



Edition 2017
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This publication is financed by the Ministry of Economic Development of the Republic of Poland.
DTP, print: <i>Gvafpol</i> Agnieszka Blicharz-Krupińska

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Poland – en vogue!

The way Poland is perceived on the international scene has changed considerably in recent years. Firstly, because the country enjoys an uncommon and highly attractive economic stability and secondly because of the unique strength of Polish human capital. The challenges faced during recent economic upheaval have helped Poles demonstrate their practicality and optimism. Stable and dynamic economic growth, sensible business decisions and the wise management of public finance have become strongly associated with Poland, not only in a political context but also in business.

Poland is a trustworthy and reliable partner for international businesses. Poland's exceptional business and investment opportunities attract investors from Western Europe as well as from the US and Asia. The growing interest of foreign investors is visible through the number of projects currently supported by the Polish Investment and Trade Agency (PAIH). According to a 2017 survey on the investment climate in Poland conducted by PAIIIZ, Grant Thorton and HSBC, 92% of foreign investors would invest in Poland again. The macroeconomic factors: the size of the Polish market and economic stability constitutes the biggest advantage of the country's investment attractiveness. Also, the availability of highly skilled human resources, their labour efficiency and loyalty were highly valued by foreign investors.

The number and variety of FDI projects located in Poland show that foreign investors from a wide range of industries have been running their projects in the country successfully. For years the country has been attracting companies active in, for example, the automotive, BSS and R&D, electronics, food and logistics sectors. The Polish economy has been especially receptive to sectors developing in areas in which Poland already has or stands a good chance of achieving long-term success on the international stage. Among the sectors which have been experiencing dynamic development and enjoying great popularity, there are industries which have a long tradition in Poland, e.g. the aviation sector, sectors which require qualified people such as BSS, industries with a well-developed network of suppliers, e.g. the automotive industry, and those which have considerable untapped development potential like the renewable energy sector.

In recent years, Poland has been among the select few who have bucked the trend of slowing economies and has moved to the head of the pack. The end of the economic slowdown has shown that Poland's development was not just temporary. Do not miss out on the opportunities. Poland is trendy and will remain in vogue, just like Chanel N° 5, for years to come.

Chapter 1. About Poland

Poland is located in the centre of Europe, and this factor alone demonstrates the great potential of our country. Poland borders Germany to the west, the Czech Republic and Slovakia to the south, and Ukraine, Belarus and a bit of Lithuania to the east. A small, separate fragment of Russia known as Kaliningrad Oblast also borders part of Poland to the north. The rest of the northern border comprises the golden beaches of the Baltic Sea. The capital of Poland is Warszawa), located almost in the centre of the country.

Poland is a country with a well-founded system of democratic government. Our republic is a multiparty democracy with a two chamber parliament. The Head of State is the President, elected by a majority of the electorate for a five year term. The upper parliamentary chamber is the Senate, with 100 senators; in the lower chamber, the Sejm, there are 460 members. Parliament is chosen by a majority of the electorate for a 4 year term.

The state's internal and foreign policy is decided by the government (the Council of Ministers), whose activities are directed by the president of the Council of Ministers (the Prime Minister). He or she is officially designated by the President, as are the ministers upon the Prime Minister's recommendations.

There are almost 38.4 million Polish citizens. The majority live in cities. By European standards, it is a relatively young society – around 42% of Poland's citizens are under the age of 35. Approximately half of the population are professionally active (with the greatest number, 6 million, in the service sector, followed by industry and construction, 3.2 million and agriculture and forestry with 86 thousand).

Poland is the biggest politically and economically stable country in Central & Eastern Europe, this creates opportunities for successful long-term investment. Poles account for 24% of the region's population, and produce nearly 40% of its GDP. That is an indicator of the potential of the Polish economy.

Poland is a perfect place for investment and business expansion. According to the E&Y Attractiveness Survey Europe 2017, Poland is ranked 5th in Europe in terms of number of FDI projects (with a 24% increase compared to 2016) and the first one in Central and Eastern Europe. The report highlighted the fact that in 2016, foreign direct investments (FDI) created 12% more new jobs than the year before. The sheer number of new jobs (22 thousand) ranks Poland second in the continent after the United Kingdom and before Germany.

Thousands of foreign companies already profit from investments in different sectors of the Polish market. The key reasons behind their decision to do business here are Poland's: strategic location, investment potential and human resources. Another important factor that increases the competitiveness of the Polish economy are investment incentives.

Poland is a great country full of opportunities. Its rich culture, traditions and lifestyle make Poland a fascinating, interesting and enjoyable country to live in.

Chapter 2. A stable and growing economy

According to the European Commission data for 2017, Poland was one of the fastest growing countries in the EU. Only Ireland, Estonia, Malta, Czech Republic, Romania and Slovenia recorded higher rates of GDP growth. While on average the size of GDP in the EU increased by 1.5% in 2017, the Polish economy grew by 4.2%. According to the Autumn 2017 forecast by the European Commission, GDP growth in Poland is expected to accede 3.8% in 2017. This figure is far above the growth forecasts for the EU as a whole, which is expected to grow by only 2.3% in 2017.

Fiscal prudence and keeping the economy growing in recent years have also enabled the Polish government to keep the level of public debt within reasonable limits – in 2017 the consolidated public debt of Poland amounted to 53.2% of GDP while for EU28 countries it reached 83.5%. It is a positive change when compared to 56% in 2013. It means that Poland has successfully passed the tests that all European economies have been recently subject to.

There are several factors explaining the robustness of the Polish economy in relation to the economic turmoil of the last few years.

Poland enjoys a good competitive position and high attractiveness as a production site. Producers have unlimited access to the whole European market and they enjoy access to a quickly improving infrastructure. The cost of labour, although gradually increasing, is still low and represents only a fraction of Western European levels, but the quality and consequently the productivity of Polish workers is constantly improving, making it one of the most competitive countries in Europe.

The high flexibility of Polish economic agents is also an important asset. Therefore both international and local businesses have become used to continual reform. The rapidly changing environment Polish companies have operated in over the last 20 years has helped them to become both less fragile and more agile. They are less fragile to a demanding and unstable regulatory environment which helps them to successfully compete in local and also in other emerging markets. Polish managers are able to make decisions quickly which is necessary in order to react best to changing market behaviour. This has helped many of them to take advantage of the changing consumer and business preferences in EU markets that have resulted from the recent crisis.

Moreover, most businesses are also strong supporters of reforms leading to an increase in the efficiency and transparency of public institutions. These are the sort of reforms that need to continue in Poland.

Poland's huge domestic market is a valuable asset and it is also taken into account by foreign investors. In 2016 the relation of exports to GDP in Poland was only 52.1%, whereas in neighbouring countries such as the Czech Republic, Hungary and Slovakia it was much higher -79.3%, 92.2% and 93.6% respectively. It means Poland is much less dependent on changing external environments. Yet the export growth recorded in recent years was also

satisfactory, despite the adverse conditions in the EU. Growth reached 6.4% in 2017, with a forecast of 6.8% growth in 2018 and 5.8% in 2019.

The Polish banking sector proved to be healthy, profitable and resilient to global financial turbulence, while Polish firms and households are only moderately indebted. Praise for this should be attributed, partly, to the banking supervision in Poland. Additionally, the stabilizing role played by the foreign owners of banks that control ca 45% of the banking assets of Poland should be praised as well. Despite some initial fears, foreign holding companies were ready to extend additional short-term loans to their Polish subsidiaries during the global turmoil rather than trying to transfer liquidity abroad.

The policy of the flexible exchange rate used by Poland proved to be a good protective shield during the financial crisis. Polish exporters are still benefiting from a reasonably weakened currency (the current exchange rate EUR/ PLN is about 4.17, while before the crisis it was about 3.20). With a weaker currency, Polish exports are more profitable, and imports more costly. Altogether, it improves the financial situation of Polish firms and helps to keep unemployment at a relatively low level.

Poland has also benefited from the growing inflow of EU funds has that helped increase the scale of public investment. As the biggest beneficiary of EU structural policy, Poland receives a growing amount of EU funds every year. Poland will also obtain EUR 82.5 billion in the 2014-2020 programme.

