to major European business centres

Europe				Poland			
Bydgoszcz –	km	Toruń –	km	Bydgoszcz –	km	Toruń –	km
Amsterdam	1021	Amsterdam	1069	Białystok	408	Białystok	353
Athens	2431	Athens	2407	Gdańsk	168	Bydgoszcz	46
Belgrade	1265	Belgrade	1224	Gdynia	191	Gdańsk	168
Berlin	401	Berlin	449	Poznań	139	Gdynia	191
Bern	1320	Bern	1369	Katowice	406	Poznań	173
Budapest	969	Budapest	925	Kraków	483	Katowice	364
Helsinki	1196	Helsinki	1140	Lublin	466	Kraków	441
Copenhagen	838	Copenhagen	886	Łódź	223	Lublin	380
Lisbon	3148	Lisbon	3196	Szczecin	259	Łódź	181
London	1466	London	1514	Olsztyn	212	Szczecin	314
Madrid	2687	Madrid	2736	Rzeszów	513	Olsztyn	170
Oslo	1353	Oslo	1402	Toruń	46	Rzeszów	472
Paris	1422	Paris	1471	Warsaw	281	Warsaw	210
Prague	559	Prague	608	Wrocław	279	Wrocław	329
Rome	1867	Rome	1852				
Sofia	1728	Sofia	1687				
Vienna	782	Vienna	740				

Note: approximate values-distances depending on means of transport and route chosen.
Source: own work based on Google Maps (accessed 06/05/2022).



Kujawsko-Pomorskie Voivodeship lies almost entirely within the Great Valleys belt [Polish: Pas Wielkich Dolin], which is part of three lake districts: Wielkopolskie, Pomorskie and Mazurskie. A characteristic of the voivodeship's location is that it is situated at the intersection of two important valley sequences – the meridional Vistula valley and the latitudinal pre-valley route, currently drained by the Drwęca River, the mouth of the Brda River and the Noteć River. At their intersection, the Toruń Basin was formed, in which the two main cities of the voivodeship are located – Bydgoszcz (the seat of the Voivodeship Governor) and Toruń (the seat of the Regional Council and Voivodeship Board). All major rivers (Vistula, Drwęca, Noteć and Brda) converge here and major transport and communication routes, including those within the Trans-European Transport Network (TEN-T), intersect here. The voivodeship has a well-developed rail network of regional, national and international importance. In addition, Bydgoszcz International Airport and several smaller airports for civil and sports purposes are located on its territory.

Demographic structure



Kujawsko-Pomorskie Voivodeship covers an area of 17 972 km² and has a population of 2 027.3 thousand (according to the 2021 Population and Housing Census), of which 48.4% are male and 51.6% female. The majority of the people, 58.5%, live in cities. In Kujawsko-Pomorskie Voivodeship, as in the entire country, a decrease in population has been observed compared to 1999, i.e. the year of its creation, when the voivodship was inhabited by 2 068.9 thousand people. A decline in population was recorded in all township poviats – Bydgoszcz, Grudziądz, Toruń and Włocławek. Among the rural poviats, the largest population decrease occurred in Inowrocław and Radziejów. In contrast, the largest increase in population was recorded in the following rural poviats: Bydgoszcz, Toruń, Brodnica, Nakło and Świecie. A key factor influencing the continuing decline in the voivodeship's population is inter-voivodeship migration movements – between 2015 and 2020, the difference between the number of de-registrations from Kujawsko-Pomorskie Voivodeship and the number of registrations therein was 12.6 thousand people.



The predominant proportion of Kujawsko-Pomorskie Voivodeship's population (62.8%) is in the manufacturing group, while the pre-productive and post-productive groups account for 15.1% and 22.1% respectively. Projections by the Statistics Poland (GUS) indicate that the population of the voivodeship will continue to decline. The decline will affect the pre-production and production groups. Compared to 2020, the number of people in the first group will fall by almost 30% in 2050 and by around 29% in the second group. In contrast to these groups, the post-working age population will increase, by as much as over 44%. This will be reflected in an increase in the rate demographic of ageing (the proportion of the total population aged over 65).

Entrepreneurship



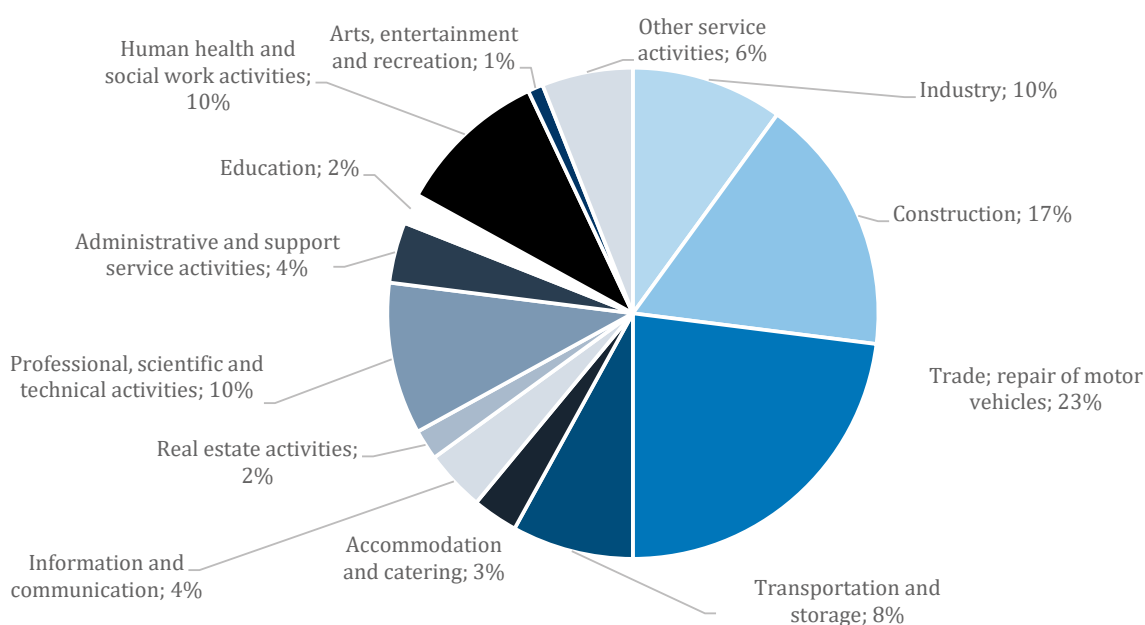
As at the end of 2020, there were 113,561 non-financial enterprises (entities whose main activity is production and trade in goods or the provision of non-financial services) in the voivodeship, which accounted for 5.0% of entities of this type in Poland. Micro enterprises dominated the structure of active non-financial entities, accounting for 97.1% of the collective, with small enterprises amounting to 2.2%, medium-sized enterprises to 0.6% and large enterprises to just 0.1%. There has been an increase in the number of businesses in recent years, particularly influenced by the growth of the smallest entities.



In the Kujawsko-Pomorskie Voivodeship, the largest number of active entities (23%) is engaged in the section “trade; repair of motor vehicles”, followed by “construction” with 17%, “health care and social assistance” and “professional, scientific and technical activities” with 10% and “manufacturing” with 9%.

The key sectors of Kujawsko-Pomorskie Voivodeship are BPO (business process outsourcing) which provides specialised services to other enterprises (entities of this sector are mainly located in Bydgoszcz), the chemical sector (located in Włocławek, Toruń, Inowrocław, Bydgoszcz and Świecie), the electrical machinery sector (located in Bydgoszcz, Toruń, Grudziądz, Inowrocław and Tuchola) and the food sector (Invest in Kujawsko-Pomorskie, 2022).

Non-financial enterprises conducting business by type of activity – Kujawsko-Pomorskie Voivodeship



Source: own work based on the Local Data Bank of the Statistics Poland.

Innovation

Expenditure on R&D activities



In recent years, there has been a systematic increase in R&D expenditure in the voivodeship. In 2020, such expenditure amounted to PLN 0.89 billion, which accounted for 2.7% of national outlays. In per capita terms, this amounted to PLN 431.6, 51.1% of the national average.

R&D entities



The research potential of the voivodeship is represented by 294 entities (6,381 for the country) operating in the R&D field, of which the vast majority of research-active units operate in the business sector (275). There are 7,512 in-house staff involved in R&D, amounting to 3.3% of staff involved in R&D in the country.

R&D investment activity of entities



Innovative activity is performed by 27.2% of service companies and 24.3% of industrial companies in the voivodeship, which translates into an average share of 22.5% of innovative companies in the total number of entities in the Kujawsko-Pomorskie Voivodeship. Product innovations are more often introduced by industrial enterprises (13.9%) than by service companies (7.8%), while service companies lead in business process innovations (25.8%) over industrial enterprises (21.2%).

Expenditure on innovative activities in industrial enterprises in Kujawsko-Pomorskie Voivodeship



Expenditure on innovative activities in 2020 amounted to PLN 561.64 million, which represents 2.8% of outlays on innovative activities of industrial enterprises for the country. This amounted to PLN 1,343 per economically active person, corresponding to 59% of the indicator for Poland.

Inventions filed with the Polish Patent Office



In Kujawsko-Pomorskie Voivodeship, 171 inventions were filed with the Polish Patent Office and 68 granted, which translates into 4.3% of the number of invention applications and 3% of patents granted in Poland in this period.

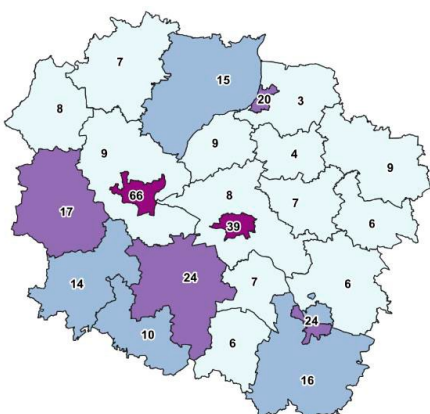
Social infrastructure

Educational infrastructure

A significant number of vocational schools



There are 112 secondary schools of general education, 90 vocational schools and 132 technical high schools in Kujawsko-Pomorskie Voivodeship. The number of vocational schools located in the region far exceeds the average for the provinces nationwide. Nearly half of the students at vocational schools study engineering.



Secondary schools of general education, vocational schools and technical high schools (as of 2020)

Unit	Secondary schools of general education	Vocational schools	Technical high schools
Kujawsko-Pomorskie Voivodeship	112	90	132
Average for Poland	138	80	124

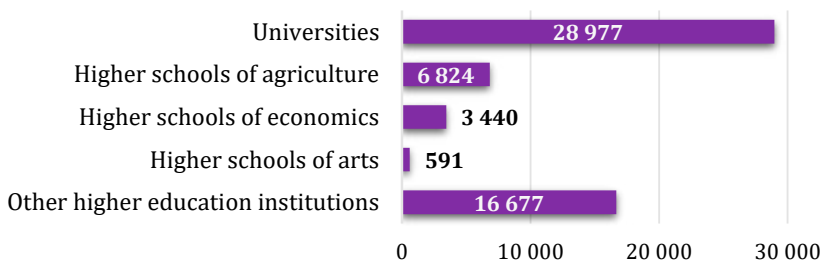
Source: own work based on the Local Data Bank of the Statistics Poland.

There are 17 higher education institutions in the voivodeship, including:



- 2 universities (Nicolaus Copernicus University in Toruń and Kazimierz Wielki University in Bydgoszcz),
- Bydgoszcz University of Science and Technology (Politechnika Bydgoska im. Jana i Jędrzeja Śniadeckich – PBS),
- The Feliks Nowowiejski Academy of Music ,
- The State Academy of Applied Sciences in Włocławek
- as well as non-public universities (such as Wyższa Szkoła Bankowa in Toruń, Wyższa Szkoła Gospodarki in Bydgoszcz, Kujawska Szkoła Wyższa in Włocławek).

Students by type of higher education institutions in the Kujawsko-Pomorskie Voivodeship (as of 2018)



Source: own work based on the Local Data Bank of the Statistics Poland.

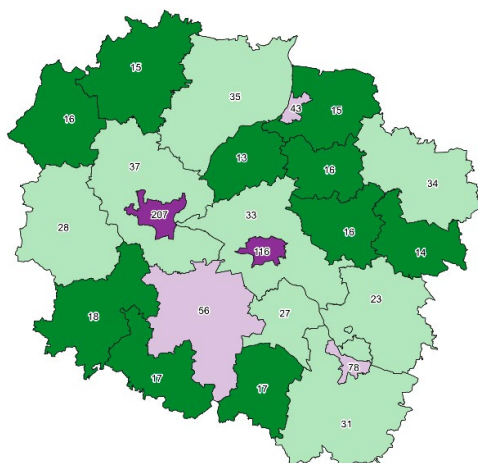
Social infrastructure

Health care infrastructure

More than 900 outpatient clinics provide medical services in the Kujawsko-Pomorskie Voivodeship.



Most are located in Bydgoszcz (207), Toruń (116), Włocławek (78), Inowrocław powiat (56) and Grudziądz (43).



Medical clinics (as of 2020)

Source: own work based on the Local Data Bank of the Statistics Poland.

There are 40 general hospitals in the voivodeship.



In 2020, as many as 11 of them were recognised in the ranking of the 100 best treatment, multi-specialty and oncology hospitals in Poland, drawn up by the Healthcare Quality Monitoring Centre [Centrum Monitorowania Jakości w Ochronie Zdrowia] and the “Rzeczpospolita” newspaper. In terms of the number of hospitals awarded, Kujawsko-Pomorskie Voivodeship was ranked 2nd in Poland. The highest grade in the ranking was granted to the Oncology Centre in Bydgoszcz (2nd) and 10th Military Hospital and Out-Patient Clinic in Bydgoszcz [Wojskowy Szpital Kliniczny z Polikliniką] (15th place).

Kujawsko-Pomorskie Voivodeship has a rich base of spa hospitals and sanatoriums.



In respect of the number of such facilities, the voivodeship ranks 4th in Poland, while in terms of their accessibility, measured by the average number of beds in these facilities, it ranks 2nd. Places with particular spa qualities are Ciechocinek, Inowrocław and Wieniec-Zdrój offering treatment services using brine and thermal waters.

Social infrastructure

Cultural and sports infrastructure

There are 70 cultural facilities in the voivodeship.



Forty-six of these are museums, 7 theatres and musical institutions and the remaining 19 are cinemas. The main cultural establishments include Opera Nova in Bydgoszcz, Wilam Horzyca Theatre in Toruń, The Kujawsko-Pomorski Musical Theater, Ignacy Jan Paderewski Philharmonic in Bydgoszcz and, The Chopin Centre in Szafarnia, Archeology Muzeum in Biskupin, The Muzeum of Kujawy and Dobrzyń in Włocławek, and Maria Znamierowska-Prüfferowa Ethnographic Museum in Toruń. The Cultural and Congress Centre Jordanki in Toruń is an important cultural venue in the province.

Kujawsko-Pomorskie Voivodeship is famous for its numerous cultural events of national and international scope.



The most important festivals organised in the province include EnergaCAMERIMAGE International Film Festival of Cinematographers, Bydgoszcz Opera Festival, Bydgoszcz Music Festival, PROBALTICA Festival of Music and Art of the Baltic Countries, TOFIFEST International Film Festival, KONTAKT International Theatre Festival, Bella Skyway Festival and JAZZ Od Nowa Festival.

In terms of the number of sports centres, Kujawsko-Pomorskie Voivodeship was ranked 9th in Poland.

