POLAND'S PACKAGING INDUSTRY

Invest in Poland
Polish Information and Foreign Investment Agency
www.paiz.gov.pl

The packaging market in Poland

- It can be estimated on the basis of the foreign trade balance and the value of sold production that the Polish packaging market was worth about USD 6.0 billion (EUR 4.8 billion) in 2007. In comparison with the end of 2006 the market's value rose by 11.2% in USD, by 10.8% in PLN, and by 11.7% in EUR. These differences in the packaging market's growth rates can be attributed to the strengthening of the zloty in relation to the dollar which occurred in 2002-2007; estimates are based on the average annual exchange rates of the National Bank of Poland (NBP).
- The continuing high rate of growth of the packaging market is largely attributable to the general growth in consumption and improvement in the profile of consumption, as well as improvement in the quality of various types of packaging. The per capita consumption of packaging in Poland does not exceed 100 kg annually, including 25 kg of glass packaging (according to the Polish Packaging Research and Development Centre – COBRO). In the countries of Western Europe this index is almost 1.5 times higher; they consume around 150-170 kg annually per capita.

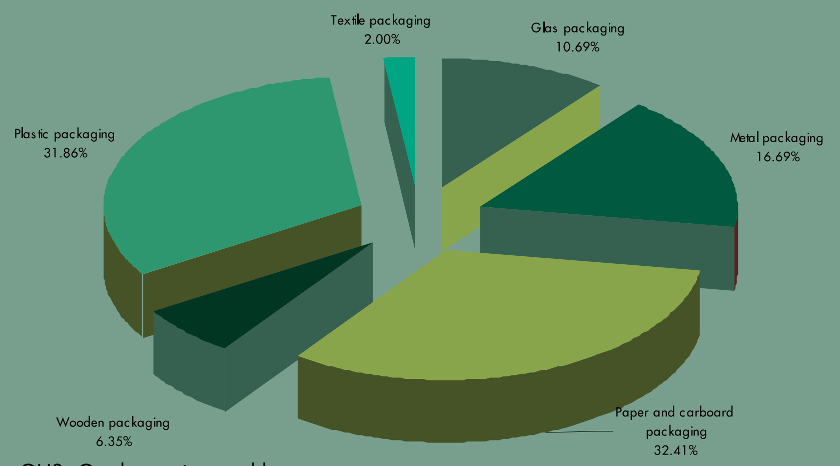
The packaging sector in Poland

- The Polish packaging sector generated 1.6% of Poland's gross domestic product in 2005. In other developed countries this index ranges from 1.5% to 2.5%.
- The packaging sector's share in 2007 in the sold production of the Polish processing industry was 2.51%.
- Share of packaging in the value of total output of selected industry sectors in 2007:

Sector	Percentage share in 2007
Timber and wood products:	100.0
• wooden packaging	6.6
Rubber and cardboard products:	100.0
• paper and corrugated cardboard, and paper and cardboard packaging	33.5
Rubber and plastic goods:	100.0
• plastic packaging	17.6
Products made of other non-metal raw materials:	100.0
• glass packaging	6.0
Finished metal goods:	100.0
• metal containers	1.5
• packaging made of light metals	6.9

Source: Central Statistical Office (GUS)

Profile of the sold production of packaging in 2007 in terms of value



Source: GUS, Opakowanie monthly

Number of enterprises producing packaging in 2007

Item	Total number of enterprises	Number of employed persons			
		<9	10 -49	50 - 249	>249
Wooden packaging	3,839	3,506	301	30	2
Paper and cardboard packaging	123	105	9	8	1
Plastic packaging	2,919	2,408	389	118	4
Glass packaging	634	496	66	54	18
Metal containers	306	224	50	28	4
Packaging made of light metals	80	52	14	9	5
Producers jointly	7,901	6,791	829	247	34

Source: GUS – REGON register of economic entities

Producers of packaging

- According to GUS data, there were around 7,901 manufacturers of packaging registered in Poland in 2007. As many as 6,791 food producers belong to the group of the smallest firms that employ fewer than 9 workers each.
- The largest producers of packaging, often supported by foreign capital, have financial resources sufficient to purchase the latest technologies and the most efficient technological lines. Besides the low production costs ensured by modern technology, large producers benefit from long-term contracts for delivery of packaging, concluded with major buyers. This leads to gradual consolidation of the packaging market and is the key reason for the decrease in the number of producers on the market, from 10,022 registered in mid-2004 to 7,901 in 2007.