All the economic fundamentals of the country, connected with the macroeconomic equilibrium, safety and stability of the financial sector, and the competitiveness of companies, have been greatly strengthened. As a result, Poland was perfectly able to face the global crisis and withstand both the financial storm and the deep worldwide recession and has emerged in astonishingly good shape. Despite many problems that may still appear, the Polish economy is attractive, stable and set to grow substantially more than the EU average in the coming years.

Chapter 3. Human capital

Undoubtedly, the outstanding quality of human capital is one of the strongest assets of Poland. Surveys made among foreign investors who do business in the country show that the following are among the most appreciated characteristics of Polish employees: excellent qualifications, strong communication skills, proficiency in foreign languages as well as motivation to work and the organizational culture of Polish staff. Poles are innovative, creative and smart. Well-educated Polish economists, engineers, IT specialists and scientists are highly sought-after and appreciated employees who find employment in IT companies, R&D centres and scientific institutes. Investors who opt for Poland will barely have any problems finding suitable personnel. Also it is thanks to highly skilled Polish employees that the shift in the profile of incoming investments to Poland towards more sophisticated and know-how projects has taken place. This may have much to do with the fact that Poland has about 370 academic centres with ca 1.5 million students. University teaching staff account for round 95,000 specialists, half of this number hold a Ph.D. Every tenth European student comes from Poland. In addition, Poland has one of the highest percentage of people with secondary and tertiary educational attainment (62,6%) in the labour market.

The high standards of the Polish educational system are reflected in a number of scientific achievements. Polish scientists are well known for: discovering the first extra-solar planetary system, the creation of the technology for the production of the blue laser, the production process to make the world's smallest synthetic diamonds and for the isolation of queen cells from bone marrow. Other important achievements are the unmanned helicopter and the modern prosthetic hand. 2018 is to bring the launch of the first Polish commercial satellite.

It is worth noting that Polish scientists have been involved in the recent and most ambitious space project of the new century- the Rosetta mission which was the first ever precision comet landing. The touchdown of the Rosetta satellite on Comet 67/PT was successfully completed in November 2014. A Polish team designed a group of temperature sensors integrated to measure the temperature under the comet's surface.

In the prestigious international competition University Rover Challenge (URC) Poland was represented on the podium for the fifth consecutive year, as in 2017 the PCz Rover Team from the Częstochowa University of Technology won second place. Also students of the Białystok University of Technology, the Rzeszów University of Technology and University of Warsaw had successes in the previous editions of the Challenge.

Driving 607 km on one litre of fuel? It is possible thanks to the team of young scientists from the Warsaw University of Technology who constructed Kropelka (Droplet), a super-economic car. Kropelka is light (46 kg), comfortable and has a streamlined shape. The constructors used innovations from the aviation and automotive sector. It is so economical that it really seems to drive on a mere droplet of fuel.

Excellent universities and technical schools provide a wealth of academic talent. Polish mathematicians and information technology experts are world leaders in research and development, winning many prestigious international

competitions like Microsoft Imagine Cup, European Merrill Lynch Investment Challenge, Google Code Jam, or the IBM-ACM International Collegiate Programming Contest. Polish specialists from the IT sector are highly sought-after, by international corporations in Poland and from abroad. In fact, Poles form a large percentage of managers responsible for R&D departments within the world's largest corporations.

Wise, clever, intelligent, open-minded, innovative and creative – this is the staff of companies operating in Poland.

Chapter 4. Strategic location

Poland's convenient location at the junction of the East-West and North-South of Europe makes it the perfect investment destination for enterprises targeting any area of Europe. From Warsaw it takes only a few hours either by car, train or plane to reach a number of Europe's major capital cities e.g. Berlin, Moscow, Vienna, Bratislava, Kiev, Vilnius and Minsk. Poland is a country where the main trade and transport routes leading from the North to the South and from the West to the East of the continent intersect. Thanks to Poland's exceptional location, it is one of the most important countries on the map of the Trans-European Transport Network (TEN-T), and it has four major projects crossing its territory. The international routes crossing Poland are being constantly developed and modernised. Transport investments are possible largely thanks to the co-operation between national road directorates and the governments of neighbouring countries and with substantial help from EU funds and subsidies. Communication hubs have become centres where various means of transport interconnect. Development of the country's road infrastructure is one of the Polish administration's priorities.

According to the European Aviation Safety Agency (EASA), Poland ranks among the fastest growing markets of aviation services in the whole region. This is mainly due to the increase in the number of air connections from Poland, the initiation of numerous low-cost flights and a significant rise in the number of passengers. According to the World Bank, the number of registered carrier departures worldwide, excluding domestic take-offs and take-offs abroad (of air carriers registered in Poland), grew from 28,600 in 1990 to 82,596 in 2016. Both the central government administration and local governments have been developing plans concerning the construction and organisation of several new regional airports together with the development of convenient road and train transport links to the biggest cities in the country.

One of the undoubted strengths of the country's geographical position is its access to the Baltic Sea. Poland has four major ports, located in Gdańsk, Gdynia, Świnoujście and Szczecin as well as several local ports supporting the freight reloading processes.

The central location of Poland and its importance as a gateway to the European Union is a major incentive in attracting foreign companies which aim to slash the time of order realisation for customers in markets which are east of the centre of Europe. The fact that foreign entrepreneurs invest in creating logistic centres in Poland results from dynamic growth in demand, development of trade co-operation within the framework of the extended European Union and also from the ever more attractive domestic suppliers market in Poland. At the end of 2016, there were 11.2 million m² of warehouse and production space for rent. The biggest amount of space was available in Warsaw and its surroundings (more than 3.1 million m²), the Upper Silesia region (around 2 million m²), Central Poland (around 1.37 million m²) and Wrocław (around 1.4 million m²). Despite the fact that currently about 75% of modern warehouse space is located in the vicinity of the capital, new office and commercial storage space has been expanding in regional business centres.

Chapter 5. Significant European market

Poland is attractive for investors for many reasons, but top of the list is its 38.4 million strong domestic consumer market. Our country is the 37th largest market in the world with regards to population, 23rd with regards to GDP, one of the biggest EU member states, the 6th most populated country in the European Union and the biggest market in the region of Central and Eastern Europe with regards to GDP. The Polish market is not only large and varied but it is much more dynamic than other markets in the region. Poland's position is being strengthened year after year by rapid economic growth and the subsequent increases in rates of pay. Turbulence on the international financial markets and the slowdown of growth in the EU has not reduced consumption in Poland.

Here, in the very centre of Europe, entrepreneurs may establish business activity and not only sell products in Poland but also gain vast export opportunities and export to large markets situated both in the West and East of the continent – but always within easy reach of Poland.

According to a 2017 survey on the investment climate in Poland conducted by PAIH, Grant Thorton and HSBC, 92% of foreign investors would invest in Poland again. The macroeconomic factors: the size of the Polish market and economic stability constitutes the biggest advantage of the country's investment attractiveness. Also, the availability of highly skilled human resources, their labour efficiency and loyalty were highly valued by foreign investors.

This all shows that investments in Poland are profitable, not only from the point of view of the export potential but also, and perhaps primarily due to, it's very large domestic market.

Chapter 6. Investment incentives

The system of investment incentives in Poland consists of a series of instruments which may be used by foreign investors. For entrepreneurs, the most important elements of the system include: financial support for investments of considerable importance for the Polish economy (Governmental grant), investment incentives in special economic zones, real estate tax exemptions, financial support from European Union funds (mostly for R&D activity) and labour market instruments for employing people officially registered as unemployed.

Governmental support system

Governmental grants are provided on the basis of the Program for the support of investments of considerable importance for the Polish economy for the years 2011-2023, adopted by the Council of Ministers on July 5, 2011, and amended on July 22, 2014 and June 8, 2016.

Form of support

Support is provided in the form of a grant on the basis of an agreement concluded between the Minister of Economic Development and the investor. The agreement provides conditions for the payment of the grant, which is paid proportionately to the degree of the investor fulfilling their commitments.

