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P O L A N D

STATEMENT ON THE WOOD MARKET REVIEW AND PROSPECTS

Ministry of the Environment

1. GENERAL ECONOMIC TRENDS AFFECTING THE FOREST AND FOREST INDUSTRIES SECTOR

In 2013 in Poland Gross Domestic Product increased by 1.6% in real terms; however, it was lower than a year before (by 0.4 percentage points). The dynamics of Polish GDP was relatively high compared to average in the European Union equalling 0.1% (in ten EU countries a negative growth rate of this index was recorded).

As in previous years the economic growth was significantly affected by export (an increase by 6.5% in real terms in relation to the previous year), and to a lesser extent by consumption (an increase by 1.2%), including individual consumption (an increase by 0.8%). The dynamics of domestic demand remained at a level of last year. The gross outlay on fixed assets decreased by 0.2% in relation to 2012 (when its decrease by 1.6% was recorded). On the other hand, gross value added increased by 1.5% in fixed prices (it was 2% in 2012); whilst in industry it increased by 3% (1 percentage point more than in 2012), and in construction it decreased by as much as 9% (in 2012 the decrease was 3.2%).

In the opinion of analysts, in the coming years in Poland GDP will be increasing at a stable rate, yet lower than before crisis. It is expected that in the years 2014 and 2015 GDP will increase by 3.2% and 3.4%, respectively, in real terms. Domestic demand should be a stimuli of the economic development (it is anticipated that in the years 2014 and 2015 the demand should increase by 3.5% and 3.8%, respectively, including an increase in general consumption by 2.6% and 2.8%, respectively). The investment demand in the economy is to be stimulated mainly by private investments (in the years 2014 and 2015 the growth rate of investments in general is to be 6.7% and 7.4%, respectively, in real terms).

In 2013 sold production of industry increased by 2.1% in real terms in relation to the previous year (in 2012 it was 0.5%); whilst an increase in manufacturing was 2.2% (0.7% in 2012). Wood industries recorded a significantly higher sold production dynamics. In the wood industry it increased by 5.4%, in the pulp and paper industry and paper processing by 6%, and in the furniture industry by 5.8%. In 2013 sold production of the wood sector equalling PLN 98.6 bn ($ 31.2 bn; € 23.5 bn) was 8.1% of sold production value in industry, and 9.6% of sold production value in manufacturing. The structure of sold production of the wood sector has not changed significantly, i.e. in 2013 the shares of the wood industry and the pulp and paper industry together with paper processing were approximately 34% each, and the share of the furniture industry was 31.9%. It is anticipated that in the years 2014 and 2015 the performance of industry in general and manufacturing should be better than in 2013 (it is expected that sold production will increase by 3%-5% annually). Sold production of the wood sector should grow at a relatively faster rate (according to the current results of 2014 sold production should grow, depending on the industry, by 4%-10% annually).

In 2013 a gradual improvement in economic situation brought about on the labour market a cessation of a previous increase (since 2009) in the unemployment rate and its maintenance at the level of the previous year (13.4%). Nonetheless, average employment in the economy dropped to 9.6 m people (i.e. by 0.9% in relation to 2012), including in the company sector to 5.5 m people (by 1%). In the forest-based sector average employment was approximately 322 thou. people and by 0.3% lower than in 2012. On the other hand, in the discussed period the number of the employed in forestry increased from 31 thou. people to approximately 32 thou. people. The employed in the wood sector (over 290 thou. people) accounted for 11% of average employment in industry in general and more than 13% of average employment in manufacturing. The employment structure of the wood sector is dominated by the furniture industry with a share of 47%, followed by the wood industry (approximately 35%), and the pulp and paper industry together with paper processing (18%). According to forecasts, the observed economic revival and a typical for the labour market double take of the changes occurring in the economy should result in a drop of the unemployment rate to a level of 12.5% in 2014 and 11.8% in 2015. The employment in the economy should also slowly rise to 9.8 m people in 2015 (in the years 2014 and 2015 the anticipated increase in the employment in the economy is to be 0.4% and 0.8%, respectively, and in the company sector 0.7% and 1%, respectively).