Paper and cardboard packaging in 2007

Size of market (USD million)	2,151.0
Size of market (EUR million)	1,572.5
Market share of domestic producers (%)	82.4
Share of imports (%)	17.6

Source: GUS

- Poland's main producers of paper and cardboard packaging are:
- Eurobox Polska Sp. z o.o.,
- Frantschach Świecie S.A.,
- Kappa Expac Sp. z o.o.,
- Polpak-Karton Sp. z o.o.,
- Amcor Polska Sp. z o.o.,
- DS Smith Packaging S.A.,
- Intercell S.A.,
- Mondi Packaging Sp. z o.o.,
- Hammer Sp. z o.o.

Glass packaging in 2007

Size of market (USD million)	716.8
Size of market (EUR million)	568.9
Market share of domestic producers (%)	75.9
Share of imports (%)	24.1

Source: Eurostat

- The main producers of glass packaging are:
- O-I Polska, in Jarosław (market share of about 40%),
- Huta Szkła Czechy,
- Stolzle Glas Częstochowa,
- Warta Glass Group (10%),

Production of principal types of packaging

Product	Unit	2002	2003	2004	2005	2006	2007
Textile packaging:							
sacks and bags used as packaging	Thousand tonnes	6.7	7.0	7.2	6.4	7.7	7.5
Paper and cardboard packaging:							
non-coated packaging paper	Thousand tonnes	620.2	674.6	723.9	746.9	781.6	815.3
crepe and crinkled paper used in the production of sacks	Thousand tonnes	158.9	160.6	141.4	153.0	146,7	138.8
paper sacks and bags	Thousand tonnes	74.2	83.8	86.3	89.6	104.2	116.8
• including paper bags	Thousand tonnes	55.9	59.3	58.2	74.9	88.8	85.2
boxes made of paper or corrugated cardboard	Thousand tonnes	711.3	798.5	926.2	1,154.6	1,192.8	1,416.6
Plastic packaging:							
boxes made of paper or corrugated cardboard	Thousand tonnes	94.0	100.8	119.4	121.6	135.1	145.6
Glass packaging:							
bottles and other containers made of transparent glass	Million pieces	1,437.3	1,512.7	1.748	1,698.9	1,783.6	2,035.6
bottles and other containers made of coloured glass	Million pieces	791.6	721.1	827.7	860.4	894.3	944.4
Metal packaging:							
light cans made of tinplate, used for canned foods and beverages	Thousand tonnes	41.3	38.4	31.5	32.3	33.9	28.2
metal cans other than those used for canned foods and beverages	Thousand tonnes	9.0	10.2	9.7	10.7	12.4	12.4

Source: GUS

Sold production of packaging

	2002	2003	2004	2005	2006	2007
Sold production (PLN billion)	11.2	13.1	14.7	15.3	16.9	18.7
Growth rate in current prices (previous year = 100)	109.8	116.5	112.2	104.1	110.5	110.8
Sold production (USD billion)	2.8	3.4	4.0	4.7	5.4	6.0
Growth rate in current prices (previous year = 100)	110.3	120.1	135.6	117.4	115.0	111.2
Sold production (EUR billion)	2.9	3.0	3.2	3.8	4.3	4.8
Growth rate in current prices (previous year = 100)	104.5	102.5	112.4	117.4	113.4	111.7

Source: GUS

Sold production of paper and cardboard packaging

	2002	2003	2004	2005	2006	2007
Sold production (PLN million)	3,440.7	4,093.9	4,408.0	4,683.3	5,275.2	6,172.4
Growth rate in current prices (previous year = 100)	106.4	119.0	107.7	106.2	112.6	107,8
Sold production (USD million)	843.4	1,052.7	1,212.0	1,451.1	1,700.3	2,230.9
Growth rate in current prices (previous year = 100)	106.8	124.8	115.2	119.7	117.1	131.2
Sold production (EUR million)	892.4	930.9	1,136.0	1,166.4	1,354.3	1,631.6
Growth rate in current prices (previous year = 100)	101.2	104.3	125.5	102.6	116.1	120.4

