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# POLAND STATEMENT ON THE WOOD MARKET REVIEW AND PROSPECTS

**Ministry of the Environment** 

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

In 2017 the Gross Domestic Product of Poland increased 4.6% in real terms, which meant that it was 1.6 percentage point higher, compared to 2016. Domestic demand remained the major driving force of economic growth (the real growth was 4.7%, while in 2016 it was 2.2%), including private consumption (a 4.8% increase compared to 3.9% in the previous year), whose share in GDP creation was 2.7 percentage point. It is important that gross accumulation increased 6.2%, including a 3.4% increase in gross outlay on fixed assets, while in 2016 the respective values demonstrated a -2.4% and a -8.2% decrease, respectively. In 2017 gross added value increased 4.4% (compared to 2.9% in the previous year), while its highest increase was observed in construction (11.5%, compared to a -8.5% decrease in the previous year) – the sector that is an important stimulus of the forestry-wood sector development in Poland. The relatively high dynamics of added value growth was also observed in industry (6.2%, compared to 3.5% in the previous year). The balance of foreign trade had a slight positive influence on the GDP level (0.1 percentage point, compared to 0.8 percentage point in 2016). The share of export in GDP increased to unprecedented 54%. It is anticipated that in the period 2018-2019 Poland's GDP will increase 3.8% annually, in real terms. Domestic demand (its increase is forecasted to be 4.5% and 4.2%, respectively), including private consumption (3.8% and 3.5% increase, respectively), will remain the main driver of the GDP's growth. It is anticipated that the share of investments within GDP will increase in that period. This growth will be connected mainly with the intensification of the use of funds under the European Union's financial horizon 2014-2020 (according to the assumptions gross outlay on fixed assets is to increase 9.1% in 2018 and 8.4% in 2019).

In 2017 sold production of Polish industry increased 6.6% in relation to the previous year (in fixed prices) and sold production of manufacturing augmented 7.4%. In the wood sector the highest dynamics was recorded for the wood industry production (8.5%). In the furniture industry the increase in sold production was 6.7%, and in the pulp and paper industry and paper processing 3.3%. Sold production of the total wood sector was PLN 129.5 billion (\$ 34.3 billion, €30.4 billion) and accounted for approximately 9% of total sold production of industry and more than 10% of total sold production of manufacturing. As in previous years, the furniture industry had the highest share within sold production of the sector (36%), whereas the share of the pulp and paper industry (together with paper processing) and the wood industry was approximately 32% in each case. The results for 2018 hitherto indicate that in the near future the upward trend in production will continue in industry as a whole and in manufacturing, as well as in the wood sector. In the period 2018-2019 it is possible that the real growth of sold production of the wood sector will reach 8%-10% annually, depending on the industry.

The year 2017 witnessed continuation of former trends on the labour market in Poland. At the end of the year registered unemployment rate was 6.6% (whereas in 2016 it was 8.2%; harmonised unemployment rate (as per the Eurostat definition) decreased from 6.2% to 4.9%). In 2017 the average employment in industry increased more than 2% and in manufacturing 3%, compared to the previous year. In the wood sector employment increased fastest in the furniture industry (almost 7% according to estimates) and in the pulp and paper industry and paper

processing (more than 3%). In the wood industry employment grew less than 2%. The employed in the wood sector (345 thou. people in 2017 according to estimates) accounted for 12% of the employed in industry and for 14% of the employed in manufacturing. Employment in forestry and in the State Forests remained at the level of 2016 and was approximately 44 thou. people and 26 thou. people, respectively. The unemployment rate is anticipated to decrease further in the near future – to 6.2% in 2018 and 5.6% in 2019. Former trends suggest that this rate may be even lower and harmonised unemployment rate may drop to 4.2% in 2018 and to 3.9% in 2019. Employment should continue to grow but slower than hitherto. The increase is expected to be 1.7% in national economy in 2018 and 0.5% in 2019 (compared to the previous year). The employment growth anticipated in the wood sector (4%-5% annually) may be higher than in industry and manufacturing (1%-2%).

In 2017 Poland's balance of foreign trade recorded a surplus of exports over imports, although it was significantly lower than in previous years and amounted to PLN 2.5 billion (\$ 0.6 billion; €0.5 billion). Polish exports' value was PLN 882.6 billion (\$ 231.6 billion; €206.6 billion), meaning a 6.4% increase in exports compared to 2016 (in fixed prices). The increase in imports, whose value was PLN 880.1 billion (\$ 231 billion; € 206.1 billion), was also considerable (8.8%). As in previous years, in 2017 Poland's trade partners (in export and import) were primarily the European Union countries (in the first place Germany, France, Italy, and Czech Republic), whose share within exports was 80% and within imports 60%. Trade partners from outside the EU were China and Russia, which were mainly partners in imports. It is estimated that wood and wood products accounted for approximately 9% of the exports' value and 4% of the imports' value in 2017. Furniture was still one of the major commodity group in Polish exports (with a share of 5%). It is anticipated that in coming years import will be characterised by higher dynamics than export and its real growth will be 7.6% in 2018 and 6.9% in 2019. In the same period the growth of export may be 6.2% and 6%, respectively (and in consequence there may occur a trade deficit, which will reduce the GDP growth by approximately 0.5 and 0.3 percentage point in the period 2018-2019).

In 2017 deflation, which had been observed in previous years, was superseded by a 2% growth of price index of consumer goods and services, compared to the previous year (in 2016 the index was -0.6%). The greatest increase was observed for the prices of food and transport (especially fuels), whereas the prices of, inter alia, gas and heat energy, dropped. Inflation was primarily fuelled by changes of raw material prices on the global market, especially of petroleum price. It is estimated that in the period 2018-2019 inflation will be 2.3% annually.

The prospects for the growth of Polish economy, including the development of the forestry-wood sector, are good but strongly dependent on situation in the global and European economy, especially in the European Union. Although short-term forecasts of global growth are rather optimistic, an increase in risk connected with, inter alia, growing inflation, changes of monetary policy, reduction of labour supply in developed economies and a slowdown of global trade development (interruptions of global flows of goods and capital as an effect of growing protectionism) is anticipated in the medium- and long term. Another source of threats encompasses the progressing climate change, incidents connected with breach of cyber-security and continuous geopolitical tensions, inter alia, in the Middle East and on Korean Peninsula. Within the European Union the hard-to-forecast consequences of Brexit continue to be a source of threats.