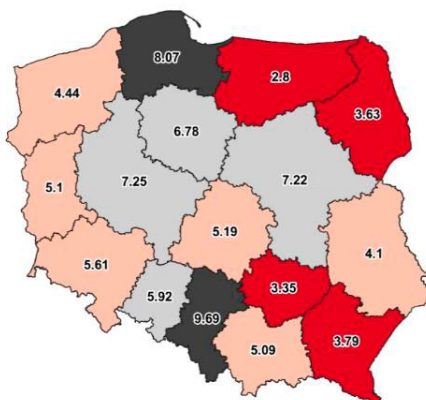


The region has numerous pitches (football, basketball, volleyball, handball and universal), sports halls, stadiums, tennis courts, indoor swimming pools, skateparks, ice rinks and shooting ranges. Kujawsko-Pomorskie Voivodeship is the organiser of high-profile sporting events, particularly in athletics and speedway sport, of which the ORLEN Copernicus Cup Toruń holds a special place, with the biggest stars of Polish and world athletics taking part. In 2021, Toruń hosted the 36th European Indoor Athletics Championships.

Kujawsko-Pomorskie Voivodeship has a particularly well-developed sports infrastructure for outdoor recreation.



The voivodeship has nearly 500 outdoor gyms and a dense cycle network. In terms of the length of cycle routes, Kujawsko-Pomorskie Voivodeship ranks 4th in Poland (1,219.8 km). Numerous cycle rallies take place here, providing a great opportunity for bicycle enthusiasts to get to know the region's natural assets.



Cycle routes per 1000 km (km as of 2020)

Source: own work based on the Local Data Bank of the Statistics Poland.

Technical infrastructure



Kujawsko-Pomorskie Voivodeship is characterised by good communication and transport accessibility and a high potential for the use of renewable energy sources

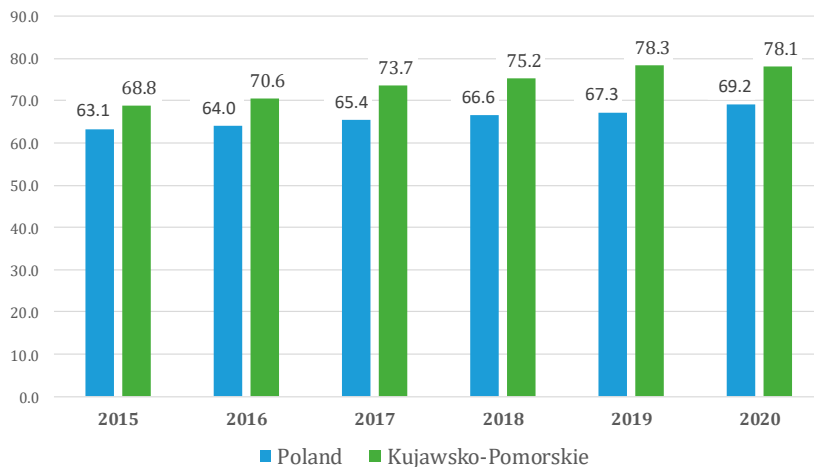
Communication and transport infrastructure

The region lies in the Pan-European Transport Corridor VI (Baltic-Adriatic) which connects Scandinavia to Southern Europe. The major routes include A1 (E75) motorway (Gdańsk-Toruń-Katowice-Gorzyczki – direction: Czech Republic), national road No. 5 (E-261), being a branch of transport corridor No. VI (Grudziądz-Świecie-Bydgoszcz-Poznań-Wrocław: direction the Czech Republic) and leading to corridor No. II, national road No. 10 (Warsaw -Toruń-Bydgoszcz-Szczecin – direction: Germany), national road No. 15 (Trzebnica-Krotoszyn-Inowrocław-Toruń-Brodnica-Ostróda), national road No. 80 (Bydgoszcz-Toruń-Lubicz). The S10 Bydgoszcz-Toruń route is being extended, and the extension of the S5 Grudziądz-Ostróda route is in preparation.



As of 2020, the total length of motorways and carriageways in the province was 273 km, hard-surfaced roads 19,100 km and improved hard-surfaced roads 17,200 km. The length of municipal and powiat hard-surfaced roads per 10,000 population was higher in Kujawsko-Pomorskie Voivodeship than in Poland as a whole, by an average of 12.4% between 2015 and 2020.

Municipal and poviata hard-surfaced roads per 10,000 population (km)



Source: own work based on the Local Data Bank of the Statistics Poland.



Kujawsko-Pomorskie Voivodeship has a well-developed railway network of regional, national and international significance. Particularly important are the following lines: the freight line designated as C-E 65 (Tczew–Bydgoszcz–Inowrocław–Zduńska Wola–Tarnowskie Góry–Pszczyna), connecting the northern and southern parts of the country as part of the Pan-European Transport Corridor, and railway line No. 353 (Poznań–Inowrocław–Toruń–Olsztyn–Korsze), running from the western to the eastern border of Poland. The most important regional rail hubs include Bydgoszcz, Toruń, Włocławek and Inowrocław. Since 2008, an agglomeration ticket has been available, allowing travel between Bydgoszcz and Toruń and vice versa combined with the use of public transport for one hour in one of these cities (as part of the BiT City project), as well as an integrated regional ticket between Włocławek and Toruń, covering train travel and public transport in the destination city for one hour.



The total length of operational railway lines in 2020 in the Kujawsko-Pomorskie Voivodeship was 1200 km or 6.2% of the total length of railway lines in Poland (6th place in the country). Electrified lines accounted for 563 km of this and the length of two or more track lines was 537 km. At that time, 1,297 domestic regular bus routes were operating in the voivodeship (the highest in the entire country) and more than 3,000 registered taxis.



Ignacy Jan Paderewski International Bydgoszcz Airport is located within the voivodeship's territory – 3 km from the city centre. Between 2015 and 2020, the airport handled around 370,000 passengers per year, with the highest number being in 2019, at 425,200. (There was a drop to 128,000 in 2020 and only 2,400 in 2021, but 35,700 passengers were already checked in during Q1 2022). The Bydgoszcz Airport currently offers regular flights to Birmingham, Dublin, London and Warsaw, as well as charter flights to Greece and Turkey. The airport also has a cargo terminal (ground handling agent certificate No. PL-23H/10 for cargo handling) with a 500 m² hangar with modern import and export areas and a manoeuvring

area with a 1,500 m² internal road. There are also civilian and sports airports, as well as airstrips in the region: Bydgoszcz-Biedaszkowo airport (civilian airport, sports airport), Toruń Airport (civilian airport, sports airport), Włocławek-Kruszyn airport (civilian airport, sports airport), Inowrocław-Latkowo airport (civilian airport, sports airport), Lisie Kąty airport near Grudziądz (civilian airport, sports airport), Chełmża airport (civilian airport, sports airport) and Watorowo airstrip near Chełmna (civilian, multi-purpose airstrip).



Two of the three international waterways running through Poland traverse Kujawsko-Pomorskie Voivodeship. The first is the E-70, which runs through Nakło nad Notecią, Bydgoszcz, Toruń, Chełmno and Grudziądz, connecting Antwerp in Belgium (via Berlin in Germany) to Klaipėda in Lithuania. The aim now is to revitalise this waterway, restore navigability and make it fully usable for tourist shipping and freight transport. The other is the E-40 waterway, which runs through Bydgoszcz and connects the Baltic to the Black Sea. It runs from Gdańsk to Warsaw and then along the Narew and Bug rivers to Brześć, where it joins the waterway leading through Polesie to the Dnieper. It has not yet been navigated.



The region's strategic location and good transport accessibility are conducive to the development of logistics, distribution and warehousing centres, *inter alia*, within the region. Important in this context are the plans to create a multimodal platform (transshipment hub) Bydgoszcz - Solec Kujawski and the development of the Bydgoszcz logistics hub with the Bydgoszcz Emilianowo intermodal terminal as part of the TEN-T Trans-European Transport Network.

Technical infrastructure

Power infrastructure – renewable energy

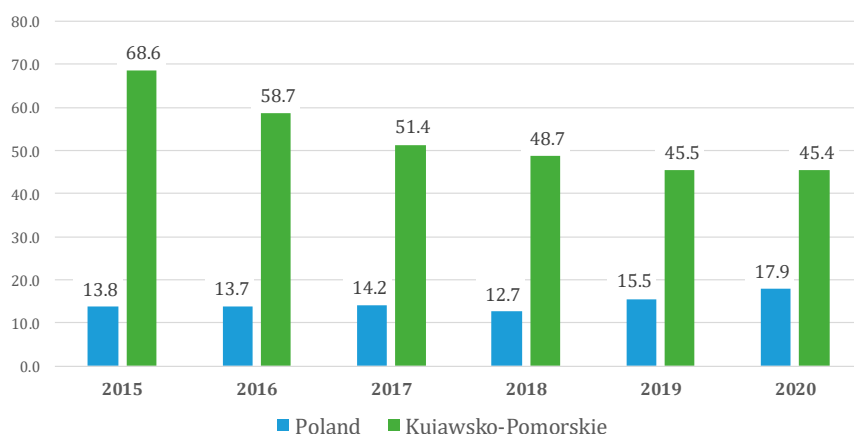


Although the location of electricity generation (location of the power plant) is not essential for its availability to consumers (due to the use of the national transmission grid), this area of infrastructure does not remain neglected in the Kujawsko-Pomorskie Voivodeship. Over the past few years, the installed capacity of power plants in the voivodeship has been increased by 49.8% from 1524 MW in 2015 to 2282 MW in 2020, (compared to a national increase of 28.4% over this period). Similarly, an increase in available capacity was achieved, with an even higher scale of increase at 60.3% over the period in question (nationally, it was 24.5%). Electricity production in the province also increased significantly between 2015 and 2020, from 3732 GWh to 8134 GWh, by nearly 2.2 times (nationally, it was a 1-fold increase).



In terms of the structure of electricity production, i.e. the share of renewable energy generated in hydroelectric power plants and on renewable fuels, Kujawsko-Pomorskie Voivodeship is ranked 5th among Polish regions. Between 2015 and 2020, the average annual share of such energy was 28.1% in the province (compared to 10.7% nationally). On the other hand, considering all renewable energy sources, their average annual share in total electricity production was as high as 53.1% in Kujawsko-Pomorskie Voivodeship (14.6% in Poland), placing it 3rd among all Polish voivodeships.

Share of renewable energy in total electricity production – Kujawsko-Pomorskie Voivodeship in comparison with the country (%)



Source: own work based on the Local Data Bank of the Statistics Poland.



At the end of 2021, the number of renewable energy installations in Kujawsko-Pomorskie Voivodeship was as follows: wind energy – 312, solar energy – 129, hydropower – 53, biogas – 19, and biomass – 5.



Analyses made by the Kujawsko-Pomorskie Office for Spatial and Regional Planning in Włocławek [Kujawsko-Pomorskie Biuro Planowania Przestrzennego i Regionalnego] reveal that wind energy has the greatest potential (viable for market use) among all types of renewable energy sources in Kujawsko-Pomorskie Voivodeship. However, its potential is largely unrealised. It is estimated that a large part of the province (southern and south-eastern area – about 30% of the area) has a useful wind energy of 1250–2000 kWh/m²/year, which confirms the favourable conditions for wind energy development in the region. Currently, the development of this energy sector is particularly evident in the poviats of Inowrocław, Radziejów and Włocławek. Hydropower has the second largest market potential for energy in the voivodeship. Moreover, the agricultural potential of the voivodeship predestines it for the development of locally distributed energy based on biogas, produced from agricultural and livestock production waste. The potential for biogas production should not go unnoticed, especially as it is a stable, weather-independent source of renewable energy.

Environment protection



Kujawsko-Pomorskie Voivodeship is characterised by a good natural environment and landscape values.

Significant areas of special natural interest



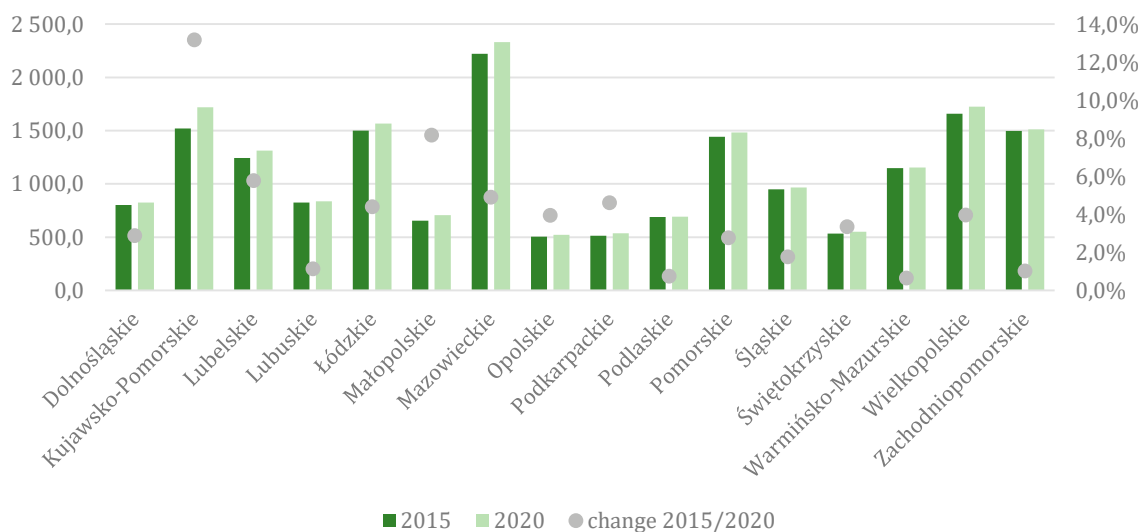
Legally protected areas of special natural values amounted to 579,644.53 ha in 2020, representing 32.3% of the region's total area. Within these areas, all forms of these can be encountered apart from national parks. The rich range of natural assets and tourist attractions creates favourable conditions for tourism development in the region.

The region also has relatively large groundwater resources.



They account for 10% of the exploitable groundwater resources in the country, placing the voivodeship in third place with an index value of 1719.5 hm³. Over the last few years, there has been an increase of more than 13% in the province's groundwater resources, the largest increase recorded in the country.

Exploitable groundwater resources in Poland (in hm³)



Source: own work based on the Local Data Bank of the Statistics Poland.

The directions of the voivodeship development set out in the *Strategy for the Development of Kujawsko-Pomorskie Voivodeship until 2030 – Strategy for Acceleration 2030+* [Polish: *Strategia rozwoju województwa kujawsko-pomorskiego do 2030 roku – Strategia Przyspieszenia 2030+*] provide for an intensification of activities aimed at ensuring the highest possible level of environmental protection. These will be clarified in the document titled *Environmental Protection Programme for Kujawsko-Pomorskie Voivodeship for 2022–2030* [Polish: *Program ochrony środowiska województwa kujawsko-pomorskiego na lata 2022–2030*].

Land and housing stock



Kujawsko-Pomorskie Voivodeship is characterised by a high availability of investment areas.

The availability of investment land is a very important factor in the attractiveness of a municipality, powiat, or voivodeship.



The availability of investment areas is assessed through the prism of their locational (distribution) and infrastructural potential. As of 31/12/2022, 150 offers concerning production, storage, service and office areas from the entire voivodeship were registered in this database, of which as many as 134 were related to investment areas, with a total area of approx. 2,700 ha.

Offered investment areas in Kujawsko-Pomorskie Voivodeship broken down by poviats as of 31/12/2022 – PAIH database

Powiat	Number of investment offers	Total land area in the poviats (ha)
Aleksandrowski	6	115.61
Brodnicki	3	13.2
Bydgoski	18	444.98
Chełmiński	0	0
Golubsko-dobrzyński	2	10.07
Grudziądzki	0	0
Inowrocławski	12	70.87
Lipnowski	0	0
Mogileński	1	32.37
Nakielski	9	207.59
Radziejowski	0	0
Rypiński	3	18.33
Sępoleński	0	0
Świecki	2	17.46
Toruński	10	853.02
Tucholski	4	30.89
Wąbrzeski	8	123.42
Włocławski	20	339.54
Żniński	5	190.31
Bydgoszcz	11	152.31
Grudziądz	3	22.63
Toruń	12	52.26
Włocławek	5	9.79
TOTAL	134	2704.65

Source: <https://baza.paih.gov.pl/region/kujawsko-pomorskie> (accessed 10/01/2023).