Source: GUS

Sold production of glass packaging

	2002	2003	2004	2005	2006	2007
Sold production (PLN million)	2,084.5	2,257.7	2,455.3	2,300.0	2,223.4	2,036.4
Growth rate in current prices (previous year = 100)	107.0	108.3	108.8	93.6	96.6	91.6
Sold production (USD million)	511.0	580.5	675.2	712.8	716.6	736.0
Growth rate in current prices (previous year = 100)	107.4	113.6	116.4	105.6	100.5	102.7
Sold production (EUR million)	540.6	513.4	542.6	572.8	570.8	538.3
Growth rate in current prices (previous year = 100)	101.8	95.0	108.7	105.6	99.6	94.3

Source: GUS

- Huta Szkła Feniks, in Piotrków Trybunalski,
- Vitrosilicon, in Iłowa,
- Rexam Szkło Gostyń (10%),
- Huta Szkła Sława,
- Huta Szkła Działdowo,
- Huta Szkła Ujście S.A.,
- Huta Szkła Orzesze,
- Heinz Glass Działdowo.

Plastic packaging in 2007

Size of market (USD million)	2,009.4
Size of market (EUR million)	1,468.4
Market share of domestic producers (%)	68.7
Share of imports (%)	31.3

Source: GUS

- The main producers of plastic packaging are:
- Akerlund & Rausing S.A.,
- Bana PET Sp. z o.o.,
- Autobar Packaging Poland Sp. z o.o.,
- Greiner Opakowania Sp. z o.o.,
- Carnaud Metalbox Tworzywa Sztuczne Sp. z o.o.,
- Ergis Group Sp. z o.o.,
- Inline Poland Sp. z o.o.,
- Masko-Graham Sp. z o.o.,
- Alpla Sp. z o.o.,
- Cofinec Polska Sp. z o.o.,
- ERG S.A.

Metal packaging in 2007

Size of market (USD million)	1,182.8
Size of market (EUR million)	865.1
Market share of domestic producers (%)	91.1
Share of imports (%)	8.9

Source: Eurostat

- The leading producers of metal packaging are:
- Asko Vogel & Noot Sp. z o.o.,
- Ball Packaging Europe Radomsko Sp. z o.o.,
- Carnaud Metalbox Polska Sp. z o.o.,
- Continental Can Polska Sp. z o.o.,
- Fabryka Opakowań Blaszanych Sp. z o.o.,
- Grupa Can-Pack S.A.,
- Polmetal Fabryka Wyrobów Blaszanych S.A.,
- Pakmet - Zakład Opakowań Blaszanych s.c.

Sold production of plastic packaging

	2002	2003	2004	2005	2006	2007
Sold production (PLN million)	3,096.7	3,721.7	4,313.4	4,893.3	5,403.1	6,066.2
Growth rate in current prices (previous year = 100)	113.0	120.2	115.9	112.9	110.4	112.2
Sold production (USD million)	759.6	957.0	1,191.3	1,516.6	1,741.5	2,192.5
Growth rate in current prices (previous year = 100)	113.4	126.0	140.4	127.3	114.8	125.8
Sold production (EUR million)	803.1	846.3	957.4	1,218.7	1,387.1	1,603.5
Growth rate in current prices (previous year = 100)	107.5	105.4	116.4	127.3	.113.8	115.6

Source: GUS

Sold production of metal packaging

	2002	2003	2004	2005	2006	2007
Sold production (PLN million)	2,096.8	2,417.8	2,778.0	2,626.3	3,106.6	3,178.9
Growth rate in current prices (previous year = 100)	114.7	115.3	114.9	94.5	118.2	102.3
Sold production (USD million)	514.0	621.7	763.9	813.9	1,001.3	1,148.9
Growth rate in current prices (previous year = 100)	115.1	121.0	138.6	106.5	123.0	114.7
Sold production (EUR million)	543.8	549.8	613.9	654.1	797.5	840.3
Growth rate in current prices (previous year = 100)	109.1	101.1	114.9	106.5	121.9.	105.6