## 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

In Poland the state policy priority is to maintain the stability of public finance, while supporting inclusive economic growth. One of the basic documents setting forth the lines of economic growth, including the forestry-wood sector growth, is the *Multiannual Financial Plan for Poland for the period 2018-2021*, presented in April 2018 (which is also the basis for the Budget Act for 2019). The document contains the *Convergence Programme. Revision 2018* and *The main goals of the state's function together with the measures of their achievement* and presents an assessment of Poland's economic situation as well as a forecast of its development till 2021 together with an analysis of the stability and quality of public finance. It also points out the goals of economic policy and measures of their achievement. Those goals pertain to the priorities set forth in the *Strategy for Responsible Growth till 2020* (with a time horizon till 2030), adopted in 2017, and concern a sustainable economic growth based on knowledge and organisational excellence, a socially-sensitive and territorially-sustainable growth, and an efficient state and institutions serving the growth and social and economic inclusion.

The document that outlines policies and actions of the state is the *National Programme* of *Reforms*, which is consistent with the *Multiannual Financial Plan for Poland for the period* 2018-2021. The *Programme* also concerns the forestry-wood sector and wood companies. It is the basic instrument for the implementation by the European Union member states of the EU strategy *Europe* 2020 in the areas of employment, R&D, energy and climate, education and higher education, and counteracting poverty and social exclusion. Another edition of the *National Programme of Reforms. Revision* 2018/2019 presents structural reforms, which are presently being introduced in Poland and points out actions which are being undertaken with the view of facing key challenges concerning, inter alia: the support for investments; business and its surroundings; environmental protection; and health care.

Construction and implementation of proper instruments for management of resources is of strategic importance for the economic development, including the forestry-wood sector growth. Presently in Poland there are social consultations of the *Raw material policy of Poland*, i.e. a set of principles, actions and instruments aimed at rational management of raw material resources, definition of the lines of investment in this field, reduction of dependence on external sources of raw materials, and assurance of the raw material safety of Poland in the short, medium- and long-term.

According to the strategic objectives of Poland's development, an updated version of the *National Programme of Social Economy Development for the period 2014-2023. Economy of Social Solidarity* was presented in 2018. The *Programme* defines key actions and instruments for the creation of optimum conditions for the development of a social economy and social enterprises. A long-term strategic objective of the *Programme* is to make the social and solidary economy an important instrument of active social policy and of the support for social and local development, as well as an impulse to increase the effectiveness of actions towards job creation and to help vocational and social reintegration of people threatened with social exclusion.

In the field of the environment, the authorities take actions connected with, inter alia, waste management and water management. The new regulations are to prevent waste storage in places not intended for that purpose and in places where waste management activities were ceased. They are also to prevent fires in places of waste storage. In 2018 a new *Water Act* entered into force in Poland. The *Act* defines rights and obligations of entrepreneurs, local self-government, administration and citizens in the field of water-supply and sewage-disposal (concerns development and protection of water resources, usage of waters, management of water resources) in accordance with the principles of sustainable development.

Actions undertaken within the framework of science policy, science and technological policy and innovation policy of Poland contribute to the increase in the technological advancement of Polish economy and strengthening of the economy's competitiveness and innovativeness. On October 1<sup>st</sup>, 2018, a new law concerning higher education and science will take effect in Poland, i.e. the *Constitution for Science (Law on higher education and science and provisions introducing it)*. The comprehensive reform of science and higher education is to free the potential of Polish science and contribute to the growth of its importance on the international arena. The new regulations are to enhance the internationalisation of research, improve the effectiveness of management of the higher education institutions, make it possible to join the potential of scientific disciplines, strengthen the human resources of the sector, build the optimum conditions for education of future human resources, and ensure a system support for Polish scientific journals. They are also aimed at improvement of the quality of research results, modernisation of the research infrastructure, improvement of the scientific institutions' competence, and strengthening of cooperation between science and industry.

#### 3. MARKET DRIVERS

Amongst the actions undertaken in Poland in the years 2017-2018 within the framework of the state's economic policy, the actions aimed at stimulation of the investment processes, improvement of the quality of regulations concerning investing and reduction of the investment risk are especially important for the forestry-wood sector and wood companies. An important step is the implementation of the new mechanism of investment support (the act on support for new investments), which expands the area, where tax allowance may be obtained, on almost 100% of the areas dedicated for investments in Poland (not only within the Special Economic Zones). The mechanism also simplifies the procedures, especially for SMEs, rewards initiatives enhancing competitiveness and innovativeness, especially of regional economies. The authorities also prepared regulations, which are to augment the share of private capital in financing of public investments (public-private partnership) and improve the effectiveness of public expenditure. Support for public investments and for creation of conditions for private investments is also envisaged in the *Package for medium-sized cities* (above 20 thou. residents), which is aimed at levelling the development opportunities in all regions of Poland, especially in those where socio-economic issues are the most severe. At present the authorities are updating the Programme for support of investments of significance for Polish economy for the years 2011-2023, which is a stimulus of high-quality investments, mainly in the sectors of biotechnology, food and agriculture, and R&D. They are also drawing up a new Public procurement law, which will contain a legal basis for preparation and execution of the state's procurement policy ("effectiveness" is to be understood as the best relation of outlay to effects; it is assumed that there will be a possibility of: restricting a commission to SMEs only, selecting innovative and ecological products and solutions, cooperation between mandator and manadatary, reduction of open tenders in favour of other courses of action).

A comprehensive reform of the economic law was started by the introduction of the package *Business Constitution*, including the *Entrepreneurs Law* and the *Small and Medium-sized Entrepreneurs Ombudsman Law* in 2018. The *Constitution* assumes freedom of business activity, partnership in the administration-entrepreneur relations, a friendly interpretation of regulations, and lesser inconvenience of inspections. It also introducers so-called *commencement relief*, i.e. temporary exemption from the obligation to pay social insurance premiums. The *Entrepreneurs Law* sets a catalogue of entrepreneurs' rights and obligations, as well as guidelines for creation and enforcement of law in the sphere of business activity. The role of the *Small and Medium-sized Entrepreneurs Ombudsman Law* is to protect the rights of entrepreneurs and stimulate partner relations between them and public administration.

