

# **WHY POLAND?**

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## Poland – en vogue!

Poland has been one of the relative winners during the global financial crisis and may now, in the post crisis years, offer a product which has lately been in short supply - economic stability. Numerous companies which seek steady conditions for development have started to take a serious interest in the Polish market.

The way Poland is perceived on the international scene has changed considerably in recent years; Poland has topped numerous rankings. Firstly, because the country enjoys an uncommon and highly attractive economic stability and secondly because of one of the unique strength of Polish human capital. The challenges faced during recent economic upheaval have helped Poles demonstrate their practicality and optimism. According to Deloitte, Poland is the leader among Central European countries in terms of levels of 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 Information and Foreign Investment Agency (PAlilZ). According to PAlilZ's report on the investment climate in Poland in 2015, the most appreciated attribute was economic stability, the size of the market and the availability of suppliers. The next most highly assessed attribute of the business climate was political stability.

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 the, for example, electronics, BPO and R&D, domestic appliances, machinery and IT 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 BPO, 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 en vogue, just like Chanel  $N^{\circ}$  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 (with a lengthy border along the Oder River), the Czech Republic and Slovakia to the south (mountain borders), and Ukraine, Belarus and a bit of Lithuania to the east (with beautiful landscapes). 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 of the golden beaches of the Baltic Sea. The capital of Poland is Warsaw (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 38.5 million Polish citizens. The majority live in cities. By European standards, it is a relatively young society – around 45% of Poland's citizens are under the age of 35. Approximately half of the population are professionally active (with the greatest number, 8.2 million, in the service sector, followed by industry and construction, 3.7 million, and agriculture and forestry with 2,3 million).

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 2015, Poland is ranked 7th in Europe in terms of number of FDI projects (with a 23% increase compared to 2013) and the first one in Central and Eastern Europe. The report highlighted the fact that in 2014, foreign direct investments (FDI) have created 12% more new jobs than the year before. The sheer number of new jobs (15,485) ranks Poland third on the continent after the United Kingdom (31,198) and Russia (18,248).

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.

No less important are the issues of quality of life and everyday conditions. Poland is in the group of countries with the highest degree of social development<sup>1</sup> and is the leader among Central European countries in terms of the level of optimism.<sup>2</sup> Poles are also above average in terms of life satisfaction among the nations in Europe.<sup>3</sup>



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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.

<sup>&</sup>lt;sup>1</sup> United Nations Development Program, Human Development Report, 2014.

<sup>&</sup>lt;sup>2</sup> Deloitte, Business Sentiment Index, 2011.

<sup>&</sup>lt;sup>3</sup> OECD, How's life in Poland?, 2014.

## Chapter 2. A stable and growing economy

According to the European Commission data for 2014 Poland was one of the fastest growing countries in the EU. Only Ireland, Malta and Hungary recorded higher rates of GDP growth. While on average the size of GDP in the EU increased by 1.4% in 2014, the Polish economy grew by 3.4%. Poland is set to outperform the European Union's largest post-communist members this year and in 2016, according to an autumn forecast by the European Commission. GDP growth in Poland was expected to accelerate to 3.5% in 2015 and 3.5% in 2016. Both of these figures are far above the growth forecasts for the EU as a whole, which in 2015 was expected to grow by only 1.9% and in 2016 by 2.0%.

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 2014 the consolidated public debt of Poland amounted to 50.1% of GDP while for EU28 countries it reached 88.6%. It is a positive change when compared to 55.7% in 2013. It means that Poland has successfully passed the tests that all European economies have been recently subject to.

Obviously, passing this test was no mean feat. After a long and painful process of economic transformation, which started in the early 1990s, Poland – similar to several other CEE countries – successfully completed the construction of an efficiently operating market economy and joined the EU. The market became liberalised and open to global competition, state-owned companies were privatized while economic policy acquired features of stability and prudence. Labour productivity and international competitiveness radically improved, trade openness increased and foreign investments started to flow in from across the globe. From the moment of joining the EU in 2004, all these positive trends have been strengthened further.

There are several factors explaining the robustness of the Polish economy to the economic turmoil of 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 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 2013 the relation of exports to GDP in Poland was only 46.1%, whereas in neighbouring countries such as the Czech Republic, Hungary and Slovakia it was much higher – 77.2%, 88.8% and 93% 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 8.0% in 2013, 5.7% in 2014 with a forecast of 6.3% growth in 2015.

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 over 70% 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 4.19, 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. As of August 2014, Poland was able to spend over EUR 54 billion from EU structural funds programs, more than 10% of the Polish annual GDP, in the 2007-2013 framework program, where most of the money was spent on infrastructural, technological or human capital investments. Poland will also obtain EUR 82.5 billion in the 2014-2020 programme.