In 2013 foreign trade recorded a rise of both exports (by 6.5% in real terms) to PLN 647.9 bn ($ 206.1 bn; € 155 bn) and imports (by 2.9%) to PLN 656.1 bn ($ 208.8 bn; € 157 bn). The previous very high negative balance of foreign trade was reduced (to PLN -8.2 bn; $ -2.6 bn; € -2 bn). Wood and products of wood processing have a significant share within the Polish foreign trade. In 2013 they accounted for 9.1% of exports and 4% of imports. Furniture is one of the major commodity groups in the Polish exports accounting for 4.5% of its total value. The main trade partners of Poland are the European Union countries. In 2013 75% of Polish exports was directed to the markets of the Community member states; on the other hand, 59% of supplies to Poland came from this area. In the case of wood and wood products the share of the European Union within their exports and imports was significantly higher and equalled 84% and 82%, respectively. The balance of foreign trade in the products of the forest-based sector was positive and amounted to PLN 32.3 bn. Forecasts for the years 2014 and 2015 assume an increase in exports by 5.4% annually in real terms, and an increase in imports by 6% in 2014 and 6.4% in 2015. It is also anticipated that, due to the current situation on the eastern markets (mainly Ukrainian and Russian), in the near future Polish companies, also wood companies, will be forced to search intensively for new outlets for their products (e.g. Asian markets).

In 2013 inflation was 0.9% and was by 2.8 percentage point lower compared to the previous year. The value of this index was most influenced by, on the one hand, an increase in prices (mainly of food, alcoholic beverages, tobacco products, thermal energy, transport services, medical services, and postal services) and, on the other hand, a decrease in prices (mainly of fuels, gas, clothes, and footwear). The analysts expect that at the end of 2014 inflation will slowly accelerate and will equal 0.1%, and then 1.2% at the end of 2015, and 2.3% in 2016.

At times of globalisation the Polish economy depends to a large extend on the economic situation of the main foreign partners, including Germany, the United Kingdom, Russia, and China. At present the economic situation indices in the euro zone are worse than expected; however, the greatest danger may be the situation on the eastern markets, especially in Ukraine and Russia. It is highly probable that the trade between the EU countries and Russia will be significantly limited (any forecasts concerning Russia and Ukraine are very uncertain; in the opinion of economists this countries are in for economic stagnation or even recession). Despite this, in the coming years one expects increased activity and revival of the Polish economy (current economic situation indices are better than in the previous year).

2. POLICY MEASURES TAKEN IN POLAND OVER THE PAST 18 MONTHS, WHICH MIGHT HAVE A BEARING ON TRADE AND MARKETS OF FOREST PRODUCTS OR FOREST MANAGEMENT

The wood market operates under constant influence of changes occurring in the economy, including the effects of the state policy instruments implemented in Poland. One of such instruments is the *Multiannual Financial Plan of the Country*, which directly refers to the development priorities and the lines of socio-economic policy defined in inter alia the *Development Strategy of the Country 2020*. In 2013 the *Multiannual Financial Plan* was drawn up. The plan encompasses next time horizon, i.e. the period 2014-2017, and includes the *Convergence Programme. Update 2014*, which hitherto was a separate document. The actions planned under the programme are aimed at reduction of the public finance imbalance, which is to create safe and long-lasting foundations of the country's development. The programme encompasses also the actions to increase revenues and aimed at reduction of expenditure in relation to GDP. The thing important for companies, including the wood sector companies, will be the reduction of VAT rates from 23% to 22% and from 8% to 7% planned for in 2017.

The actions described in the *National Programme of Reforms*, which is updated annually due to the execution of the Europe 2020 strategy, also have a bearing on the forest-based sector. This year's *National Programme of Reforms. Update 2013/2014* takes into consideration both the current economic situation of Poland and the recommendations of the European Union Council. In 2013 a significant role in this programme was ascribed to actions aiding entrepreneurs and leading to industry increasing its share within generation of the EU countries' GDP from the current 16% to 20% in 2020. The programme also refers to the proposition of the European Council concerning fiscal consolidation, actions towards unemployment reduction (especially amongst the young), support for the economic growth and competition on the EU market.

Continuation of the implementation of the medium-term *Development Strategy of the Country 2020* and connected with it the *Strategy of the Economy Innovativeness and Effectiveness – Dynamic Poland 2020* (SIEG) is also important for the forest-based sector. The main goal of this strategy is creation of a highly competitive (innovative and effective) knowledge-based economy. The strategy assumes continuation of the actions aimed at the elimination of needless burdens and barriers to the entrepreneurship development, an increase in co-operation between the sphere of science and business, the improvement of the effectiveness of public expenditure allocated to R&D and innovation financing, and support for the development of areas and technologies with the highest growth potential. The strategy also takes into consideration actions for the economy internationalisation, including the promotion of the economy, the enhancement of supporting instruments adjusted to the company development stage, aiding the process of internationalisation of innovative companies etc. The executive programme to this strategy is the *Company development programme 2020* (PRP) adopted by the government in April 2014. An integral part of this programme is the document *National Intelligent Specialisation* (KIS), which presents the process of intelligent specializations selection at a national level (R&D and innovation areas) and the outline of the process of their monitoring and updating. The National Intelligent Specialisation is an open document, which will be verified and updated in accordance with socio-economic changes occurring in Poland. It will be possible to get financial support for the selected intelligent specialisations under the operational programmes for the period 2014-2020.