New regulations, which solve the complex issues connected with succession after entrepreneur's decease, create favourable conditions for building and development of Polish family companies of many generations (it is a numerous group of companies in Polish economy and in the forestry-wood sector). The *Act on succession stewardship of a natural person's company* enables the successors to move on to the next stage of the company's development and provides instruments (appointment of succession steward) that assure an uninterrupted process of succession (stable situation of employees; continuity of tax settlements; validity of bank accounts, permissions, licences, concessions, and permits).

Changes in the tax law have a significant influence on operation of companies, including wood companies. In 2018 new principles of tax control entered into force and the authorities introduced the mechanism of *split payment*, which assures transparency of transactions and protects entrepreneurs from dishonest contractors. A bill of a new *Tax Law* is now in social consultations (it is to become effective as of 2020). The new regulations are to enhance the taxpayer rights and ensure better protection of those rights, as well as to increase the effectiveness of tax collection. The *Tax Law* appoints *Taxpayer Rights Ombudsmen* (whose role is to protect the taxpayers right) and *Local Taxes Competence Centres* (which are to support local tax offices).

At present, the authorities are carrying out social consultations of a bill concerning the labour market. Changes of the labour law are forced by changes on the national labour market, especially low unemployment and occurring shortages of skilled labour (those shortages are also visible in the forestry-wood sector). The new regulations are to facilitate optimum management of potential labour resources. They envisage support (loan) for setting up a company by people returning from emigration and lengthening of the period when foreigners can work in Poland based on declaration of an intention to commission work. They also abolish the necessity of defining the profile (type) of help for the unemployed (which is to allow any form of help deemed purposeful) and introduce a new solution, i.e. so-called "offer voucher", which is to enable entrepreneurs to look for employees outside the official registers.

So-called second act on innovativeness (act changing some acts with the view of improvement of legal surroundings of innovative activity) facilitates innovative activities and contains incentives to undertake them. On the other hand, the project entitled Network of Open Innovation is to ensure increased effectiveness of external sources in creation of innovative solutions (it is to stimulate technology transfer between innovators and the SME sector; ensure financial support in the form of grants for purchase of intangible and legal property in the form of patents, licences, know-how, and utility models). Operational Programmes offer support for companies through, inter alia, the project entitled Research for sale (support for research projects "from an idea to a market product"), support for coordinators of the National Key Clusters, and the programme BRIdge Alfa (support for ideas with high potential in the seed phase characterised by the highest investment risk). There is also the recently launched programme Techmatstrateg aimed at the development of, inter alia, technologies of structural materials, zero-waste material technologies, and technologies of biodegradable engineered materials.

Projects concerning green technology development are still supported within the framework of *Interreg* programme. The programme *Start in Poland* is still functional as a tool for innovativeness support. Polish Agency of Information and Foreign Investments, whose job was to support exporters and foreign investors, was turned into *Polish Agency of Investments and Commerce*, and its offer was broadened (for instance, by establishing foreign trade offices which help entrepreneurs with expansion on a chosen market). SMEs located in Eastern Poland also get support for internationalisation. An important line of activity was promotion of economy in its entirety as well as of particular brands, which was carried out within the framework of branch programmes (inter alia *Polish Furniture*) and programmes addressed to individual companies (*Go to Brand*). The furniture industry can also benefit from two programmes, i.e. *Design – it is good for SMEs* and *Design for entrepreneurs*, which finance the development of industrial design of products.

#### 4. DEVELOPMENTS IN FOREST PRODUCTS MARKETS SECTORS

#### 4. (A) Wood raw materials

W 2017 45.3 million m<sup>3</sup> of roundwood (net, without bark) was harvested in Poland, i.e. almost 7% more than in the previous year. It was primarily roundwood from forest (44.3 million m<sup>3</sup>, over 8% more than the year before), less than 2% was roundwood harvested from afforested areas (0.8 million m<sup>3</sup>, a 36% drop in removals compared to the previous year), and 0.6% were forest chips (0.3 million m<sup>3</sup>, a 6% increase in removals). Almost 94% of harvested roundwood originated from the state forests, and less than 5% from private forests. The main roundwood type harvested in Poland was softwood (77% in 2017). 88% of roundwood harvested in 2017 was industrial roundwood, primarily pulpwood (53% of industrial roundwood harvested) and sawlogs (together with veneer logs accounted for 45% of roundwood harvested for industrial processing). Approximately 1 million m<sup>3</sup> of other roundwood was also harvested for industrial purposes. Removals of fuelwood were at a level similar to that of the previous year (5.3 million m<sup>3</sup>).

It is estimated that about 7% (3 million m<sup>3</sup>) of roundwood harvested in Poland was exported in 2017, i.e. over 8% more than in the previous year. Approximately 94% of exported

roundwood was wood for industrial processing (2.8 million m<sup>3</sup>). Majority of it was softwood, most of which was pine. Exported industrial hardwood was dominated by beech and birch. 0.2 million m<sup>3</sup> of fuelwood was also exported in 2017 (33% more than in 2016).

In 2017 Poland imported 1.7 million m<sup>3</sup> of roundwood, i.e. 30% less than in the previous year. The imports accounted for less than 4% of domestic removals of roundwood and almost all of it was roundwood for industrial purposes (97%, 1.7 million m<sup>3</sup>). Industrial softwood was dominated by pine, and industrial hardwood by birch and poplar. Imports of tropical wood species amounted to 1.7 thou. m<sup>3</sup>. In 2017 Poland also imported approximately 58 thou. m<sup>3</sup> of fuelwood (threefold more than in the previous year).