The offers of investment areas are diversified in terms of surface area and functionality, making it possible to meet the expectations of both small and large investors and create large-scale production facilities, warehouses, services, or housing estates. Referring to the offers included in the PAIH database, in Kujawsko-Pomorskie Voivodeship, as the only one in Poland, there are

two very large potential investment sites (Dźwierzno and Emilianowo), in an area managed by the Pomeranian Special Economic Zone, which is a leader in servicing investment projects and cooperates with all business environment institutions in the region in this respect.

Selected investment areas of strategic importance for the Kujawsko-Pomorskie Voivodeship



Investment areas of strategic importance in Kujawsko-Pomorskie Voivodeship

No.	Address identification	Site description
1	<p>Central Investment Park in Dźwierzno (Centralny Park Inwestycyjny Dźwierzno) District (Obręb): Dźwierzno Municipality: Chełmża Powiat (Powiat): toruński</p>	<p>468 ha, with potential to expand by a further 100 ha; owner: National Support Centre for Agriculture (KOWR). The site is located directly on the A1, provincial road DW no. 551 and municipal road no. 100538C, DW no. 649 and municipal road 100538C, current access to the A1 motorway – to the Lisewo junction via powiat road 1716c, distance to the motorway – several kilometres. The site is currently without an assigned development project. The area identified as strategic for the development of Kujawsko-Pomorskie Voivodeship. Included in the voivodeship development strategy. Local development plan under preparation, intended use of land: production development, warehouses, storerooms. Current use – agricultural. The entire area can be prepared, developed and subdivided according to the requirements of the potential investor(s).</p>
2	<p>Emilianowo Industrial Park (Park Przemysłowy Emilianowo) Districts: Bydgoszcz, Brzoza, Przyłubie Poviats (Powiaty): the city of Bydgoszcz, Nowa Wieś Wielka municipality, Solec Kujawski municipality, Bydgoski powiat</p>	<p>400 ha, expandable to 1,000 ha; owner: State Forests (Lasy Państwowe). The site is currently without an assigned development project, located on the DK 10 national road. The area identified as strategic for the development of Kujawsko-Pomorskie Voivodeship. Adjacent areas include: the planned railway terminal – to be implemented by Terminal Intermodalny Bydgoszcz Emilianowo sp. z o.o. and close proximity to investment areas within the Bydgoszcz Industrial and Technological Park. The entire area can be prepared, developed and subdivided according to the requirements of the potential investor(s).</p>

Source: <https://baza.paih.gov.pl/> (accessed 17/01/2023).

The residential property market situation is one of the factors determining regional development.



Investment and consumption demand sustained until Q3 2022 and has contributed to a significant increase in the number of applications for further residential building permits—in relation to the number of building permits per 10,000 inhabitants, Kujawsko-Pomorskie Voivodeship ranks at an average/higher level. In turn, the median purchase price of a flat in Kujawsko-Pomorskie Voivodeship was PLN 355,765 in December 2022, and PLN 527,106 in Poland, i.e. approximately 33% lower (tabelaofer.pl). In Q4 2022, the median price per sq m of flats in Kujawsko-Pomorskie Voivodeship was PLN 6,216/m².

Labour resources



Kujawsko-Pomorskie Voivodeship is characterised by a favourable labour market supply situation.

Potential reserves are high among the voivodeship's working-age population.



The proportion of the unemployed in this group was 6% in 2020. Only three voivodeships recorded higher percentages—Podkarpackie (6.7%), Świętokrzyskie (6.2%) and Lubelskie (6.1%). In the group of women with an unemployment rate of 7.4%, Kujawsko-Pomorskie Voivodeship was ranked 2nd in the country, behind the Podkarpackie voivodeship (7.6%). Kujawsko-Pomorskie Voivodeship also had the largest difference between the share of unemployed women and unemployed men – 2.7 percentage points.

The relatively high availability of employees encourages people to choose the province as a place to do (develop) business.



The authors of the report formulated this conclusion with caution, being fully aware that supply reserves in the labour market may result from a mismatch between the structure of labour supply and demand in branch-industry, qualification and spatial aspects. Thus, seeing unemployment as a factor indicative of potentially greater ease of obtaining workers may be illusory.

It is worth noting in this context that for a long time, the voivodeship has been among the national leaders in terms of the percentage of students studying in vocational training schools, vis-à-vis the total number of young students.



Vocational training in the region is more successful among students than the national average. This can be confirmed by the region's 2nd place in the country in 2020, after the Opolskie Voivodeship, according to the share of graduates of vocational and technical schools in the total number of graduates of upper-secondary and primary schools.

The latest available data shows that the voivodeship's vocational schools taught 90 vocational subjects.



The educational offer of the voivodeship's higher education institutions should be more oriented towards the current and future needs of the labour market. This is evidenced, for example, by the low percentage of students and graduates from the voivodeship's higher education institutions studying (who have completed their studies) subjects belonging to sub-groups of particular interest to this labour market: biological, environmental sciences, medical, physical, mathematical and statistical, information and communication technology, engineering, architecture and construction. Nevertheless, the central location of the voivodeship and, above all, its proximity to other voivodeships with a more developed range of education means that this state does not represent a serious barrier to the attractiveness of Kujawsko-Pomorskie Voivodeship in terms of investments.

The Pomeranian Special Economic Zone

Special Economic Zones (SEZs) are subordinate to the minister responsible for the economy (currently the Minister of Development and Technology) and entirely comprise the Polish Investment Zone. The main tasks of the SEZ management companies include, *inter alia*, issuing support decisions on behalf of the Minister for the Economy – i.e. income tax exemptions for new investments under the “Polish Investment Zone” instrument, implementing measures to promote economic activity and new investments, taking measures to improve cooperation between entrepreneurs, the local community and social partners and taking initiatives to consider the needs of the labour market at various levels of education.

The Pomeranian Special Economic Zone (Pomorska Specjalna Strefa Ekonomiczna sp. z o.o.) operates in the Kujawsko-Pomorskie Voivodeship. Its activity is evidenced by its placement in the fDi Global Free Zones of the Year 2022 ranking, published by the Financial Times, in the 2nd place in Europe and 7th in the world. In 2022, the Pomeranian Special Economic Zone supported 78 investment projects with a total outlay of more than PLN 2.7 billion, which turned out to be the best result in Poland.

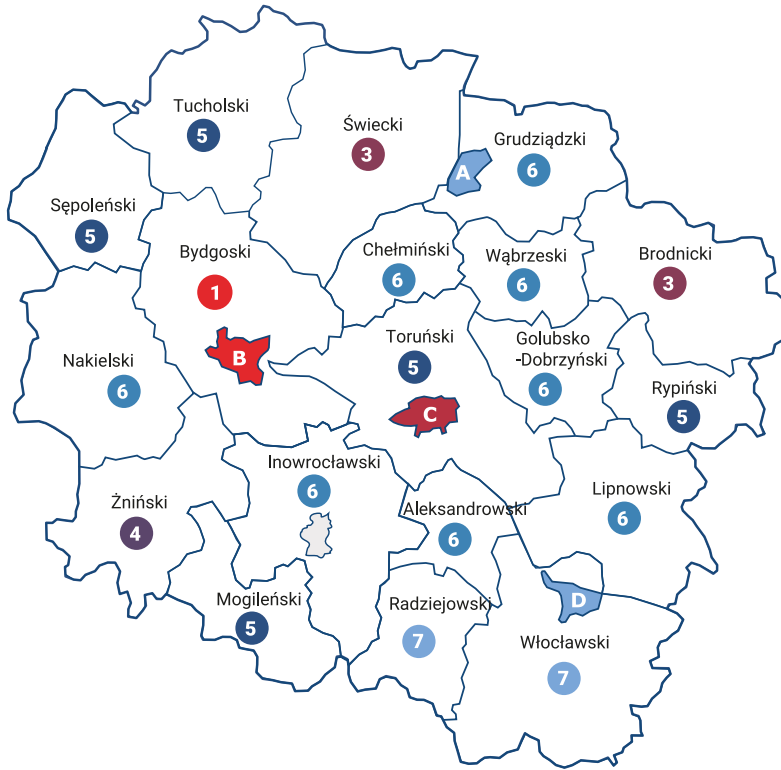
The Pomeranian Special Economic Zone offers entrepreneurs operating or planning to commence business activities in the voivodeship public assistance in the form of income tax (PIT or CIT) exemptions and comprehensive investment services. The aid ranges from 40% to 60% of the eligible expenditure, depending on the size of the company and the region of investment.

THE MAXIMUM AMOUNT OF INVESTMENT AID IN KUYAVIAN-POMERANIAN REGION



The zone is part of the Polish Investment Zone, a statutory support instrument for companies planning new investments. One of its key tasks is to grant tax relief for 12 to 15 years. Assistance is provided to companies in the industrial and modern services sector, regardless of their size and location.

A condition for obtaining a support decision is meeting the quantitative and qualitative criteria of the investment project. The quantitative criteria are the minimum investment that the entrepreneur undertakes to make. The amount required depends on the unemployment rate in the county where the investment will be made, as well as the size of the company.



MINIMUM INVESTMENT EXPENDITURE				
	large	medium	small & BPO	micro
1	100 m	10 m	5 m	2 m
2	80 m	8 m	4 m	1.6 m
3	60 m	6 m	3 m	1.2 m
4	40 m	4 m	2 m	0.8 m
5	20 m	2 m	1 m	0.4 m
6	15 m	1.5 m	0.75 m	0.3 m
7	10 m	1 m	0.5 m	0.2 m

*values given in PLN

MEDIUM-SIZED TOWNS LOSING SOCIO-ECONOMIC FUNCTIONS AND BORDERING COMMUNES
Chelmno, Grudziądz, Inowrocław, Nakło nad Notecią, Rypin, Świecie, Włocławek

SIZE OF THE ENTERPRISE				
	large	medium	small & BPO	micro
	10 m	1 m	0.5 m	0.2 m

CITIES WITH COUNTY RIGHTS	
7	A. Grudziądz
1	B. Bydgoszcz
2	C. Toruń
7	D. Włocławek

* In the case of a planned investment by an entrepreneur concerning an increase in production capacity, diversification of production or a fundamental change in the production process, **the quantitative criteria are reduced by 50%.**

Qualitative criteria are those related to economic and social sustainability. An entrepreneur in the Kujawsko-Pomorskie Voivodeship must meet five such criteria.

Criteria for sustainable economic development
Investment in projects supporting industries compliant with the current national development policy, in which the Republic of Poland may gain a competitive advantage, covering investments within the strategic sectors compliant with the Strategy for Responsible Development or as per smart specialisations of the voivodeship in which the investment is planned to be implemented
Utilising the potential of human resources
Conducting research and development activities
Creating regional links
Membership in the National Key Cluster (for investments from the industrial sector)
Having a status of a micro, small, or medium entrepreneur
Robotisation and automation of processes
New investment in renewable energy sources
Criteria for sustainable social development
Creating high-paying jobs and offering stable employment (for investments from the service sector)
Creation of specialised jobs to carry out the economic activity covered by the new investment and offer stable employment (for investments in the industrial sector)
Carrying out activities with a low negative impact on the environment
Locating the investment: <ol style="list-style-type: none"> 1) in a medium-sized town losing socio-economic functions listed in Table 3 in Annex 1 to the Regulation or 2) in the municipality in which the town referred to in point 1 is situated, or 3) in a municipality bordering a municipality referred to in point 2 or a city referred to in point 1, or 4) in the area of poviats or cities with poviat rights, where the unemployment rate is at least 160% of the average unemployment rate in the country, excluding cities where the seat of the voivodeship governor or the voivodeship local government assembly [sejmik] is located.
Promoting the acquisition of education and professional qualifications and cooperation with vocational training
Taking action related to employee care

For example, a medium-sized company plans to incur a capital expenditure of PLN 10 million to expand its plant. Upon receipt of the support decision, the company receives an income tax exemption of PLN 5 million. In practice, a company with a new activity will be exempt from income tax either until the PLN 5 million pot is used up or until the expiry of the support decision, i.e. 12 or 15 years after its issuance.

The mechanism of this form of state aid is increasingly being touted by entrepreneurs. By 2023, more than 150 decisions to support entrepreneurs from various industries have been issued in the Kujawsko-Pomorskie Voivodeship.

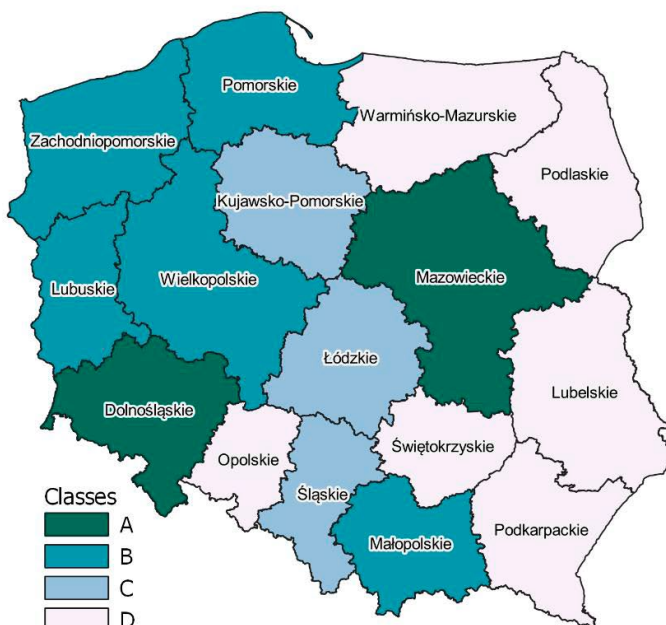


III.

**Investment attractiveness
of Kujawsko-Pomorskie Voivodeship
compared to the rest of the country
in the light of statistical data**

Pillar 1. ENTREPRENEURSHIP

Classes of Polish voivodeships under the Entrepreneurship pillar



Source: own work based on the Local Data Bank of the Statistics Poland.

The assessment of investment attractiveness within the Entrepreneurship pillar ranks Kujawsko-Pomorskie Voivodeship in Class C, alongside two other voivodeships – Łódzkie and Śląskie. The levels of all the diagnostic variables analysed in the described area turned out to be lower for Kujawsko-Pomorskie Voivodeship than for Poland.

Diagnostic variables of voivodeship's investment attractiveness for the Entrepreneurship pillar

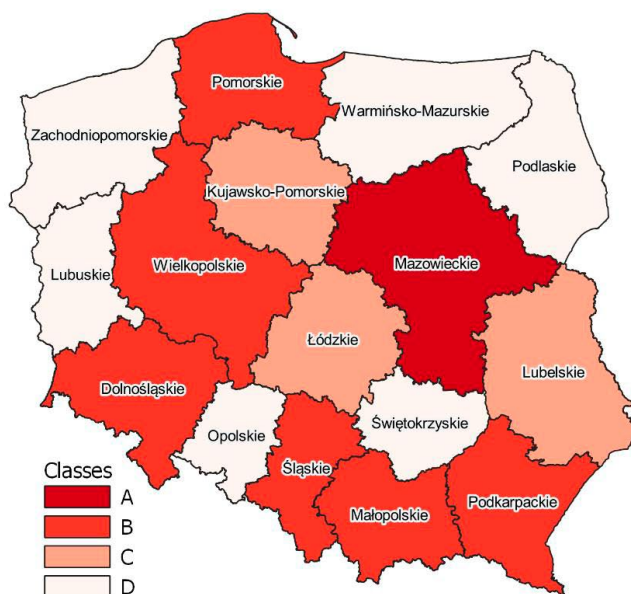
Kujawsko-Pomorskie		Poland
Private sector entities according to REGON register per 10,000 inhabitants		
982	<	1,167
Number of enterprises with foreign capital per 10,000 inhabitants		
2.2	<	6.3
Newly registered private sector entities per 10,000 inhabitants		
66	<	73
Foreign capital per 10,000 inhabitants		
PLN 16 million	<	PLN 56 million
Business investment expenditure per capita		
PLN 6,267	<	PLN 8,068

Higher level of the variable than the value for Poland
 Lower level of the variable than the value for Poland

Source: own work based on the Local Data Bank of the Statistics Poland.