Last, but certainly not least. Shortly before joining the EU in 2004, Poland went through a 4-year period of painful and deep restructuring of banks and enterprises, caused by a combination of an extremely tight macroeconomic policy, very strong currency, and growing external competition. Between 2000-2003 unemployment boomed from 10% to over 20%, productivity increased, firms underwent the process of drastic cost reductions, and banks made a huge effort to amend the quality of their asset portfolio.

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 430 academic centres with over 1.4 million students. University teaching staff account for round 100,000 specialists, half of this number hold a PhD. Every tenth European student comes from Poland. In addition, Poland has the highest percentage of people with secondary and tertiary educational attainment (68%) 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.

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.

Also 2013 and 2014 students of the Białystok University of Technology constructed the Mars rovers which won the prestigious international competition University Rover Challenge (URC) in the U.S.A.

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 Internation-

al Collegiate Programming Contest. Most recently, the Polish team under the aegis of the Warsaw School of Economics, won the Google Online Marketing Challenge 2014, beating over 2500 teams from all over the world.

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.

Poland is also an active partner in the Framework Programmes for Research and Development of the EU. Polish research centres have submitted 5 of the 20 winning projects included on the Research Potential competition main ranking list in the 7th Framework Programme. Polish projects received total funding in excess of 18 million euros, nearly one-quarter of the total budget of the competition.<sup>4</sup>

One of the milestones of the 7th Framework Programme is the Technology Platforms. Currently 34 Technology Platforms operate in Europe and 28 in Poland. Technology Platforms have been created in order to establish development strategies for essential European economy sectors and future technologies. One of the major aims is to settle an effective public and private partnership for the implementation of pre-prepared strategies.<sup>5</sup>

Needless to say, Polish students have excellent knowledge of foreign languages. Over half of them speak fluent English and the vast majority of the rest have a basic understanding of the language. The second most commonly studied language is German, followed by Russian, French and Spanish. Furthermore, according to the 2008-2011 EUROSTUDENT report, more than 70 percent of Polish students are self-dependent. The report confirms that Polish students are among the busiest in Europe.



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

<sup>&</sup>lt;sup>4</sup> Source: www.naukawpolsce.pap.pl

<sup>&</sup>lt;sup>5</sup> Source: http://en.kpk.gov.pl

## Chapter 4. Strategic location

Poland's convenient location at the junction of the East-West and North-South of Europe makes it perfect investment destination for enterprises targeting any area of Europe. From Warsaw it takes only several 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. From 2007 to 2013 the EU has spent over EUR 8 billion on TEN-T projects. 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, including domestic take-offs and take-offs abroad (of air carriers registered in Poland), grew from 31,500 in 1989 to 81,154.35 in 2014. 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 the first quarter of 2015, there were 9.02 million m2 of warehouse and production space for rent. The biggest amount of space was available in Warsaw and its surroundings (more than 2 000 000 m2), the Upper Silesia region (around 1 500 000 m2), Poznań (around 1 500 000 m2), Central Poland (around 1 250 000 m2) and Wrocław (around 1 250 000 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.



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## Chapter 5. Significant European Market

Poland is attractive for investors for many reasons, but top of the list is its 38.5 million strong domestic consumer market. Our country is the 25th 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 survey on the investment climate in Poland conducted by PAlilZ and the consulting firm Grant Thornton and global bank HSBC, the size of the Polish market, economic and political stability are the biggest advantages of the country's investment attractiveness. This factor was evaluated as good or very good by foreign entrepreneurs. Also, the availability of production and human recourses 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, its 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 2011-2020, adopted by the Council of Ministers on July 5, 2011, and amended on July 22, 2014.

### Form of support

Support is provided in the form of a grant on the basis of an agreement concluded between the Minister of the 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 investment (m PLN)	Amount of aid (% of eligible costs)	
Automotive, electronics and household appliances, aviation, biotechnology, food processing *		250 40		From PLN 3 200 to	
modern services,		1.5***		PLN 15 600	
R&D	35	1***		(~ EUR 800 – EUR 3	
significant investment in other sectors	200		750	900)**	
Significant investment in other sectors	500		500		

<sup>\*</sup>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,
  - attractiveness of the products on the international markets.

- 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		and	Eligible costs of the new investment (m PLN)	Amount of aid (% of eligible costs)	
Automotive, electronics and household appliances, aviation, biotechnology, food processing *	50		160	1.5 -7.5**	
aignificant investment in other costers	200			1,5 -7.5	
significant investment in other sectors	500				
R&D	35		10***	up to 10	

<sup>\*</sup>Aid is not granted if the unemployment rate in the location (powiat) is below 75% of the national average, excluding Eastern Poland

<sup>\*\*</sup>extra 20% for investments in Eastern Poland

<sup>\*\*\*</sup>excluding office space rental costs

<sup>\*\*</sup>extra 5 p.p. for investments in Eastern Poland or 4 p.p. for significant investment outside of Eastern Poland

<sup>\*\*\*</sup>excluding office space rental costs

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

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

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 the Development. The Polish Information and Foreign Investment Agency (Polska Agencja Informacji i Inwestycji Zagranicznych S.A. - PAlilZ) 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. 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 the Development through the entities managing a particular SEZ.