It is anticipated that roundwood harvesting will steadily increase in the near future to 47.9 million m<sup>3</sup> in 2018 and 48.5 million m<sup>3</sup> in 2019 (although the growth dynamics will demonstrate a downward trend). The share of industrial roundwood within total removals should increase (to 43.0 million m<sup>3</sup> in 2019). Majority of it will still be softwood. The structure of harvested industrial roundwood will be dominated by pulpwood, whose removals may increase steadily (to 23 million m<sup>3</sup> in 2019). There should also be an increase in removals of sawlogs and veneer logs to 19 million m<sup>3</sup> in 2019; however, dynamics of that growth will be lower than in the case of pulpwood. In the period 2018-2019 removals of the other industrial roundwood should remain at a level of 1.1 million m<sup>3</sup>, while fuelwood removals will probably reach 5.5 million m<sup>3</sup> in that period. It is forecasted that in the years 2018-2019 approximately 7% of roundwood harvested in Poland may be exported (3.2-3.3 million m<sup>3</sup>, respectively). The primary exports will be, as in the past, industrial roundwood, mainly softwood. Fuelwood export should not exceed 0.2 million m<sup>3</sup> in the forecast horizon, while roundwood import (majority of it being industrial roundwood) may increase to 1.9 million m<sup>3</sup> and 2.1 million m<sup>3</sup>, respectively, in the period 2018-2019. Unlike exports, imports should be dominated by hardwood species. Fuelwood imports will remain insignificant in the forecast horizon and probably at a level of 75-85 thou. m<sup>3</sup>.

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

Production of renewable energy in Poland has been steadily growing. In the period 2015-2016 it increased from 8.7 million toe (tonnes of oil equivalent) to 9.1 million toe, i.e. 4.5%. Compared to the year 2000 (3.8 million toe) the increase was more than twofold. In 2016 the share of energy from renewable sources within total energy production was 13.5%, and within total energy consumption 9%. Biomass remains the major source of renewable energy (81%), of which solid biomass accounts for approximately 71% (most of it being wood biomass).

The act on renewable energy sources was amended in 2018 in Poland. The amendment was made with the view of ensuring the consistency of provisions contained in the act with regulations concerning public aid and the consistency of key definitions (e.g. biomass, agricultural biomass, biocarbon, energy wood) with the EU directive on promotion of the use of energy from renewable resources. The new regulations concern, inter alia, investments in water power plants, bring the principles of the auction system up to date, and introduce support mechanisms for small producers of electric energy (feed-in-tariffs or feed-in-premium) using chosen technologies (hydropower engineering, biogas). The amendment of former regulations

is to induce new investments in renewable energy sources and thus increase their share in final energy consumption to the level envisaged for 2020.

#### 4. (C) Certified forest products

Certification of forest management and wood products has a long tradition in Poland and is carried out according to two systems, i.e. PEFC (*Programme for the Endorsement of Forest Certification Scheme*) and FSC (*Forest Stewardship Council*).

In Poland 449 entities have certificates of forest management according to PEFC system, of which 445 certificates are active (as for July 2018). All State Forests Regional Directorates (17) have those certificates, as well as 425 forest inspectorates and 3 forest companies. The area of PEFC certified forests is 7.3 million hectares, which accounts for more than 79% of the area of forests in Poland and, at the same time, for 7.5% of PEFC certified forests in Europe and for 2.3% in the world. In mid-2018 Polish companies also had 327 certificates of wood products, i.e. CoC (*Chain of Custody*) certificates, including 252 active certificates. Most of those certificates (approximately 58%) are owned by production companies, mainly manufacturers of sawnwood (at various processing stages; including producers of pallets and flooring materials), wood-based panels, wood pulp, paper and paperboard, paper products, and furniture.

As regards FSC system, certificates of the FM type (*Forest Management*) are held by 16 out of 17 State Forests Regional Directorates (as for July 2018), 2 Forest Experimental Stations (in Rogów and Siemianice) and 1 natural person (private forest). This means that in Poland the total area of FSC certified forests amounts to 6.9 million hectares, i.e. to more than 75% of total forest area, and, at the same time, accounts for 7% of FSC certified forests in Europe and for 3.4% in the world. Out of 3665 registered FSC-CoC certificates 2416 (66%) are active. 70% of those certificates is owned by production companies, primarily by the manufacturers of sawnwood (at various processing stages), wooden garden products, wooden accessories, furniture, and furniture elements. Amongst the production companies with active FSC-CoC certificates, 368 companies own FSC-CW certificates attesting that such company is an authorised supplier/seller of controlled wood (*FSC Controlled Wood*), and 74 companies obtained certificates attesting that such company implemented the due diligence system and trades wood in accordance with the FSC system (*CW Due Diligence*).

#### 4. (D) Value-added wood products

Furniture is the most important element in the group of value-added wood products manufactured in Poland. Builder's carpentry and joinery products, wooden packaging, and products of paper and paperboard are also important items.

In 2017 the value of furniture manufactured in Poland was PLN 41 billion (\$ 10.9 billion, €9.6 billion), meaning that the real increase in production was 6.8% compared to the previous year. Wooden furniture (together with wooden elements of furniture) was 71% of it (PLN 29 billion, \$ 7.7 billion, €6.8 billion), and its production was 9% higher than in 2016 (in fixed prices). The value structure of the production was dominated by upholstered furniture for sitting and furniture for bedrooms, dining rooms and living rooms. Approximately 10% of the value of manufactured wooden furniture were furniture parts (PLN 2.9 billion, \$ 0.8 billion, €0.7

billion). Furniture is one of the most important groups in Polish foreign trade (it accounts for approximately 5% of total value of Polish exports). In 2017 Poland exported 75% (in terms of value) of wooden furniture produced in the country (PLN 21.8 billion, \$ 5.7 billion, € 5.1 billion), which was 7% more than in the previous year (in current prices, in PLN). The exports, as in the case of the production, was dominated by upholstered furniture for sitting and furniture for bedrooms, dining rooms and living rooms. On the other hand, Poland imported wooden furniture worth PLN 1.8 billion (\$ 0.5 billion, €0.4 billion), which meant a 7% increase in its imports compared to the previous year 7% (in current prices, in PLN). Imports was approximately 6% in relation to the production. The value structure of imported wooden furniture was dominated by furniture for bedrooms, dining rooms and living rooms, as well as furniture parts.

