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Republic of Poland



INSTITUTION OF THE MAŁOPOLSKA REGION
Regional Labour Office
in Krakow

○ 2023



OCCUPATIONAL BAROMETER



Report summarizing
the study in **Poland**



Occupational Barometer

Raport summarizing
the study **in Poland**



2023

The report was prepared in the Regional Labour Office in Krakow as part of a nationwide survey „Occupational Barometer”, commissioned by the Ministry of Family and Social Policy.

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Dear Sirs,

The COVID-19 pandemic has shown the importance of flexibility and the ability to adapt to changing conditions. In the face of an economic downturn, compounded by the Russian aggression against Ukraine that began in February 2022, that will be key to the country's continued development.

In 2023, there may be a number of challenging moments relating primarily to the uncertain geopolitical situation. Inflation, disruptions in supply chains and a downturn in major trading partners will hamper Poland's economic growth.

Despite these negative phenomena, the labour market situation should remain relatively favourable. Companies, faced with rising costs (energy, raw materials, labour), will probably be much more cautious about recruitment. On the other hand, however, they will most likely hold off on making redundancies because, as the experience of recent years has shown, getting the right employees is always a major challenge. As a result, only a slight increase in the number of unemployed is expected at the end of 2023.

The results of the 8th edition of the Occupations Barometer also indicate that the situation on the labour market should be stable. Although the number of shortage occupations will decrease nationwide (from 30 in the 2022 forecast to 27 in the 2023 forecast), there will not be a single surplus occupation. Thus, the demand for employees (very high in recent times) will mostly be balanced out. In such situation, those who are willing to work and having required qualifications should still have no difficulty finding employment.

However, it is important to bear in mind that the situation will vary between provinces and districts, as shown by the results of the Barometer, available at regional and local level on the dedicated website barometrzwodow.pl.

Finally, I would like to thank all those involved in the implementation of the survey: the national coordinator, the provincial and district coordinators, as well as experts from outside the public employment services who are becoming increasingly involved in the preparation of the Occupational Barometer.

Marlena Małąg
Minister for the Family and Social Policy

1. Research methodology

1.1. Survey objective and methodology

The Occupational Barometer is a short-term (one year) forecast of the situation in occupations. The barometer is developed at the counties level and allows to observe the directions and intensity of changes taking place on local labour markets. The results can be useful for planning training, supporting the process of job mobility or selecting career path.

The survey methodology was developed in Sweden in 1990's, as a part of a broader system for forecasting changes in the labour market. In 2007, the Occupational Barometer was adapted by the public employment service in south-western Finland. Currently the survey is conducted throughout Finland¹.

The Barometer was first used in Poland by the Regional Labour Office in Krakow. In 2009, the staff of the Labour Market and Education Observatory of Małopolska (a research project of the Regional Labour Office in Krakow) learnt about the concepts of the Barometer during a study visit to Turku, Finland. At the same year, a pilot survey was conducted in six counties in Małopolska, and then in the entire region. The survey has been conducted in all counties in Poland since 2015.

Until 2019, the Occupational Barometer survey was carried out in parallel to the quantitative research called Deficit and Surplus Occupation Monitoring (MZDiN). MZDiN was conducted countrywide, pursuant to the Employment Promotion and Labour Market Institutions Act of 20 April 2004. By the decision of the Ministry of Family, Labour and Social Policy, from 2020, due to their complementarity, these studies were combined into one, called Occupational Barometer. After that, Barometer remained qualitative research (as it has been from the beginning).

Barometer is carried out using the method of an expert panel. During the group discussion, participants use their knowledge and experience gained at work, coming

¹ <https://www.ammattibarometri.fi/>

from observations, researches and contact with the unemployed and employers. As a part of the preparation for the meeting and during the panel, the experts also use quantitative data (previously used within MZDiN)². The quantitative data covers the second half of the preceding year and the first half of the year in which the survey takes place. In their assessment, the experts use data on:

- job offers in the particular occupation,
- people registered as unemployed in the particular occupation,
- employment of foreigners
- other aspects that may influence the situation in the professions like e.g. information on people working in the shadow economy, the conditions of employment, multitasking, required qualifications, information about pupils, students and graduates, information on planned investments and new jobs, information on changes in legal regulations affecting the local labour market.

The panel usually consist of four to eight people:

- employees of county labour offices: employment agencies, career counsellors, representatives responsible for cooperation with businesses and for training as well as the EURES (The European Jobs Network),
- employees of other institutions with knowledge of the local labour market e.g. the private employment agencies, employees of the special economic zone managers, voluntary labour corps, trade associations, non-government organizations and university career centres.

Panel members assess only those occupations that are existing on the local labour market. If they have no overview of the situation in the occupation concerned, they should leave it out – that is why the list of occupations which are ultimately included in the forecast for the specific county may be shorter than maximum (168 items).

During the discussion experts answer the following questions:

- In your opinion, how will the demand for occupation change in the upcoming year? Is it going to:
 - increase dynamically
 - increase

² The Minister of Labour is responsible for obtaining the data from Sygnity. The Regional Labour Office in Kraków is responsible for converting the data into occupations included in the survey. All data is available on the barometr.zawodow.pl website in the „Data on professions” module.

- be balanced
- decrease
- decrease rapidly
- In your opinion, what will the relationship between the available labour force and the demand for occupation in the upcoming year be? Will there be:
 - great shortage of job seekers
 - shortage of job seekers
 - balance between the demand and supply
 - surplus of job seekers
 - great surplus of job seekers

Based on the answers, the occupations are classified into one of three categories:

- **shortage occupations** – those, in which it should not be difficult to find a job, as the demand from employers will be high, while the supply labour with the required skills will be low,
- **balanced occupations** – those, in which the number of jobs offered will be similar to the number of people capable of taking up employment in a given occupation (supply and demand are balanced),
- **surplus occupations**, those, in which it might be more difficult to find a job due to the low demand and/or excess number of candidates that meet the employers' requirements

After all the county expert panels are finished, the Occupational Barometer for the region and for the country is developed, based on the data collected from all the county panels. The regional results include only professions that were assessed in at least half of the counties³.

³ Only occupations that have been assessed in at least half of the districts are included in the provincial results. The grading is determined by an algorithm created for the purposes of this study. A deficit on the regional scale is a situation in which the number of deficits (assessments from all counties /poviats/ in the region /voivodeship/ in a given group of occupations is higher than the sum of surpluses and balances, at the same time the number of deficits is not equal to the number of balances. Analogically, forecasts are generated for all categories for the whole country (the basis is all district forecasts). A surplus on a provincial scale is a situation in which the number of surpluses (assessments from all the districts of the province) in a given group of occupations is higher than the sum of deficits and balances and, at the same time, the number of surpluses is not equal to the number of balances. Equilibrium refers to a situation where an occupation has not been classified as deficit or surplus. In justified cases, the provincial coordinator, after consultation with the national coordinator, may change the classification of an occupation into a particular category.

The results of the study, as well as all quantitative data taken into account during the panels, are available on the website www.barometrzawodow.pl

1.2. Presumptions concerning the list of occupations

The list of occupations used in the Barometer survey is based on the Classification of Occupations and Specializations for Labour Market Needs of 2014 (KZiS).

Names of professions defined for the Barometer are not fully consistent with the names of occupations and groups used in KZiS. The list developed for the Occupational Barometer groups the occupations and specializations with 4-digit code (elementary groups) and 6-digit code (occupations and specializations) taken from KZiS.

The list of occupations assessed in the Barometer was developed with the focus on those occupations, that are numerous represented by the potential candidates as well as offered by employers, who recruit such candidates. Therefore, some of the occupations, for which the candidates must be appointed or elected, were omitted: parliament members, politicians, senior government officials, senior officials of special-interest organizations, university directors, etc.

The list also does not include religion related occupations (clergy and consecrated persons or other religious professionals) or professionals practicing unconventional or complementary therapy. The list also omitted some arts and sports occupations, which involve artistic and sports professionals. On the other hand, the occupations involving work in the cultural, sports and recreation centres are included in the cultural associate professionals, event planners and fitness and recreation instructors groups. In addition, the occupations that require artistic talent have been classified into interior designers and decorators, product and garment designers and photographers groups.

The occupations were grouped in the Barometer list by similar professional areas or contents, based on the methodology used in the Scandinavian countries. The occupations were compiled taking into consideration candidates having partial qualifications or being overqualified (e.g. archivists and curators group consists of elementary groups KZiS 2621 archivists and curators and 4414 filing and similar clerks). Based on the observations of local and regional labour markets, this is how the candidates are actually selected for jobs. In situations, when a specific education level is a requirement on a local labour market, the panel members were asked to indicate that in comments. Comments included in the forecasts

and published on the Barometer website give the interested parties (career counsellors, job seekers, who are more computer savvy) an opportunity to learn more about local conditions .

The Barometer survey includes teaching professions (i.e. vocational schools, secondary technical schools, colleges as well as professional training courses), which are assigned to the groups related to specific occupations that are popular on the market.

In regards to occupations involving university education, after the discussions with experts, regional coordinators and the survey team, the only occupations which were omitted, were those that could not have been clearly assigned to the existing groups. At the same time, it was not possible to reach a consensus on including them in a new group, as they were not represented in such numbers on the majority of local labour markets, that would justify doing so.

That is why, the physicists group was not included in the Barometer survey, as a physicist without a teaching license, who is neither a research scientist at the university or a research institute, in terms of labour market, does not practice his profession studied.

The Classification of Occupations and Specializations for the Labour Market Needs also contains elementary groups, where occupations not classified elsewhere are included – the occupations that could not be assigned to any other group. As a result of combining certain occupations similar in terms of the required competencies and job description, the groups were formed, in which most of “not classified elsewhere” occupations could be included.

The list of occupations in the eighth national edition of the survey (i.e. in the Barometer for 2023) contains 168 items, the same as last year. At the same time, two occupations were merged into one compared to last year, i.e.: foreign language teachers and lecturers were included in general subject teachers. Due to the changes in the NCSC, it was not possible to separate those, as was before, from digital group 4 2330 (secondary school teachers except vocational education teachers) and from group 2341 (primary school teachers), foreign language teachers. It was therefore decided to assess foreign language teachers and lecturers together with other subject teachers.

At the same time, one profession was separated from the larger group assessed so far: medical laboratory diagnosticians were separated from biologists and biotechnologists. The decision was taken after consultation with the professional

community and was based on the fact that diagnosticians represent a medical profession with a specific market situation and specific qualification requirements. It was decided that for the consistency in assessments it would be reasonable to split this group into two professions.

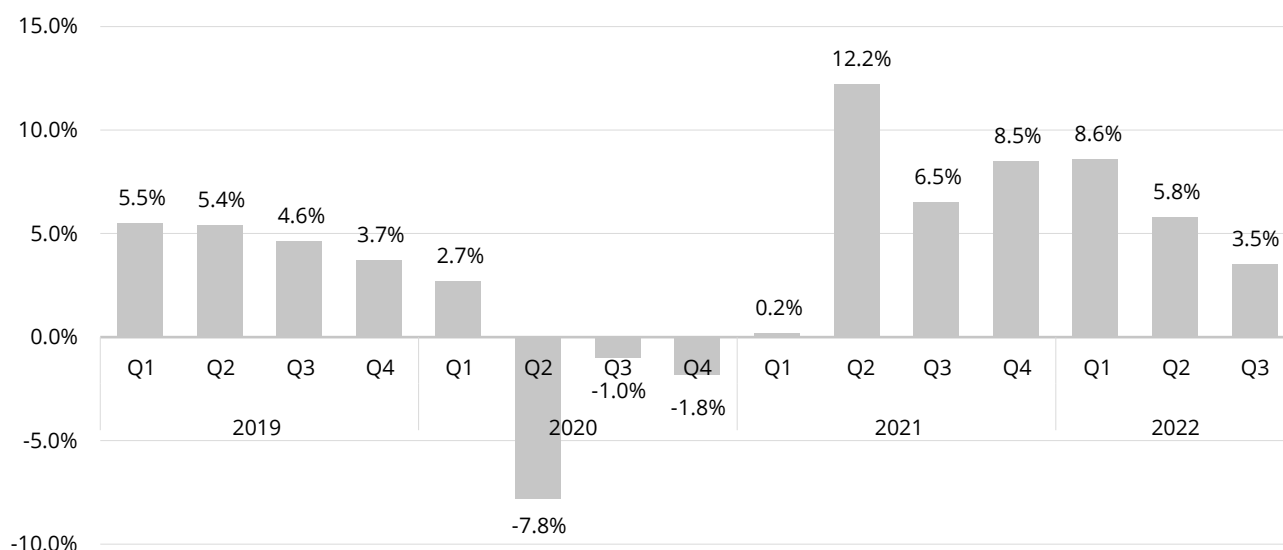
2. Labour market

2.1. Economic situation

The economy, recovering from the slowdown caused by the COVID-19 pandemic, has entered another difficult period. The Russian aggression against Ukraine, which began in February 2022, has compounded the negative outcome that will undermine growth in 2023.

According to the data from the Central Statistical Office (CSO), a gradual deceleration of Polish economy has been visible since spring 2022. In the third quarter of 2022, the Gross Domestic Product (GDP), not seasonally adjusted (at constant average prices of the previous year) grew year-on-year by 3.5%, which is less than in the previous two quarters⁴.

Chart 1. Seasonally unadjusted GDP growth, constant average prices of the previous year (year-on-year)



Source: own compilation based on CSO studies „preliminary estimate of gross domestic product in q3 2022” and „preliminary estimate of gross domestic product in q3 2021”.

⁴ Cf. Central Statistical Office / Subject areas / National accounts / Quarterly national accounts / Preliminary estimate of gross domestic product in Q4 2021 [12.12.2022].

According to forecasts by the European Commission or the National Bank of Poland, a further slowdown of the economy is to be expected in the upcoming months. Both institutions unanimously predict that in 2023 GDP growth will be at 0.7% in Poland. The situation will worsen in most countries of the European Union. Average growth in the member states will be just 0.3%, with Germany – Poland's main trading partner – seeing its GDP decline by 0.6%⁵.

Factors influencing the economic situation in Poland⁶:

- **the unstable geopolitical situation** caused primarily by the Russian invasion of Ukraine and the uncertainty about its further course,
- **inflation**, including in particular an increase in raw material prices resulting in higher production costs. Forecasts assume a peak in early 2023, after which inflationary pressures should ease,
- **lower demand for goods and services** from Eurozone countries, particularly Germany,
- **stagnation in private investment**, due to the uncertainty of the situation, rising implementation costs and difficult access to financing,
- **increased public investment for defence, in** parallel with the delay in European-funded investment (National Reconstruction Plan),
- **a downturn in the construction industry due to** increases in operating costs (prices of construction materials, fuels and wages) and, above all, interest rates, resulting in less activity in the housing sector,
- **maintaining high private consumption** thanks to public support, low unemployment and the influx of Ukrainian citizens,
- **shielding measures to** minimise the negative effects of inflation, including, inter alia, the Anti-Inflation Shield, compensation for energy sellers in connection with price regulation, subsidies for energy-intensive enterprises.

⁵ Cf. Autumn 2022 Economic Forecast: The EU economy at a turning point (europa.eu) [28.11.2022].

⁶ Own elaboration based on: Autumn 2022 Economic Forecast: The EU economy at a turning point (europa.eu), PowerPoint presentation (nbp.pl) and Forecasts_IPAG_2022_4(116).pdf [28.11.2022].

2.2. Situation on the labour market

The phenomena observed in the economy are usually translated into the labour market with a delay. The situation is therefore still favourable, although some negative symptoms are already becoming visible.



Employment in the business sector is increasing, but overall employment is decreasing

In Q3 2022, 16,690 thousand people were working, 0.7% less than a year before. There was more of a decrease in the number of employed men (down 1.2% to 9 074 thousand) than women (down 0.2% to 7 616 thousand respectively). Fewer people than a year ago worked in both the public sector (down 2.1% to 4,007k) and the private sector (down 0.3% to 12,683k respectively).

At the same time, the business sector⁷, a key contributor to economic growth, has seen an improvement. In October 2022, average employment amounted to 6,500.9 thousand and was 2.4% higher than a year ago. Growth was recorded in the vast majority of industries (PKD sections). The largest in information and communication (by 11.8%), accommodation and catering (6.3%), transport and storage (3.6%) and cultural, entertainment and recreation activities (2.6%), while there was a decrease in real estate services (by 1.6%) and electricity, gas, steam and hot water generation and supply (by 0.3%)⁸.