### The maximum permitted level of regional public aid

From July 1st 2014 a new map of regional aid is 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;
- 2. **35**% in areas belonging to the provinces (voivodships) of: Kujawsko-Pomorskie, Lubuskie, Łódzkie, Małopolskie, Opolskie, Pomorskie, Świętokrzyskie, Zachodniopomorskie, partly Mazowieckie,
- 3. 25% in areas belonging to the provinces (voivodships) of: Dolnośląskie, Śląskie, Wielkopolskie,
- 4. 20% in parts of Mazowieckie,
- 5. 15% in Warsaw until 31.12.2017 r.,
- 6. 10% in Warsaw starting from 1.01.2018 r.

#### 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.

## 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, BPO/SSC, electronics, energy, food, household appliances, IT and R&D sectors. Poland has at its disposal a highly qualified workforce. Our workers are well regarded by their employers for their expertise, knowledge and industriousness. In many places there many different firms in a specific sector already operate, as a result of which there is no issue finding sub-contractors. This all means that 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.



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## Chapter 7.1 Automotive

The Polish Automotive sector ranks second in terms of manufacturing output, 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. They export vehicles, parts and accessories, which totalled EUR 16.7 billion in 2014. Almost 80% of Polish automotive exports are directed to EU markets. According to information from the Central Statistical Office it constituted 9.7% of Polish manufacturing output sold in 2014 and provides jobs to around 160,000 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 1.4 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).

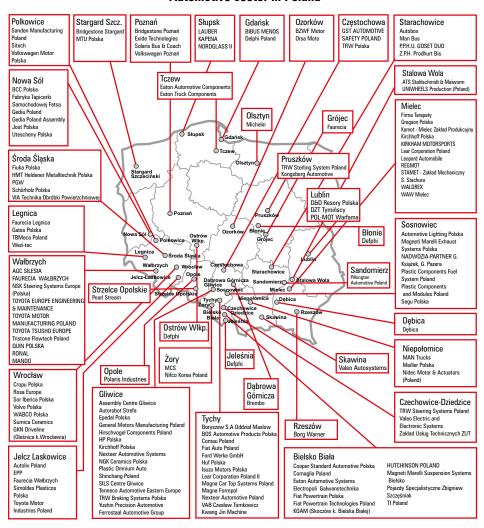
Approximately 550 companies in Poland have an ISO/TS 16949 certificate confirming the quality management system required by automotive OEMs. The fact that there are several R&D development centres operating in Poland is a testimonial of the high technical potential of Polish staff. The largest R&D centre 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 been constantly 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 further highlight the potential of the Polish market.

#### **Automotive sector in Poland**



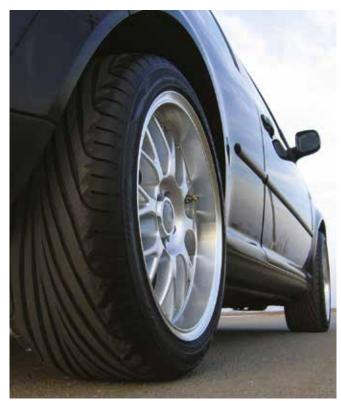
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### Poland's advantages:

- Fiat, Volkswagen and General Motors will continue to treat Poland as the major hub for their automotive production,
- · Poland is also one of the biggest EU producers of trucks, busses 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.



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## Chapter 7.2 Aerospace

Poland has 100 years of aerospace history and a tradition of aviation 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.

There are over 200 aerospace and aerospace-related companies with annual sales of EUR 800 million, and over 25 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 south-east 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.

Polish participation in such projects should increase due to the subsidy of the National Centre for Research and Development, which in the years 2013-17 will invest EUR 75 million in research, development work and knowledge transfer to the aerospace industry.

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 ex-

ploration 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.

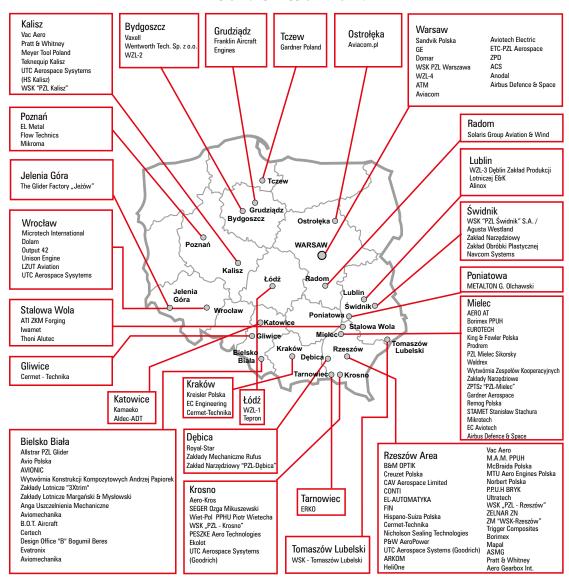
The development of the aerospace sector would not have been possible without qualified workers - over 10 thousand engineers (600 graduates in aviation studies) graduate from Polish technical universities every year. A highly developed university and vocational education system and long-standing tradition 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.