Builder's carpentry and joinery products are also characterised by a relatively high added value. In 2017 value of their production was PLN 8.3 billion (\$ 2.2 billion, €1.9 billion), of which 0.3 billion was the value of the production of prefabricated wooden houses. In 2017 the production of builder's carpentry and joinery products for construction was 8% higher, in real terms, than the year before. Among other things, producers manufactured 75.6 million m<sup>2</sup> of flooring materials (4% more than in the previous year) and 19.7 million m<sup>2</sup> of wooden and doors (i.e. 3.4 million pieces of windows and 10.4 million pieces of doors), which meant a 3% increase in their production year-to-year. Approximately 62% (in terms of value) of builder's carpentry and joinery products manufactured in Poland was exported (PLN 5.2 billion, \$ 1.4 billion, €1.2 billion), i.e. 3% more than in 2016 (in current prices, in PLN). Main exported commodities were windows and doors and flooring materials. Almost all prefabricated wooden houses produced in Poland were exported. On the other hand, Poland imported builder's carpentry and joinery products worth PLN 0.4 billion (\$ 0.1 billion, €0.1 billion). It was a level similar to that of the previous year (import of prefabricated wooden houses was relatively insignificant and amounted to approximately 3% of the import value of builder's carpentry and joinery products). The imports (primarily windows) was 5% in relation to the production value.

In 2017 producers in Poland also manufactured wooden packaging worth PLN 2.3 billion (\$ 0.6 billion, €0.5 billion). It was approximately 8% more, in real terms, than in 2016. Among other things, the producers manufactured 122.3 million pieces of pallets (a 15% increase in production compared to the previous year) and 92.9 thou. tonnes of crates, boxes and similar packaging (more than 10% less than the year before). The demand for Polish packaging was largely created by foreign customers – approximately 72% (in terms of value) of products from this group was exported (PLN 1.7 billion, \$ 0.4 billion, €0.4 billion). It was 5% more than in 2016 (in current prices, in PLN). Primary exported goods were pallets and various types of creates and boxes. Polish imports of products from this commodity group was worth PLN 0.2 billion (\$ 0.1 billion, €0.06 billion), i.e. 8% more than the year before (in current prices, in PLN). In terms of value, imports of wooden packaging amounted to approximately 11% of the production and it was mainly pallets.

Products of paper and paperboard are also important on Polish market in value-added wood products. In 2017 their production amounted to PLN 25.8 billion (\$ 6.8 billion, € 6.1 billion) and was almost 10% higher compared to the previous year, in real terms. The value structure of the production was dominated by corrugated paper and paperboard, packaging of

paper and paperboard, household articles, and toilet and sanitary products. Poland exported 34% (in terms of value) of paper products manufactured in the country (PLN 8.9 billion, \$ 2.3 billion, €2.1 billion). It was 7% more than in 2016. Exports consisted primarily of packaging of paper and paperboard, special coated papers, and paper products for households and sanitary purposes. On the other hand, the value of Poland's imports of paper products was PLN 5.2 billion (\$ 1.4 billion, €1.2 billion), i.e. 11% more than the year before. At the same time, imports accounted for 20% of the production, in terms of value, and its structure was dominated by packaging of paper and paperboard and special coated papers.

#### 4. (E) Sawn softwood

In Poland for many years the structure of sawn softwood production has been dominated by softwood species. In 2017 sawn softwood production amounted to 4.4 million m<sup>3</sup> and it was a more than 1% increase compared to the previous year. Domestic offer was supplemented by sawn softwood imports (primarily pine), which amounted to 0.8 million m<sup>3</sup> (which meant an approximately 21% increase in relation to 2016). The imports amounted to 18% of domestic production volume. Poland exported 0.7 million m<sup>3</sup> of sawn softwood (16.0% of its production). In 2017 its export was 0.5% lower than the year before. Main exported sawnwood was sawn pinewood.

It is estimated that in the period 2018-2019 sawn softwood production in Poland will increase to 4.5 million m<sup>3</sup> and 4.6 million m<sup>3</sup>, respectively. Former trends in foreign trade should remain unchanged. Both exports and imports of sawn softwood should not exceed 0.9 million m<sup>3</sup>.

#### 4. (F) Sawn hardwood

In 2017 sawn hardwood accounted for 12% of total sawnwood production in Poland. Sawn hardwood production amounted to 0.6 million m³ (a 4% increase compared to 2016). Imports increased sawn hardwood supply by 0.3 million m³ (approximately 9% decrease compared to the previous year) and accounted for 51% of domestic production volume. Main imports were sawn oakwood and beechwood. Approximately 5% of imported sawn hardwood were tropical species. On the other hand, Poland exported 0.2 million m³ of sawn hardwood (i.e. 44% more than in 2016). Exports accounted for approximately 29% of domestic production volume. Main exports were sawn oakwood and beechwood.

Forecasts for the near future assume a slow growth of sawn hardwood production, i.e. 3% annually (0.6 million m<sup>3</sup> in 2018 and 0.7 million m<sup>3</sup> in 2019). Polish market in sawn hardwood should be supplemented by its imports in the amount of 0.3-0.4 million m<sup>3</sup> annually, while its exports should not exceed 0.2 million m<sup>3</sup> within the forecast horizon.

#### 4. (G) Veneer sheets

In 2017 in Poland production of veneers (including veneer sheets) amounted to 64.6 thou. m<sup>3</sup> and increased 64% compared to the previous year. Approximately 55% of total production were hardwood veneers. Poland imported 74.4 thou. m<sup>3</sup> of veneers, i.e. 38% more than in 2016, and it was 115% of domestic production volume. 88% of those veneers were hardwood veneers (import of tropical veneers was insignificant and did not exceed 1 thou. m<sup>3</sup>). On the other hand, Poland exported insignificant amounts of veneers, i.e. 13.6 thou. m<sup>3</sup> (21% of their domestic production), primarily hardwood veneers. Veneer export decreased approximately 21% compared to the previous year.

In the years 2018-2019 production of veneers (including veneer sheets) may increase 1-3% annually (to 67 thou. m<sup>3</sup> in 2019). Their imports may increase 6-8% annually (to 85 thou. m<sup>3</sup> in 2019), while exports may grow to 16 thou. m<sup>3</sup> in 2019.