Entrepreneurship is growing, but business closures are increasing

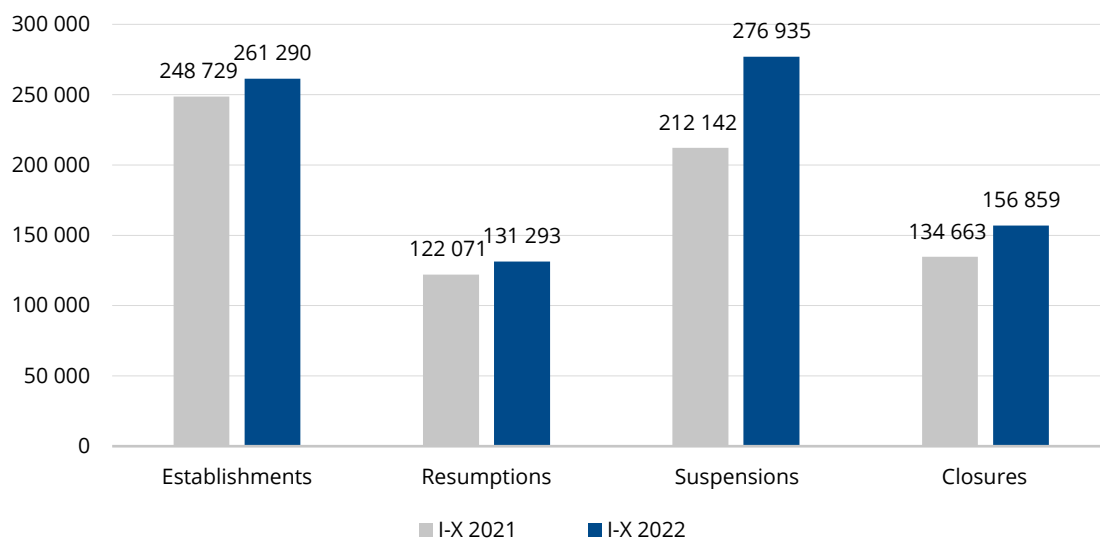
On the basis of an analysis of business activities carried out by individuals entered in the Central Register of Business Activity Information, a high rate of change is evident. Although newly established businesses continue to outnumber those that are being closed, there was a marked increase in the scale of drop-outs between January and October 2022. In comparison to the same period in the year before, the number of suspended businesses increased by 30.5% and terminated businesses by 16.5%. At the same time, start-ups increased by 5% and renewals by 7.6%⁹.

⁷ In units with more than 9 employees

⁸ Cf. Central Statistical Office / Subject areas / Other studies / Information on the socio-economic situation / Statistical Bulletin No. 10/2022 [28.11.2022].

⁹ Own elaboration based on data from Data | CEIDG data warehouse and Biznes.gov.pl [9.11.2022].

Chart 2. Number of applications submitted to the Central Register and Information on Economic Activity for the establishment, resumption, suspension and termination of economic activity, from January to October 2021 and 2022



Source: own compilation based on data from ceidg data warehouse [as at 8.11.2022].



Wages are increasing, but purchasing power is decreasing

The average gross monthly salary in the enterprise sector¹⁰ in October 2022 was PLN 6,687.92, i.e. 13.0% more than a year ago. An increase was recorded in all industries (PKD sections). The largest in transport and storage (25.1%) and in activities related to culture, entertainment and recreation (14.4%). The smallest, not exceeding 10%, in accommodation and catering and water supply; sewage and waste management; remediation (9.8%).

However, wage growth has not kept pace with inflation. The purchasing power of the average monthly gross wage in the business sector in October 2022 decreased by 3.8% compared to October 2021, a decrease greater than in previous months. Between January and October 2022, the gross real wage decreased by 0.4% compared to the same period last year (at that time it increased by 3.6%)¹¹.

¹⁰ In units with more than 9 employees

¹¹ Cf. Central Statistical Office / Subject areas / Other studies / Information on the socio-economic situation / Statistical Bulletin No. 10/2022 [29.11.2022].



No more collective redundancies

Between January and October 2022, 265 employers declared collective redundancies, two times less than as in the same period of 2021, when 529 establishments declared collective redundancies (with some companies being able to make redundancies across several counties, and therefore could be shown several times). There were 18,800 employees to be made redundant, 32.2% less than in the same period last year¹².



Unemployment remains low

At the end of October 2022, there were 796.0 thousand unemployed people registered in labour offices, i.e. 114.9 thousand less (12.6%) than a year earlier. The registered unemployment rate was 5.1%, 0.8 percentage points lower than a year ago, although it should be noted that the rate has remained very similar since June 2022 - between 5.2% and 5.1%. It should be noted that the favourable changes in the labour market in Poland have not been disturbed by the massive influx of Ukrainian citizens who can register at labour offices. Compared to the situation taking place at the end of January 2022, i.e. before the outbreak of war in Ukraine, the number of unemployed fell by over 14% and the registered unemployment rate decreased by 0.8 percentage points.

In the provinces, the unemployment rate in October ranged from 2.8% in Wielkopolskie to 8.7% in Podkarpackie. Compared to October 2021, it decreased in all regions, most notably in Podkarpackie (by 1.3 percentage points) and Świętokrzyskie (by 1.2 percentage points)¹³.

Poland is a country with one of the lowest unemployment rates in the EU. According to the data published on 1 December 2022, the harmonised unemployment rate, calculated according to the definition adopted by Eurostat, was in October 2022. 3.0% in Poland compared to 6.0% in the European Union and 6.5% in the EURO area. Thus, together with Germany, Poland ranked second, after the Czech Republic (2.1%), in terms of the lowest unemployment rate in the EU¹⁴.

¹² Ministry of Family and Social Policy data from MRiPS-01 labour market report [05.12.2022].

¹³ Cf. Central Statistical Office / Subject areas / Other studies / Information on the socio-economic situation / Statistical Bulletin No. 10/2022 [29.11.2022].

¹⁴ Cf. <https://ec.europa.eu/eurostat/documents/2995521/15497496/3-01122022-AP-EN.pdf/eaaa1272-82e4-2456-ed30-e6f29f801bd8> [07.12.2022]



Job vacancies in district employment offices and online portals are decreasing

In the period from January to the end of October 2022, 1,053.5 thousand jobs and economic activation were reported to district labour offices, of which 87.8% were offers from the private sector. Compared to the same period in 2021, the number of job offers decreased by 8.5%, with a decrease observed only in the private sector (by 10.8%). The number of job offers coming from the public sector increased by 12.0%¹⁵.

A gradual reduction in the number of recruitments can also be seen in online services. According to a Grant Thornton study, on the 50 largest recruitment portals in Poland, employers published around 307,000 new job advertisements in October, i.e. 5.1% less than in the same period in 2021. Thus, the downward trend observed since May 2022 continued (comparing year-on-year data). Nonetheless, it is worth noting that the level of job advertisements published online is still high, i.e. higher than during the pandemic (in October 2020), and also higher than before the pandemic (in October 2019)¹⁶.



Strong demand for foreign workers persists

Due to legal changes regulating the employment of foreigners, comparing inflow data is difficult. Citizens of Ukraine, still the largest group of foreign workers, since the Russian invasion of the country (24.02.2022) most often take up employment based on a new instrument, notifications submitted by employers to district labour offices. Between March 2022 (when this form of employment was introduced) and the end of October, 631,100 of them were received.

In such a situation, the number of other forms of labour legalisation used so far has significantly decreased. From January to October 2022, 948.7 thousand declarations on the intention to employ a foreigner were registered¹⁷, i.e. 44% less than in the same period of 2021. Fewer permits were also issued - 314.4 thousand, i.e. by 23% compared to last year. The share of Ukrainian nationals in work permits issued fell from 66% to 26%, and in the case of statements from 83% to 61%. At

¹⁵ Own elaboration based on CSO data, LDB

¹⁶ Cf. <https://grantthornton.pl/wp-content/uploads/2022/11/Oferty-pracy-w-Polsce-pazdziernik-2022.pdf> [29.11.2022].

¹⁷ Due to legal changes, from 29 January 2022, based on a declaration, citizens of Armenia, Belarus, Georgia, Moldova and Ukraine can work in Poland for 24 months, whereas previously only for six.

the same time, the share of citizens of India (from 3 to 11%), Uzbekistan (from 3 to 9%), Turkey (from 1 to 6%) and the Philippines (from 2 to 6%) in permits increased. In contrast, there was an increase in declarations by citizens of Belarus (from 5 to 19%) and Georgia (from 6 to 14%).

Regarding Ukrainian nationals, it should be noted that the profile of those taking up work in Poland has changed since the start of the Russian aggression against that country. Previously, those were mainly men, employed in the manufacturing and construction sectors. Today, women are in the majority (67.8% of notifications registered from January to the end of October 2022). Ukrainians most often find work in manufacturing (31.5% of the total notifications submitted), administrative and support services activities (17.2%) and transport and storage (13.0%)¹⁸.



Labour market situation will remain good in 2023

In 2023, negative economic phenomena will intensify, but the situation on the labour market should remain relatively favourable. According to a projection by the Institute for Economic Forecasting and Analysis, the registered unemployment rate will rise to 5.5% at the end of 2022 and reach 5.8% at the end of 2023. As experts note, an increase at this level does not represent a significant macroeconomic challenge¹⁹. A strong labour market will be one of the main pillars for stabilising the country and the European Union.

According to the European Commission's forecast, in 2022 the unemployment rate in Poland, as defined by Eurostat, will be 2.7%, and in 2023 it is expected to rise slightly, to 3%, but it will still be the lowest in the European Union, where the unemployment rate is expected to be at 6.5%²⁰.

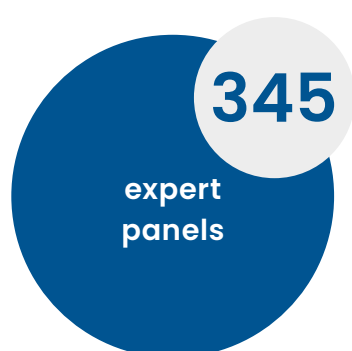
¹⁸ Own elaboration based on data from the analytical and reporting system CeSAR [data download date: 29.11.2022].

¹⁹ Cf. Forecasts_IPAG_2022_4(116).pdf [30.11.2022].

²⁰ „Autumn 2022 Economic Forecast: the EU economy at a turning point”, European Commission, Directorate-General for Economic and Financial Affairs, online.

3. Demand for occupations

3.1. Implementation of the 8th edition of the Occupational Barometer



The forecast for 2023 was developed during 345 expert panels. In most panels, participants assessed the demand for employees in one county. In case of 35 panels, the situation was forecast simultaneously in 2 counties, most often land and urban, was served by one local labour office. In the end, forecasts were made for all 380 counties in the country.

More than 2 200 people were involved in the eighth edition of the Barometer, including employees of: local labour offices (1 793 people), regional labour offices (34 people), volunteer labour corps (83 people), town/county councils (69 people), schools/other educational institutions (65 people), chambers/chambers of crafts (63 people), employment agencies (51 people), other organisations of employers (25 people) and other entities (80 people). On average, 6 experts participated in one panel (not including the provincial and national coordinator, who participated in the meetings as discussion facilitators).

The 8th edition saw a return to the traditional survey formula. The majority of panels (68%) took place in the form of a face-to-face meeting, most often at the offices of district labour offices. 1% of the panels had a mixed form, i.e. some participants were present directly and some remotely. The remaining 31% of the panels were held remotely.

The results of the county panels were converted to the provincial and national levels. A summary of the national data, included in this report, aims to detail the phenomena occurring nationally and the trends observed over the years.

3.2. Demand for staff

The results of the Occupations Barometer indicate that demand for workers will decrease in 2023. However, due to previously entrenched deficits, a large increase in unemployment should not be expected to translate into staff surpluses. The labour market situation will move towards equilibrium.

Figure 1. Number of shortage, surplus and balanced occupations in Poland according to the Occupations Barometer in 2023



27

Shortage occupations

Those, in which it should not be difficult to find a job, as the demand from employers will be high, while the supply labour with the required skills will be low.



141

Balanced occupations

Those, in which the number of jobs offered will be close to the number of people capable of taking up employment in a given occupation (supply and demand are balanced).



0

Surplus occupations

Those, in which it might be more difficult to find a job due to the low demand and/or excess number of candidates that meet the employers requirements.

Source: barometrzwodow.pl

Twenty-seven occupations will be in deficit, three fewer than a year earlier, after five occupations moved into balance i.e.:

- concrete placers, concrete finishers and related workers and pavers - which is linked to the downturn in the construction industry and the announcement of a reduction in investment particularly in residential construction,
- handicraft workers in wood and joiners - a consequence of the deterioration in the construction industry, but also in manufacturing,
- bakers - as a result of the rising cost of making bread and the search for savings, including job cuts,
- ambulance workers - a consequence of the weakening pandemic situation and the limited number of posts. Despite patient demand, no new jobs are expected to be created, resulting in a nationwide staffing deficit.

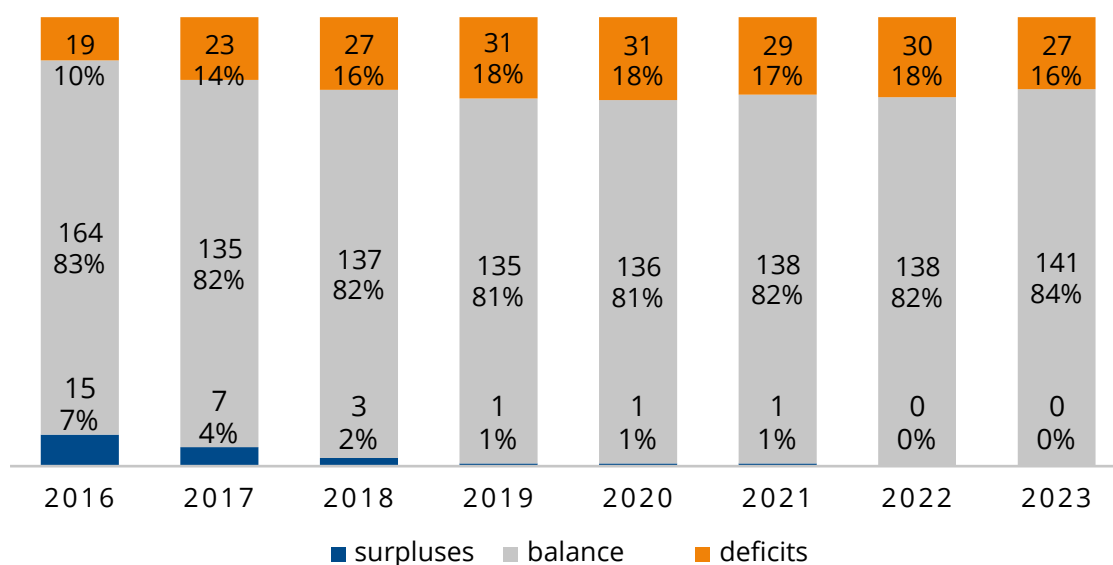
On the other hand, two occupations from the education sector went from balance to deficit: teachers of general subjects and special school teachers.

There will be 141 occupations in equilibrium, three more than in the 2022 forecast. The changes are due to shifts within shortages. Equilibrium of demand

and supply, after a period of shortages, is expected among: concrete placers, concrete finishers and related workers, pavers, handicraft workers in wood and joiners, bakers and ambulance workers. On the other hand, a greater demand for workers, resulting in a shift from equilibrium to deficit, will be observed among teachers of general subjects and special school teachers.

The number of surpluses will not change, they will continue to be non-existent at the national level in Poland. This means that at the national level there will be not a single occupation in which the number of qualified and willing to work people exceeds the number of available jobs. It should be borne in mind that this is an average result and the situation will vary locally and regionally and will strongly depend on the condition of poviats and voivodship labour markets.

Chart 3. Number and share of shortage, balanced and surplus occupations in the 2016–2023 Occupation Barometer forecast in Poland



Source: barometrzawodow.pl

3.3. Deficit occupations by industry

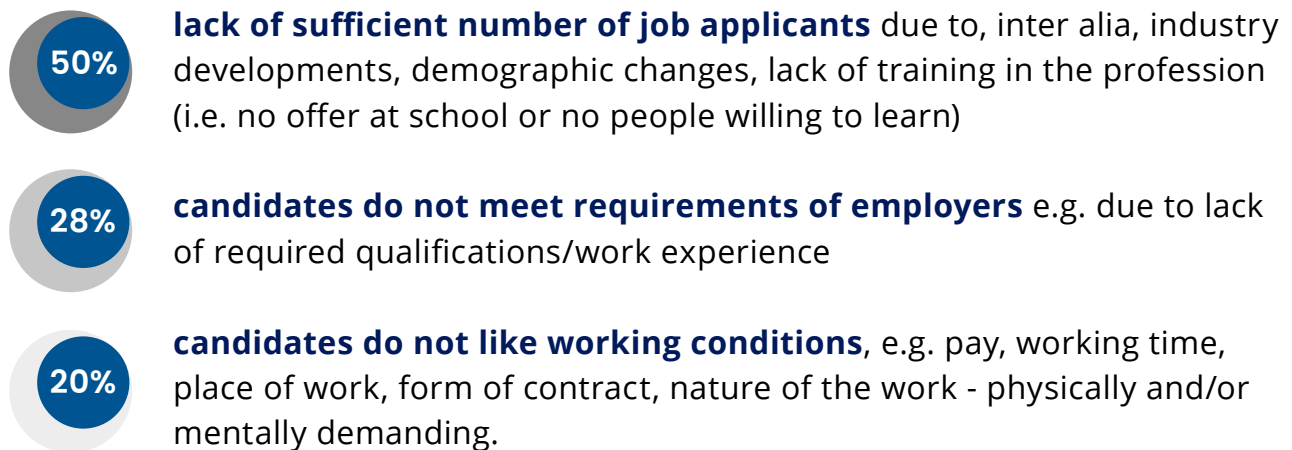


Out of 27 occupations in deficit in the 2023 forecast, 8 are considered to be in long-term deficit. This means that the shortage of workers in these professions has been recorded continuously since the 2016 forecast.