Representatives of the forest-based sector also have the possibility of participation in the creation of the development strategy for the Polish forestry and the wood market. The preparations of the *National Forest Programme* include cyclical organisation of experts' panels with participation of representatives of various social groups connected with forests and with forest goods and services (especially wood). These panels are also attended by representatives of scientific centres, self-governments, professional associations, non-governmental organisations, and politicians (an information and discussion forum – the website of the Forest Research Institute, www.ibles.pl). These actions are taken with the view of the creation of a vision of the Polish forestry within a time horizon till 2030 and beyond – till 2080. The effect of these actions is to be a strategic programme of the development of forests and forest management, thus an integrated programme of the development of the whole forest-based sector and the environmental protection in forests over the times of economic transformation, environmental transformation, climate change, and social preferences change.

3. MARKET DRIVERS

The executive programmes of the development strategies, national and international, play an important role in the operation of companies, including forest-based sector companies. One of such programmes is *Company development programme 2020*, whose goal is an increase in innovativeness, productivity and competitiveness of companies, especially SMEs. This programme drives at intensification of co-operation between companies and science sphere. Solutions, proposed in the programme, are also to be significant support in programming of the new EU financial perspective for the period 2014-2020.

The forest-based sector companies are direct addressees of one of the strategic programmes of the National Centre for Research and Development entitled *The environment, agriculture, and forestry* (acronym: BIOSTRATEG). This programme encompasses five strategic thematic areas resulting directly from the National Research Agenda, which are in line with the priority lines of research currently conducted in the European Union and in the world. The beneficiaries of the programme will be inter alia the forest-based sector companies, which through participation in scientific consortia carrying out research projects will be involved in the process of the implementation of new products, techniques and technologies, and also other solutions that can be used in the areas covered by the thematic scope of the programme. The programme will be executed in the period 2014-2019.

Special Economic Zones (SSE) play the role of entrepreneurship stimulus, to a large extent also in the wood sector. The zones offer inter alia various types of tax allowances, aid in staff employment, and construction sites prepared for investments. Due to the still relatively large interest of companies in such form of support a prolongation of the operation of the SSEs in Poland till 2026 is considered.

An additional stimulus for activation of the economic activity in the forest-based sector is the programme approved in July 2014 entitled *New Opportunity Policy (PNS).* This programme defines so-called new opportunity policy as an indispensable element of the economic policy, especially the entrepreneurship policy. For the first time this document in a comprehensive way addresses the issues of company management in a crisis and the issues connected with company liquidation. The programme is especially important for the companies which are financially and economically unstable. Its main goal is to counteract bankruptcy and facilitate resumption of company operation. The main instruments of the programme are: counteracting crises (rapid alert systems), reduction of company liquidation risk, efficient company liquidation procedures, and aid in resumption of company operation (so-called “new start”). The programme is of importance especially for construction companies, which in recent years have suffered significantly from a downturn in the economy resulting from the crisis which was started on the world mortgage market in 2008.

4. DEVELOPMENTS IN FOREST PRODUCTS MARKETS SECTORS

4.1. (A) Wood raw materials

In 2013 38.9 m m^3 of roundwood (net, without bark) was harvested and it was over 2% more than a year before. In this amount almost 1 m m^3 of wood (merchantable bole) originated from afforestation (production and protective planting of trees and shrubs in public and private areas, outside forests and green areas within the cities). The dominant type of roundwood was this originating from public forests (95%, 37 m m^3), including mainly roundwood from the state forests (93%, 36.3 m m^3). Similarly to previous years, the structure of harvested roundwood was dominated by softwood (73%). The wood for industrial purposes was approximately 87% of harvested roundwood (33.8 m m^3, an increase by 2% in relation to 2012). More than 51% of its structure was pulpwood (17.2 m m^3, its harvest increased by almost 3% in relation to the previous year), and sawnlogs accounted for 45% (15.3 m m^3; it was over 2% more than in 2012).

In 2013 3.1 m m^3 of roundwood (approximately 8% of domestic removals) was exported and it was by 53% more than in 2012. The structure of exported roundwood was dominated by industrial wood (92%, 2.8 m m^3; exports increased by 51% in relation to the previous year). Softwood accounted for more than 91% of industrial wood exports. The exports of pulpwood amounted to approximately 1.4 m m^3 (41% more than in 2012) and of sawnwood to 1.4 m m^3 (over 62% more than in the previous year). Additionally, 0.2 m m^3 of fuelwood was exported (an increase by 83%).