Pillar 2. INNOVATION

Classes of Polish voivodships under the Innovation pillar



Source: own work based on the Local Data Bank of the Statistics Poland.

The assessment of investment attractiveness within the “Innovation” pillar ranks Kujawsko-Pomorskie Voivodeship in Class C, alongside two other voivodships – Łódzkie and Lubelskie. The levels of all the diagnostic variables analysed in the described area turned out to be lower for Kujawsko-Pomorskie Voivodeship than for Poland.

Diagnostic variables of voivodeship’s investment attractiveness for the Innovation pillar

Kujawsko-Pomorskie		Poland
Internal R&D expenditures per capita		
PLN 431.6	<	PLN 844.8
R&D entities per 100 000 population		
14.2	<	16.6
Share of internal R&D staff in the number of economically active employees		
0.84 persons	<	1.33 persons
Expenditures on innovative activities in enterprises per 1 economically active person		
PLN 1,343	<	PLN 2,284
Average share of innovative enterprises in the total number of enterprises		
25.8%	<	31.2%
Share of production sold of new/improved products in total sales value of products		
6.9%	<	12.0%
Invention applications at the Polish Patent Office per 1 million inhabitants		
82.6	<	104.5

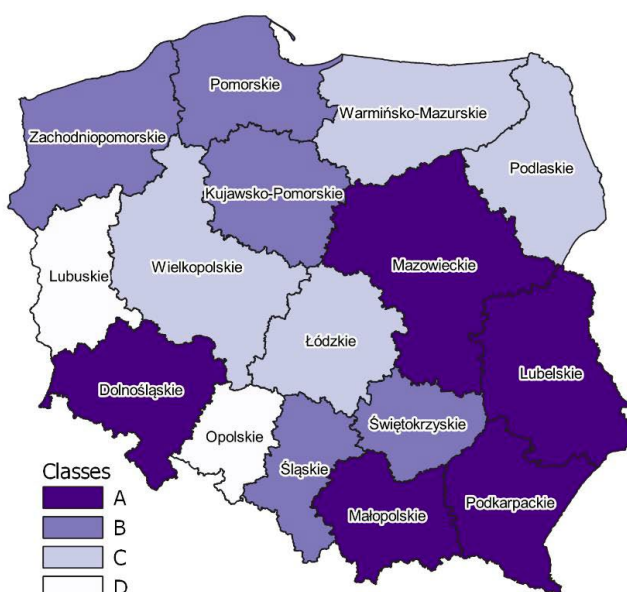
Higher level of the variable than the value for Poland

Lower level of the variable than the value for Poland

Source: own work based on the Local Data Bank of the Statistics Poland.

Pillar 3. SOCIAL INFRASTRUCTURE

Classes of Polish voivodships under the Social infrastructure pillar



Source: own work based on the Local Data Bank of the Statistics Poland.

The assessment of investment attractiveness within the “Social infrastructure” pillar ranks Kujawsko-Pomorskie Voivodeship in Class B, alongside other voivodships: Świętokrzyskie, Pomorskie, Śląskie and Zachodniopomorskie. In the areas of health care infrastructure, sports infrastructure and cultural infrastructure, all the diagnostic variables analysed were lower for Kujawsko-Pomorskie Voivodeship than for Poland. A much higher value than the national average was recorded for the educational infrastructure variable– the rate of vocational schools (levels 1 and 2) per 10 000 inhabitants. In this respect, Kujawsko-Pomorskie Voivodeship is ranked high in 2nd place in Poland. This result draws a very favourable picture of Kujawsko-Pomorskie Voivodeship, primarily as a location for industrial investments requiring labour resources with specific professional qualifications.

Diagnostic variables of voivodeship’s investment attractiveness for the Social infrastructure pillar

Kujawsko-Pomorskie		Poland
Level 1 and 2 vocational schools per 10,000 inhabitants		
0.456	>	0.354
Number of universities per 10 000 inhabitants		
0.082	<	0.102
Doctors/physicians (total working staff) per 10,000 inhabitants		
54.7	<	59.7
Beds in general hospitals per 10,000 inhabitants		
41.7	<	43.8
Number of sports facilities per 10,000 inhabitants		
1.78	<	1.94
Number of cultural facilities per 10,000 inhabitants		
0.35	<	0.43

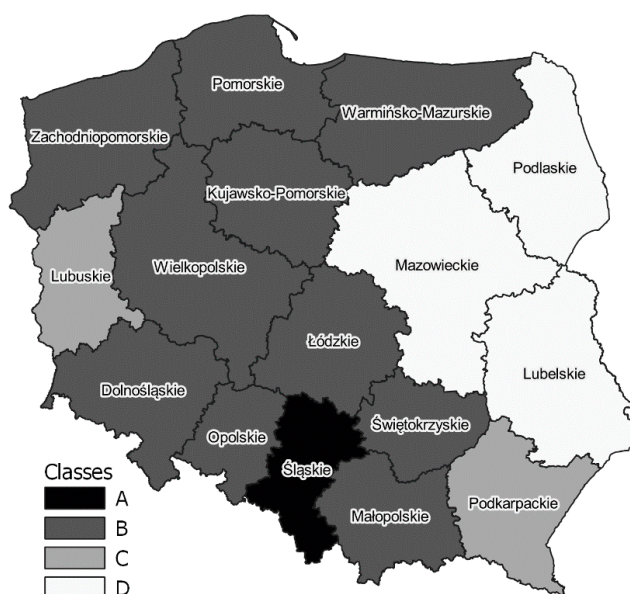
Higher level of the variable than the value for Poland

Lower level of the variable than the value for Poland

Source: own work based on the Local Data Bank of the Statistics Poland.

Pillar 4. TECHNICAL INFRASTRUCTURE

Classes of Polish voivodeships under the **Technical infrastructure** pillar



Source: own work based on the Local Data Bank of the Statistics Poland.

The assessment of investment attractiveness within the “Technical infrastructure” pillar ranks Kujawsko-Pomorskie Voivodeship in Class B, alongside 8 other voivodeships – Dolnośląskie, Pomorskie, Opolskie, Warmińsko-Mazurskie, Zachodniopomorskie, Łódzkie, Małopolskie and Świętokrzyskie. Kujawsko-Pomorskie Voivodeship is ranked 3rd among the voivodeships in this class and 5th nationwide. The levels of 4 diagnostic variables analysed in the described area were lower for Kujawsko-Pomorskie Voivodeship than for Poland.

Diagnostic variables of voivodeship’s investment attractiveness for the **Technical infrastructure** pillar

Kujawsko-Pomorskie		Poland
Carriageways and motorways per 1,000 km ²		
15.19 km	>	13.63 km
Percentage of length of public roads with improved hard surfacing		
62.3%	<	67.8%
Total railway lines per 100 km ²		
6.7 km	>	6.2 km
Share of renewable energy in total electricity generation		
45.4%	>	17.9%
Material results of investments in the reporting years: waste recovery and disposal facilities per 10,000 km ²		
190	>	147

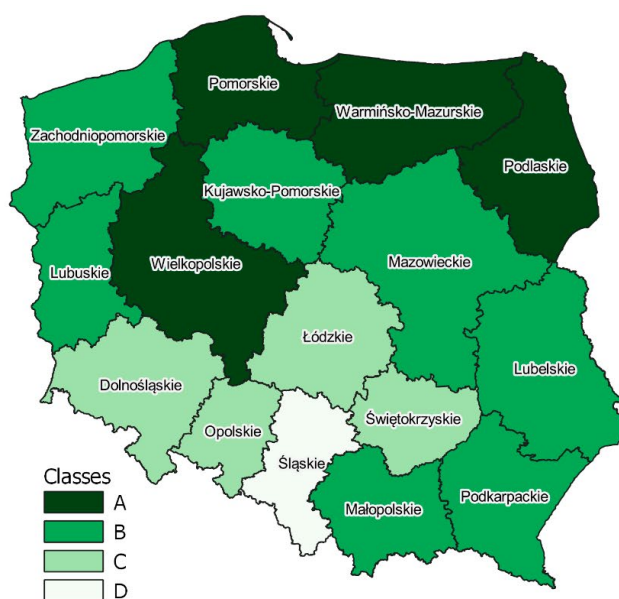
Higher level of the variable than the value for Poland

Lower level of the variable than the value for Poland

Source: own work based on the Local Data Bank of the Statistics Poland.

Pillar 5. ENVIRONMENT PROTECTION

Classes of Polish voivodships under the Environment protection pillar



Source: own work based on the Local Data Bank of the Statistics Poland.

The assessment of investment attractiveness within the “Environment protection” pillar ranks the Kujawsko-Pomorskie Voivodeship in Class B, alongside 7 other voivodeships: Lubuskie, Zachodniopomorskie, Mazowieckie, Lubelskie, Małopolskie, Podkarpackie and Dolnośląskie. Kujawsko-Pomorskie Voivodeship is ranked 1st among the voivodeships in this class and 5th nationwide. The levels of 3 out of 5 diagnostic variables analysed in the area described place the voivodeship above the values of these parameters for Poland.

Diagnostic variables of voivodeship’s investment attractiveness for the Environment protection pillar

Kujawsko-Pomorskie		Poland
Gaseous pollutant emission per km ² *		
552.25 t/km ²	<	595.31 t/km ²
Particulate matter emissions per km ² *		
0.10 t/km ²	>	0.07 t/km ²
Industrial and municipal wastewater treated as % of wastewater requiring treatment		
98.88%	>	94.33%
Share of waste recovered in the amount of waste generated per year		
22.9%	<	23.7%
Exploitable groundwater resources		
1719.5 hm ³	>	1152.5 hm ³

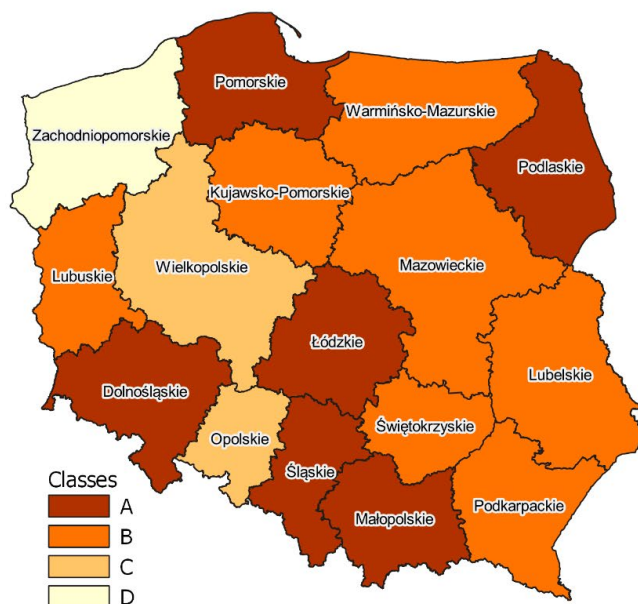
* *destimulant, i.e. a variable whose decreasing values are assessed positively from the point of view of the phenomenon in question.*



Source: own work based on the Local Data Bank of the Statistics Poland.

Pillar 6. LAND AND HOUSING STOCK

Classes of Polish voivodships under the Land and housing stock pillar



Source: own work based on the Local Data Bank of the Statistics Poland.

The assessment of investment attractiveness within the “Land and housing stock” pillar ranks the Kujawsko-Pomorskie Voivodeship in Class B, alongside 6 other voivodships: Warmińsko-Mazurskie, Lubuskie, Lubelskie, Mazowieckie, Świętokrzyskie and Podkarpackie. Significantly lower land prices than the Polish average encourage investment in the voivodeship.

Diagnostic variables of voivodeship’s investment attractiveness for the Land and housing stock pillar

Kujawsko-Pomorskie		Poland
Share of area covered by valid local development plans		
7.7%	<	31.4%
Share of built-up and urbanised land in total area		
5.4%	<	5.7%
Number of building permits and construction notifications with a design: collective residential, non-residential, civil engineering buildings per 10,000 inhabitants		
20.89	<	21.44
Number of building permits and residential building construction notifications issued per 10,000 inhabitants		
35.54	>	34.83
Number of flats sold in market transactions per 10,000 inhabitants		
40.48	<	52.09
Median price per 1 m ² of flats sold in market transactions		
PLN 4,724/m ²	<	PLN 5,248/m ²
Average price of developed industrial land*		
PLN 20/m ²	<	PLN 153/m ²
Average price of developed commercial and retail land*		
PLN 140/m ²	<	PLN 164.25/m ²

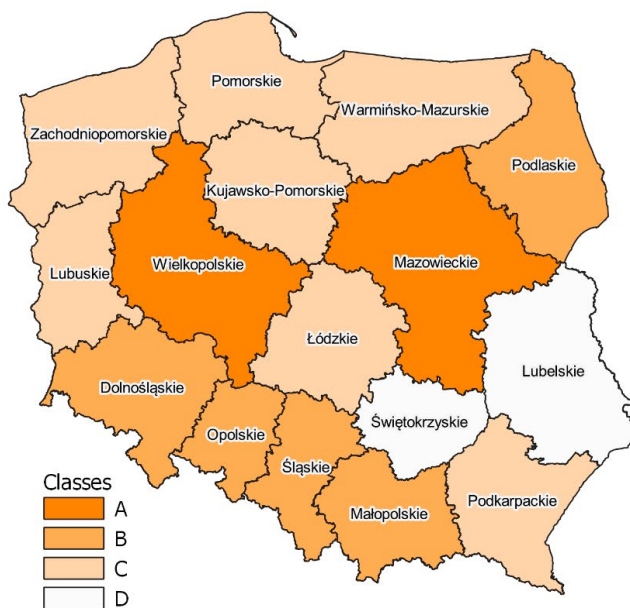
* *destimulant, i.e. a variable whose decreasing values are assessed positively from the point of view of the phenomenon in question.*

 Higher level of the variable than the value for Poland	 Lower level of the variable than the value for Poland
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Source: own work based on the Local Data Bank of the Statistics Poland.

Pillar 7. MARKET ABSORPTION

Classes of Polish voivodships under the Market absorption pillar



Source: own work based on the Local Data Bank of the Statistics Poland.

The assessment of investment attractiveness within the “market absorption” pillar ranks the Kujawsko-Pomorskie Voivodeship in Class C, alongside 6 other voivodships: Lubuskie, Łódzkie, Podkarpackie, Pomorskie, Warmińsko-Mazurskie and Zachodniopomorskie. Within the analysed pillar, Kujawsko-Pomorskie Voivodeship occupies the 12th position in the whole country and 5th among the voivodships classified in class C. Out of 7 diagnostic variables analysed in the described area, as many as 6 had lower levels in the Kujawsko-Pomorskie than in Poland.