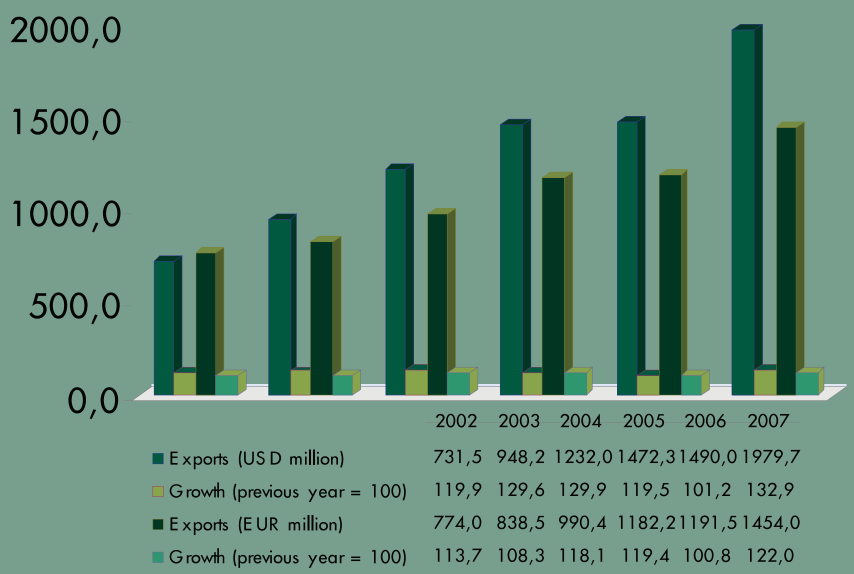
Source: GUS

Sold production of wooden packaging

	2002	2003	2004	2005	2006	2007
Sold production (PLN million)	512.3	591.2	735.6	789.4	894.9	1,208.3
Growth rate in current prices (previous year = 100)	110.3	115.4	124.4	107.3	113.3	135.0
Sold production (USD million)	125.6	152.0	202.2	228.9	288,4	436,7
Growth rate in current prices (previous year = 100)	110.7	121.0	133.1	113.2	125.9	151.4
Sold production (EUR mililon)	132.9	134.4	161.8	188.1	229.7	319.4
Growth rate in current prices (previous year = 100)	105.0	101.2	120.1	116.2	122.1	139.0

Source: GUS

Exports of packaging



Source: GUS

- The size of the Polish market (production + imports - exports) of wooden packaging can be put at USD 95 million (EUR 67.9 million). The greater part of wooden packaging manufactured in Poland is exported. Due to the considerable role of re-export and also the export of revitalised used pallets it is difficult to estimate the share of imports in the domestic sales of wooden packaging.

- The main producers of wooden packaging are:
- Palettenwerk Sp. z o.o.,
- Palko Sp. z o.o.,
- PalPol Sp. z o.o.,
- PPH Tor-Pal Sp. z o.o.,
- Prymas Cargo s.c.,
- Raven Sp. z o.o.,
- Rotom Polska Sp. z o.o.

- Exports of packaging have been growing steadily in recent years – nearly tripling since 1999.
- In 2007 close to 40% of various types of packaging produced in Poland was exported.
- The most important export outlets for individual types of packaging produced in Poland are:

- Germany, Czech Republic, Russia and Lithuania – plastic packaging,
- Germany, Italy and Netherlands – wooden packaging,
- Germany, Russia, Austria, Hungary and Ukraine – metal packaging,
- Russia, Germany, Lithuania and Sweden – paper and cardboard packaging,
- Russia and Germany – glass packaging.

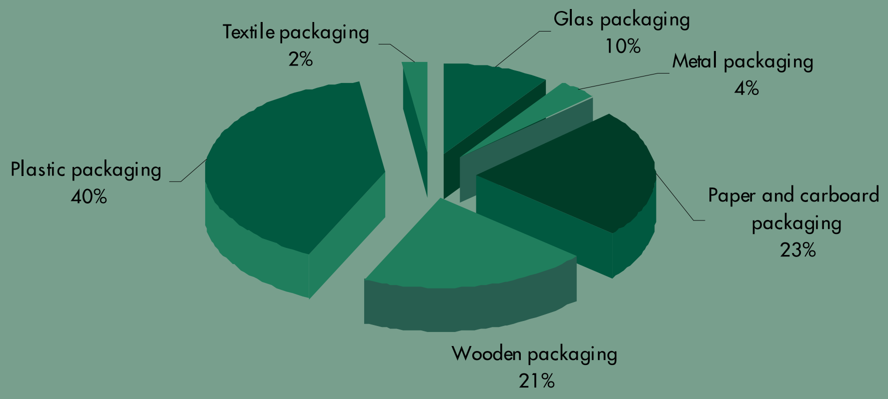
Foreign investments

- According to data from the Polish Information and Foreign Investment Agency (PAIiIZ), foreign investments in the Polish packaging sector exceeded USD 1,977 million (EUR 1,591 million) as of the end of 2004.