In 2013 the imports of roundwood amounted to 2.3 m m^3 (and it was 7% less than a year before). 2013 was another year in which the amount of imported roundwood decreased (in 2012 the decrease in wood imports was 28%). Imported wood amounted to 6% of domestic removals. For the most part it was roundwood for industrial purposes (98%; 2.3 m m^3). The share of coniferous roundwood within the structure of imported industrial wood increased to 46% (from 35% in 2012). Altogether almost 1.5 m m^3 of pulpwood (an increase by 19% in relation to 2012) and 131 thou. m^3 of sawnlogs (34% less than in the previous year) was imported to Poland. The imports of fuelwood amounted to 57 thou. m^3 and was almost 2.5-fold higher than a year before.

In the nearest future a further increase in wood removals may be expected – yearly average by 1%, i.e. to the level of 39.5 m m^3 in 2014 and 39.9 m m^3 in 2015. The structure of harvested roundwood should not change significantly, i.e. industrial wood will continue to dominate (34.2 m m^3 in 2014 and 34.5 m m^3 in 2015), and removals of fuelwood will amount to 5.3 m m^3 and 5.4 m m^3, respectively. The foreign trade in wood should also be characterised by an upward trend. It is estimated that its exports in the years 2014 and 2015 will amount to 3.2-3.3 m m^3 (including fuelwood exports which may amount to 60-70 thou. m^3) and imports to 2.4-2.5 m m^3 (including fuelwood with an amount of 250-260 thou. m^3).

In further time perspective, taking into consideration that Poland is the main consumer of raw wood exported from Belarus, the Polish wood market (especially wood importers) may be considerably affected by a ban on raw wood export from Belarus, which is to take effect on January 2016.

4.2. (B) Wood energy, with a focus on government policies promoting wood energy

In Poland generation of renewable energy from biomass (it is estimated that to a great extent the biomass is wood biomass) has been on the rise for a few years and it amounted to 6988 thou. toe in 2012, which was more than 82% of renewable energy generation and almost 10% of energy generation in total. In 2012 the share of renewable energy within energy generation in total was 11.7% and within energy consumption 8.6%.

Regulations, which currently are under preparation and consultation, are to help achieve the 15% share of renewable energy sources within total energy generated in Poland by 2020. In April 2014 the government adopted a bill on renewable energy sources (RES). Apart from the regulations on the support system for RES installations, the bill contains an important element which is the promotion of so-called *prosumer* energy generation from RES in micro and small installations (where prosumer is producer and consumer at the same time). The bill introduces the concept of micro-installation, i.e. a low power installation which generates energy mainly to satisfy the needs of the producer. A significant simplification of the procedures concerning setting up business connected with renewable energy sources is also proposed. At the same time an update of the *Poland's energy policy by 2050* is being prepared. This document assumes that the main goal of the energy policy is to create conditions for the continuous and sustainable development of the national economy and the environmental protection, as well as to assure Poland's energy safety and satisfy the energy needs of companies and households. The *Poland's energy policy by 2050* takes into account important issues concerning the development of the power sector such as: the use of gas from nonconventional sources, climate challenges, building of a common power market within the European Union, and also the use of EU funds from the new financial perspective for the period 2014-2020 for that purpose.

4.3. (C) **Certified forest products**

Presently in Poland in forestry and the wood sector there are two equal certification systems: PEFC (*Programme for the Endorsement of Forest Certification Scheme*) and FSC (*Forest Stewardship Council*).

All the State Forests Regional Directorates hold certificates under the PEFC system (September 2014). Altogether these certificates cover 7.3 m hectares of Polish forests, i.e. approximately 80% of their total area. Presently also 139 wood product certificates (PEFC – CoC – *Chain of Custody*) are active, of which 89 is held by production companies. These companies are dominated by sawnwood producers (28%) and manufacturers of paper and products of its processing (27%).

On the other hand, presently 16 out of 17 State Forests Regional Directorates and 3 Forest Experimental Stations (in Krynica, Rogów, and Siemianice) is certified under the FSC standard (according to data of September 2014), meaning that in Poland the total area of forests certified under this system equals 6.9 m hectares, i.e. 75.5% of their entirety. 2373 certificates (including 670 inactive, i.e. 28%) are registered under the FSC-CoC system. 1218 certificates out of 1703 active (72%) is held by production companies dominated by sawnwood producers (342 companies, i.e. 28% of the total number of companies holding FSC CoC certificates). This type of certificate is important also for the manufacturers of wooden garden products (16% active certificates in production companies), wooden accessories (15%), and furniture and furniture elements (12%). Within the total number of certificates held by production companies 293 certificates concern controlled wood – FSC-CW (*Controlled Wood*), and 164 confirm the implementation of the wood supply risk assessment system – FSC RA (*Controlled Wood Risk Assessment*).