It is worth emphasizing that Poland is the 5th best investment destination for aerospace manufacturing projects in Europe (8th in the world) according to a PwC survey.

#### **Aeronautical sector in Poland**



© PAlilZ, 2015 (selected investments)

### Selected foreign companies operating in the aerospace sector:

- Airbus Military,
- Avio Aero Polska.
- GE EDC Poland,
- Hamilton Sundstrand,
- · Hispano Suiza,

- MTU Aero Engines Polska,
- Pratt & Whitney / WSK Rzeszów,
- · Sikorsky / PZL Mielec,
- · Thoni Alutec,
- UTC Aerospace Systems.

The presence of foreign companies in Poland may significantly increase due to 120 billion PLN allocated to the modernisation of the Polish army.

### Strengths of 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 suppliers network,
- three aviation clusters.
- · dense network of international and domestics airports.





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## 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 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-fuels 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 broad access to highly qualified researchers. Due to rapid growth in the student base in Poland, we are dealing with a significant surplus of alumni, especially in the field of biotechnology. Despite this, university admission is highly competitive and over the last 5 years there were approximately 6 candidates for every place. A biotechnology major is offered by 38 universities (including 30 at PhD level), which are educating more than 13 thousand students and generating about 6 thousand graduates per year.

Research facilities constitute a network of more than 110 scientific institutions employing over 3,000 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, Trójmiasto, Kraków, Wrocław and Poznań). There were 122 active companies in Poland in the field of biotechnology. The number grew by 32 in comparison to the previous year, with the biggest gain in R&D companies (by 25). The overall number of entities in this sector is 191.

Business spending on biotechnology in Poland in 2013 was PLN 483 million, and when including R&D, this area has grown by 43.7%.

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).



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## Chapter 7.4. BPO/SSC

Poland is one of the best places to locate BPO/SSC services in Europe. It offers public support, a stable economy, EU standards, availability of well qualified and cost-competitive labour force with extensive foreign language 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. According to ABSL data, 68% of surveyed investors have significantly increased the degree of sophistication of the services they provide in the past 3 years.

The main strength of Poland's business services sector is the availability of a skilled workforce at competitive prices. Almost 1.4 million students are currently studying at Polish universities and a large part of them study business related subjects. Each year there are approximately 400 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 over 1.2 million m2 of office space under construction all over Poland, with 700.000 m2 alone in Warsaw expected to be delivered in 2015 and 2016. Average rents vary between 13 and 24 Euro/m2/month for Warsaw and between 11 and 15 Euros/m2/month for regional cities.

Therefore, it is not surprising that over recent years, Poland has become a leading destination for offshore services. As of December 2014, there were around 659 BPO/SSC centres in Poland and about 150 thousand people employed in this relatively new industry. Average employment in one centre was 228. The highest employment in this sector, 30 000 people, was in Kraków and the biggest number of BSS centres was in Warsaw – 133. The three most popular processes in SSC/BPO centres were: finance and accounting – 46%, customer service – 44%, IT support – 22%. Currently approximately 40% of all BPO centres in the CEE region are located in Poland.

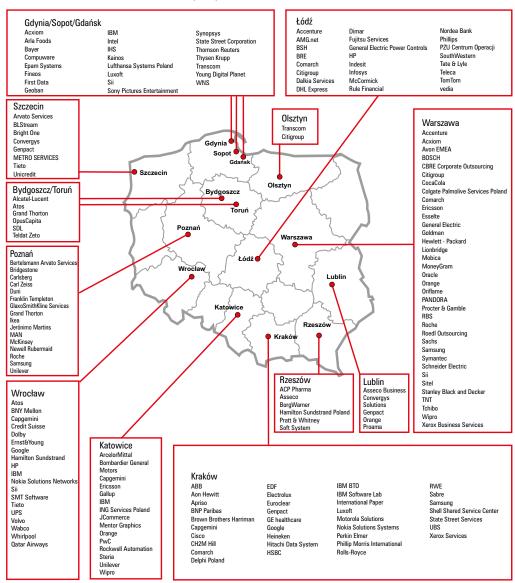
A number of the most recognizable brands are already present with their finance & accounting, research & development or IT centres in Poland. They are located in the biggest Polish cities, taking advantage of well-developed local infrastructure, including easy access to airports and the best education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

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



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



Source: PAlilZ, 2015 (selected investments)

## 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. According to available estimates, total sales of the electronics industry in 2012 amounted to EUR 8.5 billion and should increase in years to come, reaching potentially EUR 12 billion by 2016. The total worth of production of electronics and household appliances is estimated to reach EUR 13.8 billion in 2014<sup>6</sup>. 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 also expected to grow in the near future. According to BMI experts it is estimated to be approximately EUR 9.3 billion (as of 2013) and it is expected to increase to above EUR 10 billion in 2019.