#### 4. (H) Wood-based panels

In 2017 wood-based panel production in Poland increased 6% compared to 2016, i.e. from 10.4 million m<sup>3</sup> to 11.0 million m<sup>3</sup>. Its assortment structure was dominated by particleboards, whose share was 51%. Particleboard production increased 4% in relation to the previous year and amounted to 5.6 million m<sup>3</sup>, of which 16% were OSBs (0.9 million m<sup>3</sup>). The share of fibreboards within the total production of wood-based panels was 44% (4.9 million m<sup>3</sup>, more than 7% increase in production annually). The production was dominated by dry-process fibreboards (approximately 72% of the production of all fibreboards), whose production amounted to 3.5 million m<sup>3</sup>. 0.5 million m<sup>3</sup> of plywood was also produced in Poland, i.e. 18% more than in 2016. Domestic production of wood-based panel was supplemented by their imports in the amount of 3.2 million m<sup>3</sup>, which accounted for 29% of the production and was 27% higher than in 2016. Almost 68% of wood-based panels imported to Poland were particleboards (2.2 million m<sup>3</sup>, 27% increase in imports in relation to the previous year). OSBs were a small part of the imports (0.1 million m<sup>3</sup>). Poland also imported 0.6 million m<sup>3</sup> of fibreboards (72% of them were dry-process boards) and 0.4 million m<sup>3</sup> of plywood (24% and 29% greater than the year before). Approximately 29% of domestic production of wood-based panels was sold on foreign markets (3.2 million m<sup>3</sup>, 10% more than in the previous year). The assortment structure of wood-based panel exports was dominated by fibreboards 63% (2.0 million m<sup>3</sup>, while supplies increased 7% in relation to the previous year), namely dry-process boards and wet-process porous boards. The share of particleboards in wood-based panel exports was 28% (0.9 million m<sup>3</sup>, 11% increase in exports). OSBs accounted for 42% (0.4 million m<sup>3</sup>) of exported particleboards. Poland also exported 0.3 million m<sup>3</sup> of plywood, i.e. 22% more than in 2016.

It is estimated that in the period 2018-2019 wood-based panel production will increase approximately 2% annually, i.e. to 11.4 million m<sup>3</sup>. Its structure should still be dominated by particleboards (further growth of OSB production is anticipated) and fibreboards (primarily dry-process). An increase in wood-based panel imports is also anticipated – to 3.4 million m<sup>3</sup> in 2019 (as previously the imports will be dominated by particleboards). In the coming years exports should also increase – in 2019 Poland may export 3.3 million m<sup>3</sup> of wood-based panels (primarily fibreboards).

#### 4. (I) Pulp and paper

In 2017 wood pulp production in Poland increased more than 9% in relation to 2016 and reached a level of approximately 1.3 million tonnes. Its assortment structure was dominated by cellulose with a 74% share (more than 0.9 million tonnes). Semi-chemical wood pulp and mechanical wood pulp accounted for 17% (0.2 million tonnes). Additionally, 0.1 million tonnes of cellulose pulp for chemical processing was produced. In 2017 domestic demand forced wood pulp imports in the amount of more than 1 million tonnes (however, it was 2% less than the year before and accounted for 81% of the production). The imports consisted primarily of cellulose, which accounted for 91% of total wood pulp imports. As in previous years, export of

wood pulp was insignificant and amounted to 0.2 million tonnes in 2017 (almost the whole of it was cellulose). At the same time, it amounted to 15% of the production and was 6% higher than in 2016.

It is estimated that in the near future wood pulp production will remain at a level of approximately 1.3 million tonnes. Import of wood pulp will remain important for domestic market, and it may reach 1.1 million tonnes in 2019, while its export should not exceed 0.2 million tonnes in the years 2018-2019.

In 2017 4.8 million tonnes of paper and paperboard was produced in Poland and it meant a 3% increase in the production compared to 2016. The structure of production was dominated by packaging paper (67%, 3.2 million tonnes) and graphic paper (18%, 0.9 million tonnes). On the other hand, Poland imported 4.2 million tonnes of paper and paperboard (which was 87% of domestic production volume), i.e. 10% more than the year before. The imports' structure was dominated by packaging paper and graphic paper. Poland exported 2.3 million tonnes of paper and paperboard (4% increase in exports in relation to the previous year). Export of paper and paperboard was 48% in relation to domestic production volume. Primary export items were packaging paper and graphic paper.

It is forecasted that in the near future production of paper and paperboard will keep increasing (to 4.9 million tonnes in 2018 and 5 million tonnes in 2019). It is also assumed that export and import of those products will grow (to 2.5 million tonnes in 2019 and to 4.4 million tonnes in 2019, respectively).

#### 4. (J) Innovative wood products

In 2016 outlay on innovative activity in the wood sector amounted to PLN 1.7 billion and was 6% of such outlay in the whole of industry and almost 9% in manufacturing. The highest outlay was recorded in the pulp and paper industry and paper processing and amounted to PLN 786 million (46% of the whole outlay on innovative activity in the wood sector). The outlay in the wood industry was PLN 484 million (28%), and in the furniture industry PLN 442 million (26%). The expenditure was primarily on machines and technical tools, and the money came mainly from companies' own funds. The average individual wood company's spending on innovative activity was PLN 3.1 million. In pulp and paper companies and paper processing companies the spending was PLN 7.9 million, and in the furniture industry PLN 2 million (in industry the average outlay of an individual company on innovative activity was PLN 5.9 million in 2016, and in manufacturing PLN 4.5 million). In 2016 companies with expenditure on innovative activity were approximately 8% of wood companies, 14% of companies of the pulp and paper industry, including paper processing, and 12% of furniture companies (in industry and manufacturing the proportion was approximately 15%). In 2016 income from the sales of new or significantly improved products was approximately 6% of total sales in the furniture industry, 10% in the wood industry, and 15% in the pulp and paper industry, including paper processing (the percentage in industry and manufacturing was 8% and 10%, respectively).

In the period 2014-2016 companies which were active in the field of innovation (i.e. which introduced at least one product innovation or process innovation or carried out one

innovative project in that period) accounted for approximately 13% of wood companies, 20% of companies of the pulp and paper industry, including paper processing, and 17% of furniture companies (in industry and manufacturing the proportion was 20% on average).

Innovations in the wood sector, as in the whole of industry and manufacturing, concern primarily technological processes, mainly new or significantly improved methods of product manufacturing. The wood sector also introduces organisational innovations (primarily concerning methods and principles of operation as well as methods for distribution of tasks and decision-making powers) and marketing innovations (primarily concerning changes in the product structure or packaging as well as tools and techniques of product promotion).