In comparison to last year, the list of permanently shortage occupations remained unchanged. It includes: construction joiners and carpenters, roofers and sheet metal workers in building trades, bus drivers, truck drivers, metal working machine tool setters and operators, nurses and midwives, independent accountants, welders.

This shows that, despite the lower demand for employees, the situation for occupations which are permanently in shortage is not changing significantly. The staff shortages in them are so large that will still remain significant in the 2023 perspective.

The deficits are due to various reasons. According to the 2023 forecast, **the main reason is** to be found in the following:



Some of the deficits will still be offset, going forward, by an influx of foreigners. However, in the face of the Russian-Ukrainian war, the structure and nature of migration, and thus the supply of potential workers, is changing. Firstly, in the case of Ukrainian citizens, these are now more often women than men. Secondly, migrants from countries in the Middle and Far East: India, Turkey or Uzbekistan are an increasing group.

This is crucial for the various industries that rely on foreign labour.



CONSTRUCTION INDUSTRY: construction joiners and carpenters (in permanent deficit, i.e. uninterrupted since the 2016 forecast), **roofers and sheet metal workers in building trades** (in permanent deficit), construction installation assemblers, bricklayers and plasterers, earthmoving plant operators and mechanics, finishing work technologists in building trades, construction workers.

Over the years for which the Barometer has been carried out, the construction sector has recorded the largest number of shortage occupations. In the 2023 forecast, they again represent the largest group. However, it can

be seen that the demand for employees will be lower due to, among other things, a reduction in investments in housing construction (in connection with a decrease in the creditworthiness of Poles) and infrastructure construction (in connection with a smaller number of public investment starts).

Although there will be less work, qualified people willing to work will still be in demand. Problems with recruiting suitable employees will mainly result from:

- in the case of construction joiners and carpenters, roofers and sheet metal workers in building trades and construction installation assemblers – due to the **lack of a sufficient number of candidates** (experts have noted for years that there is no generational replacement in these professions – older workers, due to health contraindications, end their professional activity, while the young are not interested in training),
- in the case of earthmoving plant operators and mechanics, due to a **lack of appropriate qualifications** to operate the specialised machinery used on site, such as excavators, bulldozers or road machinery,
- in the case of construction workers, from **difficult working conditions** that discourage employment (in low/high temperatures, dust, noise), but also from unsatisfactory wages.



MEDICAL AND CARE INDUSTRY: physiotherapy technicians and assistants, medical doctors, social work professionals caring for the elderly and disabled, **nurses and midwives** (in permanent shortage), psychologists and psychotherapists.

The situation of the medical and care industry has been difficult for years. In 2023, staff shortages will be visible across the country due to a number of overlapping issues. However, a lack of sufficient candidates must be considered as the main cause.

Obtaining the necessary qualifications involves lengthy and costly education, and the possibility of employing people from abroad (due to language skills and the need to nostrify diplomas) is severely limited. On top of this, many Polish professionals continue to migrate in search of higher salaries and better working conditions, and experienced workers are retiring. As a result, shortages will be felt throughout Poland - in the case of nurses and midwives in 336 districts (out of 380 in the country), psychologists and psychotherapists in 329 districts, and medical doctors in 321.

In the case of psychologists and psychotherapists, the deficit is further exacerbated by changes to education, which, from 1 September 2022, introduced the requirement to employ specialist teachers, including psychologists, in schools and kindergartens²¹.

Social work professionals caring for the elderly and disabled will also be in widespread demand (a shortage is forecast in 246 districts), but here the staff shortages are mainly due to difficult working conditions, i.e. unattractive salaries, physical and mental overload with duties.

²¹ Cf. Implementing the first stage of standardisation of the employment of psychologists, pedagogues, speech therapists, pedagogical therapists and special educators in kindergartens and schools - Ministry of Education and Science - Gov.pl Portal (www.gov.pl), [24.11.2022].



MANUFACTURING INDUSTRY: electrical mechanics and electrical assemblers, **metal working machine tool setters and operators** (in permanent shortage), **welders** (in permanent shortage), toolmakers.

In many professions, employment in the manufacturing sector is dependant on on the possession of the relevant qualifications: for example, in the case of electricians, these are SEP qualifications, and in the case of welders, certificates confirming knowledge of welding techniques such as MIG/MAG, TIG.

Those with the right qualifications should not face a lack of job offers. Candidates requiring further training will find themselves in a more difficult situation. Due to rising operating costs (the manufacturing sector is one of the most energy-intensive, and from January labour costs will also raise due to the increase in the minimum wage), it is expected that some companies will suspend planned recruitments and, faced with a particularly difficult situation, may even reduce employment.



TSL (TRANSPORT, SPEDITING, LOGISTICS) and MOTOR VEHICLE INDUSTRY: **bus drivers** (in permanent shortage), **truck drivers** (in permanent shortage), stock clerks, motor vehicle mechanics and repairers.

The dynamic development of the TSL industry should continue in 2023. New warehouse space, which is being created, among others, in Dolny Śląsk area, and the unrelenting demand for transport services, will intensify the demand for staff. The gap in the labour market will be further exacerbated by a smaller influx of workers from the Ukraine, who have taken up work in the industry in large numbers in recent years.

As a result, truck drivers will remain the profession most demanded in the country. There will be shortages in supply in 363 counties (four more than in the 2022 forecast). Bus drivers will be in demand in 256 counties, stock clerks in 254 and motor vehicle mechanics and repairers in 215.

The shortage will be caused by a number of factors, including the aforementioned development of the industry or difficult working conditions (e.g. on business trips),

but what is believed to be the main reason is the lack of appropriate qualifications. To take up a job as a driver (of a truck or bus), it is necessary to have the relevant qualifications, to know the basics of vehicle mechanics and, on international routes, also a command of a foreign language.



EDUCATIONAL SECTOR: teachers for practical vocational training, teachers of vocational subjects, teachers of general subjects, special school teachers.

The difficult situation in the education sector observed so far in branch education has also expanded to general and special schools. As a result, the education sector was the only one to note more deficit occupations in 2023 than in 2022.

Staff shortages will be mainly due to an insufficient number of candidates for the job regardless widespread training in the profession. However, unattractive salaries

and the deteriorating image of the teaching job discourage potential candidates. Gaps will sometimes be minimised by extending the employment of people of retirement age and offering teachers additional full-time positions. However, this will not change the fact that many jobs will remain unfilled.

A deficit teachers for practical vocational training in 2023 will appear in 258 counties (out of 380 nationally), teachers of vocational subjects in 254, teachers of general subjects in 258, special school teachers in 219.



FINANCIAL INDUSTRY: independent accountants (in permanent shortage), accounting and bookkeeping clerks.

The demand for employees in the financial industry in 2023 will follow a similar pattern to the year before. In many parts of the country, there will be a shortage of employees with the right qualifications and competences.

In the case of independent accountants, these are: directional education, knowledge of current regulations, professional experience, conscientiousness, responsibility, readiness for continuous training in the face of rapidly changing legal regulations.

For accounting and bookkeeping clerks, people with a combination of HR and payroll expertise will be particularly sought after.



GASTRONOMIC INDUSTRY: cooks

The deficits expected in 2023 will largely continue to be the aftermath of the industry restrictions put in place due to the COVID-19 pandemic.

Employees who found employment in other industries as a result of temporary closures in majority have not returned to catering, mainly because of the working conditions: unattractive salaries, the need to work during weekends and holidays as well as night shifts. For similar reasons, young graduates of trade schools do not take up jobs in the industry. Consequently, there will be

a shortage of cooks in 220 districts.

The gap in the market can be filled to some extent by foreign workers, including those from the Ukraine, although in addition to their willingness to work, they will also have to meet other requirements of employers, i.e.: knowledge of various cooking techniques, availability, stress resistance, ability to work in a team, basic knowledge of the language in which the team communicates.

3.4. Balanced occupations

With fewer labour market deficits expected in 2023, the group of balanced occupations, i.e. occupations in which labour supply and demand relatively balance each other, will increase. According to the Barometer, there will be 141 of these - the highest number since the second edition of the survey, which was the 2017 projections.

The group of sustainable occupations in 2023 will expand to include five professions that were in deficit the year before, i.e. concrete placers, concrete finishers and related workers, pavers, handicraft workers in wood and joiners, bakers, ambulance workers.

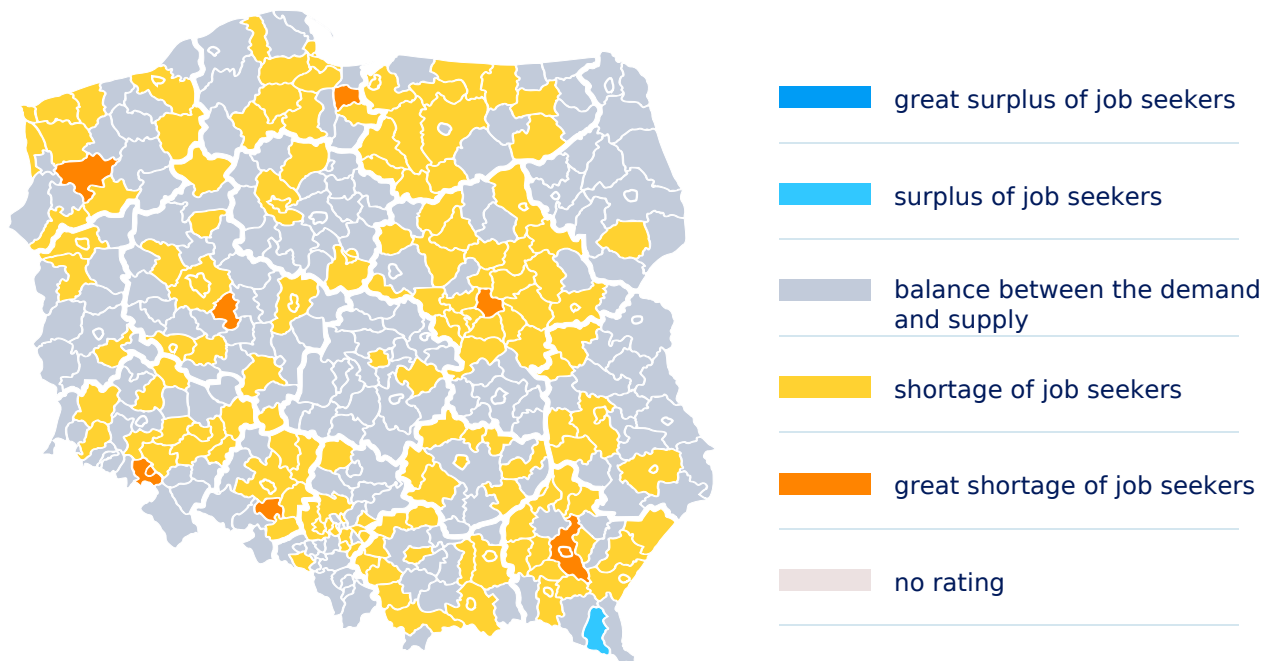
At the same time, it will be reduced by 2 professions that have gone into deficit: teachers of general subjects and special school teachers.

The shift of a sizable group of occupations from deficit to balance is due to the expected economic slowdown and downturn in industries such as construction and manufacturing. In the face of reduced activity, the demand for employees will also decrease. However, it will still be large enough for those willing to work to find employment without major issues.

At the same time, it should be borne in mind that the situation will vary regionally and locally, as can be seen in the case of concrete placers, concrete finishers and related workers. In the Mazowieckie or Pomorskie regions, deficits will still prevail, in the Łódzkie or Podlaskie regions there will be a balance, while in the Podkarpackie, in one county, surplus of workers in this occupation can be expected.

Map 1. Relationship between available workers and employers' needs in 2023

concrete placers, concrete finishers and related workers



Source: barometrzawodow.pl

3.5. Surplus occupations

Despite the fact that the economic situation is more difficult in 2023, the situation on the labour market should remain stable. As the Barometer shows, the number of surplus occupations, i.e. occupations in which the number of applicants exceeds

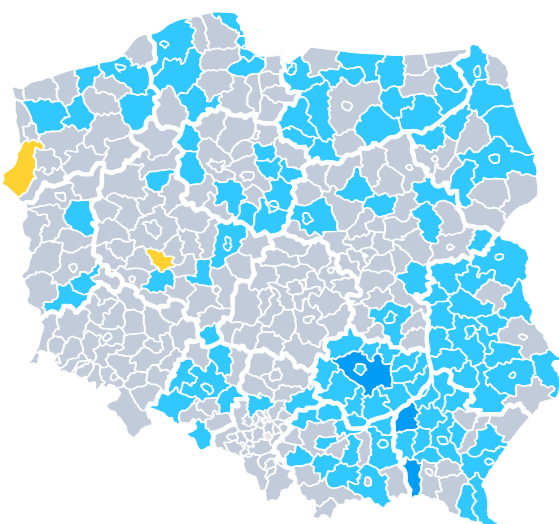
the number of jobs, will remain at the same level as last year. This means that in 2023, nationwide, there **should not be a surplus of workers in any occupation.**

However, the situation will vary from county to county. The highest number of surpluses occurring locally can be expected for:

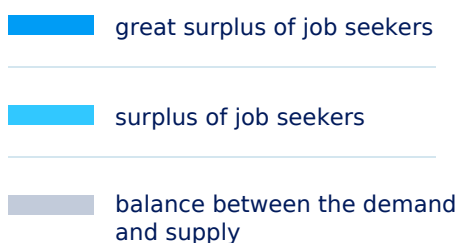
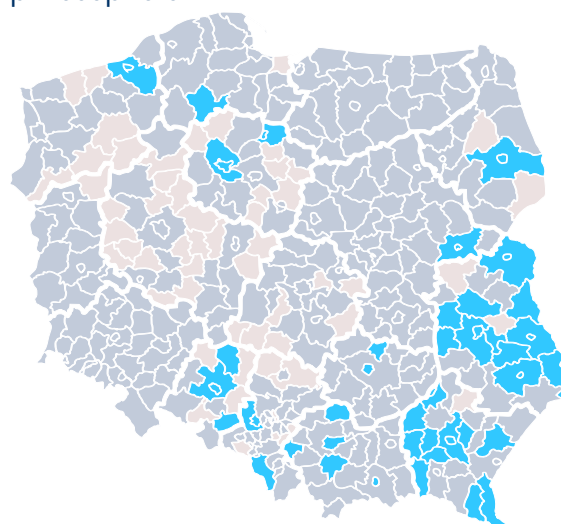
- economists (surplus projected in 140 counties)
- travel consultants and clerks (in 68 counties)
- food and nutrition technology professionals (in 63 counties)
- administration and office clerks (in 59 counties)
- political scientists, historians, philosophers (in 53 counties).

Map 2. Relationship between available workers and employers' needs in 2023

economists



political scientists, historians,
philosophers



Source: barometrzwodow.pl

As can be seen, to a large extent these are occupations in which quite a few people are trained, both at secondary and tertiary level, at the same time in many county

labour markets there are not enough jobs for everyone to find employment in the studied profession. In this situation it becomes vital to look for a job in a related profession or to retrain or seek employment in other counties.

3.6. Situation in capitals of region

The provincial cities²² represent the largest and most diverse labour markets in Poland. In comparison to the previous year, the situation in those will change only slightly in 2023, which means that the demand for employees still will be high. There will be a deficit in 52 professions (one less than in the 2022 forecast), and an equilibrium in 114. For the first time since the launch of the survey, no profession will see a surplus of workers, after philosophers, historians, political scientists and cultural scientists (indicated as surplus in most provincial cities in the 2022 forecast) were put into equilibrium.

In addition to numerous occupations in the construction, manufacturing, medical/ care, TSL and education sectors, there will also be a shortage of workers in the provincial cities in the following sectors : IT and high technology, services and uniformed services.

In the case of IT, employees with various specialisations will be sought after: analysts, testers and ICT system operators, database designers and administrators, programmers, UX/UI Designers/specialists in web product implementation and platform development, electronics technology, automation and robotics specialists. At the same time, as experts point out, often no formal education is required to work in IT, but a proven (practical) knowledge of a particular programming language and work experience. This encourages many people, tempted by working conditions and high salaries, to retrain.

In the case of uniformed services workers, a lack of sufficient candidates will affect all services: police, fire brigade or army. The high demands on candidates in terms of physical and mental aptitude will compound the difficulty of filling vacancies.

The service industry will be looking for cleaners and room service as well as salespeople and pos operators in the provincial cities. There is a high turnover of

²² The following cities were included in the analysis: Białystok, Bydgoszcz, Gdańsk, Gorzów Wielkopolski, Katowice, Kielce, Kraków, Lublin, Łódź, Olsztyn, Opole, Poznań, Rzeszów, Szczecin, Toruń, Warsaw, Wrocław, Zielona Góra

workers in these occupations (due to working conditions) and the employment of foreigners.