Beneficiaries

Support is dedicated to companies planning investments in the following priority sectors:

- automotive,
- aviation,
- electronics and household appliances
- food processing,
- biotechnology,
- BPO, ICT, SSC,
- R&D.

Support is also provided for companies planning manufacturing investments in other sectors, if a project's minimum eligible costs are 750 m PLN and a minimum of 200 new jobs or 500 m PLN and 500 new jobs (significant investments).

The Programme provides support for investments under the two following categories:

Support for the creation of new jobs (employment grant)

Sector	New jobs	and		Eligible costs of the new invest- ment (m PLN)	Amount of aid (% of eligible costs)
Automotive, electronics and household appliances, aviation, biotechnology, food processing *	250			40	From PLN 3 200 to PLN 15 600
modern services,	250		1.5***		(~ EUR 800 – EUR 3 900)**
R&D	35		1***		
significant investment in other sectors	200 500			750 500	

^{*}Aid is not granted if unemployment rate in the district (powiat) is below 75% of the national average, excluding Eastern Poland

The amount of the employment grant depends, among others, on:

- 1) In the case of manufacturing projects:
 - the percentage of employees with higher education,
 - location,
 - investment expenditures,
 - sector,
 - local input,
 - $\bullet \quad \text{attractiveness of the products on the international markets}. \\$

^{**}extra 20% for investments in Eastern Poland

^{***}excluding office space rental costs

- 2) In the case of services projects:
 - the percentage of employees with higher education,
 - location,
 - complexity of the processes provided by the company,
 - cooperation with universities,
 - brand.

Support for new investment (investment grant)

Sector	New jobs	and		Eligible costs of the new invest- ment (m PLN)	Amount of aid (% of eligible costs)
Automotive, electronics and household appliances, aviation, biotechnology, food processing *	50		160		1.5 -7.5**
significant investment in other sectors	200 500		750 500		
R&D	35			10***	up to 10

^{*}Aid is not granted if the unemployment rate in the location (powiat) is below 75% of the national average, excluding Eastern Poland

The amount of the investment grant depends, among others, on:

- the number of new jobs created,
- investment outlays per employee,
- location.

^{**}extra 5 p.p. for investments in Eastern Poland or 4 p.p. for significant investment outside of Eastern Poland

^{***}excluding office space rental costs

Under the Programme, aid is provided exclusively for investment projects whose completion in Poland is conditional on receiving a financial grant from the State budget (the aid must have an incentive effect).

The operator of the Programme and the authority granting state aid is the Minister of Economic Development. The Polish Investment and Trade Agency (Polska Agencja Inwestycji I Handlu S.A.- PAIH) is responsible for accepting applications and providing the Inter-ministerial Committee for Foreign Investment (hereinafter referred to as the Committee) with the dossier of investment projects.

Each project is subjected to individual assessment by the Committee on the basis of detailed criteria laid out in the Programme.

Special Economic Zones

Special Economic Zones (SEZ) are separate areas in selected regions of Poland intended for the conducting of business activities under preferential conditions. The purpose of creating such privileged areas was to accelerate the economic development of particular regions of the country by enhancing their attractiveness for new investments.

At present there are 14 special economic zones operating in Poland. They differ in respect of area, location, development conditions, and their technical and telecommunication infrastructure. Each of the zones is managed by management authorities in the form of a commercial company controlled by the State Treasury or provincial local government.

Special Economic Zones in Poland



SEZs were established in 1996-1998 and will operate until 2026. The principle underlying the zones' operation is the possibility of income tax exemption for entrepreneurs undertaking new investments in SEZ areas. Additional encouragement for entrepreneurs may also be the infrastructure that has been specially prepared for investment purposes in these zones.

The minimal level of investment enabling a firm to utilise public aid in a SEZ is EUR 100.000,00. The amount of tax exemption is based on the value of the investment expenditure incurred by the entrepreneur or on two years' of the labour costs resulting from the creation of new jobs.

These exemptions are available solely for business activity carried out in the area of the SEZ. If an entrepreneur conducts business activity also outside of the SEZ, the business activity within the SEZ has to be organisationally separated and the amount of the exemption is determined on the basis of the data of the organisational unit conducting business activity solely within the SEZ.

The formal basis for tax exemptions is the receipt of a permit to conduct business activities in an SEZ. Such permits are granted by the Minister of Economic Development through the entities managing a particular SEZ.

Later in 2018, there are changes planned in the system of investment incentives in the framework of regional aid in Poland - in terms of the government support program and investment in Special Economic Zones.

The maximum permitted level of regional public aid

Since July 1st 2014, a new map of regional aid has been in force for the years 2014- 2020. The maximum level of regional public aid is calculated as a percentage of investment expenditure (or two years' labour costs, should the latter be higher). The following percentages apply:

- 1. **50%** in areas belonging to the provinces (voivodships) of: Lubelskie, Podkarpackie, Podlaskie, Warmińsko-Mazurskie;
- 1. **35%** in areas belonging to the provinces (voivodships) of: Kujawsko-Pomorskie, Lubuskie, Łódzkie, Małopolskie, Opolskie, Pomorskie, Świętokrzyskie, Zachodniopomorskie, partly Mazowieckie,
- 2. 25% in areas belonging to the provinces (voivodships) of: Dolnośląskie, Śląskie, Wielkopolskie,
- 3. 20% in parts of Mazowieckie,
- 4. **10%** in Warsaw.

Aid calculation method

The amount of aid is calculated in relation to:

- costs of investment in fixed assets and tangible and legal assets which are connected with the completion of a new investment, or
- the costs of creating jobs associated with the completion of the new investment.

Real Estate Tax Exemption

The municipal council (rada gminy) may, by way of a resolution, establish exemption from real estate tax for entrepreneurs as one of the forms of state aid.

The aid provided in the form of exemption from real estate tax is equivalent to the value of the tax exemption. What is worth emphasizing is that the tax aid granted under the resolutions of municipal councils constitutes the so-called "automatic aid", which means that an entrepreneur is automatically entitled to exemption after fulfilling the conditions set out in the resolution of the municipal council. However, intention to use this aid must always be

notified in accordance with the model notification, which should be specified in the resolution of the municipal council. All investment expenditure incurred before the exemption cannot be regarded as eligible costs.

R&D Tax Relief Scheme

On January 1, 2018 a piece of legislation also known as 'the large act on innovation', revolutionizing the current shape of tax relief for research and development, came into force.

The new provisions state that, starting from 2018, entrepreneurs conducting research and development activities may deduct **up to 100% of eligible costs**. This means that the companies will deduct expenses incurred on R&D from their tax base twice: first in the form of ordinary tax deductible costs, followed by the tax relief scheme – this time as eligible costs.

Businesses conducting only part of their activities in a Special Economic Zone (SEZ) will also benefit from the changes. From 2018 onwards they may use it in relation to eligible costs that do not apply to their operations performed in a SEZ.

Research and development centres are by far the biggest beneficiaries of the new provisions:

- they now enjoy the possibility of deducing up to 150% of eligible costs,
- expenses borne on expert opinions, analyses or opinions prepared not only by scientific units, but by every third party, can be deduced in full.

Deduction levels:

Type of eligible cost	Entity	Additional deduction			
		2016	2017	2018	
Dougonalocata	A	30%	50%		
Personnel costs	Any	Employmer	1000/		
	SME	20%	50%	100%	
Other eligible costs	Large	10%	30%		
	R&D Centers	-	-	150%*	
		according to			

^{*} intellectual property protection for large enterprises: 100%

An entrepreneur may apply for the status of a Research and Development Center (RDC) if:

- the net revenues from the sale of goods, products, and financial operations amounted to at least:
 - o **PLN 5 m** and revenues from the sale of research and development services and services or industrial property rights they produce constitute at least **20%** of net revenues
 - o PLN 2.5 m and are lower than PLN 5 m and revenues from the sale of research and development services and services or industrial property rights they produce constitute at least **70%** of net

and

- accounting regulations are applied;
- they are not in arrears with the payment of taxes and social security and health contributions;
- their financial statements are audited by a certified auditor.