Too high costs of innovation and the lack of possibility of financing them from internal funds is pointed out a by the producers of the wood sector as the main barrier to the growth of innovativeness.

#### 4. (K) Housing and construction

In 2017 the increase in construction and assembly production observed in Poland was 6.6% in real terms compared to 2016 (which meant that the negative trend of the previous year (-2.4%) was reversed). The increase occurred primarily due to the results achieved in the category "construction of civil engineering facilities" (more than a 13% increase in production). In the case of specialist construction works the increase was almost 5%, and in the case of erection of buildings 4%. In 2017 a slight increase in employment in construction was also observed, i.e. 1% compared to the previous year.

In 2017 the number of dwellings completed (178.3 thou.) was 9.2% higher than in 2016. The greatest increase was recorded in the segment of dwellings intended for sale or rental (15%). The number of dwellings completed in the area of individual construction increased 3%, whereas the number of cooperative dwellings decreased (15%). A favourable phenomenon was the fact that at the end of the year the number of dwellings under construction was almost 4% higher than in the corresponding period of the previous year, and the number of dwelling whose construction had been started was 18% higher.

General economic situation in construction, including housing, is assessed "positive". The results for the first half of 2018 reflect further growth of construction and assembly production (an over 20% increase compared to the corresponding period of the previous year), of the number of dwellings completed (6%), of dwellings under construction (4%), and of dwellings whose construction had been started (7%). The use of production capacity in construction increased to 87% (compared to 83% in the previous year). As in previous years, barriers to construction business encompass high labour costs and fierce competition on the market; however, the development of construction is primarily hindered by shortages of skilled workforce and growing prices of building materials.

In the coming years the development of construction will depend on the new regulations adopted in the form of the *National Housing Programme* (act on facilitating preparation and execution of housing investments and auxiliary investments), which are to accelerate construction of inexpensive dwellings for rent (with an optional buyout) and contribute to solving housing issues in Poland. The *Act* sets forth principles and procedures of preparation

and execution of housing investments (including investments on agricultural lands within city limits, on post-industrial lands, on post-military lands, on post-railway lands etc.) and auxiliary investments, as well as standards of those investment location and execution. A partnership *Polish Wooden Houses Joint-Stock Company* was also established with the view of intensifying wooden construction in Poland (ecological and energy-saving) and promoting the use of wood in construction. *The Housing Council* was established to coordinate activities for the implementation of the state's housing policy. There was also a *Forum of Housing Dialog* – a Polish debate on the development of the housing market in Poland, which concerned all key challenges, i.e. social, economic, financial, and legal. As a result of the debate there were established expert groups acting as analytical and consulting bodies to *The Housing Council*.

Table 1 **Economic indicators** 

Indicator	2012	2013	2014	2015	2016	2017			
Indicator	% change on previous year								
Gross Domestic Product	101.6	101.4	103.3	103.8	103.0	104.6			
Sold production of industry	100.5	101.8	104.1	106.0	103.6	106.6			
Construction and assembly production	93.7	94.1	105.9	103.7	97.6	106.6			
Dwellings completed	116.8	94.9	98.6	103.2	110.6	109.2			
Dwellings under construction	98.5	97.5	100.7	103.0	101.5	103.8			
Average paid employment									
- total	99.2	98.4	101.4	101.3	103.1	102.0			
- in the enterprises sector	100.1	99.0	100.6	101.3	102.8	104,5			
Registered unemployment rate (at the end of the year) <sup>1</sup>	13.4	13.4	11.4	9.7	8.2	6.6			
Average monthly gross real wages and salaries									
- total	100.1	102.8	103.2	104.5	104.3	103.4			
- in the enterprises sector	99.8	102.0	103.7	104.5	104.4	103.9			
Price indices of consumer goods and services ( <i>inflation</i> )	103.7	100.9	100.0	99.1	99.4	102.0			
Investment outlays	97.2	98.8	109.5	107.1	88.8	103.5			
Trade									
	millions of	PLN, curr	ent prices						
Exports	603418.6	647878.8	693471.6	750835.8	803477.8	882619.5			
Imports	648127.6	656098.2	704567.5	740973.3	786470.1	880078.4			
Balance of trade	-44709.0	-8219.4	-11095.9	+9862.5	+17007.7	+2541.1			
	millions of	USD, curr	ent prices						
Exports	184660.6	206138.0	222339.4	200342.8	205047.7	231600			
Imports	198463.4	208780.4	225898.5	197682.1	200672.4	231000			
Balance of trade	-13802.8	-2642.4	-3559.1	+2660.7	+4375.3	+600			
	millions of	EUR, curr	ent prices						
Exports	143456.1	154994.0	165773.6	179578.2	184842.9	206647.3			
Imports	154040.2	156978.0	168432.3	177232.9	180924.6	206084.4			
Balance of trade	-10584.1	-1984.0	-2658.7	+2345.3	+3918.3	+562.9			

<sup>&</sup>lt;sup>1</sup>as a ratio of registered unemployed persons to the economically active civil population