4.4. (D) **Value-added wood products**

In Poland furniture is the most important in the group of value-added wood products, which is due to the fact that furniture is a product with high value added and significant share within foreign trade (in 2013 the share of furniture within total Polish exports was 4.5%). In 2013 furniture production amounted to PLN 28.4 bn ($ 9 bn; € 6.8 bn). It was almost 9% more in real terms than in the previous year. The furniture of wood accounted for 69% of this value (together with furniture elements of wood it was PLN 19.6 bn; $ 6.2 bn; € 4.7 bn). In fixed prices furniture production was by 8% higher than a year before. The structure of wooden furniture production is dominated by furniture for seating (approximately 32%, elements of this furniture excluded) and furniture for rooms and living rooms (22%). Most of Polish furniture is exported. In 2013 almost 78% of wooden furniture produced in Poland was exported (PLN 15.2 bn; $ 4.9 bn; € 3.6 bn), meaning an increase in its supply abroad by approximately 9% (in current prices) in relation to the previous year. The structure of wooden furniture exports was dominated by furniture for seating (38%) and furniture for rooms and living rooms (18%). On the other hand, Poland imported wooden furniture of the value of PLN 1.1 bn ($ 0.3 bn; € 0.3 bn). In relation to domestic production of wooded furniture the imports amounted to 5.6% in 2013; however, wooden furniture imports was more than 1% lower than in 2012 (in current prices). The structure of wooden furniture imports was dominated by furniture for seating (18%) and furniture for rooms and living rooms (16%).

Builder's carpentry and joinery products are also of vital importance on the market in wood products in Poland. In 2013 their production (together with wooden houses) amounted to PLN 6.1 bn ($ 1.9 bn; € 1.5 bn), meaning an increase in the production by more than 3% in real terms in relation to the previous year. An increase was primarily recorded in the production of laminated floor panels (by 7%, to 52.8 m m^2) and inlay floors (by more than 5%, to 1.9 m m^2). On the other hand, the production of windows and doors dropped (by almost 4%, to 13.3 m m^2). The exports of builder's carpentry and joinery products of wood (including prefabricated wooden houses) amounted to PLN 3.6 bn ($ 1.1 bn; € 0.9 bn), i.e. was over 18% higher than in 2012 (in current prices). In relation to domestic production the exports of this product group accounted for almost 59%. Wooden windows accounted for approximately 45% of it. In 2013 Poland imported builder's carpentry and joinery products of wood of the value of PLN 0.3 bn ($ 0.094 bn; € 0.071 bn) and it was over 8% less than in the previous year (in current prices). In relation to domestic production the imports accounted for almost 5%. In the case of the imports of builder's carpentry and joinery products of wood the flooring materials (25%) and wooden windows (18%) were of importance.

In 2013 in Poland wooden packaging of the value of PLN 1.6 bn ($ 0.5 bn; € 0.4 bn) was produced, meaning an increase in the production by almost 11% in real terms in relation to 2012. The packaging was mainly pallets (83.8 m pieces, almost 15% more than in the previous year). Approximately 78% of the packaging produced in Poland was exported (PLN 1.3 bn; $ 0.4 bn; € 0.3 bn). Therefore, in 2013 the exports of packaging increased by 15% in relation to the previous year (in current prices). The exports was dominated by pallets (over 90%). On the other hand, Poland imported packaging of the value of PLN 0.2 bn ($ 0.062 bn; € 0.047 bn). In relation to the previous year the imports dropped by almost 12% (in current prices). In relation to domestic production the imports was 12%. Similarly to the exports, the imports of packaging was dominated by pallets (74%).

In 2013 also the production of paper and paperboard products increased by almost 9% (in relation to the previous year) and amounted to PLN 18.4 bn ($ 5.8 bn; € 4.4 bn). The structure of the production was dominated by paper and corrugated paperboard and packaging made of it (57%) and by household products and toilet and sanitary products (27%). Approximately 35% of domestic production of value-added paper products was exported (PLN 6.4 bn; $ 2 bn; € 1.5 bn). In relation to 2012 their exports increased by approximately 6% (in current prices) and was dominated by paper and paperboard packaging (36%) and special coated papers (25%). On the other hand, Poland imported value-added paper products of the value of PLN 4.3 bn ($ 1.4 bn; € 1 bn), i.e. by 3% more than in the previous year (in current prices). The imports accounted for 24% of domestic production. Similarly to the exports, the assortment structure of the imports of this product group was dominated by paper and paperboard packaging (they accounted for 36%).