Consumer Electronics Overview (Poland 2013-2019)								
	2013	2014E	2015F	2016F	2017F	2018F	2019F	
E/F = BMI ESTIMATE/FORECAST. SOURCE: BMI								
Consumer electronics devices total demand, USDmn	9,306.11	9,557.79	8,717.13	8,857.49	9,333.84	9,819.59	10,161.10	
Computers, USDmn	3,743.41	3,856.89	3,292.03	3,281.79	3,668.74	4,025.79	4,340.10	
Video, Audio & Gaming, USDmn	2,487.40	2,424.00	2,087.00	2,180.00	2,219.00	2,282.00	2,259.00	
Communications, USDmn	3,075.30	3,276.90	3,338.10	3,395.70	3,446.10	3,511.80	3,562.00	

Source: BMI

Poland is currently responsible for more than 1/3 (over 20 million units) of the total production of television sets in the EU, with the official value of production close to EUR 4 billion in 2013 according to EUROSTAT data.

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.

<sup>&</sup>lt;sup>6</sup> Infomarket.

Currently, approximately 300 enterprises conduct business in the Polish electronics sector and the largest players are foreign companies. The main investors in the industry include:

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

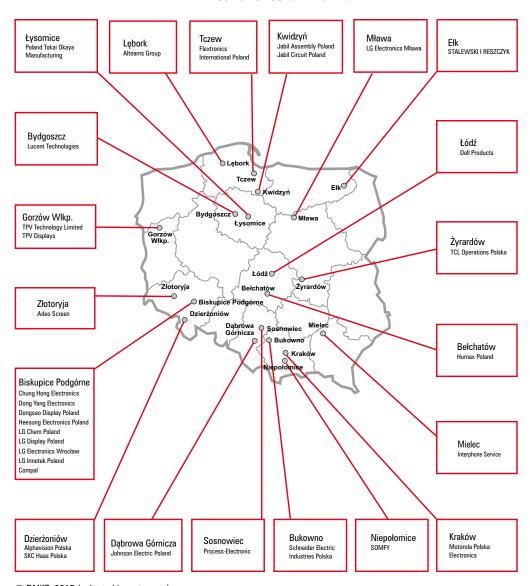
### The rationale for the development of the electronic industry in Poland:

- · 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.



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## **Electronic sector in Poland**



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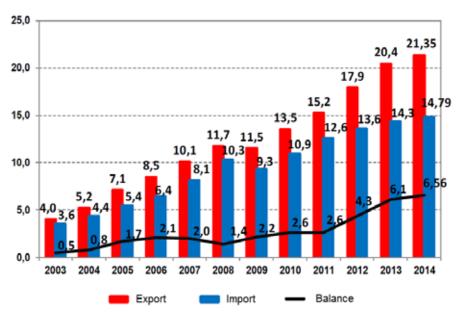
# Chapter 7.6. Food processing

Poland is the 7th largest food producer in the EU with total sales of around EUR 37 billion and the food industry is one of the biggest Polish industrial sectors. According to the 2014 data from the Central Statistical Office (GUS) its share in total manufacturing production was 20.8% and its share in employment was around 18.5%. It is a mature and well established sector facing stable demand conditions. It is one of the most attractive Polish sectors from the point of view of foreign investors.

Meat, dairy, 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. This positive balance grew from 0.5 billion EUR in 2003 to 6.56 billion EUR in 2014 (with total exports of 21.35 billion EUR and total imports of 14.79 billion EUR). 79% of Poland's exports are destined for EU markets.

#### **Exports/imports of food-related products (billion EUR)**



Source: Central Statistical Office, Statistical Yearbook of Agriculture 2014

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 overall productivity of the industry has grown by 35% since 2008. Gross profitability was 3.8%, while net profitability was 3.2% in 2013.

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.

According to the last available data from the Central Bank, the food and drink industry is one of the dominant sectors of foreign investments in Poland. The current amount of investment in this sector is close to USD 14 billion and it is 19% of the total manufacturing FDI in Poland.

Kernel Holding, Nestle, Cargill, Ferrero, Coca-Cola, Danone, Kraft-Foods, Mars, Kofola and Pfeifer&Langen were among the biggest companies in Polish food industry in 2013.

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



Source: PAliIZ compilation, 2015

# Chapter 7.7. Household appliances

Domestic appliance manufacturing is a sector with a long historical tradition in Poland. The manufacturing of modern equipment started in the early 70s. Currently, according to Eurostat, the value of this sector's production has reached EUR 4.4 billion and this is comparable to the biggest producers in Europe.