Diagnostic variables of voivodeship’s investment attractiveness for the market absorption pillar

Kujawsko-Pomorskie		Poland
Gross disposable income per person in the household		
PLN 1,845	<	PLN 1,919
Average gross monthly salary per person		
PLN 4,832	<	PLN 5,523
Population density		
115 persons/km ²	<	122 persons/km ²
Share of working-age population in total population		
59.9%	>	59.5%
Budget revenue of local government unit per capita		
PLN 542	<	PLN 546
Retail sales of goods per capita		
PLN 12,945	<	PLN 23,221
sold production of industry per capita		
PLN 33,098	<	PLN 41,191

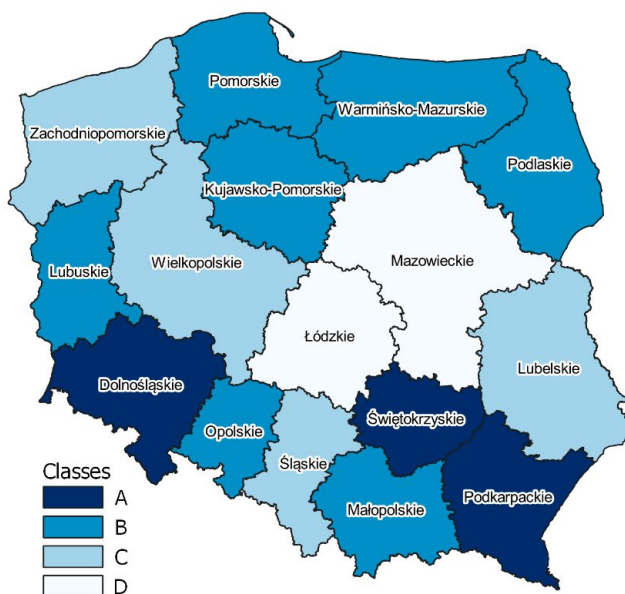
Higher level of the variable than the value for Poland

Lower level of the variable than the value for Poland

Source: own work based on the Local Data Bank of the Statistics Poland.

Pillar 8. LABOUR RESOURCES

Classes of Polish voivodeships under the Labour resources pillar



Source: own work based on the Local Data Bank of the Statistics Poland.

The numerical values calculated for the described pillar placed the Kujawsko-Pomorskie Voivodeship in a high 5th place in the country behind the Dolnośląskie, Podkarpackie, Małopolskie and Świętokrzyskie voivodeships. The first three make up Class A. Together with seven other voivodeships, Kujawsko-Pomorskie Voivodeship is in Class B – second only to Świętokrzyskie. Four voivodeships were ranked in Class C, with two in the lowest class (D). W klasie C uplasowały się 4 województwa, a w najniższej klasie (D) znalazły się 2.

Diagnostic variables of voivodeship's investment attractiveness for the Labour resources pillar

Kujawsko-Pomorskie		Poland
Gross value added per employee		
PLN 117,600	<	PLN 132,000
Average gross monthly salary in relation to the national average wage		
87.5%	<	100%
Registered unemployment rate		
7.7%	>	5.4%
Percentage of population aged 15-64 with tertiary education		
23.7	<	29.3
Share of graduates of lower secondary and technical schools in the total number of graduates of upper secondary and post-primary schools		
58.7%	>	50.4%
Percentage of university graduates in subjects belonging to the following subgroups: biological, environmental sciences, medical, physical, mathematical, mathematical and statistical, information technology, engineering, architecture and construction		
13%	<	20.6%

Higher level of the variable than the value for Poland

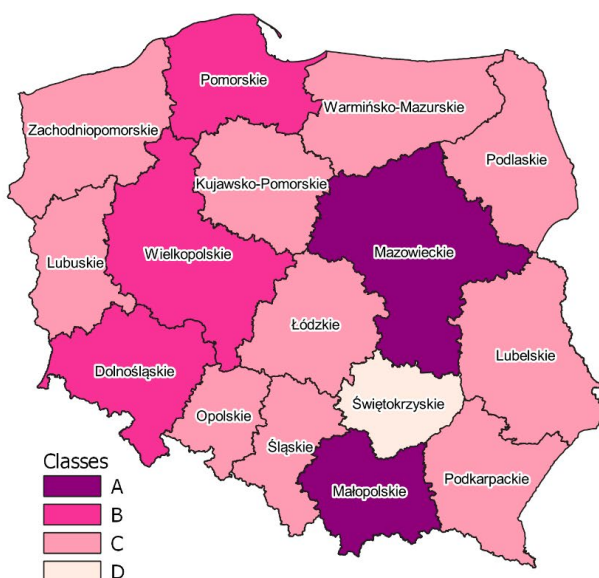
Lower level of the variable than the value for Poland

Source: own work based on the Local Data Bank of the Statistics Poland.

Investment attractiveness of Kujawsko-Pomorskie Voivodeship compared to other Polish voivodeships

Considering the indicators of the individual pillars and the weights attributed thereto, Kujawsko-Pomorskie Voivodeship is placed in Class C along with eight voivodeships: Podlaskie, Śląskie, Lubuskie, Zachodniopomorskie, Warmińsko-Mazurskie, Lubelskie, Łódzkie and Opolskie. Two voivodeships are characterised by the highest level of potential investment attractiveness (Class A) – Mazowieckie and Małopolskie. There are four voivodeships in Class B: Dolnośląskie, Pomorskie, Wielkopolskie and Podkarpackie. The Świętokrzyskie voivodeship is in the lowest class.

Investment attractiveness of Polish voivodeships



Source: own work based on research results.

In presenting the above classification, the authors of the report point out that investors are guided in their investment decisions to a greater, if not essential, degree by the assessment of individual pillars, and more specifically those most related to the specifics of their business (type, scale, scope).

The weights were adopted based on an expert survey to which representatives from academia, business, local government and business supporters were invited. The opinions of 64 experts were used. The results of the survey confirmed the validity of all eight pillars. At the same time, they showed their diversity. The class category of each pillar in Kujawsko-Pomorskie Voivodeship is shown below.

Classes of pillars according to their investment attractiveness in Kujawsko-Pomorskie Voivodeship

Pillar	I Entrepreneurship	II Innovation	III Social infrastructure	IV Technical infrastructure	V Environment protection	VI Land and housing stock	VII Market absorption	VIII Labour market
Class	C	C	B	B	B	B	C	B

Source: own work based on research results.

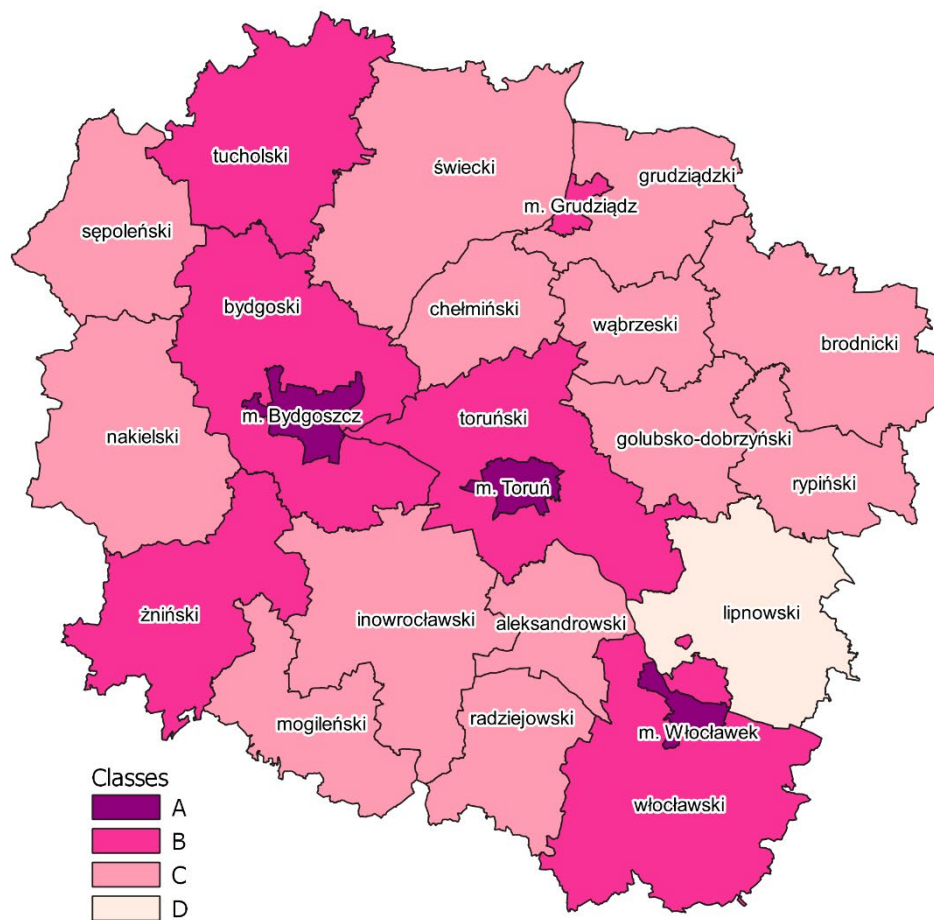


IV.

Assessment of the investment attractiveness of the subregions of Kujawsko-Pomorskie Voivodeship in the light of statistical data

The highest level of investment attractiveness is found in the 3 township poviats – the cities of Toruń, Bydgoszcz and Włocławek. There are 6 poviats in the second class – 1 township poviat, i.e. the city of Grudziądz, and 5 rural poviats – Toruń, Bydgoszcz, Tuchola, Włocławek, Żnin. As many as 13 poviats – Radziejowski, Aleksandrowski, Nakielski, Świecki, Inowrocławski, Mogileński, Sępoleński, Grudziądzki, Brodnicki, Chełmiński, Golubsko-dobrzyński, Wąbrzeski, Rypiński – were ranked in class 3. Only 1 poviat was found in the lowest class – Lipnowski.

Investment attractiveness of the poviats of Kujawsko-Pomorskie Voivodeship



Source: own work based on research results.

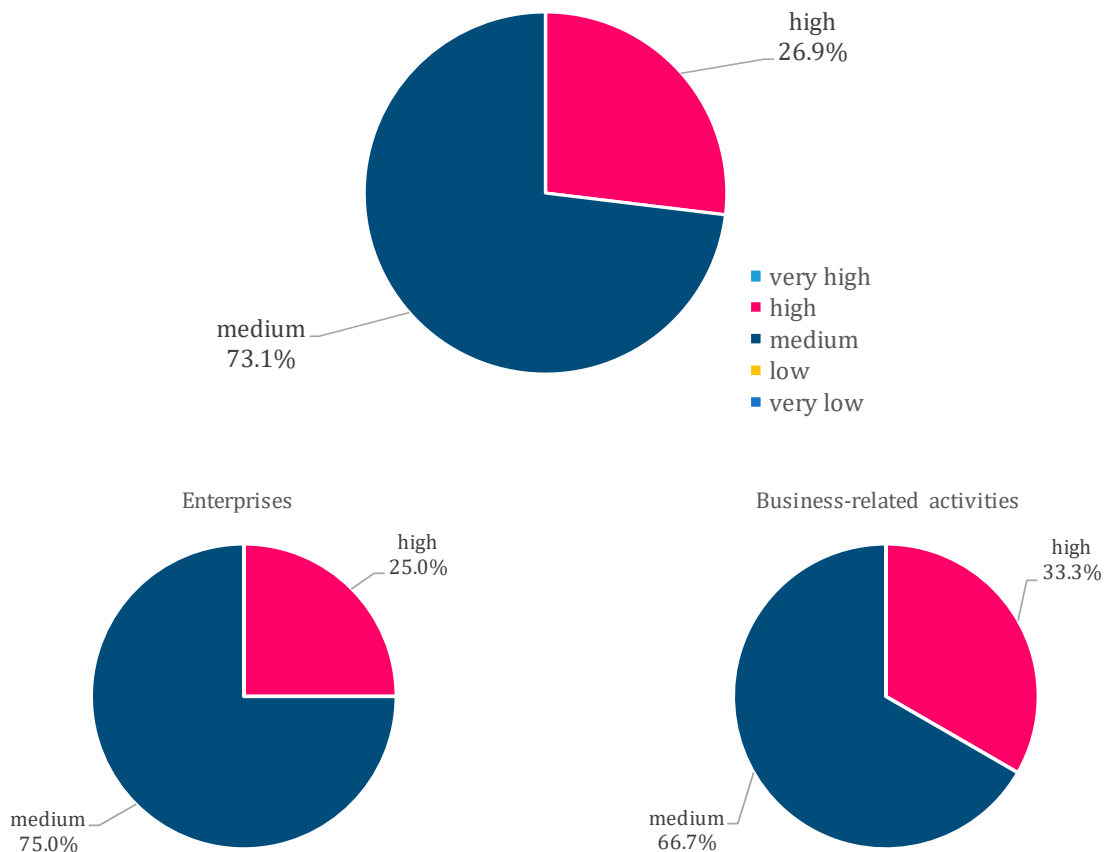


V.

**Investment attractiveness
of Kujawsko-Pomorskie Voivodeship
– experts' opinion**

Representatives of companies and business support institutions invited to the expert survey rated the investment attractiveness of Kujawsko-Pomorskie Voivodeship as “medium” – 73.1% of the responses, while 26.9% of respondents indicated it to be “high”. None of the respondents selected the answers “very high”, “low” or “very low”.

Assessment of the investment attractiveness of Kujawsko-Pomorskie Voivodeship



Source: own study based on the survey.

These assessments draw attention to a slightly more “optimistic” picture of the voivodeship’s investment attractiveness in the case of answers given by representatives of business-related institutions – in this group, 33.3% of respondents chose the rating “high” and 66.7% “medium”. In the corporate group, on the other hand, the percentages were 25.0% and 75.0% respectively.

In addition, the participants of the expert survey evaluated 28 factors, indicating their influence on the investment attractiveness of Kujawsko-Pomorskie Voivodeship. The “geographical location” of the voivodeship was unequivocally ranked first – in both groups of respondents. This was followed by infrastructural factors and the availability of suitably prepared land for business use.



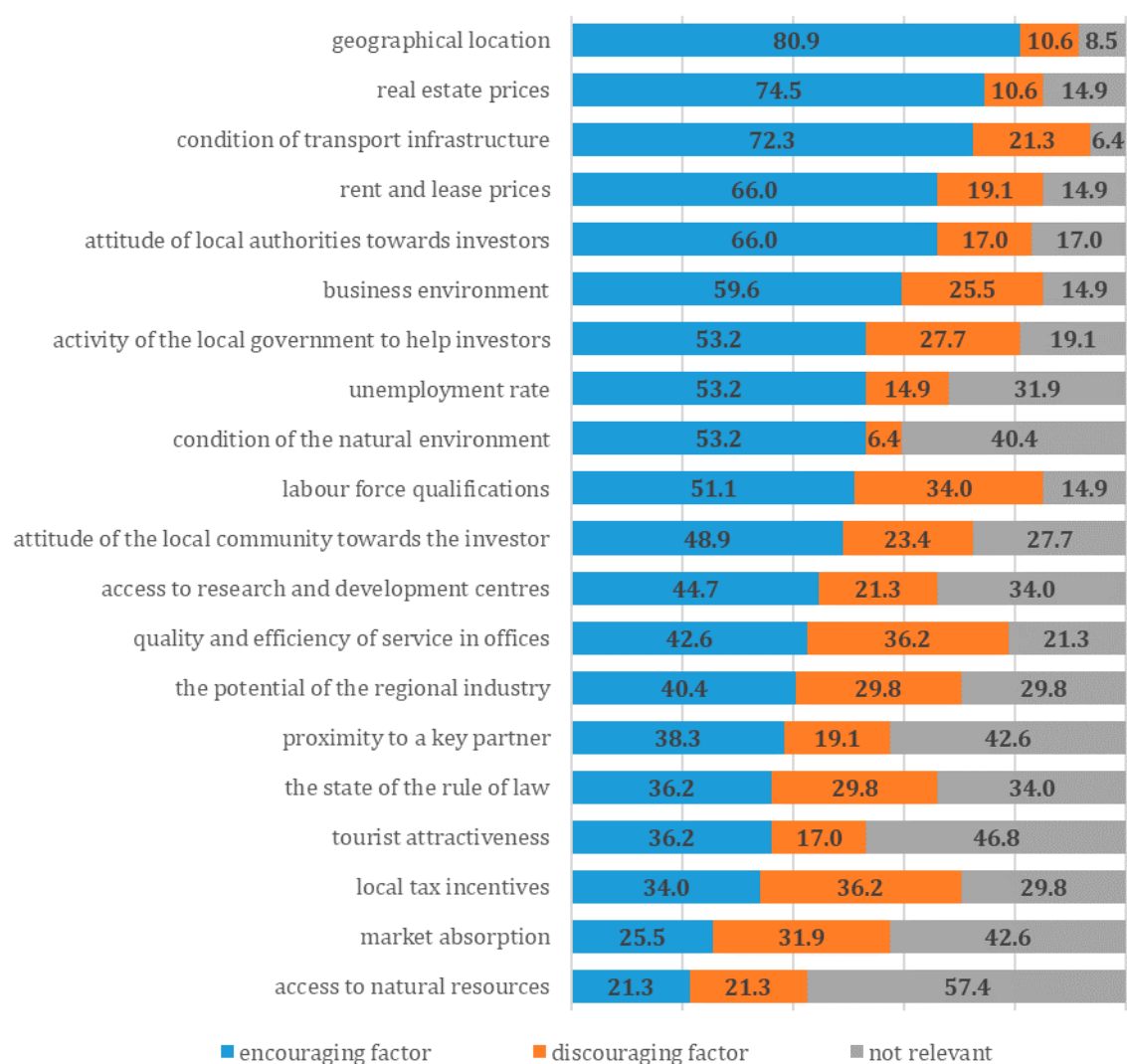
VI.