4.5. (E) **Sawn softwood**

In 2013 the production of sawn softwood (90% of total sawnwood production) increased to 3.9 m m^3 (from 3.8 m m^3 in 2012). 0.5 m m^3 was sold on foreign markets, i.e. 13% of domestic production (in 2012 it was 0.4 m m^3). Sawn softwood accounted for 85% of total exports of sawnwood. On the other hand, the imports of sawn softwood amounted to 0.4

m m^3 (15% less than in 2012). Coniferous species accounted for almost 67% of imported sawnwood in total; whilst in relation to domestic production their imports was 11%.

It is estimated that by 2015 the production of sawn softwood will increase to 4.1 m m^3. An upward trend should also characterise foreign trade in these products. In 2015 the exports of sawn softwood may amount to 0.6 m m^3, and the imports may increase to 0.5 m m^3.

4.6. (F) Sawn hardwood

In 2013 the production of sawn hardwood amounted to 0.4 m m^3 (approximately 1% less than a year before) and accounted for 10% of sawnwood production in total. Most of this sawnwood was sold in Poland (81%); whilst 87 thou. m^3 was exported (1% more that in the previous year). Tropical species accounted for approximately 6% (5 thou. m^3) of exported sawn hardwood. On the other hand, 0.2 m m^3 of sawn hardwood (similarly to 2012) was imported to Poland, of which 20 thou. m^3 was tropical species. The imports of sawn hardwood accounted for 50% of its domestic production.

It is assumed that by 2015 the production of sawn hardwood will increase to 0.5 m m^3; whilst as regards the foreign trade an increase in exports (to 95 thou. m^3) and imports (to 0.2 m m^3) is expected.

4.7. (G) Wood-based panels

In 2013 the Polish market in wood-based panels was characterised by essentially upward trends. The wood-based panel production increased by 6% in relation to the previous year, i.e. to 9 m m^3. The production of fibreboard rose (by 18%); however, mainly of dry-process. Likewise, the production of plywood and veneers increased by 11% and 16%, respectively. On the other hand, the production of particleboards (including OSBs) dropped by 2%. The structure of the wood-based panel production did not change significantly and was dominated by particleboards (4.8 m m^3, 53%) and fibreboards (3.7 m m^3, 42%). Additionally, 0.4 m m^3 of plywood and 50 thou. m^3 of veneers was produced.

The exports of wood-based panels remained at a level similar to that of 2012 and amounted to 2.4 m m^3. 26% of wood-based panel domestic production was exported. In terms of export, fibreboards (1.5 m m^3, 63%) and particleboards (0.7 m m^3, 29%) were of the greatest importance. Moreover, approximately 0.2 m m^3 of plywood and 17 thou. m^3 of veneers was exported.

In 2013 the imports of wood-based panels amounted to 1.6 m m^3 (it increased by 19% in relation to the previous year) and accounted for 18% of domestic production. The imports was dominated by particleboards, i.e. Poland imported almost 1.1 m m^3 (i.e. 66% of wood-based panel imports in general), meaning that the imports was by 18% higher than in 2012. A significant increase in imports, i.e. by 24%, was also recorded in the case of fibreboards and veneers (by 0.3 m m^3 and 50 thou. m^3, respectively). On the other hand, plywood imports increased by 15% and amounted to 0.2 m m^3.

In the period 2014-2015 both the production of and the foreign trade in wood-based panels should be characterised by upward trends. Their production may increase to 9.1 m m^3 in 2014 and 9.4 m m^3 in 2015. Due to the planned launching of a new OSB production line, it is assumed that the production of particleboards will rise to 5 m m^3 in 2015. The production of fibreboards will remain important (mainly dry-process boards and wet-process insulating boards) and may amount to 3.8 m m^3 in 2014 and 3.9 m m^3 in 2015. In 2015 0.5 m m^3 of plywood and 52 thou. m^3 of veneers will be probably produced as well.

It is anticipated that in 2015 2.5 m m^3 of wood-based panels will be exported, of which 61% will be fibreboards (1.6 m m^3) and 31% particleboards (0.8 m m^3). 0.2 m m^3 of plywood and 18 thou. m^3 of veneers will be also exported. On the other hand, in 2015 Poland will import 1.8 m m^3 of wood-based panels. The structure of the imports should still be dominated by particleboards (63%, 1.1 m m^3); whilst fibreboards may amount to approximately 20% (0.4 m m^3). The imports of plywood will amount to 0.2 m m^3 and of veneers to 55 thou. m^3.