The sector is strongly export oriented. The value of household appliances exports from Poland in 2014 increased by around 10% and reached EUR 4 billion. Washing machines are the main export product (more than 25% of total exports) and they are followed by other large appliances such as: cooking appliances (17%), dishwashers (16%), refrigerators (15%) and dryers (10%). The leading export destinations for domestic appliances in 2014 were Germany (21%), the United Kingdom (13%), France (12%), Italy (8%) and Russia (6%).

However the domestic market is also significant and growing. Sales of household appliances in Poland in 2014 increased by around 6% and were estimated to be EUR 1.9 billion which constitutes around 3% of the total European market. 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, taking into account the current slowdown of the world economy, the market's expected growth rates are based on strong macroeconomic fundaments. According to most recent estimates the total domestic sales of home appliances increased by around 12% in the first quarter of 2015 and this trend is expected to continue.

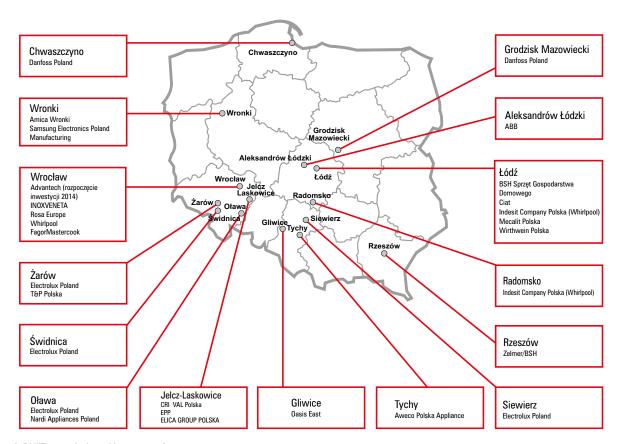
Leading multinationals and Polish companies are present and competing in the Polish home appliances market. This has led to the constant improvement of the quality and technological advancement of production. The productivity of this sector has also been constantly increasing over recent years. Currently 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. Currently there are more than 20,000 well educated, experienced and dedicated employees working in this industry.

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 been recently 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.

## The map of household appliances sector in Poland



© PAlilZ, 2015 (selected investments)

## Chapter 7.8. IT

According to PMR estimates, the revenue of the information technology sector (consisting of three components - hardware, software and IT services) in Poland for the year 2015 amounted to 30.7 billion PLN. The vast majority of this amount comes from sales of computer equipment. However, it is IT services (through booming outsourcing) and software distribution that shows pronounced growth. IT services' share of the industry is expected to grow from what is currently 39% to 45% in 2019, whereas the share of computer hardware sales is expected to drop from 43% to 36% respectively.

Taking the Computerworld TOP200 ranking into account, the cumulative revenue of the largest IT companies in Poland for the last year was 57 billion PLN. This difference is due to the inclusion of companies dealing in electronics, subcontractors and shared service centres which operate in Poland. On average, 8 out of 10 companies achieved approximately 27% of their revenues from exports. The most popular distribution locations are Germany, the USA, the Czech Republic and France.

Despite the global economic slowdown, the Polish IT market, after a brief dip in 2009, is expected to grow twice as fast as in Western Europe according to Computerworld. When looking at various sources, it can be estimated that Poland will witness a steady yearly growth of around 6% over the next few years.

In 2015 the Polish software and IT services market remained the second (after the Russian) IT market in Central and Eastern Europe. According to Euromoney, the IT services sector is expected to grow at 8.2 % p.a. between 2015 and 2019 while the software sector is expected to grow at 7.4% p.a.. The computer hardware sector is expected to grow at a much lower rate than the overall IT market, 3.2% p.a. between 2015 and 2019 and therefore its share is expected to drop significantly.

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. In 2014 more than 750,000 people studied IT programs. The average number of candidates per place at universities of technology equals 4, whereas it equals 3.5 at standard universities and universities of economics. 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 a start 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, Gdansk, Krakow, Wroclaw, Poznan 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, 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).

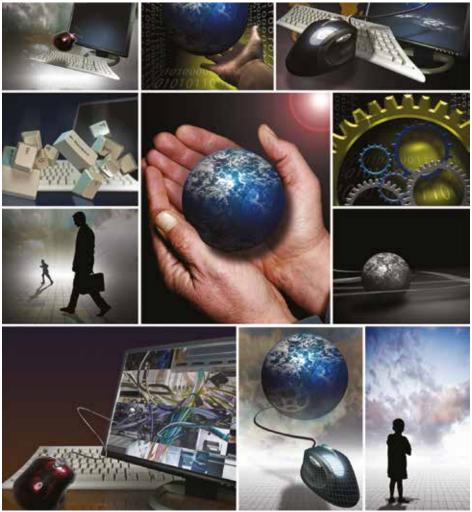
In the forthcoming years the Polish IT sector will be driven by such factors as: public sector spending, small and medium enterprises' (SMEs) reliance on modern technologies and the development of IT services outsourcing.