- Imports of packaging have been growing steadily in recent years, but slower than exports.
- In 2007 imports accounted for close to 22% of the Polish packaging market.
- Various types of packaging are imported, chiefly from:

- Germany, Italy, Great Britain and France – plastic packaging,
- Germany, Austria and Czech Republic – paper and cardboard packaging,
- Germany, France and Italy – glass packaging,
- Germany, Czech Republic, Slovakia and Denmark – metal packaging.

Profile of packaging exports in 2007 in terms of value



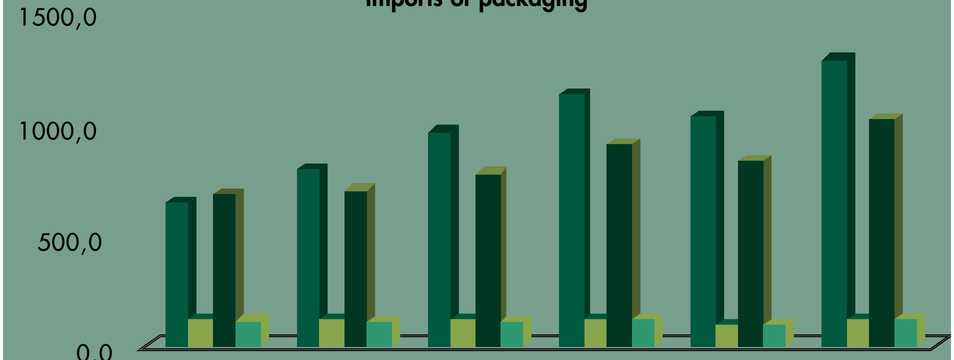
Source: GUS

Largest foreign direct investments in the packaging sector (as of the end of 2007)

	Investor name	Country of registration	Place of investment	Province	Activities	Value of investmet (EUR million)	Number of employees
				2005			
1.	Viva Magnetics	Hongk Kong	Teresin	mazowieckie	Plastic packaging (DVD i CD)	200	200
2	Fuji Seal	Japonia	Kutno	łódzkie	production foil of packaging	33	250
				2006			
3	Knauf Pack	Francja	Świdnica	dolnośląskie	Packaging	3.50	40
				2007			
4.	Sealed Air	USA	Ożarów Mazowiecki	mazowieckie	Packaging	25	250
5	UPM Raflatac	Finlandia	Kobierzyce	dolnośląskie	Plastic packaging	82	149
6	Printpack	Wielka Brytania	Kutno	łódzkie	production of packagings	40	150
				2008			
7	Cosmetic Essence	USA	Smolice	łódzkie	Packaging cosmetics	3	200

Source: Polish Information and Foreign Investment Agency (PAIiIZ)

Imports of packaging



	2002	2003	2004	2005	2006	2007
Imports (USD million)	634,6	785,4	955,1	1121,5	1023,9	1274,8
Growth (previous year = 100)	120,7	123,8	121,6	117,4	91,3	124,5
Imports (EUR million)	671,7	694,5	767,9	900,5	827,3	1008,1
Growth (previous year = 100)	114,4	103,4	110,5	117,3	91,8	121,9

Source: GUS

Recycling and product fees

- In accordance with regulations introduced to meet EU environmental protection standards, producers, importers and trading firms in Poland have been jointly responsible for recycling of waste packaging since 2002.
- Firms introducing packed goods onto the market may choose one of the following solutions:

- organise collection of waste packaging independently;
- establish a separate waste packaging collection entity, which may render services to more than one firm;
- hire specialised waste management firms;
- pay product fees, the amounts of which are defined in the relevant legal acts.

- The adoption of regulations relating to waste packaging has contributed to the development of firms specializing in retrieval and recycling of used packaging, largely owing to the fact that the amounts paid for the services rendered by such firms are 20% - 50% lower than any product fee (according to the trade monthly Opakowanie).
- The level of retrieval for all kinds of packaging is set at 43% in 2006, and 50% in 2007.