4.8. (H) **Pulp and paper**

In 2013 the production of wood pulp, as in previous years, amounted to almost 1.1 m tonnes. The structure of production did not change significantly and was dominated by cellulose production (82%), which amounted to 881 thou. tonnes (848 thou. tonnes in 2012). The upward trends were observed in foreign trade. The exports of wood pulp (it was almost entirely cellulose) increased by more than 4.5-fold (from 19 thou. tonnes in 2012 to more than 87 thou. tonnes in 2013). On the other hand, 851 thou. tonnes of wood pulp was imported to Poland (18% more than in the previous year). The imports accounted for 79% of domestic production. The structure of wood pulp imported to Poland was dominated by cellulose (92%).

In 2013 4.1 m tonnes of paper and paperboard was also produced (i.e. 7% more than in 2012). It was mainly packaging papers and paperboards (2.7 m tonnes, 66%) and graphics papers (901 thou. tonnes, 22%). 53% of domestic production of paper and paperboard (2.2 m tonnes) was sold on foreign markets, including mainly packaging papers and paperboards (1.5 m tonnes) and graphics papers (0.6 m tonnes). On the other hand, Poland imported 3.4 m tonnes of paper and paperboard (5% more than in the previous year). In relation to domestic production the imports was 82%, and was dominated by packaging papers (2 m tonnes, 60%) and graphics papers (1.2 m tonnes, 37%).

It is estimated that by 2015 the production of wood pulp will maintain at a level of 1.1 m tonnes. Moreover, in 2015 0.9 m tonnes of wood pulp may be imported to Poland from abroad. This would mean an increase in the imports by 7% in relation to the level of 2013. At the same time it is anticipated that by 2015 the exports of wood pulp will still remain insignificant and will not exceed 90 thou. tonnes.

The market in paper and paperboard should also be characterised by upward trends. In the period 2014-2015 paper and paperboard production may rise to 4.2 m tonnes. Forecasts also assume that by 2015 the exports of paper and paperboard will increase to 2.3 m tonnes and the imports to 3.5 m tonnes.

4.9. (I) **Innovative wood products**

The wood sector is characterised by large branch diversity, including specific production processes and different assortment of manufactured products. On the other hand, the diverse production processes are reflected by various degrees of innovativeness of the techniques and technologies applied. In the Polish wood sector innovation are primarily of technical and technological nature and concern mainly changes occurring in the material structures of products. Amongst them one finds trends such as: a drive towards the development of products with new and perfected physical and chemical properties and better quality and durability parameters, changes in the properties of wood products which broaden their application range, the strengthening of the phenomenon of material substitution, and a drive towards saving of raw material, energy and labour.

The interest of companies in innovative operations is reflected by inter alia their outlay on innovation. In recent years in the wood sector an increase in the outlay on innovation has been observed, although its scale is unsatisfactory. In 2012 this outlay amounted to more than PLN 1.2 bn (PLN 960 m in 2010) and was almost 8% of such outlay in manufacturing (5% in 2010) and less than 6% in industry in general (4% in 2010). The highest outlay on innovation was recorded in the case of the furniture industry (49% outlay of the sector) and the pulp and paper industry (39%); whilst the lowest was observed in the wood industry (16%), which stems from the specificity of its production processes.

In the wood sector the highest percentage of investment in innovation is allocated to machines and equipment (almost 73% in 2012). In the wood industry this rate was 69%, in the furniture industry 65%, and in the pulp and paper industry 83% (for comparison, in manufacturing the rate was 54%, and in industry in general 58%). A relatively small part of the outlay on innovation is allocated to R&D (5.5% in 2012). In this respect the furniture industry stood out above the rest with the R&D share within total outlay on innovation equalling 8%; whilst in the pulp and paper industry this share was 2% and in the wood industry 6% (in industry in general this share equalled 17.1% and in manufacturing 20.7%).

The increase in investment in innovation in the whole Polish economy, including the wood sector, should be stimulated by R&D tax incentive system changes, which have been postulated by entrepreneurs.