Chapter 7. Strategic sectors

Each sector has its own specific nature and the investors operating within it have specific needs. In this chapter we concentrate on the areas in which the investors show the most interest, that is, automotive, aviation, biotechnology, BPO/SSC, electronics, energy, food, household appliances, IT and R&D sectors. Poland has at its disposal a highly qualified workforce. The highly skilled human resources are highly valued by their employers for their expertise, knowledge and industriousness.

Many firms have already decided to invest in our country, both those that are giants in their fields and those that are seeking conditions for fast and safe development.

We offer private professional help and are able to assist in finding the best locations regarding the needs and plans of a firm's development. Additionally we are able to provide in- depth knowledge regarding specific Polish sectors.

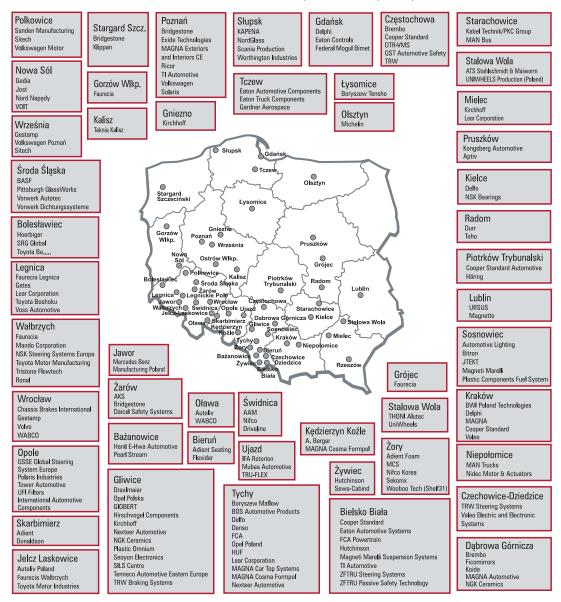
Chapter 7.1 Automotive

The Polish automotive sector ranks second in terms of manufacturing output, and it is the solid backbone of the country's economy. Thanks to the flexibility and creativity of Polish workers, healthy cost structures and a strong demand for vehicles and parts manufactured in Poland, the industry has emerged from turbulent times in a healthy state. Three major passenger car OEMs, several bus producers and hundreds of Tier 1 and 2 manufacturers prove a solid industrial base. It is noteworthy that every tenth zloty from Polish exports is generated by the automotive sector. Out of 40 car and engine plants located in Central Eastern Europe (CEE), 16 are based in Poland. According to information from the Central Statistical Office it constituted 11,6% of Polish manufacturing output sold in 2015 and provides jobs to over 170 thousand employees.

The numbers above are not a result of coincidence or good luck. Aside from an excellent cost-to-quality ratio, Poland offers the largest pool of talent. Within easy reach there are 1.5 million students spread across several major university hubs. Young professionals accustomed to the highest expectations and efficiency standards represent a strong asset for new investments. Close proximity to major European motor vehicle markets, attractive incentives system and a stable and predictable economy make Poland an ideal investment location.

The product portfolio of Polish Tier 1 and 2 suppliers is very wide. It covers, among others: powertrain units (two Toyota plants, Volkswagen Motor Polska, Fiat Powertrain and GM), steering systems (Nexteer Automotive, TRW, Delphi, Mando Corporation), lightning systems (Valeo, Automotive Lightning), cooling systems (Delphi, Valeo, Hutchinson), car body and chassis structures (Gedia, Kirchoff), tyres (Michelin, Bridgestone, Goodyear), car glass (Pilkington, Saint-Gobain Sekurit, PGW), interior parts (Boshoku, Faurecia), seating systems (Faurecia, Sitech, Johnson Controls, Lear Corporation), safety systems (TRW, Autoliv).

Automotive sector in Poland (selected companies)



Approximately 550 companies in Poland have an ISO/TS 16949 certificate confirming the quality management system required by automotive OEMs. The fact that there are several R&D centres operating in Poland is a testimonial of the high technical potential of Polish staff. The largest R&D centre in Poland was created in Cracow by the Delphi company. Other R&D establishments includes: Tenneco, TRW, Valeo, Faurecia, Wabco, Eaton, and Draexlmaier. Poland is also an important bus producer, this sector is also mainly driven by export demand.

A number of multinational companies have made large investments over a number of years, attracted by government incentives, the low-cost and highly qualified workforce and Poland's attractive position in Central Europe. The existence of Special Economic Zones has also been an important factor influencing the location decision of foreign investors.

Export competitiveness is still strong and despite dynamic growth over the past few years, Poland's labour costs are still much lower than those in Western Europe and some Central Eastern European peers. Furthermore, the country's human capital is highly skilled, as well as efficient, and Poland is geographically well-placed to export to Europe. These factors facilitate investment in the country, boosting the automotive output in the long run.

What is more, Poland has long been regarded as one of the top investment destinations for the automotive industry. The investment decisions in 2014 made by Volkswagen in Września and GM in Tychy, Mercedes – Benz Cars in Jawor in 2016 as well as LG Chem in Kobierzyce in 2017 further highlight the potential of the Polish market.

Poland's advantages:

- Fiat, Volkswagen, General Motors and Mercedes-Benz will continue to treat Poland as the major hub for their automotive production,
- Poland is also one of the biggest EU producers of trucks, buses and trams,
- investors from the automotive industry, as one of the priority sectors of our economy, are still encouraged by the proactive policies of central and local government,
- the Polish internal market is relatively large and is expected to grow dynamically.

Chapter 7.2 Aerospace

Poland has a 100-year history of aerospace and a tradition of aerospace industry dating back more than 80 years. Strong scientific, academic and engineering centres were of key importance to the development of this sector. After the period of transformation in Poland, increased international business cooperation and direct foreign investments contributed to its continued development. Currently, the Polish aviation industry has a rich supply of advanced aviation products to export.

Aeronautical sector in Poland (selected companies)

Łódź Bydgoszcz Szczecin Warsaw Tczew WZL-1 Idea Machines Vaxell Lublin GE - Engineering Design Center Gardner Tepron WZL-2 WZL-3 Airbus Helicopters Aerospace WZL-4 ETC-PZL Aerospace ZPD Anodal Creotech Robot Aviation Poland Kalisz Airbus Defence & Space MB Aerospace Polonia Aero Pratt & Whitney Meyer Tool Tekneguip Kalisz UTC Aerospace Sysytems Świdnik WSK "PZL Kalisz" Agusta Westland Szczecin Zakład Obróbki Plastycznej ■ Tczew Navcom Systems Jelenia Góra Mielec The Glider Factory "Jeżów" AERO AT Flaris Bydgoszcz Borimex PPUH EUROTECH King & Fowler WARSAW Prodrem Sikorsky Wrocław Świebodzin Waldrex PIT-RADWAR Kalisz WZK Łódź Output 42 Tworzywa Sztuczne "PZL-Mielec" Unison Engine Gardner Aerospace Jelenia Lublin UTC Aerospace Sysytems Góra Remog Xeos Świdnik® STAMET Stanisław Stachura Wrocław Paradigm Presision EC Aviotech Stalowa Wola Stalowa Wola Bielsko ' Tomaszów Kraków Rzeszów Lubelski Biała ATI ZKM Forging Świebodzin ● Dębica ● **I**wamet RECARO Aircraft Seating Thoni Alutec ≪ Krosı Tomaszów Lubelski WSK - Tomaszów Lubelski Kraków Kreisler EC Engineering Debica

Zakłady Mechaniczne Rufus

Bielsko Biała Allstrar PZL Glider Avio Aero AVIONIC Wytwórnia Konstrukcji I

Wytwórnia Konstrukcji Kompozytowych Papiorek Zakłady Lotnicze Margański & Mysłowski Aviomechanika Krosno Aero-Kros WSK "PZL - Krosno" PESZKE Aero Technologies Ekolot UTC Aerospace Sysytems Rzeszów Area
Creuzet
CONTI
Safran
P&W AeroPower
UTC Aerospace Systems

Vac Aero McBraida MTU Aero Engines Ultratech Trigger Composites Borimex Pratt & Whitney Aero Gearbox Int. MB Areospace Wietpol Aerospace Brammer Fly Tech UAV South Bay Solutions Northern Aerospace

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There are over 200 aerospace and aerospace-related companies and over 30 thousand employees in total operating in Poland.