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. Poland, one of the European leaders in terms of the implementation of structural funds, has already absorbed nearly 90% of the allocation for 2007-2013. The measurable effect of implementation (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 takeovers. 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. This is mainly thanks to companies with foreign capital, current employment is about 45,000 with a growth perspective within the next two years of up to 70 000 employees (according to TechNavio). 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).



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## 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 two last 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 Gdansk 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 PAlilZ 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 are 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 936 scientific units (according to the parametric evaluation performed in 2014)<sup>7</sup>. With regards to research infrastructure, the direction of changes is indicated by the Polish Roadmap of Research Infrastructure prepared by the Ministry of Science and Higher Education. In 2014, 53 projects were listed there which is 20 more than in 2011. The map is the basis of investment projects with regards to strategic research infrastructure and it aims to increase the innovativeness of the Polish economy through scientific research with the active participation of enterprises. In 2014, category A+ was assigned to 45 scientific institutions in Poland, an increase of 8 units from the previous year.

<sup>&</sup>lt;sup>7</sup> COMMUNICATION OF THE MINSITER OF SCIENCE AND HIGHER EDUCTATION of 4 July 2014 on scientific categories assigned to scientific institutions.

#### **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 434 universities in Poland, with 400 thousand graduates leaving them each year. In addition, over 1.4 million students currently studying at Universities are studying STEM (science, technology, engineering, maths) subjects. Many of our students do extremely well in prestigious contests.

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.

In 2014, the number of personnel in research and development amounted to 153.5 thousand people, including 60.3 thousand women which is respectively 5.4% and 4.0% more than last year. The employment in R+D measured in full time employment equivalents in 2014 reached 98.6 thousand FTE and increased by 5.1% against the previous year.<sup>8</sup>

	2010	2011	2012	2013	2014
Personnel in R+D per 1000 employed	8.3	8.6	8.9	9.3	9.6
Research and development staff per 1000 employed	6.3	6.2	6.6	7.0	7.2

Source: Research and Development Activities in Poland in 2014, GUS, 2015.

In 2014, the share of researchers (research and development employees) in the total number of employees engaged in the research and development amounted to 75.2%. The number of research and development staff in 2014 increased against the previous year by 5.3%, with a 14.5% growth in the enterprise sector. This sector observed also an increase in the general number of R+D staff numbers by 13.7%. The number of technicians and equal level employees working in R+D increased by 5.8% against 2013 $^9$ .

Nowadays, there are 77 operational R&D centres which employ several 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.

<sup>&</sup>lt;sup>8</sup> The R+D centres in the category A+ the Ministry of Science and Higher Education are the centres offering the highest standard in terms of scientific research work and research and development activities with the highest potential and prestige with regards to the levels of performed research and development works.

<sup>&</sup>lt;sup>9</sup> Research and Development Activities in Poland in 2014, GUS, 2015

### **Research and Development in Sectors**

In 2013, the highest internal expenditures on R+D were made in engineering and technical sciences – PLN 7.6 billion, natural science – PLN 3.1 billion and medical and health science – PLN 1.5 billion, the share of expenditures assigned to these scientific and technical disciplines in internal expenditures on R+D in total amounted to 52.9%, 21.3% and 10.5%, respectively.

The largest amount of money was spent on research and development by the IT enterprises (30% of all expenditures in 2014), followed by producers of vehicles and machines (26% of expenditures).

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 is 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.

A dynamic growth in the number of patent applications to the UPRP (Patent Office of the Republic of Poland) has been observed since 2008. According to data from the World Intellectual Property Organisation (WIPO), Poland is currently in 17th place among the world countries with regards to the number of national patent applications, and in 15th place regarding the total number of granted patents.

Since 2008, the systematic growth in the number of patent applications to the Patent Office of the Republic of Poland by domestic entities is also visible (an increase from 2 392 in 2007 to 3 941 in 2014).

Also, the number of patents granted by the UPRP to Polish entities has increased – in 2010 1385 patents were granted and 449 protection rights to utility models, while in 2014 this value amounted respectively to 2490 and 586.

#### **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 perspective 2014-2020 than in the previous perspective. Over PLN 20 billion is earmarked for supporting innovativeness 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 Economy, 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 in 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 perspective
- 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
- In 2014 Polish entities made up 45% of all patent applications to the European Patent Office (EPO) originating from

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• In 2014, 47% of all outlays on R+D activities in Poland made by the public and private sector were made by entrepreneurs

## **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,
- availability of investment incentives for R&D projects within the "Programme of support of investments of
  considerable importance for the Polish economy for years 2011 2020" supported by the Polish Information and
  Foreign Investment Agency and various programs provided by The National Centre for Research and Development,
- the quality and productivity of 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.