5.0. (J) **Housing and construction**

Due to numerous applications of wood materials and products in construction, its situation has a significant bearing, indirect or direct, on the operation of the wood sector. In 2013 in Poland construction and assembly production dropped by over 11% in real terms. This downward trend concerned mainly construction of civil engineering facilities (a decrease by 14%), and to a lesser extent construction works connected with erection of buildings (a drop by approximately 11%) and specialist construction works (a drop by 9%). Nevertheless, the first half of 2014 witnessed an increase in the sale of construction and assembly production in companies building civil engineering facilities (by 17% in relation to the corresponding period of last year) and carrying out specialist construction works (by 16%). The companies erecting buildings were the only ones where a slight drop in the sale of production (by 0.1%) was recorded in this period. In the opinion of analysts, an improvement in situation in the Polish construction may be expected in the coming months. It is anticipated that at the end of 2014 an increase in construction and assembly production may range from 4% to approximately 7%. It will be a result of the expected increase in the private sector investment activity as regards non-residential constructions (construction of office buildings, hotels, and industrial plants).

In 2013 also the number of dwellings completed dropped to 145 thou., i.e. by 5% compared to almost 153 thou. in 2012, of which over 81 thou. were individual construction dwellings (an increase by 0.2% in relation to 2012) and 56.5 thou. dwellings for sale or rental (a drop by 11%). The year 2013 also recorded a decrease in the number of construction permits concerning new dwellings (by 16% in relation to 2012) and in the number of dwellings whose construction was commenced (by 10%) and dwellings under construction (by 2.5%). However, in the first half of 2014, despite the decrease in total number of dwellings completed (by 2%), a more than 2% increase in the number of dwellings for sale or rental was observed (in relation to the first half of 2012). A positive phenomenon is also the fact that the number of construction permits concerning new dwellings increased by more than 13% (however it concerned mainly dwellings for sale or rental) and the number of dwellings whose construction was commenced increased by 22.5% in relation to the corresponding period of last year. It is expected that in the coming years the programme designed to support the purchase of a first apartment by young people (“Apartment for the young”) should be one of the stimuli of the Polish housing development.

A significant improvement in situation of the Polish construction is foreseen for as late as 2015. It is assumed that within a new time horizon of investment financing from the EU funds, i.e. in the period 2014-2020, € 17.5 bn will be allocated for the investments connected with infrastructure, of which approximately PLN 36-38 bn will be allocated to projects connected with rail transport. The EU funds are also to support the construction of public buildings and hydrotechnical works.

Table 1

Economic indicators

Indicator	1995	2000	2005	2010	2011	2012	2013
	% change on previous year						
Gross Domestic Product	107.0	104.3	103.6	103.9	104.5	102.0	101.6
Sold production of industry	109.7	106.7	103.7	109.0	107.5	100.5	102.1
Construction and assembly production	108.1	101.4	108.0	104.6	111.8	93.7	88.9
Dwellings completed	88.2	107.1	105.5	84.9	96.4	116.8	94.9
Dwellings under construction	105.5	105.7	98.7	103.3	104.5	98.5	97.5
Average paid employment							
- total	102.8	97.1	101.7	99.8	100.6	99.2	99.1
- in the enterprises sector	101.0	96.7	101.9	100.8	103.2	100.1	99.0
Registered unemployment rate (*at the end of the year*)[1]	14.9	15.1	17.6	12.4	12.5	13,4	13.4
Average monthly gross real wages and salaries							
- total	102.8	101.0	101.8	101.4	101.4	100.1	102.5
- in the enterprises sector	103.2	101.3	101.2	100.8	100.9	99.8	102.0
Price indices of consumer goods and services (*inflation*)	127.8	110.1	102.1	102.6	104.3	103.7	100.9
Investment outlays	117.1	101.4	107.7	100.2	110.6	97.2	99.0
Trade							
millions of PLN, current prices							
Exports	55515.1	137908.7	288780.8	481058.2	558739.0	603418.6	647878.8
Imports	70502.3	213071.8	328192.0	436220.6	623372.7	648127.6	656098.2
Balance of trade	-14987.2	-75163.1	-39411.2	-55162.4	-64633.7	-44709.0	-8219.4
millions of USD, current prices							
Exports	22894.9	31651.3	89378.1	159757.6	190247.5	184660.6	206138.0
Imports	29049.7	48940.2	101538.8	178062.9	212330.9	198463.4	208780.4
Balance of trade	-6154.8	-17288.9	-12160.7	-18305.3	-22083.4	-13802.8	-2642.4
millions of EUR, current prices							
Exports	-	34373.4	71423.5	120373.1	136693.9	143456.1	154994.0
Imports	-	53084.8	81169.7	134188.4	152568.4	154040.2	156978.0
Balance of trade	-	-18711.2	-9746.2	-13815.3	-15874.5	-10584.1	-1984.0

[1] as a ratio of registered unemployed persons to the economically active civil population