The majority of these are small and medium-sized enterprises (SMEs), companies with foreign capital, and a small group of enterprises with minority state shareholding. Around 80% of the aerospace plants are located in southeast Poland in one of four aviation clusters.

Operating plants are specialized in the production of aircraft (agricultural, training and executive), helicopters, gliders, subassemblies (aluminium, composite, GRFP) and accessories. 90% of aviation production is exported to: the USA, France, Italy, Canada, the UK, China, Ireland and Germany.

The competitive edge of Polish aerospace companies lies in the high quality of their products (expertise in the treatment of materials, casting and mechanical engineering electronics) and competitive labour costs. The Polish production network and Polish service companies supported by R&D centres create potential for cooperation and orders for aviation parts and final products.

Aerospace is one of the most innovative sectors in the Polish economy due to companies' large expenditure on R&D, cooperation with research centres, participation in international projects, human potential and developing clusters.

The advanced level of processes used in the Polish aerospace sector is best illustrated by the participation in the development of innovative engines like PurePower® PW1000G (GTF), GEnx and LEAP.

Poland would also like to mark its presence in space. In 2012 Poland finally became the fully-fledged 20th member of the European Space Agency with an annual budget of EUR 4 billion. This membership will enable Polish companies and researchers to fully participate in a range of European space programs and missions. The next step in Polish space exploration is the establishment of the Space Cluster and the Polish Space Agency (POLSA). POLSA will fulfil governmental tasks in the area of space research and development of new technologies.

The development of the aerospace sector would not have been possible without qualified workers – ca 500 aviation and aerospace engineers graduate from Polish technical universities every year and 2,8 thousand young people study the subject at the moment. A highly developed university and vocational education system and long-standing tradition contribute to the quality of the aviation personnel. Moreover, initiatives such as AREOnet (www.areonet.pl) led to closer cooperation between industry, governments, and school and university authorities. This cooperation aimed for even more effective training of personnel, for example, through the preparation of training programs and the adapting of school profiles to fit market needs.

Selected universities and research centres related to the aeronautical sector:

- the Warsaw University of Technology,
- the Technical University of Rzeszów,

- the Institute of Aviation,
- the Silesian Science and Technology Centre of Aviation Industry,
- the Military University of Technology,
- the Wrocław University of Technology,
- the Lublin University of Technology,
- the Łódź University of Technology,
- the Silesian University of Technology,
- Poznań University of Technology.

Aviation and space clusters

- Aviation Valley
- Wielkopolski cluster
- Silesia cluster
- Lubelski cluster
- National Center of Space and Satellite Engineering Cluster

Selected foreign companies operating in the aerospace sector:

- Airbus Military,
- Avio Aero Polska,
- GE EDC Poland,
- Hamilton Sundstrand,
- Safran Transmission Systems (former Hispano Suiza),
- MTU Aero Engines Polska,
- Pratt & Whitney / WSK Rzeszów,

- Sikorsky / PZL Mielec,
- Thoni Alutec,
- UTC Aerospace Systems.

Strengths of the Polish aerospace industry:

- long-standing tradition
- high quality of products
- competitive costs of production and labour
- highly qualified workforce
- constantly developing R&D, educational and training activity
- well-developed supplier network
- three aviation clusters
- dense network of international and domestic airports.

Chapter 7.3 Biotechnology

Despite being one of the fastest growing sectors in Poland, biotechnology is still an emerging industry. In the coming years, further dynamic growth of the domestic biotechnological market is expected, largely thanks to innovative research projects carried out by Polish biotech companies and academic institutions, as well as the inflow of foreign investment into the biotech sector. Key reasons why Poland attracts investors is the availability of highly qualified professionals and competitive labour costs.

The continuous development of bio-substances and bio-fuel production technologies is particularly noteworthy. Hormones, antibodies and diagnostic tests, all generated with the use of modern genetic engineering techniques, are becoming a specialty of the Polish biotechnology industry. Bio-pharmacological products have also gained recognition, and this branch is currently the most rapidly expanding area within the biotechnology sector.

Manufacturing processes of human proteins and peptides based on E. coli and cell cultures are constantly improving. Undoubtedly, there is still a lot of untapped potential in the area of vaccines, protein drugs and reagents.

The most important reason why Poland is one of the most attractive locations for international biotechnology projects is the broad access to highly qualified researchers. Due to a rapid growth in the student base in Poland, we are dealing with a significant surplus of alumni, especially in the field of biotechnology. A biotechnology major is offered by 39 universities, which are educating more than 12.5 thousand students and generating about 3.3 thousand graduates per year.

Research facilities constitute a network of more than 100 scientific institutions employing over 4,000 scientists, who mostly work in biotechnology and molecular biology.

Biotech companies and research institutes generally locate their activities in one of 6 mature biotech clusters (Warsaw, Łódź, Tri-City, Krakow, Wroclaw and Poznań). There were 184 active companies in Poland in the field of biotechnology. Business spending on biotechnology in Poland in 2016 was PLN 761,1 million.

Rationale for the development of biotechnology in Poland:

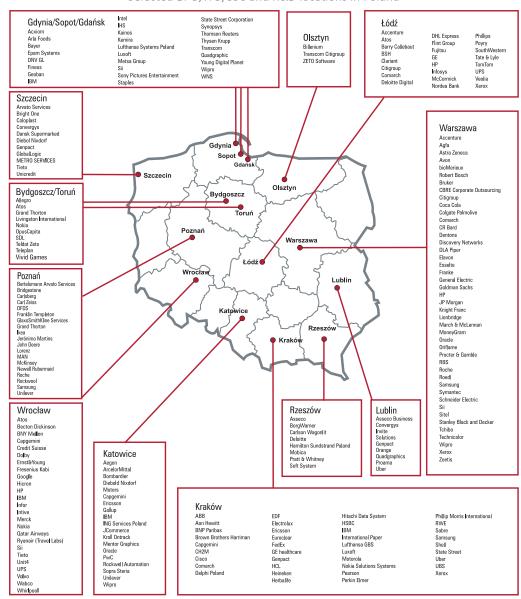
- numerous facilities with high research capabilities,
- favourable government policy supporting investments in new technologies,
- development of biotechnology-related sectors,
- competitive labour costs and rapidly increasing labour productivity,
- government grants dedicated for biotechnology projects,
- a wide variety of financing programmes (both national available through NCBiR, as well as financed from EU funds).

Chapter 7.4. BPO/SSC

Poland is one of the best places in Europe to locate BPO/SSC services. It offers public support, a stable economy, EU standards, availability of a well-qualified and cost-competitive labour force with extensive foreign languages skills and a strong work ethic. Poland's EU membership means that all the standards concerning data protection and ownership rights are protected. BPO/SSC investments are also strongly supported by central and local administration offering a number of incentives for potential investors.

In the past 10 years, the sector has evolved from handling purely transactional processes towards handling more complex services, which are often a source of innovation for their customers and their global organizations. This is reflected by the growing number of investors that constantly increase the range and sophistication of services provided.

Selected BPO/ITO/SSC and R&D locations in Poland



The main strength of Poland's business services sector is the availability of a skilled workforce at competitive prices. 1.5 million students are currently studying at Polish universities and a large part of them study business related subjects. Each year there are approximately 350 thousand graduates available for work. The BPO/SSC sector strongly cooperates with universities to attract highly skilled graduates and to help universities adjust their teaching programmes to market needs.

The BPO/SSC sector was one of the key driving forces behind the development of the real estate market. Currently there is almost 0.9 million m² of office space under construction all over Poland, with 407.000 m² alone in Warsaw expected to be delivered in 2017 and 2018. Average rents vary between 12 and 21,5 Euro/m²/month in Warsaw and between 11 and 14 Euro/m²/month in regional cities.