Figure 2. Deficit occupations in capitals of region in the 2023 forecast

DEFICIT		
	analysts, testers and ICT system operators	earthmoving plant operators and mechanics
	concrete placers, concrete finishers and related workers	metal working machine tool setters and operators
	tinsmiths and laquerers	crane, hoist and related plant operators
	pavers	social work professionals caring for the elderly and disabled
	construction joiners and carpenters	bakers
	roofers and sheet metal workers in building trades	nurses and midwives
	electrical mechanics and electrical assemblers	accounting and bookkeeping clerks
	physiotherapy technicians and assistants	manual workers in production and simple works
	construction engineers	finishing work technologists in building trades
	bus drivers	uniformed services workers
	truck drivers	social workers
	construction managers	database designers and administrators, programmers
	tailors and clothing manufacturers	psychologists and psychotherapists
	medical doctors	ambulance workers
	postmen and package deliverers	construction workers
	stock clerks	handicraft workers in wood and joiners
	motor vehicle mechanics and repairers	independent accountants
	electronic assemblers	welders
	construction installation assemblers	UX/UI Designers/specialists in web product implementation and platform development
	structural metal workers	electronics technology, automation and robotics specialists
	plant and machine operators and assemblers	clearing and forwarding agents
	bricklayers and plasterers	cleaners and room service
	teachers for practical vocational training	salespeople and pos operators
	teachers of general subjects	toolmakers
	teachers of vocational subjects	suppliers
	pre-school teachers	
	special school teachers	

Source: own elaboration based on barometrzwodow.pl

3.7. Differentiation of the situation in the regions

As the Barometer for 2023 shows, the situation in individual regions will differ significantly. The number of shortage occupations will vary from 12 in Łódzkie voivodship to 49 in Pomorskie voivodship. The number of surplus occupations will vary from 0 in the Pomorskie, Lubuskie, Dolnośląskie, Zachodniopomorskie, Wielkopolskie, Śląskie, Mazowieckie, Kujawsko-Pomorskie and Łódzkie Voivodships to 7 in the Podkarpackie Voivodship.

The largest number of shortage occupations will appear in the northern and western part of Poland, i.e. the **Pomorskie, Opolskie, Lubuskie, Dolnośląskie and Zachodniopomorskie** voivodships - from 39 in Zachodniopomorskie to 49 in Pomorskie. Candidates will be sought for jobs in construction, education, medical/care, transport, services or manufacturing. Staff surpluses will be rare. At the voivodship level, they will occur only in the Opolskie voivodship and will concern two professions: political scientists, historians, philosophers and economists.

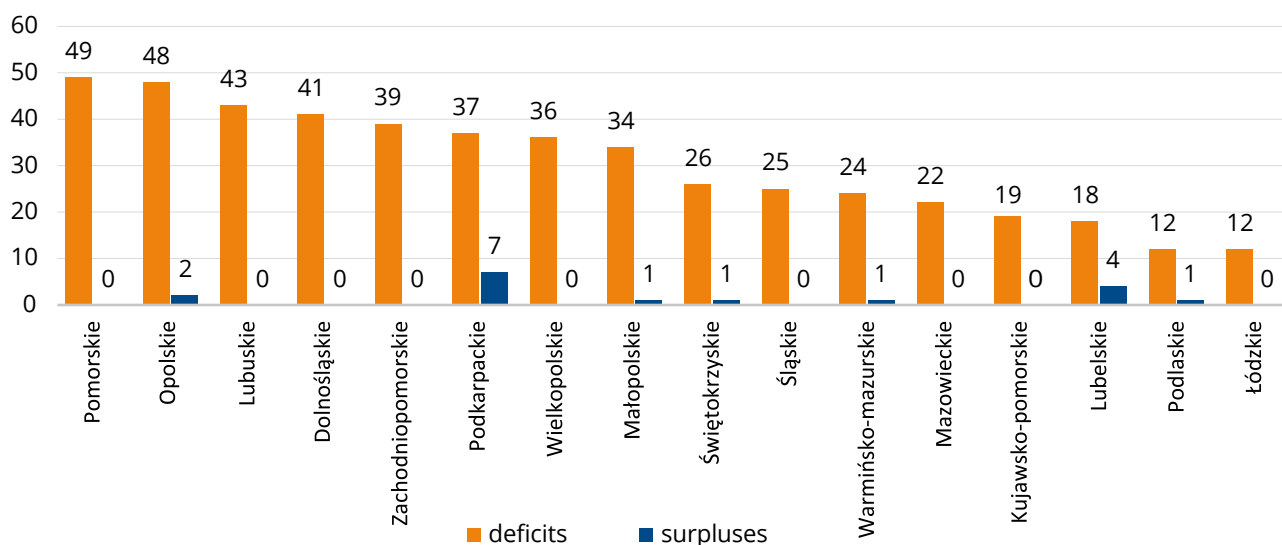
A large number of shortage occupations is also forecast in the following voivodships: **Podkarpackie, Wielkopolskie and Małopolskie** (between 37 in Podkarpackie and 34 in Małopolskie). In these regions, workers will be sought after, among others, in the construction, medical and nursing, or catering and food sectors.

At the same time, larger surpluses of employees may appear only in Podkarpackie voivodship, where 7 surplus occupations are forecast: food and nutrition technology professionals, sociologists and social/economic surveys professionals, administration professionals, travel consultants and clerks, administration and office clerks, political scientists, historians, philosophers, as well as economists, who will also be in surplus in Małopolskie voivodship.

The group of provinces with smaller deficits includes **Świętokrzyskie, Śląskie, Warmińsko-Mazurskie, Mazowieckie, Kujawsko-Pomorskie and Lubelskie**. There will be between 18 in Lubelskie and 26 in Świętokrzyskie in 2023. The lack of a sufficient number of candidates will affect, among others,: medical doctors, stock clerks, vocational teachers in trade schools (theoretical and practical), or welders.

Labour surpluses will not be widespread. In Lubelskie voivodship four occupations will appear in surplus, i.e.: food and nutrition technology professionals, travel consultants and clerks, political scientists, historians, philosophers, and economists - projected in surplus also in Warmińsko-Mazurskie and Świętokrzyskie. In the Kujawsko-Pomorskie, Śląskie and Mazowieckie regions, no profession will appear in surplus.

The smallest number of shortage occupations is expected in **Podlaskie and Łódzkie** Voivodships - 12. These will include: electrical mechanics and electrical assemblers, truck drivers, earthmoving plant operators and mechanics or nurses and midwives. A surplus is expected only in Podlasie and only in one occupation: economists. The balance in the vast majority of professions indicates a relative balancing of labour demand and supply in these regions.

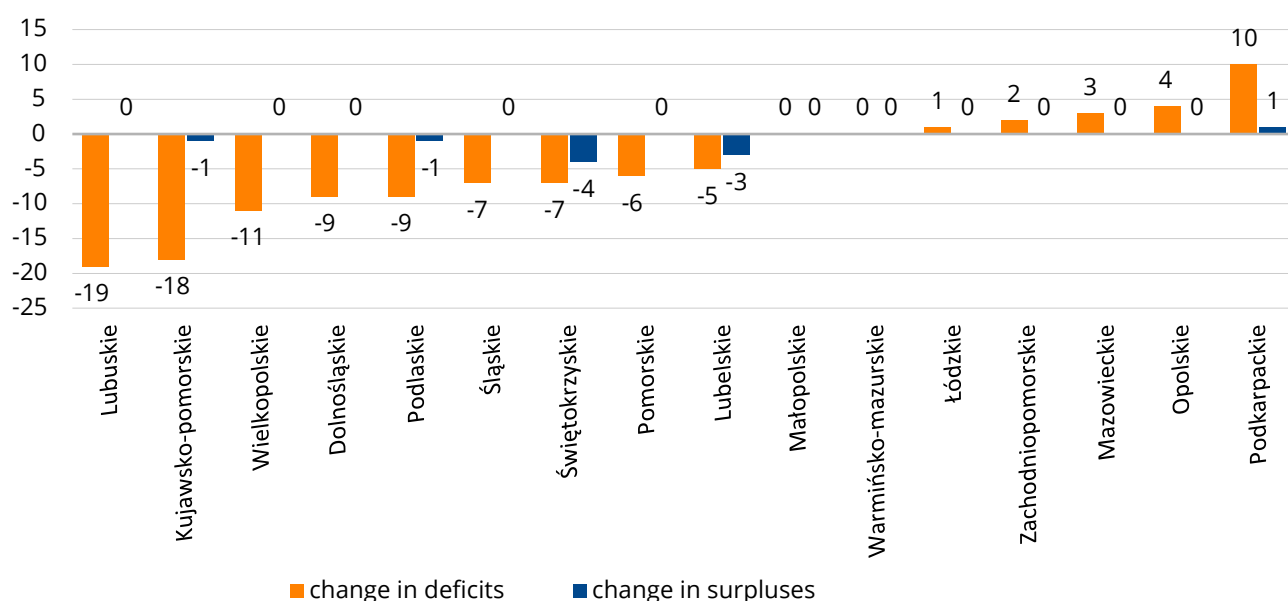
Chart 4. Number of shortage and surplus occupations in provincial projections for 2023

Source: own elaboration based on barometrzwodow.pl

In relation to forecasts for 2022, significant changes can be seen, especially in the group of shortage occupations. In most regions (9) their number will decrease (the most in Lubuskie region - by 19 occupations and in Kujawsko-Pomorskie region - by 18), in two regions it will remain at the same level (Małopolskie and Warmińsko-Mazurskie), and in 5 it will increase (the most in Podkarpackie by 10 occupations).

In the case of surplus occupations, changes will not be as significant. In 11 voivodships the number of surplus occupations will remain at the same level as last year. In 4 regions it will decrease (the most in the Świętokrzyskie region - by 4), and only in one will increase. In Podkarpackie region the list of surplus occupations will increase by one position.

Chart 5. Change in the number of shortage and surplus occupations in provincial projections between 2022 and 2023



Source: own elaboration based on barometrzwodow.pl

3.8. Summary

2023 will see a reduction in labour market deficits. The deterioration of the economic situation will mean that the demand for employees will not be as high as in 2022. Labour shortages at the national level will appear in 27 professions - three fewer than a year before. At the same time, no professions are expected to have surpluses, which means that the labour market will move towards a balance of labour demand and supply.

In 2023, representatives from the construction, manufacturing, medical/care, TSL or financial industries will be sought after.

There will be a definite increase in the deficit in the education sector - in most districts, not only vocational teachers will be in demand, but also general subjects and special school teachers. Demand from schools will also be compounded by a shortage of psychologists and psychotherapists (the third most sought-after profession in the country).

Invariably, truck drivers (sought in 363 counties out of 380 nationally) and nurses and midwives (sought in 336 counties) will be at the top of the shortage professions.

Deficit occupations in the largest number of districts:

truck drivers	363
nurses and midwives	336
psychologists and psychotherapists	329
medical doctors	321
welders	304
electrical mechanics and electrical assemblers	299
earthmoving plant operators and mechanics	280
teachers for practical vocational training	258
bus drivers	256
stock clerks	254
teachers of vocational subjects	254

Deficits will result from a number of co-occurring factors. The most common will be a lack of sufficient job candidates, due to, among other things, industry developments, demographic changes or a lack of training in the profession.

Occupational Barometer 2023

Poland

www.barometrzawodow.pl

DEFICIT	Accounting and bookkeeping clerks Bricklayers and plasterers Bus drivers Construction installation assemblers Construction joiners and carpenters Construction workers Cooks Earthmoving plant operators and mechanics Electrical mechanics and electrical assemblers Finishing work technologists in building trades	Independent accountants Medical doctors Metal working machine tool setters and operators Motor vehicle mechanics and repairers Nurses and midwives Physiotherapy technicians and assistants Psychologists and psychotherapists Roofers and sheet metal workers in building trades Social work professionals caring for the elderly and disabled	Special school teachers Stock clerks Teachers for practical vocational training Teachers of general subjects Teachers of vocational subjects Toolmakers Truck drivers Welders
BALANCE	Acoustics and sound engineers Administration and office clerks Administration professionals Agricultural and gardening machines operators Air traffic controllers Ambulance workers Analysts, testers and ICT system operators Animal services workers Architects and urban planners Archivists and curators Assistants in education Automotive diagnosis technicians Bakers Beauticians Biologists, biotechnologists Butchers and fishmongers Car wash, laundry and ironing workers Caretakers, doorkeepers, janitors and custodians Cement and stone machine operators Chefs Chemical engineers and chemists Chemical products plant and machine operators Childminders Cleaners and room service Clearing and forwarding agents Concrete placers, concrete finishers and related workers Confectioners Construction engineers Construction managers Construction supervision inspectors Construction technicians Contact centre agents, survey and market research interviewers Crane, hoist and related plant operators Database designers and administrators, programmers Dental technicians Dentists Driving instructors Economists Educational counsellors Educators in educational and care institutions Electrical and energetic engineers Electronic assemblers Electronics technology, automation and robotics specialists Environmental engineering engineers Events, cultural activities and animation organizers Farmers and animal producers Farming and forestry advisers Finance professionals	Fishermen Florists Food and nutrition technology professionals Food processing workers Forest workers Funeral service workers Gardeners i orchardists Glaziers and window fitters Graphic and multimedia designers Hairdressers Handicraft workers in leather and related materials Handicraft workers in wood and joiners Household helps Human resources and recruitment professionals Industrial ceramists Insurance agents Internet salespersons IT technicians Journalists and editors Kitchen helpers Landscape architects Lawyers Librarians and related information professionals Logistics managers Machinery mechanics and repairers Management and business service managers Manual workers in production and simple works Mechanical engineering technicians Mechanical engineers Medical imaging and therapeutic equipment technicians Medical laboratory diagnosticians Metal processing workers Meteorologists, geologists, geographers Miners and mining plant and machine operators OHS specialists Opticians and prosthetics workers Other education specialists Painters and varnishers Paper manufacturing and processing machine operators Passenger car drivers Pavers Pharmacists Photographers Physical protection services workers Plant and machine operators and assemblers Political scientists, historians, philosophers Postal clerks Postmen and package deliverers Potters and glaziers PR, advertising, marketing and sales specialists	Pre-school teachers Primary education teachers Printing trades workers Product and garment designers and CAD operators Production managers Production organisation professionals Quality specialists Railway traffic operators Real estate professionals Receptionists Road construction workers Rubber and plastic machine operators Sales managers Salespeople and pos operators Secretaries and assistants Service managers Shipdeck crew, ship and port operators Shoemakers Social institutions and culture managers Social workers Sociologists and social/economic surveys professionals Speech therapists and audiophonologists Sport and recreation instructors Stonemasons Structural metal workers Suppliers Surveyors and cartographers Tailors and clothing manufacturers Telecommunications specialists Textile machine operators Tinsmiths and laquerers Trade representatives Train drivers Translators, interpreters and other linguists Travel consultants and clerks Uniformed services workers Upholsterers UX/UI designers/specialists in web product implementation and platform development Veterinarians Vindicators Visual artists and interior designers Waiters and bartenders Webmasters

The "Occupational Barometer" is a forecast for the demand for employees in 2023. The study was conducted by experts at the turn of the third and fourth quarters of 2022. The situation in some professions may change depending on market conditions. The nationwide results include all professions assessed in the study.