**Investment attractiveness
of Kujawsko-Pomorskie Voivodeship
– assessment of enterprises
with foreign capital**

Factors encouraging and discouraging investment in Kujawsko-Pomorskie Voivodeship in the opinion of enterprises with foreign capital/foreign investors

Enterprises with foreign capital indicated the features of the voivodeship which, in their opinion, encourage them to or discourage them from making investments in its territory. In their view, geographical location (80.9%) and real estate prices (74.5%) are distinctive features of the region. This was followed by the condition of transport infrastructure (72.3%), rent and lease prices (66.0%), and the attitude of local authorities towards investors and investments (66.0%). Almost 60% of respondents considered the business environment to be a locational advantage. In contrast, features that discouraged investment in the opinion of respondents were local tax incentives (36.2%), the quality and efficiency of service in offices (36.2%), labour force qualifications (34.0%), market absorption (31.9%) and the state of the rule of law and the potential of the regional industry (29.8%).

Factors encouraging and discouraging investment in Kujawsko-Pomorskie Voivodeship in the opinion of enterprises with foreign capital/foreign investors (in %)

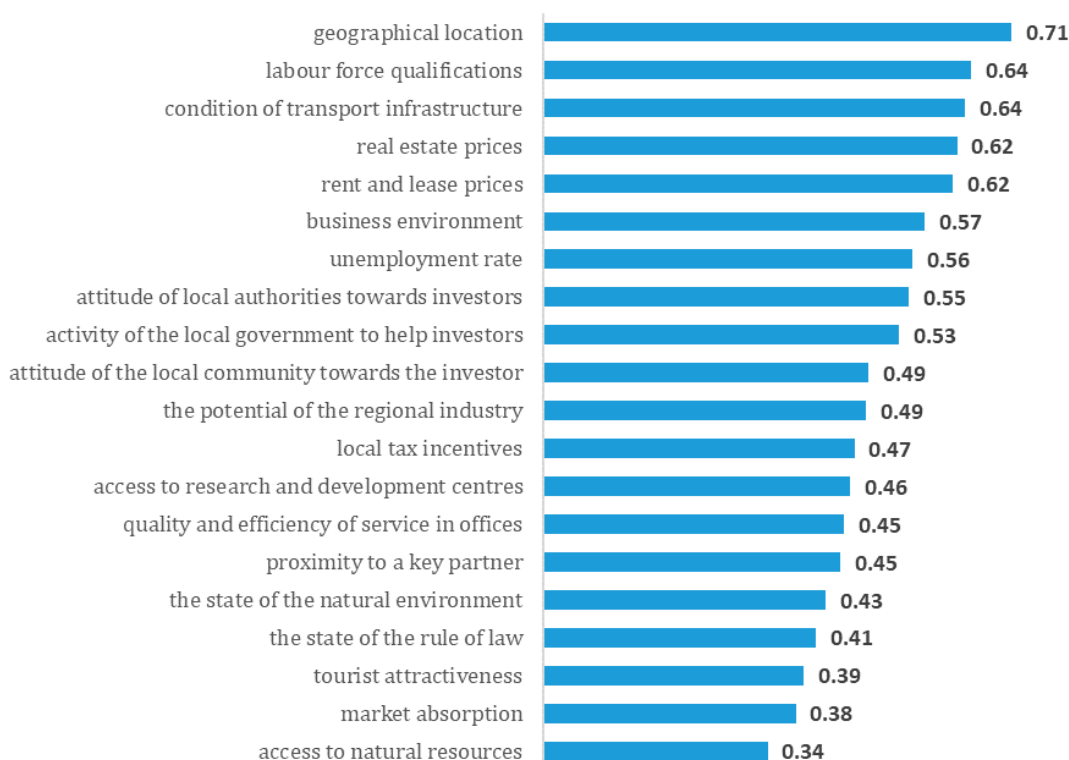


Source: own study based on the survey.

Determinants of the choice of Kujawsko-Pomorskie Voivodeship as an investment location

Foreign investors indicated that the most important factor in selecting Kujawsko-Pomorskie Voivodeship as a location for their investments was its favourable geographical location (importance index – 0.71). It can therefore be concluded that, in their opinion, the most important aspect of the voivodeship’s investment attractiveness is its transit location, both nationally and in Europe. In 2nd place were *ex aequo* the labour force qualifications and the condition of transport infrastructure (0.64). Two factors characterising the local property market – their prices and rental (lease) prices – ranked high. Investors’ rating assigned to the business environment (0.57) is encouraging, indicating a positive perception of the activities of business-related institutions whose statutory purpose is to support the development of entrepreneurship in the region, among which the activity of the Pomeranian Special Economic Zone was highly rated. The unemployment rate was also an important factor, indicating the availability of labour resources in the voivodeship (0.56). The investors ranked next the attitude of local authorities towards investors and investments and the attitude of the local community towards the investors and investment. The high rating in this respect is indicative of the pro-business attitude of the authorities and an increasing awareness of the importance of entrepreneurship in the socio-economic development of the region.

Determinants of the choice of Kujawsko-Pomorskie Voivodeship as a location for foreign direct investments in the opinion of enterprises with foreign capital/foreign investors



Explanations: Importance index “W” (the closer is the value to unity, the more important the index).

$$W = \frac{\sum_{i=1}^k n_i \cdot w_i}{k \cdot N}$$

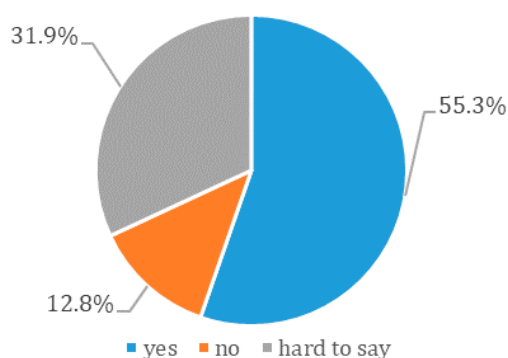
where: I – rating index; n_i – number of indications of a given factor at the i-th position; k – maximum rating on a scale from 1 to k (indicating the order of factors meant assigning them ratings in reverse order); N – number of respondents who answered the question; w_i – rating corresponding to the position of i factor.

Source: own study based on the survey.

Relevance of the choice of Kujawsko-Pomorskie Voivodeship as an investment location

The relevance of the choice of Kujawsko-Pomorskie Voivodeship as an investment location is evidenced by the fact that more than half of the companies declared that they would choose Kujawsko-Pomorskie Voivodeship again for their business activities. Only 12.8% of respondents would change the location of their investment, while 31.9% have no clear opinion on this.

Indications of enterprises with foreign capital/foreign investors regarding whether they would again choose Kujawsko-Pomorskie Voivodeship as the location of their investment



Source: own study based on the survey.

Expert's voice



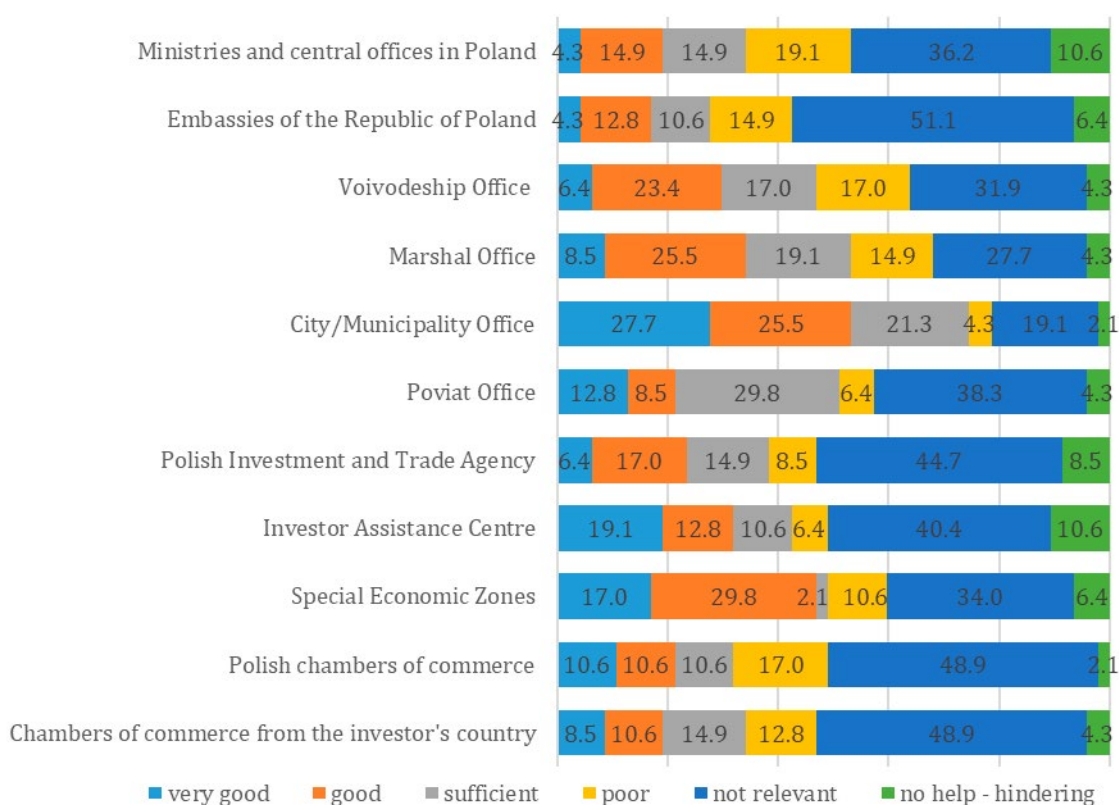
What is the most important element of a region's investment attractiveness? For our company, the answer is definitely human potential. A plant can be placed anywhere, even in Antarctica. There would be no problem with this. The problem, on the other hand, would be that there would be no one to work on it. Kitron is a technology company. Manufacturing electronics and electronic-related products requires specific skills and experience (...). The decision to choose the location in the Pomeranian Special Economic Zone in Grudziądz was made in 2018, and in September 2019, after a very intensive investment process, we started production. During this short period, the plant was built– which proved to be a relatively simple task– and a team was put in place. Building a team is no easy task, and simultaneously a crucial one. We decided on a location in Grudziądz for several reasons. The first was that the population of Grudziądz is almost 100,000, with a relatively large labour supply– access to a large group of potential employees. The second was the fact that there was a very good technical school in Grudziądz. In addition, there are good technical schools in Toruń, Bydgoszcz, Kwidzyn and Malbork. This meant there was a source of well-trained technicians – mainly automation, measurement electronics and mechatronics technicians. This was a very important determinant. The third reason was the availability of engineers educated at the Gdansk University of Technology, the Bydgoszcz University of Technology, and the availability of logistics specialists educated, inter alia, at Nicolaus Copernicus University in Toruń. All these factors relate to employees–a key asset for companies like ours in choosing where to do business. In light of our experience, the conclusion is that to strengthen its investment attractiveness, the voivodeship should strive to create an educational offer that meets the changing needs of the labour market.

Marek Browalski
Kitron sp. z o.o. Grudziądz

Activity of local authorities and business-related institutions in raising capital, as perceived by investors

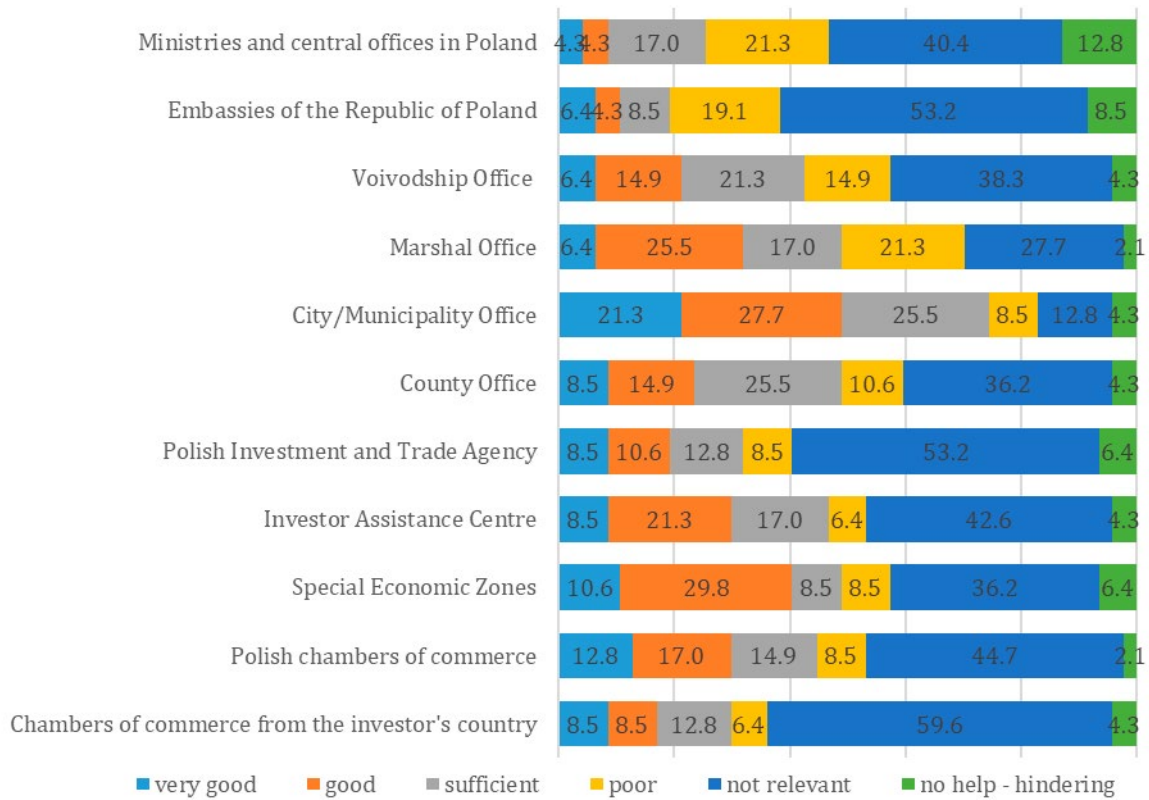
The assessment of the assistance offered by governmental and local government institutions and the business environment from the perspective of a foreign investor is extremely important in the context of creating an informed and effective policy of support for entities. When assessing the assistance of government institutions, local authorities and the business environment, and more specifically support for starting a business in the province, the majority of companies with foreign capital expressed little positive feedback. This mainly concerned central government institutions, embassies of the Republic of Poland, supra-regional business environment entities, such as Polish and foreign chambers of commerce and the Polish Investment and Trade Agency. Local government units and special economic zones were assessed most favourably. It is worrying that the subjects surveyed rated the support of most of the institutions even worse, once they had started their business.