Therefore, it is not surprising that over recent years, Poland has become a leading destination for offshore services. As of November 2017, there were 1078 BPO/SSC centres in Poland and about 244 thousand people employed in this relatively new industry¹. The highest employment in this sector, over 55 thousand people, was in Kraków and the biggest number of BSS centres was in Warsaw - 167. The three most popular processes in SSC/BPO centres were: IT services - 30% and finance and accounting - 14%. Currently, approximately 40% of all BPO centres in the CEE region are located in Poland.

A number of the most recognizable brands are already present with their finance & accounting, research & development or IT centres in Poland. They are located in the biggest Polish cities, taking advantage of the well-developed local infrastructure, including easy access to airports and the best education and research institutions.

Most centres are located in Warsaw (the capital of Poland), Kraków, Katowice, Wrocław, Gdańsk (The Tri-City area – a metropolitan area of three cities: Gdansk, Gdynia and Sopot), Łódź and Poznań.

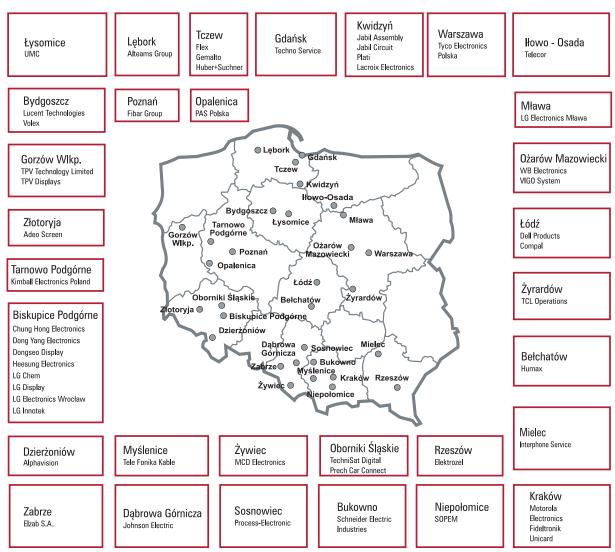
Chapter 7.5. Electronics

Poland is one of the biggest suppliers of electronic equipment (especially TVs) to EU markets. The electronics industry in Poland has been expanding in recent years and is now one of the largest in Europe. Much will however depend on the situation of the global economy as a large part of what is produced is sold abroad.

The Polish market demand for electronic equipment is expected to grow in the near future. According to Business Monitor International (BMI) experts' predictions, the value of the Polish electronics market in years 2017 - 2021 will gradually increase at the level of 1,1% CAGR (Compound Annual Growth Rate), reaching approximately USD 6,7 billion in 2021.

¹ Source: Business Services Sector in Poland, ABSL, 2017

Electronic sector in Poland (selected companies)



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The increase will be driven mainly by the growing demand for digital products and increasing public revenues. More than 40% of the Polish population is 18-44 years old, and it is precisely young people that are more likely to reach for novelties from the world of electronics.

There are almost 6000 companies (according to the Polish Classification of Activities, PKD) operating in the electronics sector in Poland. They employ over 50 thousand workers. Approximately 95% of production is generated by medium and large companies.

Poland has a major advantage over other locations for electronics manufacturers. Primarily its access to a large number of qualified computer and electronics engineers and the low level of salaries, compared with other EU member states.

A large part of electronic industry production facilities in Poland are located in Special Economic Zones offering support during the investment process and significant tax relief for investors.

The main investors in the electronics sector include:

- LG Group,
- Dell,
- Compal,
- Phillips,
- Jabil,
- TPV Displays,
- Flextronics.

The rationale for the development of the electronic industry in Poland:

- long-standing tradition in the electronic industry,
- presence of international companies, manufacturers of electronics equipment,
- a highly trained labour force, offering the highest standards of knowledge in their fields,
- well-developed base of suppliers: small and medium sized enterprises are well prepared to work with large corporations as subcontractors,
- institutional climate: the state helps manufacturers to create their own R&D centres,

- clusters: continuously developing technological parks closely cooperating with research centres,
- increased investments: new investment projects that generate demand for products and services of suppliers from the electronics industry,
- investment incentives for the electronics sector.

Investors carrying out new investments in electronic sector in Poland can count on receiving support under the "Programme of support of investments of considerable importance for Polish economy for years 2011- 2020".

Chapter 7.6. Food processing

Poland became one of the leading modern and innovative European food manufacturers.

Meat, dairy, alcohol, fruit, vegetables and sugar are the most competitive areas of the Polish food industry in international markets. Although currently the sector is strongly dominated by SMEs (Small and Medium Enterprises), the share of large enterprises in total production is constantly increasing.

Food processing in Poland is characterised by high international competitiveness and the ability to increase exports even in adverse international economic conditions. It has resulted in the strong acceleration in of international trade volumes. Poland has been a net exporter of food-related products since its accession to the EU.

Constant quality improvement is one of the main competitive factors of the Polish food industry. Its competitiveness has also been constantly improving thanks to increasing the efficiency of production organisation leading to increased labour and capital productivity.

The success of the Polish food industry is also a result of its access to a well-educated workforce. More than 3,000 students graduate every year from subjects directly related to this industry such as Food Sciences and Bioengineering of Food Production.

Since the early 90s many international companies like Danone, Heinz, Unilever, Mondelez and Nestle have entered the Polish market and set up their operations. Moreover, the constant inflow of greenfield projects indicates that Poland is an attractive and business-friendly location for investments. Examples of recent greenfield investment projects include Nestle's PetCurina factory near Wrocław and Heinz's center of excellence of white sauces in Pudliszki.

Poland is also the place where many well-known companies and brands have their roots. Some examples of Polish firms within the food processing industry are Mlekovita and Mlekpol, dairy products manufacturers, Maspex, manufacturer of juices, nectars, pasta, cereals or Hortex, manufacturer of juices. Furthermore, brands such as

Wyborowa, Sobieski (spirit), Tymbark (juice), Grycan (ice-cream), Wedel (chocolate), Sokołów and Pudliszki (sauces and ketchup), Kujawski (oil) and Winiary (spices and different kinds of instant food products) were established here.

In July 2014 the food sector was included in the list of priority sectors for the Polish government. Therefore, food processing companies planning to expand their business or establish new production facilities may apply for government cash grants. Last but not least, the companies may benefit from the Corporate Income Tax (CIT) exemption within one of the 14 Special Economic Zones in Poland.

The Polish food processing industry is concentrated in several regions, in particular Mazowieckie, Łódzkie, Wielkopolskie, Opolskie and Dolnośląskie (see the map below).



Main food processing regions

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Strengths of Polish food sector:

- centuries-old tradition,
- high quality of products,

- qualified workforce,
- R&D potential and strong education base (both vocational and higher)
- well-developed suppliers network,
- competitive costs of production.

Chapter 7.7. Household appliances

Poland is an excellent location for domestic appliances manufacturing plants, what the past investments of most of global players from the industry confirm. What is important is that those companies are still expanding their activity in Poland, by opening production facilities and introducing new products to their portfolio. Most of the production is intended for export. The leading export destinations for domestic appliances were Germany, the United Kingdom and France. However, the domestic market is also significant and growing. The growth of the Polish domestic market is strongly related to the increasing wealth of Polish consumers. As economic forecasts for Poland are still optimistic, the market's expected growth rates are based on strong macroeconomic factors.

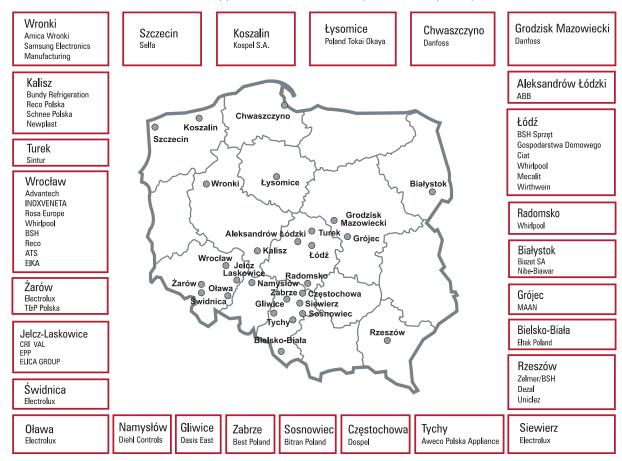
Leading multinational and Polish companies are present and competing in the Polish home appliances market. This has led to the constant improvement of the quality and technological advancement of production. The productivity of this sector has also been constantly increasing over recent years. Currently, the producers of household appliances in Poland, similarly as in other leading markets, are putting much greater focus on innovative solutions leading to energy efficiency of their products.