Occupational Barometer 2023

dolnośląskie region

www.barometrzwodow.pl

DEFICIT

Accounting and bookkeeping clerks
Ambulance workers
Bricklayers and plasterers
Bus drivers
Chefs
Construction installation assemblers
Construction joiners and carpenters
Construction workers
Cooks
Crane, hoist and related plant operators
Earthmoving plant operators and mechanics
Educational counsellors
Electrical mechanics and electrical assemblers
Finishing work technologists in building trades

Handicraft workers in wood and joiners
Human resources and recruitment professionals
Independent accountants
Kitchen helpers
Medical doctors
Metal working machine tool setters and operators
Motor vehicle mechanics and repairers
Nurses and midwives
Pavers
Physiotherapy technicians and assistants
Pre-school teachers
Primary education teachers
Psychologists and psychotherapists
Roofers and sheet metal workers in building trades

Social work professionals caring for the elderly and disabled
Social workers
Special school teachers
Stock clerks
Suppliers
Teachers for practical vocational training
Teachers of general subjects
Teachers of vocational subjects
Toolmakers
Truck drivers
Uniformed services workers
Waiters and bartenders
Welders

BALANCE

Acoustics and sound engineers
Administration and office clerks
Administration professionals
Agricultural and gardening machines operators
Analysts, testers and ICT system operators
Animal services workers
Architects and urban planners
Archivists and curators
Assistants in education
Automotive diagnosis technicians
Bakers
Beauticians
Biologists, biotechnologists
Butchers and fishmongers
Car wash, laundry and ironing workers
Caretakers, doorkeepers, janitors and custodians
Cement and stone machine operators
Chemical engineers and chemists
Chemical products plant and machine operators
Childminders
Cleaners and room service
Clearing and forwarding agents
Concrete placers, concrete finishers and related workers
Confectioners
Construction engineers
Construction managers
Construction supervision inspectors
Construction technicians
Contact centre agents, survey and market research interviewers
Database designers and administrators, programmers
Dental technicians
Dentists
Driving instructors
Economists
Educators in educational and care institutions
Electrical and energetic engineers
Electronic assemblers
Electronics technology, automation and robotics specialists
Environmental engineering engineers
Events, cultural activities and animation organizers
Farmers and animal producers
Farming and forestry advisers

Finance professionals
Fishermen
Florists
Food and nutrition technology professionals
Food processing workers
Forest workers
Funeral service workers
Gardeners i orchardists
Glaziers and window fitters
Graphic and multimedia designers
Hairdressers
Handicraft workers in leather and related materials
Household helps
Industrial ceramists
Insurance agents
Internet salespersons
IT technicians
Journalists and editors
Landscape architects
Lawyers
Librarians and related information professionals
Logistics managers
Machinery mechanics and repairers
Management and business service managers
Manual workers in production and simple works
Mechanical engineering technicians
Mechanical engineers
Medical imaging and therapeutic equipment technicians
Medical laboratory diagnosticians
Metal processing workers
Meteorologists, geologists, geographers
Miners and mining plant and machine operators
OHS specialists
Opticians and prosthetics workers
Other education specialists
Painters and varnishers
Paper manufacturing and processing machine operators
Passenger car drivers
Pharmacists
Photographers
Physical protection services workers
Plant and machine operators and assemblers
Political scientists, historians, philosophers
Postal clerks

Postmen and package deliverers
Potters and glaziers
PR, advertising, marketing and sales specialists
Printing trades workers
Product and garment designers and CAD operators
Production managers
Production organisation professionals
Quality specialists
Railway traffic operators
Real estate professionals
Receptionists
Road construction workers
Rubber and plastic machine operators
Sales managers
Salespeople and pos operators
Secretaries and assistants
Service managers
Shoemakers
Social institutions and culture managers
Sociologists and social/economic surveys professionals
Speech therapists and audiophonologists
Sport and recreation instructors
Stonemasons
Structural metal workers
Surveyors and cartographers
Tailors and clothing manufacturers
Telecommunications specialists
Textile machine operators
Tinsmiths and laquerers
Trade representatives
Train drivers
Translators, interpreters and other linguists
Travel consultants and clerks
Upholsterers
UX/UI designers/specialists in web product implementation and platform development
Veterinarians
Vindicators
Visual artists and interior designers
Webmasters

The "Occupational Barometer" is a forecast for the demand for employees in 2023. The study was conducted by experts at the turn of the third and fourth quarters of 2022. The situation in some professions may change depending on market conditions. The result for the region include professions assessed in at least half of the counties.



**DOLNY
ŚLĄSK**



Dolnośląski
Wojewódzki
Urząd Pracy



INSTITUTION OF THE MAŁOPOLSKA REGION
Regional Labour Office
in Krakow



Ministry of Family and Social Policy
Republic of Poland

Regional/Province coordinator

National coordinator

The person ordering the study

Occupational Barometer 2023

kujawsko-pomorskie region

www.barometrzwodow.pl

DEFICIT	Bricklayers and plasterers	Motor vehicle mechanics and repairers	Tailors and clothing manufacturers
	Bus drivers	Nurses and midwives	Teachers for practical vocational training
	Electrical mechanics and electrical assemblers	Physiotherapy technicians and assistants	Teachers of general subjects
	Handicraft workers in wood and joiners	Psychologists and psychotherapists	Teachers of vocational subjects
	Independent accountants	Social work professionals caring for the elderly and disabled	Truck drivers
	Medical doctors	Stock clerks	Welders
	Metal working machine tool setters and operators		
BALANCE	Accounting and bookkeeping clerks	Electronics technology, automation and robotics specialists	Postmen and package deliverers
	Administration and office clerks	Environmental engineering engineers	Potters and glaziers
	Administration professionals	Events, cultural activities and animation organizers	PR, advertising, marketing and sales specialists
	Agricultural and gardening machines operators	Farmers and animal producers	Pre-school teachers
	Ambulance workers	Farming and forestry advisers	Primary education teachers
	Analysts, testers and ICT system operators	Finance professionals	Printing trades workers
	Animal services workers	Finishing work technologists in building trades	Product and garment designers and CAD operators
	Architects and urban planners	Florists	Production managers
	Archivists and curators	Food and nutrition technology professionals	Production organisation professionals
	Assistants in education	Food processing workers	Quality specialists
	Automotive diagnosis technicians	Forest workers	Railway traffic operators
	Bakers	Funeral service workers	Real estate professionals
	Beauticians	Gardeners i orchardists	Receptionists
	Biologists, biotechnologists	Glaziers and window fitters	Road construction workers
	Butchers and fishmongers	Graphic and multimedia designers	Roofers and sheet metal workers in building trades
	Car wash, laundry and ironing workers	Hairdressers	Rubber and plastic machine operators
	Caretakers, doorkeepers, janitors and custodians	Handicraft workers in leather and related materials	Sales managers
	Cement and stone machine operators	Human resources and recruitment professionals	Salespeople and pos operators
	Chefs	Insurance agents	Secretaries and assistants
	Chemical engineers and chemists	Internet salespersons	Service managers
	Chemical products plant and machine operators	IT technicians	Social institutions and culture managers
	Childminders	Journalists and editors	Social workers
	Cleaners and room service	Kitchen helpers	Sociologists and social/economic surveys professionals
	Clearing and forwarding agents	Landscape architects	Special school teachers
	Concrete placers, concrete finishers and related workers	Lawyers	Speech therapists and audiophonologists
	Confectioners	Librarians and related information professionals	Sport and recreation instructors
	Construction engineers	Logistics managers	Stonemasons
	Construction installation assemblers	Machinery mechanics and repairers	Structural metal workers
	Construction joiners and carpenters	Management and business service managers	Suppliers
	Construction managers	Manual workers in production and simple works	Surveyors and cartographers
	Construction supervision inspectors	Mechanical engineering technicians	Telecommunications specialists
	Construction technicians	Mechanical engineers	Tinsmiths and laquerers
	Construction workers	Medical imaging and therapeutic equipment technicians	Toolmakers
	Contact centre agents, survey and market research interviewers	Medical laboratory diagnosticians	Trade representatives
	Cooks	Metal processing workers	Translators, interpreters and other linguists
	Crane, hoist and related plant operators	OHS specialists	Travel consultants and clerks
	Database designers and administrators, programmers	Opticians and prosthetics workers	Uniformed services workers
	Dental technicians	Painters and varnishers	Upholsterers
	Dentists	Paper manufacturing and processing machine operators	Veterinarians
	Driving instructors	Passenger car drivers	Vindicators
	Earthmoving plant operators and mechanics	Pavers	Visual artists and interior designers
	Economists	Pharmacists	Waiters and bartenders
	Educational counsellors	Photographers	Webmasters
	Educators in educational and care institutions	Physical protection services workers	
	Electrical and energetic engineers	Plant and machine operators and assemblers	
	Electronic assemblers	Political scientists, historians, philosophers	
		Postal clerks	

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Wojewódzki Urząd Pracy w Toruniu
Jest Jednostką Samorządu Województwa Kujawsko-Pomorskiego



Województwo
Kujawsko-Pomorskie



Regional/Province coordinator



INSTITUTION OF THE MAŁOPOLSKA REGION
Regional Labour Office
in Krakow

National coordinator



Ministry of Family and Social Policy
Republic of Poland

The person ordering the study

Occupational Barometer 2023

lubelskie region

www.barometrzwodow.pl

DEFICIT	Accounting and bookkeeping clerks	Earthmoving plant operators and mechanics	Special school teachers
	Bakers	Electrical mechanics and electrical assemblers	Stock clerks
	Bus drivers	Independent accountants	Teachers for practical vocational training
	Construction installation assemblers	Medical doctors	Teachers of vocational subjects
	Construction joiners and carpenters	Nurses and midwives	Truck drivers
	Crane, hoist and related plant operators	Psychologists and psychotherapists	Welders
BALANCE	Administration and office clerks	Finance professionals	Postmen and package deliverers
	Administration professionals	Finishing work technologists in building trades	Potters and glaziers
	Agricultural and gardening machines operators	Florists	PR, advertising, marketing and sales specialists
	Ambulance workers	Food processing workers	Pre-school teachers
	Analysts, testers and ICT system operators	Forest workers	Primary education teachers
	Animal services workers	Funeral service workers	Printing trades workers
	Architects and urban planners	Gardeners i orchardists	Product and garment designers and CAD operators
	Archivists and curators	Glaziers and window fitters	Production managers
	Assistants in education	Graphic and multimedia designers	Production organisation professionals
	Automotive diagnosis technicians	Hairdressers	Quality specialists
	Beauticians	Handicraft workers in leather and related materials	Railway traffic operators
	Biologists, biotechnologists	Handicraft workers in wood and joiners	Real estate professionals
	Bricklayers and plasterers	Household helps	Receptionists
	Butchers and fishmongers	Human resources and recruitment professionals	Road construction workers
	Car wash, laundry and ironing workers	Insurance agents	Roofers and sheet metal workers in building trades
	Caretakers, doorkeepers, janitors and custodians	Internet salespersons	Rubber and plastic machine operators
	Cement and stone machine operators	IT technicians	Sales managers
	Chefs	Journalists and editors	Salespeople and pos operators
	Chemical engineers and chemists	Kitchen helpers	Secretaries and assistants
	Childminders	Landscape architects	Service managers
	Cleaners and room service	Lawyers	Shoemakers
	Clearing and forwarding agents	Librarians and related information professionals	Social institutions and culture managers
	Concrete placers, concrete finishers and related workers	Logistics managers	Social work professionals caring for the elderly and disabled
	Confectioners	Machinery mechanics and repairers	Social workers
	Construction engineers	Management and business service managers	Sociologists and social/economic surveys professionals
	Construction managers	Manual workers in production and simple works	Speech therapists and audiophonologists
	Construction supervision inspectors	Mechanical engineering technicians	Sport and recreation instructors
	Construction technicians	Mechanical engineers	Stonemasons
	Construction workers	Medical imaging and therapeutic equipment technicians	Structural metal workers
	Contact centre agents, survey and market research interviewers	Medical laboratory diagnosticians	Suppliers
	Cooks	Metal processing workers	Surveyors and cartographers
	Database designers and administrators, programmers	Metal working machine tool setters and operators	Tailors and clothing manufacturers
	Dental technicians	Motor vehicle mechanics and repairers	Teachers of general subjects
	Dentists	OHS specialists	Telecommunications specialists
	Driving instructors	Opticians and prosthetics workers	Tinsmiths and laquerers
	Educational counsellors	Other education specialists	Toolmakers
	Educators in educational and care institutions	Painters and varnishers	Trade representatives
	Electrical and energetic engineers	Paper manufacturing and processing machine operators	Translators, interpreters and other linguists
	Electronic assemblers	Passenger car drivers	Uniformed services workers
	Electronics technology, automation and robotics specialists	Pavers	Upholsterers
	Environmental engineering engineers	Pharmacists	Veterinarians
	Events, cultural activities and animation organizers	Photographers	Vindicators
	Farmers and animal producers	Physical protection services workers	Visual artists and interior designers
	Farming and forestry advisers	Physiotherapy technicians and assistants	Waiters and bartenders
SURPLUS	Economists	Plant and machine operators and assemblers	Webmasters
	Food and nutrition technology professionals	Postal clerks	
		Political scientists, historians, philosophers	
		Travel consultants and clerks	

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Occupational Barometer 2023

lubuskie region

www.barometrzwodow.pl

DEFICIT	Accounting and bookkeeping clerks	Independent accountants	Social work professionals caring for the elderly and disabled
	Ambulance workers	Manual workers in production and simple works	Disabled
	Bakers	Medical doctors	Social workers
	Bus drivers	Metal working machine tool setters and operators	Special school teachers
	Chefs	Motor vehicle mechanics and repairers	Speech therapists and audiophonologists
	Clearing and forwarding agents	Nurses and midwives	Stock clerks
	Construction installation assemblers	Pavers	Suppliers
	Construction workers	Physiotherapy technicians and assistants	Teachers for practical vocational training
	Cooks	Postmen and package deliverers	Teachers of general subjects
	Earthmoving plant operators and mechanics	Pre-school teachers	Teachers of vocational subjects
	Educational counsellors	Primary education teachers	Tinsmiths and laquerers
	Educators in educational and care institutions	Production organisation professionals	Toolmakers
	Electrical mechanics and electrical assemblers	Psychologists and psychotherapists	Truck drivers
	Finishing work technologists in building trades	Salespeople and pos operators	Uniformed services workers
	Human resources and recruitment professionals		Welders
BALANCE	Acoustics and sound engineers	Farming and forestry advisers	Political scientists, historians, philosophers
	Administration and office clerks	Finance professionals	Postal clerks
	Administration professionals	Florists	Potters and glaziers
	Agricultural and gardening machines operators	Food and nutrition technology professionals	PR, advertising, marketing and sales specialists
	Analysts, testers and ICT system operators	Food processing workers	Printing trades workers
	Animal services workers	Forest workers	Product and garment designers and CAD operators
	Architects and urban planners	Funeral service workers	Production managers
	Archivists and curators	Gardeners i orchardists	Quality specialists
	Assistants in education	Glaziers and window fitters	Railway traffic operators
	Automotive diagnosis technicians	Graphic and multimedia designers	Real estate professionals
	Beauticians	Hairdressers	Receptionists
	Biologists, biotechnologists	Handicraft workers in leather and related materials	Road construction workers
	Bricklayers and plasterers	Handicraft workers in wood and joiners	Roofers and sheet metal workers in building trades
	Butchers and fishmongers	Household helps	Rubber and plastic machine operators
	Car wash, laundry and ironing workers	Industrial ceramists	Sales managers
	Caretakers, doorkeepers, janitors and custodians	Insurance agents	Secretaries and assistants
	Cement and stone machine operators	Internet salespersons	Service managers
	Chemical engineers and chemists	IT technicians	Shoemakers
	Chemical products plant and machine operators	Journalists and editors	Social institutions and culture managers
	Childminders	Kitchen helpers	Sociologists and social/economic surveys professionals
	Cleaners and room service	Landscape architects	Sport and recreation instructors
	Concrete placers, concrete finishers and related workers	Lawyers	Stonemasons
	Confectioners	Librarians and related information professionals	Structural metal workers
	Construction engineers	Logistics managers	Surveyors and cartographers
	Construction joiners and carpenters	Machinery mechanics and repairers	Tailors and clothing manufacturers
	Construction managers	Management and business service managers	Telecommunications specialists
	Construction supervision inspectors	Mechanical engineering technicians	Textile machine operators
	Construction technicians	Mechanical engineers	Trade representatives
	Contact centre agents, survey and market research interviewers	Medical imaging and therapeutic equipment technicians	Train drivers
	Crane, hoist and related plant operators	Medical laboratory diagnosticians	Translators, interpreters and other linguists
	Database designers and administrators, programmers	Metal processing workers	Travel consultants and clerks
	Dental technicians	Meteorologists, geologists, geographers	Upholsterers
	Dentists	Miners and mining plant and machine operators	UX/UI designers/specialists in web product implementation and platform development
	Driving instructors	OHS specialists	Veterinarians
	Economists	Opticians and prosthetics workers	Vindicators
	Electrical and energetic engineers	Other education specialists	Visual artists and interior designers
	Electronic assemblers	Painters and varnishers	Waiters and bartenders
	Electronics technology, automation and robotics specialists	Paper manufacturing and processing machine operators	Webmasters
	Environmental engineering engineers	Passenger car drivers	
	Events, cultural activities and animation organizers	Pharmacists	
	Farmers and animal producers	Photographers	
		Physical protection services workers	
		Plant and machine operators and assemblers	

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Regional/Province coordinator