Evaluation of support provided to foreign investors by the governmental, local government and business environment institutions before starting operations in the Kujawsko-Pomorskie Voivodeship (in %)



Source: own study based on the survey.

Evaluation of support provided to foreign investors by the governmental, local government and business environment institutions after starting operations in the Kujawsko-Pomorskie Voivodeship (in %)

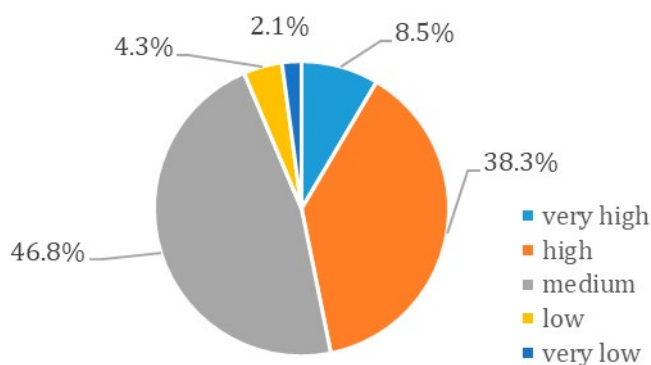


Source: own study based on the survey.

Investment attractiveness of the Kujawsko-Pomorskie Voivodeship – assessment of entrepreneurs

Almost half the companies with foreign capital considered the investment attractiveness of Kujawsko-Pomorskie Voivodeship as “high” and “very high”. The highest percentage (46.8%) comprised entities assessing the investment attractiveness of Kujawsko-Pomorskie Voivodeship as “medium”. Only less than 7% of respondents considered the attractiveness of the region to be “low” and “very low.”

Assessment of the investment attractiveness of Kujawsko-Pomorskie Voivodeship in the opinion of enterprises with foreign capital/foreign investors



Source: own study based on the survey.

Expert's voice



The history of our company dates back to the second half of the 19th century. This is because it is 160 years since the beginning of limestone quarrying in the Kujawsko-Pomorskie Voivodeship. On the 5th of July last year, we celebrated the 50th anniversary of cement production. The time of our company's activities has been filled with numerous important events, among them the start of cooperation with the Pomeranian Special Economic Zone 14 years ago. During this period, we modernised our plants located in Kujawsko-Pomorskie Voivodeship, primarily the Kujawy Cement Works and mines. We have invested more than PLN 400 million in implementing projects mainly related to sustainable development. These projects have brought us a strengthened edge in the market. Environmental challenges were very important to us, among them closed-loop waste management. We have made, and continue to make, considerable efforts to offer attractive working conditions to the local community while being socially responsible. Today, from the perspective of these years, we can see the effects of cooperation and support from the Pomeranian Special Economic Zone, without which it would have been difficult to achieve the ambitious goals set. However, there are further tasks ahead of us, and we want to do more together, although the timing is not easy. The world, and Europe within it, is changing. The war in Ukraine has brought numerous problems for our country and its local governments and businesses. Environmental expectations – which are justified – are increasing. An important task

for us is to reduce CO₂ emissions. We have ideas, we have good projects. We accentuate them in the capital group, expecting appropriate support. As the director of Kujawy Cement Works, I have a comparison of our cement plant with the European market, with the world market, because we are a corporation that has plants all over the world. I can therefore confirm from my experience how important the topic of the region's investment attractiveness is. It is our location in Kujawsko-Pomorskie Voivodeship that has become one of the factors for our being number 1 in the corporation, achieving the best results and having state-of-the-art facilities. This does not mean that we can "stand still"; on the contrary, we must intensify our pro-development efforts. Their implementation requires, on the one hand, cooperation with institutions such as the PSSE, and on the other hand, a friendly attitude towards entrepreneurship on the part of the national and regional authorities and, above all, recognition by our owners that Poland and our province are an attractive place for investment.

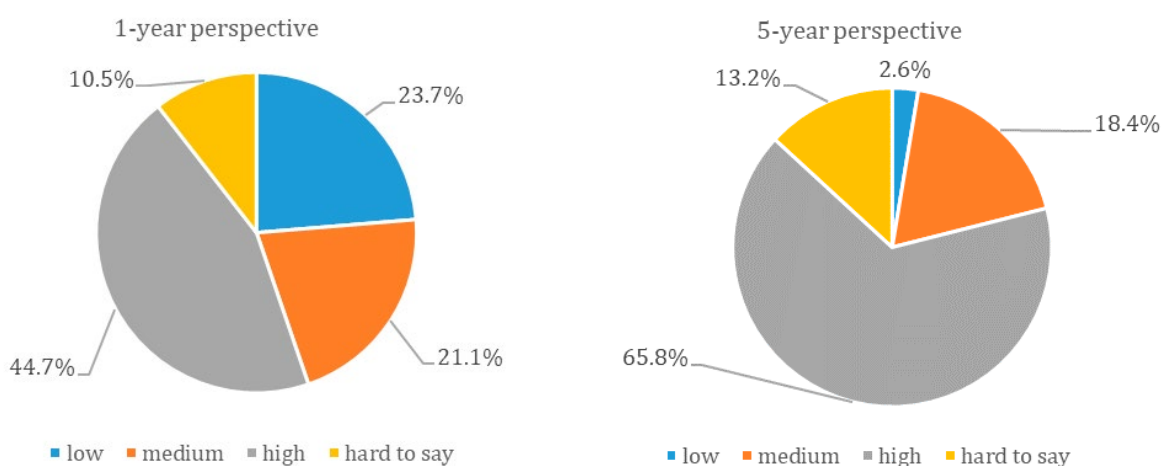
Marek Michalski

Kujawy Cement Works (Cementownia Kujawy)

Assessment of companies' development prospects

Considering the unfavourable geopolitical developments, the problems faced by entrepreneurs as a result of the COVID-19 pandemic, and the current state of the country's economy, the survey's assessments of the development prospects of foreign-owned enterprises in the upcoming year can be regarded as even surprisingly positive. Well, nearly 45% of respondents showed strong optimism, rating the prospects for the development of their business at that time as "high", while 21.1% rated it "medium". Only 23.7% of the companies surveyed rated the development prospects as "low". At the same time, 10.5% of respondents responded with "hard to say". Considering the next five years, respondents were clearly more optimistic about development prospects, with 65.8% of enterprises indicating that it was "high", only 2.6% rated their growth prospects as "low", while 18.4% rated them as "medium"; 13.2% of companies were unable to give a clear assessment in this respect and chose the option "hard to say".

Evaluation of the enterprise's development prospects over the next year and over the next 5 years in the opinion of enterprises with foreign capital/foreign investors



Source: own study based on the survey.



VII.

Brześć Economic Zone

Regardless of the high importance of agriculture to the economy of the Brześć Kujawski municipality, which is connected with the class of soils there and the high agricultural culture formed, its authorities perceived and still perceive the need for economic intensification, which is confirmed by the creation of the Brześć Economic Zone (BSG) and the activities carried out for its development.

The concept for the zone was linked to the construction of the A1 motorway. At a time when decisions were being made on the construction of the motorway on the Toruń-Stryków section, the local government of Brześć Kujawski decided to proceed with the preparation of a local land use plan. A plan covering the area of Pikutkowo, where the Włocławek-West motorway interchange was later built, was adopted in May 2011. At the time, the profiling of economic activity in the area was not done. It was evident that the planned area could be an excellent location for logistics companies, but it was hoped that it would be of interest to manufacturing companies too. Hence, the intuition of the authorities at the time suggested minimising restrictions. They basically boiled down to a provision preventing only economic activities that could have a significant adverse impact on the environment. The municipal authorities were aware that the creation and development of the BSG require multidirectional adaptation measures, including incurring not inconsiderable expenditure on the preparation of investment areas (within the framework of the development of investment areas, the municipality of Brześć Kujawski in the years 2015-2022 implemented 10 investment projects involving a total amount of PLN 13.8 million), undertaking appropriate promotional undertakings and creating appropriate relations.

Activity at exhibitions, national and international trade fairs, and numerous conversations with the business community have made it clear that the municipality must be open to and deeply consider all proposals for doing business in the zone. It was accepted as a principle that every potential investor must be received with due seriousness. Any proposal made or expectations formulated must be carefully considered, and any declarations of assistance and support from the municipality must consider the municipality's actual capabilities and be strictly implemented.

Companies operating in the Zone

Currently, the following entities are operating in the Zone: LPP LOGISTICS sp. z o.o.; RTE, Kongsberg Automotive, Lear, Kleib, Detal-Met, Raben, H&S Steel, Przedsiębiorstwo Wielobranżowe Tele-Max, Tolmet. There are also significant businesses in the municipality's economy – Kujawska Fabryka Maszyn Rolniczych KRUKOWIAK sp. z o.o., BRZEŚĆ Sipa sp.k., Uzdrowisko Wieniec-Zdrój, Efekt Metal Kowalstwo Artystyczne and Energy 5 sp. z o.o.

BSG continues to grow, as evidenced, *inter alia*, by the purchase of land by more entities – Anwis, Radpak, Mistral, TreBud, Lorenc Logistic, Naturtim sp. z o.o., Sławomir Rosiński – transport, Renex, Pneumatic System, Abra, Solar Farm II and Mercator Medical SA¹.

¹ Information provided by the Municipality of Brześć Kujawski.

Investment areas

The current offer of Brześć investment areas includes plots of various sizes. Their main assets are their favourable location and full utilities. It primarily includes sites in Pikutkowo, including 6 plots with a total area of 10.3 ha, located on the eastern side of the A1 motorway, directly adjacent to the Włocławek West interchange.

Offer of investment areas in Pikutkowo in the Brześć Kujawski municipality (10.3 ha)

Investment area	Description
Area	10.3 ha
Plot numbers	192/2, 191/6, 197/8, 197/10, 197/11, 197/9
Purpose	Production and service development
Owner	Private
Location	Pikutkowo
Local development plan	Yes
Special Economic Zone	Not
Electricity	Yes (at the plot boundary)
Water supply:	
– water intended for social purposes	Yes (at the plot boundary)
– water intended for industrial use	Yes (at the plot boundary)
Sewerage	Yes (at the plot boundary)
Gas pipeline	Yes (at a distance of 10 m)
Asphalt road	Yes (width: 5.5 m)

Source: Brześć Economic Zone, Oferta inwestycyjna, <https://inwestuj.brzesckujawski.pl> (accessed 10/12/2022).

Further sites available in Pikutkowo concern parcels of land measuring 4.7 ha), 2.12 ha, 5 ha, 2.21 ha, 9.42 ha, and 3.13 ha – these are investment areas located on both the eastern and western sides of the A1 motorway, as well as a restaurant with a residential building. In addition, the Brześć Kujawski municipality offers investment areas located in Brześć (6.79 ha on the western side of the A1 motorway near the Włocławek Północ junction) and Machnacz (3.25 ha on the western side of the A1 motorway, in the vicinity of the locations previously chosen by LPP and H&S Steel) (inwestuj.brzesckujawski.pl).

The municipality is initiating efforts to raise funds to develop further investment areas located on the eastern side of the A1 motorway. There are also further requests to take land out of agricultural production.

Benefits of doing business in the Zone

An investment in the Zone provides an opportunity to benefit from tax concessions and exemptions. The situation in the local labour market enables access to human capital. The well-developed public transport network too is significant (there are currently four KPTP bus routes to the Brześć Economic Zone: 1. Baruchowo – Machnacz via Gołaszewo – Kruszyn, 2. Chodecz – Machnacz via Choceń, 3. Nasięgniewo – Brześć Kujawski via Chełmica Duża – Włocławek – Wieniec and 4. Izbica Kujawska – Machnacz via Topólka, Lubraniec, Brześć Kujawski). Another public transport line, Telążna Leśna – Brześć Kujawski (via Smólnik, Modzerewo, Włocławek, Brzezcie, Wieniec) will be operational from 2023.

An entrepreneur investing in the Brześć Economic Zone can count on support not only in all administrative procedures, but also in the post-investment period.

Importance of the Zone for the economic exploitation of the region and prospects for its development

The location of the Brześć Economic Zone within the Brześć Kujawski municipality is currently key to the region's economy. The municipality sees the further development of the BSG as an essential factor in its economic intensification and the associated improvement in the investment attractiveness of both the Włocławek powiat and the entire Kujawsko-Pomorskie Voivodeship. Besides having a positive impact on the local labour market and thus improving the wealth of the local population, the Zone is of considerable importance for the municipality's social development. Companies operating in the Brześć Economic Zone are actively involved in the life of the local community.

By all accounts, the Brześć Economic Zone, and with it the city-municipality of Brześć Kujawski, have been a success. As its mayor Tomasz Chymkowski points out,

(...) from the point of view of the Zone's functioning, we have reason to be proud, but there is still a lot of work ahead. What has been achieved so far is the result of long-term strategic planning, the hard work of many people and institutions, consistent action, and sometimes a certain amount of cunning too, or perhaps even cunning in the good sense of those words (...). The most important thing is the truth, about what we have and what we can realistically offer an investor. What matters most here is the planning, infrastructural and administrative preparation and the availability of human capital. At the same time, it is important to be fully open, flexible and helpful in matters relating to land acquisition, obtaining the relevant decisions and permits. In my opinion, however, the most important factor is full trust and partnership.

The possibility of employing workers of the expected scale and qualifications proved to be an important determinant of investors' decisions to locate their business in the Brześć Economic Zone. Certainly, the development and appropriate profiling of vocational and higher education will be a very important part of its intensification. This is evidenced by the willingness expressed by all enterprises in the Zone to cooperate with vocational schools and The State Academy of Applied Sciences in Włocławek. The cooperation includes apprenticeships, study stays for youth in companies, as well as the factual and financial support provided by them, especially for new, desirable training courses.

The municipality also highly values the activity of companies in supporting local educational establishments.

With the creation of the Brześć Economic Zone, a process of dynamic economic intensification began in the Brześć Kujawski municipality. There has been a radical improvement in its investment attractiveness, which has been recognised by numerous awards, including the awarding of a distinction to the municipality of Brześć Kujawski in the “Innovative Local Government” [„Innowacyjny samorząd”] competition in 2020. In its justification, the competition jury pointed out:

The initiative has made the Zone a recognisable brand, a locomotive that strengthens the local economy and the municipality's position on the economic map of the country. The beneficiaries of the measures taken are the municipality's residents, investors, and local entrepreneurs, but also local business environment institutions and business-related entities.

<https://2020-innowacynysamorzad.pap.pl/laureaci/> (accessed: 13/12/2022).

Website www.inwestuj.brzesckujawski.pl contains all the basic information about the municipality of Brześć Kujawski and the Brześć Economic Zone, including available incentives (possible benefits), forms of support, and current investment offer.

Expert's voice



Today, LPP is no longer just a leader in the Polish clothing industry managing five recognisable brands such as Reserved, Mohito, House, Cropp and Sinsay. The activities of our entire Group now have a much more global dimension. Our range is already available in nearly 40 markets, which requires not only the production of successful collections tailored to diverse customer preferences but also professional, efficient and effective logistics. This was the birth of the idea of building a modern LPP Distribution Centre, for the location of which we chose Brześć Kujawski for good reason.

The very favourable location of the Kujawsko-Pomorskie Voivodeship and in particular the Brześć Economic Zone, situated in proximity to the A1 motorway and the A1/A2 junction, was an invaluable asset. The availability of attractive and spacious plots of land for the realisation of logistics activities, together with the high openness for business and the considerable human potential of the region, meant that in just a few months, we built a modern, environment- and employee-friendly facility of as much as 75,000 m² in Brześć Kujawski. Just a year later, it won the award of Best New Magazine of the Year in Central and Eastern Europe.