As in other sectors, the development of household appliance manufacturing in Poland is also strongly supported by the labour market situation in the country. There is a large number of student graduates each year and, as the competition for jobs is high, wage levels are relatively low. Moderate wage levels are accompanied by highly skilled Polish workers, resulting from the constantly increasing level of education and also from years of experience in this highly competitive and quickly developing sector.

It is not a surprise that the largest and leading world producers of household appliances have located their factories in Poland. The factories of Electrolux are located near Katowice and Wrocław. LG produces, among others, side-by-side refrigerators in Wrocław, Whirlpool has its production facilities in Wrocław and near Łódź, Samsung near Poznań, BSH near Łódź and Philips in Białystok.

The biggest producers of household appliances of Polish origin are Amica in Wronki near Poznań and Zelmer in Rzeszów, however the latter has recently been acquired by the German company Bosch-Siemens. In addition, in April 2014 BSH Bosch Siemens signed a preliminary agreement for the purchase of Wroclaw plants of Fagor Mastercook.

Household appliances sector in Poland (selected companies)



© PAIH, 2017

Main advantages of Poland in the context of investing in domestic appliances market:

- long-standing tradition in the manufacturing of home appliances,
- availability of qualified and experienced labour force,
- well-developed network of suppliers and co-operators,
- presence of key, international players in this sector together with abundant technological resources,
- excellent geographic location with easy access to the EU market as well as Eastern Europe countries,
- domestic market's large absorption rate- 12 million households,
- attractive public incentives offered to foreign investors, including governmental grants.

Chapter 7.8. IT

Why is it worth investing in this sector in Poland? On the one hand, it is worth it due to the rapidly developing market and the increase of domestic demand. On the other hand, however, the presence of such global companies as Microsoft, HP, Google, Oracle, IBM or SAP confirm the increase of Poland's significance not only as a place products and services are sold.

The reason for Poland's success as a desirable destination for IT services centre is most of all the availability of employees. Our unique and most valuable resource- people- is still available, and Polish experts provide services for foreign clients more and more often.

Certainly, a strong advantage of the domestic market is human capital. Although labour costs in Poland (depending on location) are between 20% and 50% lower than in Western Europe, the main distinguishing factor is the highest quality of services provided by Polish specialists. The skills and talent of young IT specialists can be proven by the results of international competitions, including: the Imagine Cup, Facebook Hacker Cup, Google Code Jam or the Central European Programming Contest (CEPC). The forecasts are positive since technical universities are increasingly popular among high school graduates. Academic institutions are strengthening their cooperation with businesses which results in tailor made internships, attractive curriculums in line with market expectations and the opportunity to start a career during studies.

Investors interested in expanding their business in Poland may have a dilemma when deciding on the final location of their project. Foreign companies tend to be focused on major academic centres, but a vast number of projects are carried out in other large (over 300,000 inhabitants) urban centres.

A good example is the company Sii which provides IT services. The enterprise perfectly illustrates Polish growth potential and confirms the existence of many interesting locations. The company was founded in France in 1979 and established its first foreign subsidiary in 2006 in Warsaw. Currently, the Polish branch employs more than 1,200 professionals in the capital city, Gdańsk, Kraków, Wrocław, Poznań and Łódź. The list of other global companies in the IT area with more than one branch in Poland includes: Google, Oracle, IBM, Tieto and Accenture.

Undoubtedly, the growth in this sector has been supported by readily available investment incentives. Businesses implementing new projects or expanding their activities can rely on various forms of regional aid. Support instruments include non-repayable grants, from the state budget and those co-financed with EU funds. There is exemption from income tax in Special Economic Zones and various local tax exemptions. It is also worth mentioning the offer from the National Centre for Research and Development, which is focused on supporting the most innovative and breakthrough projects, as well as CIT relief for the acquisition of new technology, allowing a deduction from taxable income of expenditure incurred on the purchase of innovative software (not older than 5 years).

In the forthcoming years, the Polish IT sector will be driven by such factors as: public sector spending, small and medium enterprises' (SMEs) reliance on modern technologies and the development of IT services outsourcing.

Financial aid based on the EU Multiannual Financial Framework 2014- 2020 is a potential source for the further development of accessibility and information infrastructure quality. One of the State Programme on Integrated Informatization's priorities is the process of public administration modernization aimed at creating broadly accessible and citizen-friendly offices. The measurable effect of implementation of EU structural funds 2007-2013 (according to the Ministry of Regional Development, dated July 2013) are 5,394 e-services and 41,197 kilometres of broadband digital network. A combination of EU financial assistance (total allocation of Cohesion Policy 2014- 2020 for Poland- 82.5 billion EUR) and public administration's determined approach should result in significant demand for hardware, software and IT services.

Small and medium enterprises also signal a growing demand for software, hardware and IT services. This is mainly due to the importance of pursuing competitive advantages and on the other hand the threat of hostile take-overs. Increasing demand for complex solutions like ERP (enterprise resource planning) is another interesting trend among SMEs.

The outsourcing of IT services, as well as the whole sector of modern business services, is one of the most dynamically developing sectors of the Polish economy. One of the sources of this estimated growth is the aim of financial-banking, telecommunications, and the energy and processing industry to optimise activity and operational costs.

Additionally, pre-existing trends will positively affect the market: the significant increase of private as well as public sector participation in cloud computing, successive growth in the number of broadband internet users, the ongoing necessity to be up-to-date with modern IT solutions and the market requirement to reduce delays (in particular in public and privatized establishments).

Chapter 7.9. R&D

The expansion of the research and development sector is one of the priorities for Poland in the upcoming years. This is reflected in many strategic documents such as the National Development Strategy Poland 2020 with innovativeness and the increase of our country's competitiveness highlighted as key factors.

The inflow of foreign capital with the aim of creating research and development centres proves that foreign investors appreciate the economic potential of Poland. Positive experiences and the great results of R&D centres are the reasons why companies have decided to expand their research activities. Among these entrepreneurs are NSN, Motorola, Samsung, Kainos, or Polish entities such as Transition Technologies or SMT Software. The last two companies chose Białystok and Lublin as the locations for their software development centres. This proves that smaller academic centres are also able to provide an outstanding labour force for such projects.

In Poland, there are numerous R&D centres which operate as subsidiaries of global corporations. These include: Oracle, Samsung, Faurecia, GlaxoSmithKline, Microsoft, Volvo, Capgemini, IBM, ABB, Lurgi, Google, Bosch and Siemens. In the IT and aviation industries, R&D laboratories co-operate with Polish universities and public R&D units: Intel with Gdańsk University of Technology, United Technologies with Rzeszów University of Technology, and Lockheed Martin and GE Aircraft Engines with Warsaw Institute of Aviation.

Recently, an increasing interest in establishing new R&D centres can be observed, both in the industrial sector (e.g. Delphi in Kraków or Rockwell Automation in Katowice) and also in the fast developing business services sector, where, according to PAIH data, more than 33,000 people are employed in approximately 182 existing R&D centres, so far.

Research and Development Units in Poland

Research, development and implementation centres have been created in Poland both as a result of foreign investments and investments by local companies and universities. The scientific potential of the research and development sector is based on 903 scientific units and 258 research institutes and about 3089 research laboratories².

Human Capital

The growing potential of the research and development sector are strongly connected to the easy access to highly qualified academic staff and students. There are 370 academic centres in Poland with ca 1.5 million students.

Among all EU countries, Poland has recorded one of the most significant increases in the number of young employees in the R&D sector (in the group between 25 and 34 years old). The number of Polish employees in this sector exceeds the EU average.