INSTITUTION OF THE MAŁOPOLSKA REGION
Regional Labour Office
in Krakow

National coordinator



Ministry of Family and Social Policy
Republic of Poland

The person ordering the study

Occupational Barometer 2023

łódzkie region

www.barometrzwodow.pl

DEFICIT	Accounting and bookkeeping clerks	Electrical mechanics and electrical assemblers	Psychologists and psychotherapists
	Bus drivers	Medical doctors	Stock clerks
BALANCE	Construction installation assemblers	Metal working machine tool setters and operators	Truck drivers
	Earthmoving plant operators and mechanics	Nurses and midwives	Welders
	Acoustics and sound engineers	Finance professionals	Pre-school teachers
	Administration and office clerks	Finishing work technologists in building trades	Primary education teachers
	Administration professionals	Florists	Printing trades workers
	Agricultural and gardening machines operators	Food and nutrition technology professionals	Product and garment designers and CAD operators
	Ambulance workers	Food processing workers	Production managers
	Analysts, testers and ICT system operators	Forest workers	Production organisation professionals
	Animal services workers	Funeral service workers	Quality specialists
	Architects and urban planners	Gardeners i orchardists	Railway traffic operators
	Archivists and curators	Glaziers and window fitters	Real estate professionals
	Assistants in education	Graphic and multimedia designers	Receptionists
	Automotive diagnosis technicians	Hairdressers	Road construction workers
	Bakers	Handicraft workers in leather and related materials	Roofers and sheet metal workers in building trades
	Beauticians	Handicraft workers in wood and joiners	Rubber and plastic machine operators
	Biologists, biotechnologists	Household helps	Sales managers
	Bricklayers and plasterers	Human resources and recruitment professionals	Salespeople and pos operators
	Butchers and fishmongers	Independent accountants	Secretaries and assistants
	Car wash, laundry and ironing workers	Insurance agents	Service managers
	Caretakers, doorkeepers, janitors and custodians	Internet salespersons	Shoemakers
	Cement and stone machine operators	IT technicians	Social institutions and culture managers
	Chefs	Journalists and editors	Social work professionals caring for the elderly and disabled
	Chemical engineers and chemists	Kitchen helpers	Social workers
	Chemical products plant and machine operators	Landscape architects	Sociologists and social/economic surveys professionals
	Childminders	Lawyers	Special school teachers
	Cleaners and room service	Librarians and related information professionals	Speech therapists and audiophonologists
	Clearing and forwarding agents	Logistics managers	Sport and recreation instructors
	Concrete placers, concrete finishers and related workers	Machinery mechanics and repairers	Stonemasons
	Confectioners	Management and business service managers	Structural metal workers
	Construction engineers	Manual workers in production and simple works	Suppliers
	Construction joiners and carpenters	Mechanical engineering technicians	Surveyors and cartographers
	Construction managers	Mechanical engineers	Tailors and clothing manufacturers
	Construction supervision inspectors	Medical imaging and therapeutic equipment technicians	Teachers for practical vocational training
	Construction technicians	Medical laboratory diagnosticians	Teachers of general subjects
	Construction workers	Metal processing workers	Teachers of vocational subjects
	Contact centre agents, survey and market research interviewers	Meteorologists, geologists, geographers	Telecommunications specialists
	Cooks	Motor vehicle mechanics and repairers	Textile machine operators
	Crane, hoist and related plant operators	OHS specialists	Tinsmiths and laquerers
	Database designers and administrators, programmers	Opticians and prosthetics workers	Toolmakers
	Dental technicians	Other education specialists	Trade representatives
	Dentists	Painters and varnishers	Train drivers
	Driving instructors	Paper manufacturing and processing machine operators	Translators, interpreters and other linguists
	Economists	Passenger car drivers	Travel consultants and clerks
	Educational counsellors	Pavers	Uniformed services workers
	Educators in educational and care institutions	Pharmacists	Upholsterers
	Electrical and energetic engineers	Photographers	UX/UI designers/specialists in web product implementation and platform development
	Electronic assemblers	Physical protection services workers	Veterinarians
	Electronics technology, automation and robotics specialists	Physiotherapy technicians and assistants	Vindicators
	Environmental engineering engineers	Plant and machine operators and assemblers	Visual artists and interior designers
	Events, cultural activities and animation organizers	Political scientists, historians, philosophers	Waiters and bartenders
	Farmers and animal producers	Postal clerks	Webmasters
	Farming and forestry advisers	Postmen and package deliverers	
		Potters and glaziers	
		PR, advertising, marketing and sales specialists	

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region
łódzkie



INSTITUTION OF THE MAŁOPOLSKA REGION
Regional Labour Office
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Ministry of Family and Social Policy
Republic of Poland

Regional/Province coordinator

National coordinator

The person ordering the study

Occupational Barometer 2023

małopolskie region

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DEFICIT	Accounting and bookkeeping clerks	Earthmoving plant operators and mechanics	Psychologists and psychotherapists
	Bakers	Electrical mechanics and electrical assemblers	Roofers and sheet metal workers in building trades
	Bricklayers and plasterers	Finishing work technologists in building trades	Social work professionals caring for the elderly and disabled
	Bus drivers	Hairdressers	Special school teachers
	Chefs	Handicraft workers in wood and joiners	Stock clerks
	Concrete placers, concrete finishers and related workers	Independent accountants	Teachers for practical vocational training
	Construction engineers	Medical doctors	Teachers of general subjects
	Construction installation assemblers	Motor vehicle mechanics and repairers	Teachers of vocational subjects
	Construction joiners and carpenters	Nurses and midwives	Truck drivers
	Construction managers	Pavers	Welders
	Construction workers	Physiotherapy technicians and assistants	
	Cooks	Pre-school teachers	
BALANCE	Acoustics and sound engineers	Food and nutrition technology professionals	PR, advertising, marketing and sales specialists
	Administration and office clerks	Food processing workers	Primary education teachers
	Administration professionals	Forest workers	Printing trades workers
	Agricultural and gardening machines operators	Funeral service workers	Product and garment designers and CAD operators
	Ambulance workers	Gardeners i orchardists	Production managers
	Analysts, testers and ICT system operators	Glaziers and window fitters	Production organisation professionals
	Animal services workers	Graphic and multimedia designers	Quality specialists
	Architects and urban planners	Handicraft workers in leather and related materials	Railway traffic operators
	Archivists and curators	Household helps	Real estate professionals
	Assistants in education	Human resources and recruitment professionals	Receptionists
	Automotive diagnosis technicians	Industrial ceramists	Road construction workers
	Beauticians	Insurance agents	Rubber and plastic machine operators
	Biologists, biotechnologists	Internet salespersons	Sales managers
	Butchers and fishmongers	IT technicians	Salespeople and pos operators
	Car wash, laundry and ironing workers	Journalists and editors	Secretaries and assistants
	Caretakers, doorkeepers, janitors and custodians	Kitchen helpers	Service managers
	Cement and stone machine operators	Landscape architects	Shoemakers
	Chemical engineers and chemists	Lawyers	Social institutions and culture managers
	Chemical products plant and machine operators	Librarians and related information professionals	Social workers
	Childminders	Logistics managers	Sociologists and social/economic surveys professionals
	Cleaners and room service	Machinery mechanics and repairers	Speech therapists and audiophonologists
	Clearing and forwarding agents	Management and business service managers	Sport and recreation instructors
	Confectioners	Manual workers in production and simple works	Stonemasons
	Construction supervision inspectors	Mechanical engineering technicians	Structural metal workers
	Construction technicians	Mechanical engineers	Suppliers
	Contact centre agents, survey and market research interviewers	Medical imaging and therapeutic equipment technicians	Surveyors and cartographers
	Crane, hoist and related plant operators	Medical laboratory diagnosticians	Tailors and clothing manufacturers
	Database designers and administrators, programmers	Metal processing workers	Telecommunications specialists
	Dental technicians	Metal working machine tool setters and operators	Tinsmiths and laquerers
	Dentists	Meteorologists, geologists, geographers	Toolmakers
	Driving instructors	OHS specialists	Trade representatives
	Educational counsellors	Opticians and prosthetics workers	Train drivers
	Educators in educational and care institutions	Other education specialists	Translators, interpreters and other linguists
	Electrical and energetic engineers	Painters and varnishers	Travel consultants and clerks
	Electronic assemblers	Paper manufacturing and processing machine operators	Uniformed services workers
	Electronics technology, automation and robotics specialists	Passenger car drivers	Upholsters
	Environmental engineering engineers	Pharmacists	UX/UI designers/specialists in web product implementation and platform development
	Events, cultural activities and animation organizers	Photographers	Veterinarians
	Farmers and animal producers	Physical protection services workers	Vindicators
	Farming and forestry advisers	Plant and machine operators and assemblers	Visual artists and interior designers
	Finance professionals	Political scientists, historians, philosophers	Waiters and bartenders
	Florists	Postal clerks	Webmasters
		Postmen and package deliverers	
		Potters and glaziers	
SURPLUS			
	Economists		

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Occupational Barometer 2023

mazowieckie region

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DEFICIT	Bricklayers and plasterers	Medical doctors	Stock clerks
	Concrete placers, concrete finishers and related workers	Metal working machine tool setters and operators	Teachers for practical vocational training
	Construction installation assemblers	Motor vehicle mechanics and repairers	Teachers of general subjects
	Construction joiners and carpenters	Nurses and midwives	Teachers of vocational subjects
	Construction workers	Psychologists and psychotherapists	Toolmakers
	Earthmoving plant operators and mechanics	Roofers and sheet metal workers in building trades	Truck drivers
	Electrical mechanics and electrical assemblers	Social work professionals caring for the elderly and disabled	Welders
	Finishing work technologists in building trades		
BALANCE	Accounting and bookkeeping clerks	Finance professionals	Potters and glaziers
	Acoustics and sound engineers	Florists	PR, advertising, marketing and sales specialists
	Administration and office clerks	Food and nutrition technology professionals	Pre-school teachers
	Administration professionals	Food processing workers	Primary education teachers
	Agricultural and gardening machines operators	Forest workers	Printing trades workers
	Ambulance workers	Funeral service workers	Product and garment designers and CAD operators
	Analysts, testers and ICT system operators	Gardeners i orchardists	Production managers
	Animal services workers	Glaziers and window fitters	Production organisation professionals
	Architects and urban planners	Graphic and multimedia designers	Quality specialists
	Archivists and curators	Hairdressers	Railway traffic operators
	Assistants in education	Handicraft workers in leather and related materials	Real estate professionals
	Automotive diagnosis technicians	Handicraft workers in wood and joiners	Receptionists
	Bakers	Household helps	Road construction workers
	Beauticians	Human resources and recruitment professionals	Rubber and plastic machine operators
	Biologists, biotechnologists	Independent accountants	Sales managers
	Bus drivers	Industrial ceramists	Salespeople and pos operators
	Butchers and fishmongers	Insurance agents	Secretaries and assistants
	Car wash, laundry and ironing workers	Internet salespersons	Service managers
	Caretakers, doorkeepers, janitors and custodians	IT technicians	Shoemakers
	Cement and stone machine operators	Journalists and editors	Social institutions and culture managers
	Chefs	Kitchen helpers	Social workers
	Chemical engineers and chemists	Landscape architects	Sociologists and social/economic surveys professionals
	Chemical products plant and machine operators	Lawyers	Special school teachers
	Childminders	Librarians and related information professionals	Speech therapists and audiophonologists
	Cleaners and room service	Logistics managers	Sport and recreation instructors
	Clearing and forwarding agents	Machinery mechanics and repairers	Stonemasons
	Confectioners	Management and business service managers	Structural metal workers
	Construction engineers	Manual workers in production and simple works	Suppliers
	Construction managers	Mechanical engineering technicians	Surveyors and cartographers
	Construction supervision inspectors	Mechanical engineers	Tailors and clothing manufacturers
	Construction technicians	Medical imaging and therapeutic equipment technicians	Telecommunications specialists
	Contact centre agents, survey and market research interviewers	Medical laboratory diagnosticians	Textile machine operators
	Cooks	Metal processing workers	Tinsmiths and laquerers
	Crane, hoist and related plant operators	Meteorologists, geologists, geographers	Trade representatives
	Database designers and administrators, programmers	Miners and mining plant and machine operators	Train drivers
	Dental technicians	OHS specialists	Translators, interpreters and other linguists
	Dentists	Opticians and prosthetics workers	Travel consultants and clerks
	Driving instructors	Other education specialists	Uniformed services workers
	Economists	Painters and varnishers	Upholsterers
	Educational counsellors	Paper manufacturing and processing machine operators	UX/UI designers/specialists in web product implementation and platform development
	Educators in educational and care institutions	Passenger car drivers	Veterinarians
	Electrical and energetic engineers	Pavers	Vindicators
	Electronic assemblers	Pharmacists	Visual artists and interior designers
	Electronics technology, automation and robotics specialists	Photographers	Waiters and bartenders
	Environmental engineering engineers	Physical protection services workers	Webmasters
	Events, cultural activities and animation organizers	Physiotherapy technicians and assistants	
	Farmers and animal producers	Plant and machine operators and assemblers	
	Farming and forestry advisers	Political scientists, historians, philosophers	
		Postal clerks	
		Postmen and package deliverers	

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Occupational Barometer 2023

opolskie region

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DEFICIT	Accounting and bookkeeping clerks Ambulance workers Bakers Bricklayers and plasterers Bus drivers Clearing and forwarding agents Concrete placers, concrete finishers and related workers Construction installation assemblers Construction joiners and carpenters Construction managers Construction workers Cooks Crane, hoist and related plant operators Database designers and administrators, programmers Earthmoving plant operators and mechanics Electrical mechanics and electrical assemblers Electronics technology, automation and robotics specialists	Finishing work technologists in building trades Handicraft workers in wood and joiners Independent accountants Kitchen helpers Medical doctors Metal processing workers Metal working machine tool setters and operators Motor vehicle mechanics and repairers Nurses and midwives Physiotherapy technicians and assistants Postmen and package deliverers Psychologists and psychotherapists Quality specialists Roofers and sheet metal workers in building trades Salespeople and pos operators Social work professionals caring for the elderly and disabled Social workers	Special school teachers Stock clerks Structural metal workers Tailors and clothing manufacturers Teachers for practical vocational training Teachers of general subjects Teachers of vocational subjects Tinsmiths and laquerers Toolmakers Truck drivers Upholsterers UX/UI designers/specialists in web product implementation and platform development Waiters and bartenders Welders
	Acoustics and sound engineers Administration and office clerks Administration professionals Agricultural and gardening machines operators Analysts, testers and ICT system operators Animal services workers Architects and urban planners Archivists and curators Assistants in education Automotive diagnosis technicians Beauticians Biologists, biotechnologists Butchers and fishmongers Car wash, laundry and ironing workers Caretakers, doorkeepers, janitors and custodians Cement and stone machine operators Chefs Chemical engineers and chemists Chemical products plant and machine operators Childminders Cleaners and room service Confectioners Construction engineers Construction supervision inspectors Construction technicians Contact centre agents, survey and market research interviewers Dental technicians Dentists Driving instructors Educational counsellors Educators in educational and care institutions Electrical and energetic engineers Electronic assemblers Environmental engineering engineers Events, cultural activities and animation organizers Farmers and animal producers Farming and forestry advisers Finance professionals	Florists Food and nutrition technology professionals Food processing workers Forest workers Funeral service workers Gardeners i orchardists Glaziers and window fitters Graphic and multimedia designers Hairdressers Handicraft workers in leather and related materials Household helps Human resources and recruitment professionals Industrial ceramists Insurance agents Internet salespersons IT technicians Journalists and editors Landscape architects Lawyers Librarians and related information professionals Logistics managers Machinery mechanics and repairers Management and business service managers Manual workers in production and simple works Mechanical engineering technicians Mechanical engineers Medical imaging and therapeutic equipment technicians Medical laboratory diagnosticians Miners and mining plant and machine operators OHS specialists Opticians and prosthetics workers Other education specialists Painters and varnishers Paper manufacturing and processing machine operators Passenger car drivers Pavers Pharmacists Photographers Physical protection services workers	Plant and machine operators and assemblers Postal clerks Potters and glaziers PR, advertising, marketing and sales specialists Pre-school teachers Primary education teachers Printing trades workers Product and garment designers and CAD operators Production managers Production organisation professionals Railway traffic operators Real estate professionals Receptionists Road construction workers Rubber and plastic machine operators Sales managers Secretaries and assistants Service managers Shoemakers Social institutions and culture managers Sociologists and social/economic surveys professionals Speech therapists and audiophonologists Sport and recreation instructors Stonemasons Suppliers Surveyors and cartographers Telecommunications specialists Textile machine operators Trade representatives Train drivers Translators, interpreters and other linguists Travel consultants and clerks Uniformed services workers Veterinarians Vindicators Visual artists and interior designers Webmasters
BALANCE	Economists	Political scientists, historians, philosophers	
SURPLUS			