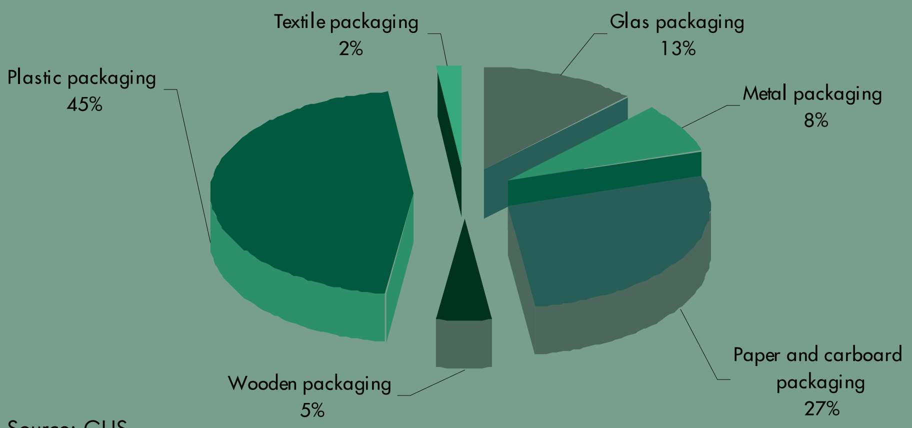
Level of recycling of waste packaging

- Poland is to achieve the level of recycling of waste packaging that is binding in the European Union by 2008. Progress made in this area to date suggests that the required recycling levels for different types of waste packaging will be achieved on time.

Prospects for development of the packaging market

- Further development of the packaging market will depend on the development of the entire Polish economy, and in particular, growth in the level of income and consumption of the Polish population. It is estimated that growth in GDP by 1 percentage point leads to growth of the packaging market by 2 percentage points.
- General predictions for development of the Polish economy suggest that the Polish packaging market is in a stage of continuous growth, at an annual rate that is likely to reach at least 10% (according to the trade monthly Opakowanie).
- It is probable that the value of sales of packaging on the Polish market will rise faster than the volume of sales (in tonnes). This will be determined by two factors:

Profile of packaging imports in 2007 in terms of value



Source: GUS

Retrieval and recycling levels achieved in 2006 (%)

Types of waste products	Recycling level required	Recycling level achieved
Paper and cardboard packaging	45	85.60
Aluminium packaging	35	110.40
Glass packaging	35	48.00
Plastic packaging	22	36.90
Packaging made of metals other than aluminium	18	34.10
Wooden and textile packaging	13	73.40

Source: Ministry of the Environment

Required recycling levels for individual types of waste packaging in 2008 - 2012 (%)

Materials	2008	2009	2010	2011	2012
Paper and cardboard	49	50	52	54	56
Aluminium	41	43	45	47	48
Glass	39	41	43	46	49
Plastics	16	17	18	19	20
Steel	25	29	33	37	42
Natural	15	15	15	15	15

Source: Ministry of the Environment

- improving quality of supplied packaging,
- increasing role of returnable packaging, in line with the adopted pro-ecological regulations.

Forecasts

- The Polish Chamber of Packaging predicts that the Polish packaging market will grow at a pace of 5-10% annually until 2012, and the value of the market may rise to as much as Euro 7-8 billion (from the current Euro 4,3 billion).
- There have been forecasts that in the years 2005-2008, the biggest increase in the consumption of packaging will be in paper packaging – at least 12-14% annually. In 2010 the consumption of paper packaging is expected to equal that of the Western countries of the European Union.
- An increase should also be noted in metal packaging; demand is expected to be especially high for beverage cans, tin boxes, and aerosol packaging.
- Despite competition from plastic packaging, an increase in glass packaging is expected. This should be observed in all groups of glass packaging, but especially bottles.
- The packaging sector is one of the main consumers of plastics. Economic development in Poland will have a great impact on the growth of the plastic packaging sector.

Invest in Poland

Polish Information and Foreign Investment Agency
Polska Agencja Informacji i Inwestycji Zagranicznych S.A.
ul. Bagatela 12, 00-585 Warszawa, Polska
tel. (+48 22) 334 98 00, fax (+48 22) 334 99 99
www.paiz.gov.pl, e-mail: post@paiz.gov.pl

© 2008 PAIiIZ. All rights reserved
ISBN 83-60049-65-3
Photos by: CorelDraw, PAIiIZ archive
The publication is financed by the Ministry of Economy of the Republic of Poland