² POLON database.

Nowadays, there are 182 operational R&D centres which employ 33 thousand Polish scientists and specialists. Most of them work in the ICT, software development, automotive, chemical, aviation and food processing industries. Those centres are located mostly in big cities which are able to provide attractive living conditions for employees and have a rich academic background and developed infrastructure. Smaller academic hubs also have a wide appeal.

Research and Development in Sectors

R+D activities are undertaken more frequently in industry than in trade and services. 65% of the industry sector and 49% of the trade and services sector are engaged in R+D projects.

The majority of new research and development centres are created by companies from:

- the industrial machinery and transport sectors,
- the petrochemical, chemical, pharmaceutical, rubber, plastics, mineral / glass sectors,
- production and supply of power, gas, water vapour, hot water,
- professional scientific and technical activities,
- information and communications industry.

Research & Development Activities in Poland

The development of a competitive economy is strictly connected with developing and implementing new inventions, utility models and industrial designs, as well as trademarks. These values should be protected but this protection cannot limit the functioning of the market nor research and development activities.

Also a dynamic growth in the number of patent applications to the UPRP (Patent Office of the Republic of Poland) has been observed since 2008.

Available support mechanisms

Companies undertaking research and development work, developing know-how and most importantly, commercialising the results of research work may count on unprecedented amounts of funding. Available support mechanisms include EU grants, national funds and tax relief.

EU Funds

Entrepreneurs will have access to almost 10 times more support for innovation and research in the EU during the years 2014-2020 than in the previous six years. Over PLN 20 billion is earmarked for supporting innovation and advanced technologies in the Smart Growth Operational Programme alone.

National Funds

Support for research and development activities in Poland is offered by various institutions including the National Centre for Research and Development, the National Science Centre, the National Fund for Environmental Protection and Water Management, the Ministry of Economiic Development and the Ministry of Finance. Investors have access to numerous programs such as CuBR, Gekon, technology relief, InnoMed, InnoLot.

Tax Exemption

Various amendments are implemented in national legislation in order to stimulate enterprises to carry out R+D work. Further amendments to the law have been announced allowing for the deduction from company income tax (CIT) of expenses related to research, development and implementation activities. This will encourage entrepreneurs investing in development and innovations to take the risk.

On 1 January 2016, an Act amending certain issues in connection with supporting innovativeness, e.g. the Acts on PIT and on CIT, and introducing tax solutions beneficial for entrepreneurs came into force. The proposed amendments should remove a number of major legal obstacles encountered by Polish research institutions as well as increase the tax incentives for enterprises encouraging them to undertake greater risk.

Did you know?

- Human resources are the main factor supporting research and development (R+D) activities in Poland with a high rate of young scientists, a large share of university graduates in the 30-34 age group and a high rate of at least secondary education in the 20-24 age group
- The main R+D activities in Polish companies are: developing and implementing new products for the market, patenting inventions and developing staff initiatives
- Entrepreneurs will have access to almost 10 times more support for innovation and research in the EU perspective 2014- 2020 than in the previous years
- Entrepreneurs will be the main beneficiaries of aid with a major focus on increasing the rate of commercialisation in research works and strengthening cooperation between enterprises and research institutions

Key factors for R&D activity in Poland:

- steady growth of the Polish economy
- competitive cost of conducting research
- highly qualified staff

- intellectual potential
- strong academic centres
- the quality and productivity of the Polish workforce,
- regional development strategies/regional innovation strategies,
- cooperation between universities and business,
- scientific achievements of researchers and students,
- presence of R&D centres of companies such as: Roche, GlaxoSmithKline, ABB, and Google.

7.10. Renewable energy sector

Development of the renewable energy sector is one of the priorities for the Polish government.- according to Directive 2009/28/EC all EU Member States should gradually increase the share of energy from renewable sources in total energy consumption and the transportation sector. The specific objectives of the Polish energy policy are as following: to increase the proportion of energy from renewable sources in final energy consumption up to 15.5% in 2020 (19.3% for electricity, 17% for heating and cooling, 10.2% for transportation fuels).

At present, the owners of most of the renewable generation assets are Polish entities, although foreign investors are also demonstrating increasing interest. So far, the following foreign firms are among those which have invested in the renewable energy sector in Poland:

- RWE,
- E.ON.
- EDP Renewables,
- Dalkia,
- EDF,
- GDF Suez,
- Axzon.

Poland is gradually becoming an attractive destination for investments in the manufacturing of devices used in energy generation.

There is no doubt that the renewable energy sector in Poland has huge potential for both Polish and foreign investors.

Key drivers of renewable energy sector development in Poland:

- dynamic economic growth in recent years, growing number of business entities and domestic market of 38 million consumers,
- demand for green energy will grow due to the targets of energy Policy: increase the proportion of energy from renewable sources in final energy consumption up to 15.5% in 2020 (19.3% for electricity, 17% for heating and cooling, 10.2% for transportation fuels).
- obligatory reduction of the percentage of municipal biodegradable waste that may be landfilled to 35% by 2020, and building waste-to-energy plants,
- favourable wind conditions, a large potential for obtaining biomass and biogas
- investment incentives for renewable energy producers

Instruments of support:

The Polish government offers the following forms of support for the production of energy from renewable sources:

- investment incentives for renewable energy producers (auction system),
- electricity trading power companies are required by law to purchase energy from renewable sources,
- renewable energy producers have priority access to transmission grid,
- electricity generated from renewable sources is exempt from excise tax,
- the grid connection fee for smaller installations (< 5 MW) is reduced by 50%. Such installations are also exempt from the license fee and the annual fee paid by license holders,
- investments in clean energy may be co-financed by the National Fund for Environmental Protection and Water Management.

Chapter 8. About the Polish Investment and Trade Agency



The Polish Investment and Trade Agency (formerly Polish Information and Foreign Investment Agency), helps investors to enter the Polish market and find the best ways to utilise the possibilities available to them. We guide investors through all the essential administrative and legal procedures that involve a project; we also

support firms that are already active in Poland. We provide rapid access to the complex information relating to legal and business matters regarding the investments, help in finding the appropriate partners and suppliers, together with new locations.

In order to provide the best possible service to investors we've established a network of Regional Investor Service Centres across Poland, which have as their goal improvement of the quality of a region's investor services, also to ensure access to the latest information- such as, the latest investment offers and to regional micro-economic data. These specialist Bureau's hire professionals that have been trained by Agency and are financed by local authority funds. Another of their task is to work as links between the investors and local authorities.

Agency's mission is also to create a positive image of Poland across the world, promoting Polish goods and services.

The support programme for Polish entrepreneurs on foreign markets operated by PAIH within the "Go global" strategy involves such programmes as "Go China", "Go Africa", "Go Arctic", "Go Iran", "Go Asean" and "Go India". Therefore PAIH is organizing: fact finding missions abroad, and participation of Polish entrepreneurs in fairs, conferences, seminars and workshops both in Poland and abroad. Furthermore, the Agency is preparing publications on foreign markets. More information can be found at: www.eksportuj.gov.pl

The aim of PAIH is also to support the global expansion of Polish companies, as one of the key elements of the new governmental supporting system. PAIH supports Polish companies in developing their export and investment activities abroad. More information can be found at: www.trade.gov.pl

Foreign Trade Offices of the Polish Trade Agency (PAIH) are a global, constantly developed network of the Agency's divisions responsible for providing support for Polish exporters and investors who look for new business opportunities, overseas. Offices have also been designed to attract foreign investors and assist them in their way to Poland.

PAIH Foreign Trade Offices are focused on distant markets of rapid growth with the biggest business potential for Polish companies. Ultimately, there will be 70 locations of PAIH Foreign Trade Offices in the world.

Foreign Trade Offices will help you to:

- reduce business risk in foreign expansion by managing business information
- select reliable business partners
- arrange B2B talks
- arrange trade missions and the presence of a client at trade shows
- offer investment site advisory
- get the access to full range of business support tools offered by the Polish Development Found

The services provided by PAIH, in line with its mission, are free of charge.

Contact us to learn more about how your company can profit from the unique business potential of Poland.

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