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Occupational Barometer 2023

podkarpackie region

www.barometrzwodow.pl

DEFICIT	Accounting and bookkeeping clerks	Earthmoving plant operators and mechanics	Roofers and sheet metal workers in building trades
	Bakers	Electrical mechanics and electrical assemblers	Social work professionals caring for the elderly and disabled
	Bricklayers and plasterers	Finishing work technologists in building trades	Special school teachers
	Bus drivers	Hairdressers	Speech therapists and audiophonologists
	Chefs	Handicraft workers in wood and joiners	Stock clerks
	Concrete placers, concrete finishers and related workers	Independent accountants	Teachers for practical vocational training
	Construction engineers	Medical doctors	Teachers of vocational subjects
	Construction installation assemblers	Metal working machine tool setters and operators	Tinsmiths and laquerers
	Construction joiners and carpenters	Motor vehicle mechanics and repairers	Toolmakers
	Construction managers	Nurses and midwives	Truck drivers
	Construction workers	Pavers	Welders
	Cooks	Physiotherapy technicians and assistants	
	Crane, hoist and related plant operators	Psychologists and psychotherapists	
BALANCE	Acoustics and sound engineers	Florists	Postmen and package deliverers
	Agricultural and gardening machines operators	Food processing workers	Potters and glaziers
	Ambulance workers	Forest workers	PR, advertising, marketing and sales specialists
	Analysts, testers and ICT system operators	Funeral service workers	Pre-school teachers
	Animal services workers	Gardeners i orchardists	Primary education teachers
	Architects and urban planners	Glaziers and window fitters	Printing trades workers
	Archivists and curators	Graphic and multimedia designers	Product and garment designers and CAD operators
	Assistants in education	Handicraft workers in leather and related materials	Production managers
	Automotive diagnosis technicians	Household helps	Production organisation professionals
	Beauticians	Human resources and recruitment professionals	Quality specialists
	Biologists, biotechnologists	Industrial ceramists	Railway traffic operators
	Butchers and fishmongers	Insurance agents	Real estate professionals
	Car wash, laundry and ironing workers	Internet salespersons	Receptionists
	Caretakers, doorkeepers, janitors and custodians	IT technicians	Road construction workers
	Cement and stone machine operators	Journalists and editors	Rubber and plastic machine operators
	Chemical engineers and chemists	Kitchen helpers	Sales managers
	Chemical products plant and machine operators	Landscape architects	Salespeople and pos operators
	Childminders	Lawyers	Secretaries and assistants
	Cleaners and room service	Librarians and related information professionals	Service managers
	Clearing and forwarding agents	Logistics managers	Shoemakers
	Confectioners	Machinery mechanics and repairers	Social institutions and culture managers
	Construction supervision inspectors	Management and business service managers	Social workers
	Construction technicians	Manual workers in production and simple works	Sport and recreation instructors
	Contact centre agents, survey and market research interviewers	Mechanical engineering technicians	Stonemasons
	Database designers and administrators, programmers	Mechanical engineers	Structural metal workers
	Dental technicians	Medical imaging and therapeutic equipment technicians	Suppliers
	Dentists	Medical laboratory diagnosticians	Surveyors and cartographers
	Driving instructors	Metal processing workers	Tailors and clothing manufacturers
	Educational counsellors	Miners and mining plant and machine operators	Teachers of general subjects
	Educators in educational and care institutions	OHS specialists	Telecommunications specialists
	Electrical and energetic engineers	Opticians and prosthetics workers	Trade representatives
	Electronic assemblers	Other education specialists	Train drivers
	Electronics technology, automation and robotics specialists	Painters and varnishers	Translators, interpreters and other linguists
	Environmental engineering engineers	Paper manufacturing and processing machine operators	Uniformed services workers
	Events, cultural activities and animation organizers	Passenger car drivers	Upholsterers
	Farmers and animal producers	Pharmacists	Veterinarians
	Farming and forestry advisers	Photographers	Vindicators
	Finance professionals	Physical protection services workers	Visual artists and interior designers
		Plant and machine operators and assemblers	Waiters and bartenders
		Postal clerks	Webmasters
SURPLUS	Administration and office clerks	Food and nutrition technology professionals	Travel consultants and clerks
	Administration professionals	Political scientists, historians, philosophers	
	Economists	Sociologists and social/economic surveys professionals	

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Occupational Barometer 2023

podlaskie region

www.barometrzwodow.pl

DEFICIT	Earthmoving plant operators and mechanics	Physiotherapy technicians and assistants	Teachers of vocational subjects
	Electrical mechanics and electrical assemblers	Psychologists and psychotherapists	Truck drivers
	Medical doctors	Stock clerks	Uniformed services workers
	Nurses and midwives	Teachers for practical vocational training	Welders
BALANCE	Accounting and bookkeeping clerks	Environmental engineering engineers	Physical protection services workers
	Acoustics and sound engineers	Events, cultural activities and animation organizers	Plant and machine operators and assemblers
	Administration and office clerks	Farmers and animal producers	Political scientists, historians, philosophers
	Administration professionals	Farming and forestry advisers	Postal clerks
	Agricultural and gardening machines operators	Finance professionals	Postmen and package deliverers
	Ambulance workers	Finishing work technologists in building trades	Potters and glaziers
	Analysts, testers and ICT system operators	Florists	PR, advertising, marketing and sales specialists
	Animal services workers	Food and nutrition technology professionals	Pre-school teachers
	Architects and urban planners	Food processing workers	Primary education teachers
	Archivists and curators	Forest workers	Printing trades workers
	Assistants in education	Funeral service workers	Product and garment designers and CAD operators
	Automotive diagnosis technicians	Gardeners i orchardists	Production managers
	Bakers	Glaziers and window fitters	Production organisation professionals
	Beauticians	Graphic and multimedia designers	Quality specialists
	Biologists, biotechnologists	Hairdressers	Real estate professionals
	Bricklayers and plasterers	Handicraft workers in leather and related materials	Receptionists
	Bus drivers	Handicraft workers in wood and joiners	Road construction workers
	Butchers and fishmongers	Household helps	Roofers and sheet metal workers in building trades
	Car wash, laundry and ironing workers	Human resources and recruitment professionals	Rubber and plastic machine operators
	Caretakers, doorkeepers, janitors and custodians	Independent accountants	Sales managers
	Cement and stone machine operators	Insurance agents	Salespeople and pos operators
	Chefs	Internet salespersons	Secretaries and assistants
	Chemical engineers and chemists	IT technicians	Service managers
	Childminders	Journalists and editors	Social institutions and culture managers
	Cleaners and room service	Kitchen helpers	Social work professionals caring for the elderly and disabled
	Clearing and forwarding agents	Landscape architects	Social workers
	Concrete placers, concrete finishers and related workers	Lawyers	Sociologists and social/economic surveys professionals
	Confectioners	Librarians and related information professionals	Special school teachers
	Construction engineers	Logistics managers	Speech therapists and audiophonologists
	Construction installation assemblers	Machinery mechanics and repairers	Sport and recreation instructors
	Construction joiners and carpenters	Management and business service managers	Stonemasons
	Construction managers	Manual workers in production and simple works	Structural metal workers
	Construction supervision inspectors	Mechanical engineering technicians	Suppliers
	Construction technicians	Mechanical engineers	Surveyors and cartographers
	Construction workers	Medical imaging and therapeutic equipment technicians	Tailors and clothing manufacturers
	Contact centre agents, survey and market research interviewers	Medical laboratory diagnosticians	Teachers of general subjects
	Cooks	Metal processing workers	Telecommunications specialists
	Crane, hoist and related plant operators	Metal working machine tool setters and operators	Tinsmiths and laquerers
	Database designers and administrators, programmers	Miners and mining plant and machine operators	Toolmakers
	Dental technicians	Motor vehicle mechanics and repairers	Trade representatives
	Dentists	OHS specialists	Translators, interpreters and other linguists
	Driving instructors	Opticians and prosthetics workers	Travel consultants and clerks
	Educational counsellors	Other education specialists	Upholsterers
	Educators in educational and care institutions	Painters and varnishers	Veterinarians
	Electrical and energetic engineers	Paper manufacturing and processing machine operators	Vindicators
	Electronic assemblers	Passenger car drivers	Visual artists and interior designers
	Electronics technology, automation and robotics specialists	Pavers	Waiters and bartenders
		Pharmacists	Webmasters
		Photographers	
SURPLUS	Economists		

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Wojewódzki
Urząd Pracy
w Białymstoku



INSTITUTION OF THE MAŁOPOLSKA REGION
Regional Labour Office
in Krakow



Ministry of Family and Social Policy
Republic of Poland

Regional/Province coordinator

National coordinator

The person ordering the study

Occupational Barometer 2023

pomorskie region

www.barometrzwodow.pl

DEFICIT

Accounting and bookkeeping clerks
Ambulance workers
Bakers
Beauticians
Bricklayers and plasterers
Bus drivers
Butchers and fishmongers
Chefs
Childminders
Cleaners and room service
Concrete placers, concrete finishers and related workers
Construction installation assemblers
Construction joiners and carpenters
Construction workers
Cooks
Earthmoving plant operators and mechanics
Electrical mechanics and electrical assemblers

Finishing work technologists in building trades
Hairdressers
Handicraft workers in wood and joiners
Independent accountants
Kitchen helpers
Manual workers in production and simple works
Medical doctors
Metal working machine tool setters and operators
Motor vehicle mechanics and repairers
Nurses and midwives
Physiotherapy technicians and assistants
Pre-school teachers
Primary education teachers
Psychologists and psychotherapists
Road construction workers
Roofers and sheet metal workers in building trades
Salespeople and pos operators

Social work professionals caring for the elderly and disabled
Social workers
Special school teachers
Stock clerks
Structural metal workers
Suppliers
Tailors and clothing manufacturers
Teachers for practical vocational training
Teachers of general subjects
Teachers of vocational subjects
Toolmakers
Truck drivers
Uniformed services workers
Waiters and bartenders
Welders

BALANCE

Acoustics and sound engineers
Administration and office clerks
Administration professionals
Agricultural and gardening machines operators
Air traffic controllers
Analysts, testers and ICT system operators
Animal services workers
Architects and urban planners
Archivists and curators
Assistants in education
Automotive diagnosis technicians
Biologists, biotechnologists
Car wash, laundry and ironing workers
Caretakers, doorkeepers, janitors and custodians
Cement and stone machine operators
Chemical engineers and chemists
Chemical products plant and machine operators
Clearing and forwarding agents
Confectioners
Construction engineers
Construction managers
Construction supervision inspectors
Construction technicians
Contact centre agents, survey and market research interviewers
Crane, hoist and related plant operators
Database designers and administrators, programmers
Dental technicians
Dentists
Driving instructors
Economists
Educational counsellors
Educators in educational and care institutions
Electrical and energetic engineers
Electronic assemblers
Electronics technology, automation and robotics specialists
Environmental engineering engineers
Events, cultural activities and animation organizers
Farmers and animal producers
Farming and forestry advisers

Finance professionals
Fishermen
Florists
Food and nutrition technology professionals
Food processing workers
Forest workers
Funeral service workers
Gardeners i orchardists
Glaziers and window fitters
Graphic and multimedia designers
Handicraft workers in leather and related materials
Household helps
Human resources and recruitment professionals
Industrial ceramists
Insurance agents
Internet salespersons
IT technicians
Journalists and editors
Landscape architects
Lawyers
Librarians and related information professionals
Logistics managers
Machinery mechanics and repairers
Management and business service managers
Mechanical engineering technicians
Mechanical engineers
Medical imaging and therapeutic equipment technicians
Medical laboratory diagnosticians
Metal processing workers
Meteorologists, geologists, geographers
Miners and mining plant and machine operators
OHS specialists
Opticians and prosthetics workers
Other education specialists
Painters and varnishers
Paper manufacturing and processing machine operators
Passenger car drivers
Pavers
Pharmacists
Photographers
Physical protection services workers

Plant and machine operators and assemblers
Political scientists, historians, philosophers
Postal clerks
Postmen and package deliverers
Potters and glaziers
PR, advertising, marketing and sales specialists
Printing trades workers
Product and garment designers and CAD operators
Production managers
Production organisation professionals
Quality specialists
Railway traffic operators
Real estate professionals
Receptionists
Rubber and plastic machine operators
Sales managers
Secretaries and assistants
Service managers
Shipdeck crew, ship and port operators
Shoemakers
Social institutions and culture managers
Sociologists and social/economic surveys professionals
Speech therapists and audiophonologists
Sport and recreation instructors
Stonemasons
Surveyors and cartographers
Telecommunications specialists
Textile machine operators
Tinsmiths and laquerers
Trade representatives
Train drivers
Translators, interpreters and other linguists
Travel consultants and clerks
Upholsterers
UX/UI designers/specialists in web product implementation and platform development
Veterinarians
Vindicators
Visual artists and interior designers
Webmasters

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Voivodeship Labour Office
in Gdansk



Pomorskie Self-Governmental
Institution

Regional/Province coordinator



INSTITUTION OF THE MALOPOLSKA REGION
Regional Labour Office
in Krakow

National coordinator



Ministry of Family and Social Policy
Republic of Poland

The person ordering the study

Occupational Barometer 2023

śląskie region

www.barometrzwodow.pl

DEFICIT	Accounting and bookkeeping clerks	Independent accountants	Stock clerks
	Bricklayers and plasterers	Medical doctors	Teachers for practical vocational training
	Bus drivers	Motor vehicle mechanics and repairers	Teachers of general subjects
	Construction installation assemblers	Nurses and midwives	Teachers of vocational subjects
	Construction joiners and carpenters	Pavers	Toolmakers
	Construction workers	Psychologists and psychotherapists	Truck drivers
	Cooks	Roofers and sheet metal workers in building trades	Uniformed services workers
	Electrical mechanics and electrical assemblers	Social work professionals caring for the elderly and disabled	Welders
	Finishing work technologists in building trades		
BALANCE	Acoustics and sound engineers	Farmers and animal producers	Political scientists, historians, philosophers
	Administration and office clerks	Farming and forestry advisers	Postal clerks
	Administration professionals	Finance professionals	Postmen and package deliverers
	Agricultural and gardening machines operators	Florists	Potters and glaziers
	Ambulance workers	Food and nutrition technology professionals	PR, advertising, marketing and sales specialists
	Analysts, testers and ICT system operators	Food processing workers	Pre-school teachers
	Animal services workers	Forest workers	Primary education teachers
	Architects and urban planners	Funeral service workers	Printing trades workers
	Archivists and curators	Gardeners i orchardists	Product and garment designers and CAD operators
	Assistants in education	Glaziers and window fitters	Production managers
	Automotive diagnosis technicians	Graphic and multimedia designers	Production organisation professionals
	Bakers	Hairdressers	Quality specialists
	Beauticians	Handicraft workers in leather and related materials	Railway traffic operators
	Biologists, biotechnologists	Handicraft workers in wood and joiners	Real estate professionals
	Butchers and fishmongers	Household helps	Receptionists
	Car wash, laundry and ironing workers	Human resources and recruitment professionals	Road construction workers
	Caretakers, doorkeepers, janitors and custodians	Insurance agents	Rubber and plastic machine operators
	Cement and stone machine operators	Internet salespersons	Sales managers
	Chefs	IT technicians	Salespeople and pos operators
	Chemical engineers and chemists	Journalists and editors	Secretaries and assistants
	Chemical products plant and machine operators	Kitchen helpers	Service managers
	Childminders	Landscape architects	Shoemakers
	Cleaners and room service	Lawyers	Social institutions and culture managers
	Clearing and forwarding agents	Librarians and related information professionals	Social workers
	Concrete placers, concrete finishers and related workers	Logistics managers	Sociologists and social/economic surveys professionals
	Confectioners	Machinery mechanics and repairers	Special school teachers
	Construction engineers	Management and business service managers	Speech therapists and audiophonologists
	Construction managers	Manual workers in production and simple works	Sport and recreation instructors
	Construction supervision inspectors	Mechanical engineering technicians	Stonemasons
	Construction technicians	Mechanical engineers	Structural metal workers
	Contact centre agents, survey and market research interviewers	Medical imaging and therapeutic equipment technicians	Suppliers
	Crane, hoist and related plant operators	Medical laboratory diagnosticians	Surveyors and cartographers
	Database designers and administrators, programmers	Metal processing workers	Tailors and clothing manufacturers
	Dental technicians	Metal working machine tool setters and operators	Telecommunications specialists
	Dentists	Meteorologists, geologists, geographers	Tinsmiths and laquerers
	Driving instructors	Miners and mining plant and machine operators	Trade representatives
	Earthmoving plant operators and mechanics	OHS specialists	Train drivers
	Economists	Opticians and prosthetics workers	Translators, interpreters and other linguists
	Educational counsellors	Other education specialists	Travel consultants and clerks
	Educators in educational and care institutions	Painters and varnishers	Upholsterers
	Electrical and energetic engineers	Paper manufacturing and processing machine operators	Veterinarians
	Electronic assemblers	Passenger car drivers	Vindicators
	Electronics technology, automation and robotics specialists	Pharmacists	Visual artists and interior designers
	Environmental engineering engineers	Photographers	Waiters and bartenders
	Events, cultural activities and animation organizers	Physical protection services workers	Webmasters
		Physiotherapy technicians and assistants	
		Plant and machine operators and assemblers	