Today, present in the region not only as a clothing manufacturer but also as a logistics operator of LPP Logistics, an employer and a good neighbour, we are not slowing down. We feel a part of this place, and need to constantly support its development, which is why, from the very beginning of our presence in Brześć Kujawski, we have been implementing a social programme consisting of organising joint initiatives for the benefit of the region's youngest inhabitants. Good relations with the local community and the companies operating here are a solid foundation for improving the investment attractiveness of this location together with the local authorities. This is an asset that builds potential for more entrepreneurs.

Sebastian Sołtys

LPP Logistics – Distribution Centre Brześć Kujawski



VIII.

SWOT Analysis of Kujawsko-Pomorskie Voivodeship



Strengths

- central location in Poland and Europe
- the large area of investment land offered by the Pomeranian Special Economic Zone
- strong potential in agriculture, spa, tourism and in certain areas of industry (pulp, chemicals, agri-food, electro-machinery, BPO)
- relatively good transport and communication infrastructure (mainly road and rail)
- favourable settlement network (density, evenness, convenient location of central centres, including the two voivodeship capitals)
- the potential for energy production from renewable sources, particularly wind and hydropower, and linked to agricultural production
- good state of the natural environment (relatively large area of legally protected land) and landscape values
- relatively large groundwater resources compared to Poland

Weaknesses

- underdeveloped entrepreneurship
- high levels of air pollution, primarily in the form of particulate and gaseous emissions
- the region's low innovativeness, evident both in the level of R&D and innovation activities carried out, and in the number of invention applications and patents granted
- the relatively low level of most universities, low participation in education in technical, biotechnology, IT, medical faculties, etc.
- very low occupancy of sites with local development plans
- low demand potential expressed in terms of people's cash income
- lack of a structured, recognisable image for the region
- low local availability of medical services (clinics)



Opportunities

- the activity of local authorities in preparing investment sites
- openness to cooperation of local government bodies and business support institutions (K-PUW, RDOŚ, PGWP, RDLP, KOWR, PSSE)
- opportunities associated with the appropriate development of the Vistula valley and the potential of the Vistula
- the possibility of exploiting the logistical potential due to the increased importance of Gdańsk as a seaport and the use of waterways (route E-70), and the planned establishment of the logistics hub of Bydgoszcz
- implementation of plans to improve road infrastructure
- development of the agri-food sector
- an increase in the significance of renewable energy
- opportunities for the development of the health tourism sector, especially rehabilitation, aesthetic medicine, rehabilitation and wellness
- increasing identification of the incentives of the Polish Investment Zone as an active form of state support for entrepreneurship development
- relatively well-developed vocational and technical education
- a relatively high proportion of people seeking employment

Threats

- highly insufficient cooperation between Bydgoszcz and Toruń in development activities, especially those related to the development of metropolitan potential
- highly unfavourable demographic changes: the marked ageing of the population, the associated supply consequences on the labour market and the low level of preparation for the treatment and care needs of people with physical disabilities
- proximity to large and powerful agglomerations, causing an intellectual drain
- the increasing severity of adverse climate change and the associated weakening of agricultural and agri-food processing potential
- the perpetuation of a state of medium-level development and economic peripheralisation
- environmental and economic constraints to making the waterways running through the voivodeship navigable
- marginalisation of Bydgoszcz Airport

Source: own work.



Conclusions

Numerous detailed conclusions are included in the body of the final report. The following list presents only those which, in the opinion of the authors, fully illustrate the current level of investment attractiveness of the Kujawsko-Pomorskie Voivodeship and in particular, those which should be considered the most important in terms of improving the voivodeship's attractiveness.

Assessment of potential attractiveness of the voivodeship is defined as the set of factors potentially considered in its selection as a place to make an investment.



Kujawsko-Pomorskie Voivodeship was ranked Class C, together with Podlaskie, Śląskie, Lubuskie, Zachodniopomorskie, Warmińsko-Mazurskie, Lubelskie, Łódzkie and Opolskie. However, in 5 out of 8 considered pillars of investment attractiveness, Kujawsko-Pomorskie Voivodeship achieved class B (social infrastructure, technical infrastructure, environmental protection, land and housing resources, labour resources), and class C only in 3 (entrepreneurship, innovation, market absorption).



In the case of the most important pillars from the viewpoint of shaping investment attractiveness, i.e. technical infrastructure, labour resources as well as land and housing resources, according to expert assessments, the voivodeship was ranked class B. Moreover, in terms of the level of technical infrastructure and labour resources, it was ranked 5th among Polish voivodeships. These findings suggest that the voivodeship's investment attractiveness is average, compared to the rest of the country, with the indication "aspiring".



Among the most important assets of the voivodeship are its central location in Poland and Europe, a large area of investment land, including the offer and support of the Pomeranian Special Economic Zone, a strong potential for agriculture, spa and tourism and some fields of industry (pulp, chemical, agri-food, electro-machinery, BPO), a relatively good transport and communication infrastructure (mainly road and rail), a favourable settlement network (density, evenness, convenient location of central centres, including the two capitals of the voivodeship), potential in terms of energy production from renewable sources (in particular wind and hydroelectric energy) and associated with agricultural production (dispersed energy production based on biogas), a good state of the natural environment (relatively large area of legally protected areas, with simultaneous availability of land for economic activity) and landscape values, relatively large groundwater resources compared to the rest of Poland and relatively well-developed vocational and technical education.



The potential investment attractiveness of Kujawsko-Pomorskie Voivodeship is diversified. The highest level of investment attractiveness (class A) is found in the 3 township poviats – the cities of Toruń, Bydgoszcz, and Włocławek. There are 6 poviats in the second class (class B) – 1 township poviat, i.e. the city of Grudziądz, and 5 rural poviats – Toruński, Bydgoski, Tucholski, Włocławski and Żniński. As many as 13 poviats – Radziejowski, Aleksandrowski, Nakielski, Świecki, Inowrocławski, Mogileński, Sępoleński, Grudziądzki, Brodnicki, Chełmiński, Golubsko-dobrzyński, Wąbrzeski, Rypiński – were ranked class 3 (class C). In the lowest class D, only 1 poviat was found – Lipnowski.

Assessment of real attractiveness of the voivodeship is the evaluation of investors who have decided to choose the voivodeship as a place to conduct (develop) business activity, as well as people (institutions) involved in such decisions.



A significant percentage of the companies with foreign capital considered the investment attractiveness of the Kujawsko-Pomorskie Voivodeship as “high” and “very high”. Considering, however, the similarly large share of those assessing this attractiveness as average, and the small percentage of those assessing it negatively, the results presented in the report signal the need to take all possible measures for improving the investment attractiveness of the voivodeship.



Another positive signal is the investors’ assessments of the relevance of choosing Kujawsko-Pomorskie Voivodeship as an investment location. More than half of the participating companies answered affirmatively to the question of whether they would choose Kujawsko-Pomorskie Voivodeship again when deciding on a location. However, the fact that 12.8% of respondents would change the location of their investment, while 31.9% have no clear opinion on the matter, should be perceived by the institutions responsible for the development of entrepreneurship in the voivodeship as signalling the need for further, perhaps more effective, action.



The results of the research confirmed that the most important asset of Kujawsko-Pomorskie Voivodeship is its central geographical location, together with its steadily improving transport infrastructure and, consequently, increasingly high transport accessibility. The latter, however, requires continued attention, considering both the improvement of existing resources and the creation of new ones, including, in particular, passenger transport (road and rail).



An important factor that provides an incentive to invest in Kujawsko-Pomorskie Voivodeship is the qualifications of the workforce which are the second most important determinant of a region’s choice for doing business. It seems that the supply of labour resources is still conditioned by the relatively high unemployment rate (especially in poviats neighbouring large cities), but the issue of the availability of staff with the expected qualifications is already a more complex problem. In this context, the availability of employees with a university degree in economics and law is the best, while the availability of employees with a university degree in technology is worse, and that of employees with a vocational/secondary technical education is the worst (and this is not a problem specific to Kujawsko-Pomorskie Voivodeship). Moreover, this last aspect points to a certain paradox, as the voivodeship is characterised by a relatively high number of level 1 and 2 vocational schools.



The voivodeship has a relatively large area of investment land, including land available and adequately prepared for business use. On the other hand, on a broader scale, there is a very low occupancy of sites with local development plans.



It is worth emphasising that, despite the observed market increases, real estate prices and rental and lease rates can still be an asset for the province, especially as they are among the most important determinants of investment location in the province.



The results of the expert survey indicated as an important factor in the investment attractiveness of the Kujawsko-Pomorskie voivodeship its agricultural potential, as well as its tourism, leisure, sport and spa infrastructure. Experts attributed high importance to the availability of appropriately prepared land for economic activities, including large-scale sites.



In assessing the assistance offered by governmental and local government institutions and the business environment from the viewpoint of a foreign investor, local government units and special economic zones were assessed most favourably.



Due to the relatively high percentage of companies indicating the following as disincentives to invest in the voivodeship's area, it seems reasonable to include them among the attractiveness barriers, despite the percentage perceiving them as attractiveness factors being higher: tax incentives offered, qualifications of the workforce, quality and efficiency of service in offices, state of the rule of law, the potential of regional industry.



Most of the companies surveyed did not perceive the voivodeship as a place of access to natural resources, and those that evaluated the voivodeship through this prism half considered it as an attractiveness factor and a barrier to attractiveness.



The results of the research indicated that the majority of the companies covered assess well the preparation of the local authorities for cooperation with foreign entities. However, the relatively high proportion of satisfactory ratings means that local authorities still face major challenges in this area as well.

For the policy of the region's authorities towards investors, the results of the research carry important indications:



Creation of an appropriate educational offer by profiling courses of study to meet investors' expectations.



Continuous improvement of technical and social infrastructure.



Demonstrate and implement a business-friendly attitude and improved service in offices.









Broad application of the principles of sustainable development understood as action in terms of not only environmental protection but also social progress and economic growth—these three interconnected elements are the path to the prosperity of the present and future generations.



Dissemination of good practice in providing service and support to entrepreneurs, exemplified by the activities of the Branch and Office of the Pomeranian Special Economic Zone in Toruń and Włocławek.

Considering the demands formulated in the framework of the debates framed by the results of the survey presented in the report, as well as the discussions with representatives of the PSSE, the following more specific recommendations should be highlighted:

-  Continue efforts to improve transport infrastructure (especially roads and railways) to increase the transport accessibility of the voivodeship, including better adjustment of the network of not only external connections, i.e. with other regions, but also internal connections, i.e. within the region, construction of bypasses for cities and towns and modernisation of national, provincial, county and municipal roads.
-  Intensify work for creating a multimodal platform (reloading transport hub) Bydgoszcz – Solec Kujawski and establishing a logistics hub at Bydgoszcz with the intermodal terminal Bydgoszcz Emilianowo, as well as making efforts to make fuller use of the Bydgoszcz Airport, including for cargo transport.
-  Strengthening the development of technical education at all levels, especially at the vocational level, in cooperation with enterprises and the Pomeranian SEZ (opening of Industrial Robot Programming Centres in Włocławek and Grudziądz, *inter alia*, to train future staff in programming and robotics). Increase the occupancy rate of local spatial development plans, considering the areas dedicated to industry and services and the possibility to invest in RES with capacities coinciding with the investors' own demand.
-  Deepen the cooperation of field government administration bodies and business support institutions (K-PUW, RDOŚ, PGW WP, WSS-E, RDLP, KOWR, PSSE) to implement activities for the development of the voivodeship.
-  Bring coherence to the promotional activities of the business environment institutions operating in the Kujawsko-Pomorskie Voivodeship to attract new investors and build the region's brand in the national and international arenas.
-  There is an urgent need to mobilise funds from the National Reconstruction Plan to implement several projects in the voivodeship (e.g. on green transformation) and European Union funds for the implementation of the "Strategy for the Development of Kujawsko-Pomorskie Voivodeship by 2030 - Acceleration Strategy 2030+".



Research methodology

The research project, the results of which are presented in this report, covered two areas:

1. Assessment of the potential investment attractiveness of the Kujawsko-Pomorskie Voivodeship and its sub-regions, and
2. Assessment of the real investment attractiveness of Kujawsko-Pomorskie Voivodeship.

The assessment of potential investment attractiveness was made by collecting and compiling information and data presented in statistical sources, mainly the Local Data Bank of the Statistics Poland. The research was conducted in the first half of 2022.

The assessment of potential investment attractiveness, at the voivodeship and poviats levels, was carried out with reference to 8 pillars in the following 3 groups: business environment, infrastructure and market. The pillars of investment attractiveness consisted of 1) entrepreneurship, 2) innovation, 3) social infrastructure, 4) technical infrastructure, 5) environmental protection, 6) land and housing stock, 7) market absorption and 8) labour resources. Each of the pillars was described by a series of diagnostic variables (a total of 49 variables were used at the voivodeship level and 28 variables at the poviats level), which were standardised in the next step. The indicators characterising attractiveness within each pillar were calculated as arithmetic means of the standardised diagnostic variables. The value of the potential investment attractiveness of a voivodeship and its poviats was calculated as a weighted average of the values of indices describing particular pillars. The weights were adopted based on an expert survey, in which representatives from academia, business, local government and business supporters participated. The opinions of 64 experts were used. The results of the survey confirmed the validity of all eight pillars. At the same time, they showed their diversity. Pillars of the highest importance were identified as “technical infrastructure” and “labour resources”, followed by “land and housing stock”, “innovation”, “social infrastructure”, and “entrepreneurship”. The list of pillars ended with “market absorption” and “environmental protection”. The order was considered in assigning weight to the individual pillars. The division of statistical units into investment attractiveness classes (A, B, C, D) was based on the natural division according to the Jenks optimisation method.

In developing the concept for the research, the authors recognised that the opinions and assessments of investors, particularly those from abroad with a broad view of a region’s attractiveness (also considering potential global locations for capital investment), provide a particularly valuable basis for learning about a region’s actual attractiveness.

The survey of the actual investment attractiveness of the voivodeship was a primary survey of the voivodeship and was conducted in two stages in the second half of 2022. The research used proprietary survey tools. In the first, called the “expert survey” (including a panel study and a complementary survey), enterprises operating in Kujawsko-Pomorskie Voivodeship (both entities with exclusively Polish capital and those with foreign capital) and entities representing the business environment – supporting the development of entrepreneurship – were invited to participate. On the other hand, the second stage of the survey procedure covered only companies with foreign capital based in the area of the province. Finally, this phase of the survey was completed on 22/11/2022, obtaining 47 correctly completed questionnaires. By relating the number of enterprises participating in the survey to that

indicated by the Statistics Poland (434 enterprises as at the end of 2020) and the number of enterprises with foreign capital, it can be inferred that nearly 11% of the surveyed collective participated in the survey. The aim of both stages was to confront the findings obtained through the evaluation of the potential investment attractiveness of the Kujawsko-Pomorskie Voivodeship with the opinions and experiences of entities operating in its area, including, in particular, enterprises with foreign capital, which can constitute a kind of barometer of the conditions of doing business in a given region. This survey was enriched by a case study of the Brześć Kujawski municipality.

The results of the survey on the potential investment attractiveness of the voivodeship were presented and discussed during the meeting held on 23/06/2022 in Kujawsko-Pomorskie Voivodeship Office in Bydgoszcz, while the results of the survey on the actual attractiveness of the voivodeship were presented during the debate organised on 08/12/2022 in Brześć Kujawski. The first was attended by representatives from academia, business and the business environment. The composition of the participants in the second debate was expanded to include representatives of local government units.

The main conclusions of the discussion are presented in the final report on the results of the research and included in the SWOT analysis of Kujawsko-Pomorskie Voivodeship.

Besides the author's research findings, the following source materials were used in the study:

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Interview with Mr Tomasz Chymkowski – Mayor of Brześć Kujawski.



Layout:
Krzysztof Skrzypczyk

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other photos:
Michał Kraszewski