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# 7.10. Renewable energy sector

The attractiveness of the Polish renewable energy market for foreign investors is due to two main factors. First of all Poland needs major investment in energy generation and transmission. This results from growing demand and serious underinvestment in the past. Secondly the share of electricity generated from bituminous coal and lignite in Poland is approximately 88% (2013 data) of the total volume of production, which in light of EU ecology policies means that serious action must be taken to increase the share of renewable sources in total energy production.

According to the International Energy Agency Poland will have to invest over EUR 195 billion before 2030 in its energy sector (EUR 134 billion – in new power and CHP plants, EUR 61 billion – in distribution and the transmission grid).

According to the most recently available EUROSTAT data the share of renewable sources in total energy consumption has been constantly increasing over the recent years reaching 11.3% in 2013, which means there was a growth of 3.67% from 2012. This process has to be continued as Poland is subject to EU policies on climate change mitigation. In particular, Poland must comply with the climate and energy package, referred to as "the 20-20-20 targets". The Government is committed to low-emissions growth. According to Poland's energy policy the share of energy generated from renewable resources should increase to at least 15% by 2020, and according to independent business forecasts of BMI experts this is a realistic goal as in 2020 the share of renewable energy in total production should already have reached at least 16%.

At present, most of the renewable energy generation investments are in the area of wind farms. According to data from the Energy Regulatory Office in 2013, alone, the total capacity of wind farms and other renewable energy power plants increased by over 18% and if hydro power plants are excluded the growth rate was above 40%. Investments also continued in 2014 – according to URE data the total power installed of all renewable sources at the end of the 3rd quarter of 2014 was around 5.8 GW. It is worth mentioning that, according to the EurObserv'ER, Poland is ranked 5th in the EU in terms of production of primary energy from solid biomass. Poland is also a leader among the new EU member states in terms of the total capacity of newly installed wind farms.

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.

Last but not least Poland is gradually becoming an attractive destination for investments in the manufacturing of devices used in energy generation. There are estimated to be more than 200 production companies working for the renewable energy sector (Institute for Renewable Energy data).

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



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# Chapter 8. About the Polish Information and Foreign Investment Agency



The Polish Information and Foreign Investment Agency (PAlilZ) is a governmental institution and has been servicing investors since 1992. Its mission is to create a positive image of Poland in the world and increase the inflow of foreign direct investments by encouraging international companies to invest in Poland. PAlilZ is a useful partner for foreign entrepreneurs entering the Polish market. The Agency guides investors through all the essential administrative and legal procedures that are involved in a project. It also provides instant access to complex information related to legal and business matters involved in making investments. Moreover, it helps investors to find appropriate partners and suppliers as well as new locations.

PAlilZ provides free of charge professional advisory services for investors, including:

- investment site selection in Poland,
- · tailor-made investor visits to Poland,
- information on legal and economic environment,
- · information on available investment incentives,
- facilitating contacts with central and local authorities,
- · identification of suppliers and contractors,
- care of existing investors (supporting reinvestments in Poland).

On the website www.paiz.gov.pl investors can find all the necessary information concerning key facts and information about Poland, the Polish economy, legal regulations in Poland and detailed information which will be useful for any company wanting to set up a business in Poland.

PAlilZ also maintains the OECD National Contact Point. All of the Agency's activities are supported by Regional Investor Assistance Centres. Thanks to the training and ongoing support of the Agency, the Centres provide complex professional services for investors at voivodship level.

Since 2011 China — Poland Economic Cooperation Centre has been operated by PAlilZ as a "one-stop shop" providing comprehensive information on investment opportunities in Poland and offering support for Chinese companies during the investment process. The Centre is responsible for: the promotion of Poland as a location for FDI, identifying sources of foreign direct investment, supporting missions and delegations from China, preparing analysis & information, maintaining regular contact with Chinese companies operating in Poland and the Go China Project. More information can be find at: www.gochina.gov.pl

Also since 2013 PAlilZ has been running the "Go Africa" programme. Its aim is to encourage Polish entrepreneurs to enter African markets and promote Poland in Africa. Therefore PAlilZ has organized: fact finding missions to African countries, and participation of Polish entrepreneurs in fairs, conferences, seminars and workshops both in Poland and in Africa. Furthermore the Agency has prepared publications on African markets.

The services provided by PAlilZ, 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.

#### Contact details:

Polish Information and Foreign Investment Agency Foreign Investment Department ul. Bagatela 12, 00-585 Warsaw, Poland tel: (+48) 22 334 98 75, fax: (+48) 22 334 99 99

tei: (+48) 22 334 98 75, tax: (+48) 22 334 99 9

E-mail: invest@paiz.gov.pl



Polish Information and Foreign Investment Agency 00-585 Warsaw, ul. Bagatela 12 Tel. (48 22) 334 98 75, Fax (48 22) 334 99 99 www.paiz.gov.pl