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Województwo
Śląskie



INSTITUTION OF THE MAŁOPOLSKA REGION
Regional Labour Office
in Krakow



Ministry of Family and Social Policy
Republic of Poland

Regional/Province coordinator

National coordinator

The person ordering the study

Occupational Barometer 2023

świętokrzyskie region

www.barometrzwodow.pl

DEFICIT	Bricklayers and plasterers Bus drivers Concrete placers, concrete finishers and related workers Construction installation assemblers Construction joiners and carpenters Construction workers Earthmoving plant operators and mechanics Electrical mechanics and electrical assemblers Finishing work technologists in building trades Handicraft workers in wood and joiners	Independent accountants Medical doctors Metal working machine tool setters and operators Motor vehicle mechanics and repairers Nurses and midwives Pavers Psychologists and psychotherapists Social work professionals caring for the elderly and disabled Special school teachers	Stock clerks Teachers for practical vocational training Teachers of general subjects Teachers of vocational subjects Toolmakers Truck drivers Welders
	Accounting and bookkeeping clerks Administration and office clerks Administration professionals Agricultural and gardening machines operators Ambulance workers Analysts, testers and ICT system operators Animal services workers Architects and urban planners Archivists and curators Assistants in education Automotive diagnosis technicians Bakers Beauticians Biologists, biotechnologists Butchers and fishmongers Car wash, laundry and ironing workers Caretakers, doorkeepers, janitors and custodians Cement and stone machine operators Chefs Chemical engineers and chemists Chemical products plant and machine operators Childminders Cleaners and room service Clearing and forwarding agents Confectioners Construction engineers Construction managers Construction supervision inspectors Construction technicians Contact centre agents, survey and market research interviewers Cooks Crane, hoist and related plant operators Database designers and administrators, programmers Dental technicians Dentists Driving instructors Educational counsellors Educators in educational and care institutions Electrical and energetic engineers Electronic assemblers Electronics technology, automation and robotics specialists Environmental engineering engineers Events, cultural activities and animation organizers Farmers and animal producers Farming and forestry advisers Finance professionals Economists	Florists Food and nutrition technology professionals Food processing workers Forest workers Funeral service workers Gardeners i orchardists Glaziers and window fitters Graphic and multimedia designers Hairdressers Handicraft workers in leather and related materials Household helps Human resources and recruitment professionals Industrial ceramists Insurance agents Internet salespersons IT technicians Journalists and editors Kitchen helpers Landscape architects Lawyers Librarians and related information professionals Logistics managers Machinery mechanics and repairers Management and business service managers Manual workers in production and simple works Mechanical engineering technicians Mechanical engineers Medical imaging and therapeutic equipment technicians Medical laboratory diagnosticians Metal processing workers Meteorologists, geologists, geographers Miners and mining plant and machine operators OHS specialists Opticians and prosthetics workers Other education specialists Painters and varnishers Paper manufacturing and processing machine operators Passenger car drivers Pharmacists Photographers Physical protection services workers Physiotherapy technicians and assistants Plant and machine operators and assemblers Political scientists, historians, philosophers Postal clerks Postmen and package deliverers Potters and glaziers PR, advertising, marketing and sales specialists	Pre-school teachers Primary education teachers Printing trades workers Product and garment designers and CAD operators Production managers Production organisation professionals Quality specialists Railway traffic operators Real estate professionals Receptionists Road construction workers Roofers and sheet metal workers in building trades Rubber and plastic machine operators Sales managers Salespeople and pos operators Secretaries and assistants Service managers Shoemakers Social institutions and culture managers Social workers Sociologists and social/economic surveys professionals Speech therapists and audiophonologists Sport and recreation instructors Stonemasons Structural metal workers Suppliers Surveyors and cartographers Tailors and clothing manufacturers Telecommunications specialists Textile machine operators Tinsmiths and laquerers Trade representatives Train drivers Translators, interpreters and other linguists Travel consultants and clerks Uniformed services workers Upholsterers UX/UI designers/specialists in web product implementation and platform development Veterinarians Vindicators Visual artists and interior designers Waiters and bartenders Webmasters
SURPLUS			

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**Regional
Labour Office
in Kielce**

Regional/Province coordinator



INSTITUTION OF THE MALOPOLSKA REGION
**Regional Labour Office
in Krakow**

National coordinator



Ministry of Family and Social Policy
Republic of Poland

The person ordering the study

Occupational Barometer 2023

warmińsko-mazurskie region

www.barometrzwodow.pl

DEFICIT	Accounting and bookkeeping clerks Bricklayers and plasterers Bus drivers Concrete placers, concrete finishers and related workers Construction installation assemblers Construction joiners and carpenters Construction workers Cooks	Earthmoving plant operators and mechanics Electrical mechanics and electrical assemblers Finishing work technologists in building trades Handicraft workers in wood and joiners Independent accountants Medical doctors Metal working machine tool setters and operators Motor vehicle mechanics and repairers	Nurses and midwives Physiotherapy technicians and assistants Psychologists and psychotherapists Roofers and sheet metal workers in building trades Teachers of vocational subjects Toolmakers Truck drivers Welders
BALANCE	Acoustics and sound engineers Administration and office clerks Administration professionals Agricultural and gardening machines operators Ambulance workers Analysts, testers and ICT system operators Animal services workers Architects and urban planners Archivists and curators Assistants in education Automotive diagnosis technicians Bakers Beauticians Biologists, biotechnologists Butchers and fishmongers Car wash, laundry and ironing workers Caretakers, doorkeepers, janitors and custodians Cement and stone machine operators Chefs Chemical engineers and chemists Chemical products plant and machine operators Childminders Cleaners and room service Clearing and forwarding agents Confectioners Construction engineers Construction managers Construction supervision inspectors Construction technicians Contact centre agents, survey and market research interviewers Crane, hoist and related plant operators Database designers and administrators, programmers Dental technicians Dentists Driving instructors Educational counsellors Educators in educational and care institutions Electrical and energetic engineers Electronic assemblers Electronics technology, automation and robotics specialists Environmental engineering engineers Events, cultural activities and animation organizers Farmers and animal producers Farming and forestry advisers Finance professionals Fishermen	Florists Food and nutrition technology professionals Food processing workers Forest workers Funeral service workers Gardeners i orchardists Glaziers and window fitters Graphic and multimedia designers Hairdressers Handicraft workers in leather and related materials Household helps Human resources and recruitment professionals Industrial ceramists Insurance agents Internet salespersons IT technicians Journalists and editors Kitchen helpers Landscape architects Lawyers Librarians and related information professionals Logistics managers Machinery mechanics and repairers Management and business service managers Manual workers in production and simple works Mechanical engineering technicians Mechanical engineers Medical imaging and therapeutic equipment technicians Medical laboratory diagnosticians Metal processing workers OHS specialists Opticians and prosthetics workers Other education specialists Painters and varnishers Paper manufacturing and processing machine operators Passenger car drivers Pavers Pharmacists Photographers Physical protection services workers Plant and machine operators and assemblers Political scientists, historians, philosophers Postal clerks Postmen and package deliverers Potters and glaziers PR, advertising, marketing and sales specialists Pre-school teachers Primary education teachers	Printing trades workers Product and garment designers and CAD operators Production managers Production organisation professionals Quality specialists Railway traffic operators Real estate professionals Receptionists Road construction workers Rubber and plastic machine operators Sales managers Salespeople and pos operators Secretaries and assistants Service managers Shipdeck crew, ship and port operators Shoemakers Social institutions and culture managers Social work professionals caring for the elderly and disabled Social workers Sociologists and social/economic surveys professionals Special school teachers Speech therapists and audiophonologists Sport and recreation instructors Stock clerks Stonemasons Structural metal workers Suppliers Surveyors and cartographers Tailors and clothing manufacturers Teachers for practical vocational training Teachers of general subjects Telecommunications specialists Textile machine operators Tinsmiths and laquerers Trade representatives Translators, interpreters and other linguists Travel consultants and clerks Uniformed services workers Upholsterers UX/UI designers/specialists in web product implementation and platform development Veterinarians Vindicators Visual artists and interior designers Waiters and bartenders Webmasters
SURPLUS	Economists		

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Regional/Province
coordinator



INSTITUTION OF THE MALOPOLSKA REGION
Regional Labour Office
in Krakow

National coordinator



Ministry of Family and Social Policy
Republic of Poland

The person ordering the study

Occupational Barometer 2023

wielkopolskie region

www.barometrzwodow.pl

DEFICIT	Accounting and bookkeeping clerks	Electronics technology, automation and robotics specialists	Social work professionals caring for the elderly and disabled
	Ambulance workers		Stock clerks
	Bakers	Finishing work technologists in building trades	Tailors and clothing manufacturers
	Bricklayers and plasterers	Handicraft workers in wood and joiners	Teachers for practical vocational training
	Bus drivers	Manual workers in production and simple works	Teachers of general subjects
	Butchers and fishmongers	Medical doctors	Teachers of vocational subjects
	Construction installation assemblers	Metal working machine tool setters and operators	Toolmakers
	Construction joiners and carpenters	Motor vehicle mechanics and repairers	Train drivers
	Construction workers	Nurses and midwives	Truck drivers
	Cooks	Pavers	Uniformed services workers
	Crane, hoist and related plant operators	Psychologists and psychotherapists	Upholsterers
	Earthmoving plant operators and mechanics	Roofers and sheet metal workers in building trades	Welders
	Electrical mechanics and electrical assemblers		
BALANCE	Administration and office clerks	Finance professionals	Postmen and package deliverers
	Administration professionals	Florists	Potters and glaziers
	Agricultural and gardening machines operators	Food and nutrition technology professionals	PR, advertising, marketing and sales specialists
	Analysts, testers and ICT system operators	Food processing workers	Pre-school teachers
	Animal services workers	Forest workers	Primary education teachers
	Architects and urban planners	Funeral service workers	Printing trades workers
	Archivists and curators	Gardeners i orchardists	Product and garment designers and CAD operators
	Assistants in education	Glaziers and window fitters	Production managers
	Automotive diagnosis technicians	Graphic and multimedia designers	Production organisation professionals
	Beauticians	Hairdressers	Quality specialists
	Biologists, biotechnologists	Household helps	Real estate professionals
	Car wash, laundry and ironing workers	Human resources and recruitment professionals	Receptionists
	Caretakers, doorkeepers, janitors and custodians	Independent accountants	Road construction workers
	Cement and stone machine operators	Insurance agents	Rubber and plastic machine operators
	Chefs	Internet salespersons	Sales managers
	Chemical engineers and chemists	IT technicians	Salespeople and pos operators
	Chemical products plant and machine operators	Journalists and editors	Secretaries and assistants
	Childminders	Kitchen helpers	Service managers
	Cleaners and room service	Landscape architects	Shoemakers
	Clearing and forwarding agents	Lawyers	Social institutions and culture managers
	Concrete placers, concrete finishers and related workers	Librarians and related information professionals	Social workers
	Confectioners	Logistics managers	Sociologists and social/economic surveys professionals
	Construction engineers	Machinery mechanics and repairers	Special school teachers
	Construction managers	Management and business service managers	Speech therapists and audiophonologists
	Construction supervision inspectors	Mechanical engineering technicians	Sport and recreation instructors
	Construction technicians	Mechanical engineers	Stonemasons
	Contact centre agents, survey and market research interviewers	Medical imaging and therapeutic equipment technicians	Structural metal workers
	Database designers and administrators, programmers	Medical laboratory diagnosticians	Suppliers
	Dental technicians	Metal processing workers	Surveyors and cartographers
	Dentists	OHS specialists	Telecommunications specialists
	Driving instructors	Opticians and prosthetics workers	Tinsmiths and laquerers
	Economists	Other education specialists	Trade representatives
	Educational counsellors	Painters and varnishers	Translators, interpreters and other linguists
	Educators in educational and care institutions	Paper manufacturing and processing machine operators	Travel consultants and clerks
	Electrical and energetic engineers	Passenger car drivers	Veterinarians
	Electronic assemblers	Pharmacists	Vindicators
	Environmental engineering engineers	Photographers	Visual artists and interior designers
	Events, cultural activities and animation organizers	Physical protection services workers	Waiters and bartenders
	Farmers and animal producers	Physiotherapy technicians and assistants	Webmasters
	Farming and forestry advisers	Plant and machine operators and assemblers	
		Postal clerks	

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Occupational Barometer 2023

zachodniopomorskie region

www.barometrzwodow.pl

DEFICIT	Accounting and bookkeeping clerks	Finishing work technologists in building trades	Social work professionals caring for the elderly and disabled
	Ambulance workers	Independent accountants	Social workers
	Bricklayers and plasterers	Kitchen helpers	Special school teachers
	Bus drivers	Medical doctors	Speech therapists and audiophonologists
	Butchers and fishmongers	Metal working machine tool setters and operators	Stock clerks
	Concrete placers, concrete finishers and related workers	Motor vehicle mechanics and repairers	Teachers for practical vocational training
	Construction installation assemblers	Nurses and midwives	Teachers of general subjects
	Construction joiners and carpenters	Pavers	Teachers of vocational subjects
	Construction workers	Physiotherapy technicians and assistants	Toolmakers
	Cooks	Pre-school teachers	Truck drivers
	Earthmoving plant operators and mechanics	Primary education teachers	Uniformed services workers
	Educational counsellors	Psychologists and psychotherapists	Welders
	Educators in educational and care institutions	Roofers and sheet metal workers in building trades	
	Electrical mechanics and electrical assemblers		
BALANCE	Acoustics and sound engineers	Fishermen	Postal clerks
	Administration and office clerks	Florists	Postmen and package deliverers
	Administration professionals	Food and nutrition technology professionals	Potters and glaziers
	Agricultural and gardening machines operators	Food processing workers	PR, advertising, marketing and sales specialists
	Analysts, testers and ICT system operators	Forest workers	Printing trades workers
	Animal services workers	Funeral service workers	Product and garment designers and CAD operators
	Architects and urban planners	Gardeners i orchardists	Production managers
	Archivists and curators	Glaziers and window fitters	Production organisation professionals
	Assistants in education	Graphic and multimedia designers	Quality specialists
	Automotive diagnosis technicians	Hairdressers	Railway traffic operators
	Bakers	Handicraft workers in leather and related materials	Real estate professionals
	Beauticians	Handicraft workers in wood and joiners	Receptionists
	Biologists, biotechnologists	Household helps	Road construction workers
	Car wash, laundry and ironing workers	Human resources and recruitment professionals	Rubber and plastic machine operators
	Caretakers, doorkeepers, janitors and custodians	Industrial ceramists	Sales managers
	Cement and stone machine operators	Insurance agents	Salespeople and pos operators
	Chefs	Internet salespersons	Secretaries and assistants
	Chemical products plant and machine operators	IT technicians	Service managers
	Childminders	Journalists and editors	Shipdeck crew, ship and port operators
	Cleaners and room service	Landscape architects	Shoemakers
	Clearing and forwarding agents	Lawyers	Social institutions and culture managers
	Confectioners	Librarians and related information professionals	Sociologists and social/economic surveys professionals
	Construction engineers	Logistics managers	Sport and recreation instructors
	Construction managers	Machinery mechanics and repairers	Stonemasons
	Construction supervision inspectors	Management and business service managers	Structural metal workers
	Construction technicians	Manual workers in production and simple works	Suppliers
	Contact centre agents, survey and market research interviewers	Mechanical engineering technicians	Surveyors and cartographers
	Crane, hoist and related plant operators	Mechanical engineers	Tailors and clothing manufacturers
	Database designers and administrators, programmers	Medical imaging and therapeutic equipment technicians	Telecommunications specialists
	Dental technicians	Medical laboratory diagnosticians	Tinsmiths and laquerers
	Dentists	Metal processing workers	Trade representatives
	Driving instructors	Miners and mining plant and machine operators	Train drivers
	Economists	OHS specialists	Translators, interpreters and other linguists
	Electrical and energetic engineers	Opticians and prosthetics workers	Travel consultants and clerks
	Electronic assemblers	Other education specialists	Upholsterers
	Electronics technology, automation and robotics specialists	Painters and varnishers	UX/UI designers/specialists in web product implementation and platform development
	Environmental engineering engineers	Paper manufacturing and processing machine operators	Veterinarians
	Events, cultural activities and animation organizers	Passenger car drivers	Vindicators
	Farmers and animal producers	Pharmacists	Visual artists and interior designers
	Farming and forestry advisers	Photographers	Waiters and bartenders
	Finance professionals	Physical protection services workers	Webmasters
		Plant and machine operators and assemblers	
		Political scientists, historians, philosophers	

The "Occupational Barometer" is a forecast for the demand for employees in 2023. The study was conducted by experts at the turn of the third and fourth quarters of 2022. The situation in some professions may change depending on market conditions. The result for the region include professions assessed in at least half of the counties.



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INSTITUTION OF THE MAŁOPOLSKA REGION
Regional Labour Office
in Krakow



Ministry of Family and Social Policy
Republic of Poland

Regional/Province coordinator

National coordinator

The person ordering the study

The Occupational Barometer is a one-year forecast of the demand for employees in the counties. The survey shows in which occupations there will be fewer and in which there will be more job opportunities in the coming year. The Barometer classifies occupations into three groups:

- shortage occupations, in which there should be no difficulty in finding a job in the near future;
- o balanced occupations, i.e. occupations in which the number of job offers will be close to the number of people able and willing to take up employment;
- o surplus occupations, where it may be more difficult to find a job due to low demand and numerous candidates willing to take up employment and meeting employers' requirements.

The survey comes from Sweden. Its methodology has been developed in the 1990s as part of a broader system for forecasting labour market changes. In 2007, the Occupations Barometer was adapted by public employment agencies in Finland. In Poland, the survey appeared in 2009 and was initially conducted only in the Małopolska region. In 2015, it was extended to the whole country.

In 2019, by the decision of the Minister of Labour, the Barometer was merged with the Deficit and Surplus Occupation Monitoring and is now a single survey entitled Occupational Barometer.

More information on the survey and detailed results from all editions are available at www.barometrzwodow.pl.

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 **MAŁOPOLSKA**