#### TF1

#### TIMBER FORECAST QUESTIONNAIRE Roundwood

Country: Poland		Date:	5.10.2018
Name of Official resp	onsible for reply:	•	
Ewa Ratajczak			
Official Address (in fu	ıll): Instytut T	echnologii Drewna	
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Draduct	T		Historic	eal data	Basicad	Estimata	Faranat
Product Code	Product	Unit	2016	2017	Revised 2017	Estimate 2018	Forecast 2019
1.2.1.C	SAWLOGS AND VENEER LOGS, CONIFEROUS	U			20.1	2010	
	Removals	1000 m <sup>3</sup> ub	13 773,367	15 112	15 005,713	15 900	16 200
	Imports	1000 m <sup>3</sup> ub	88,088	110 #	170,884	170	180
	Exports	1000 m <sup>3</sup> ub	1 253,337	1 050 #	1 064,994	1 100	1 150
	Apparent consumption	1000 m <sup>3</sup> ub	12 608,118	14 172	14 111,603	14 970	15 230
1.2.1.NC	SAWLOGS AND VENEER LOGS, NON-CONIFEROUS						
	Removals	1000 m <sup>3</sup> ub	3 022,788	3 000	2 873,692	2 850	2 800
	Imports	1000 m <sup>3</sup> ub	69,662	80 #			
	Exports	1000 m <sup>3</sup> ub	187,948	150 #			
	Apparent consumption	1000 m <sup>3</sup> ub	2 904,502	2 930			
1.2.1.NC.T	of which, tropical logs						
	Imports	1000 m <sup>3</sup> ub	1,158	2 #	1,686	2	2
	Exports	1000 m <sup>3</sup> ub	0,085	0 #	0,946	1	1
	Net Trade	1000 m <sup>3</sup> ub	1,073	2	0,740	1	1
1.2.2.C	PULPWOOD (ROUND AND SPLIT), CONIFEROUS						
	Removals	1000 m <sup>3</sup> ub	14 597,086	16 415	16 393,694	17 700	17 950
	Imports	1000 m <sup>3</sup> ub	1 157,998	1 200 #	598,796	650	700
	Exports	1000 m <sup>3</sup> ub	1 049,104	950 #	1 424,355	1 650	1 700
	Apparent consumption	1000 m <sup>3</sup> ub	14 705,980	16 665	15 568,135	16 700	16 950
1.2.2.NC	PULPWOOD (ROUND AND SPLIT), NON-CONIFEROUS						
	Removals	1000 m <sup>3</sup> ub	4 781,197	4 960	4 834,100	4 950	5 000
	Imports	1000 m <sup>3</sup> ub	721,683	560 #			
	Exports	1000 m <sup>3</sup> ub	88,211	75 #			
	Apparent consumption	1000 m <sup>3</sup> ub	5 414,669	5 445			
3	WOOD CHIPS, PARTICLES AND RESIDUES						
	Domestic supply	1000 m <sup>3</sup>	9 847,447 N	<b>11 700</b> C	10 199,102	10 600	10 900
	Imports	1000 m <sup>3</sup>	2 018,479	1 674 C	1 607,857	1 650	1 700
	Exports	1000 m <sup>3</sup>	683,999	<b>803</b> C	845,778	850	900
	Apparent consumption	1000 m <sup>3</sup>	11 181,927	12 572	10 961,181	11 400	11 700
1.2.3.C	OTHER INDUSTRIAL ROUNDWOOD, CONIFEROUS						
	Removals	1000 m <sup>3</sup> ub	884,318	846	939,271	990	1 000
1.2.3.NC	OTHER INDUSTRIAL ROUNDWOOD, NON-CONIFEROUS						
	Removals	1000 m <sup>3</sup> ub	47,616	51	52,950	60	70
1.1.C	WOOD FUEL, CONIFEROUS						
	Removals	1000 m <sup>3</sup> ub	2 570,698	2 540	2 607,537	2 690	2 700
1.1.NC	WOOD FUEL, NON-CONIFEROUS						
	Removals	1000 m <sup>3</sup> ub	2 724,445	2 750	2 640,676	2 760	2 780

#### Please return (preferably by e-mail) to Timber Section no later than 5 October 2018.

By e-mail to stats.timber@un.org.

Questions? Please contact Alex McCusker at the above address or telephone +41 22 917 2880.

The historical data are from the most recent Joint Forest Sector Questionnaire (blank) or the Timber Forecast Questionnaire (#). For explanations please see cover letter.

These data are flagged with E, R, N or C for secretariat estimate, repeat, national estimate or calculated totals (from subitems). If there is no flag, this indicates officially supplied data.

N - National estimate

Residues - production excluding recovered wood

Trade turnover is based only on data from the SAD document and Intrastat declaration; real data, without estimation of values of trade turnover realized by those parties which are released from the reporting obligation

Roundwood: sawlogs and veneer logs, pulpwood, wood fuel - with removals from tress and shrubs outside the forest, including forest chips, with stump Roundwood removals underbark

red colour - corrected data



#### TF2

#### TIMBER FORECAST QUESTIONNAIRE Forest products

Country: Poland Date: 5.10.2018 Name of Official responsible for reply: Ewa Ratajczak Official Address (in full): Instytut Technologii Drewna Wood Technology Institute, 60-654 Poznan, Winiarska 1

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Product	Post of		Historica		Revised	Estimate	Foreca
Code	Product SAWNWOOD, CONIFEROUS	Unit	2016	2017	2017	2018	2019
C	Production	1000 m <sup>3</sup>	4 355,785	4 570	4 419,476	4 500	
	Imports	1000 m <sup>3</sup>	641,582	697	774,214		
	Exports	1000 m <sup>3</sup>	708,721	730	705,136		
	1		_		4 488,554		
NC	Apparent consumption SAWNWOOD, NON-CONIFEROUS	1000 m <sup>3</sup>	4 288,646	4 537	4 488,334	4 580	
VC.		4000 3	588,940	640	644.046	620	
	Production	1000 m <sup>3</sup>			611,916		
	Imports	1000 m <sup>3</sup>	341,203	336	309,966		
	Exports	1000 m <sup>3</sup>	124,551	194	179,770		
	Apparent consumption	1000 m <sup>3</sup>	805,592	783	742,112	780	
NC.T	of which, tropical sawnwood						
	Production	1000 m <sup>3</sup>	0,013	0	0,006		
	Imports	1000 m <sup>3</sup>	18,639	17	15,291	16	
	Exports	1000 m <sup>3</sup>	2,088	2	1,923	2	
	Apparent consumption	1000 m <sup>3</sup>	16,564	14	13,374	14	
	VENEER SHEETS						
	Production	1000 m <sup>3</sup>	39,359	41 C	64,582	65	
	Imports	1000 m <sup>3</sup>	53,914	<b>82</b> C	74,419	80	
	Exports	1000 m <sup>3</sup>	17,898	15 C	13,639	15	
	Apparent consumption	1000 m <sup>3</sup>	75,375	109	125,362		
NC.T	of which, tropical veneer sheets	1000 111	. 0,0.0	.00	120,002	.00	
	Production	1000 m <sup>3</sup>	3,165	4	3,005	2	
	Imports	1000 m <sup>3</sup>	0,301	0	0,352		
	Exports	1000 m <sup>3</sup>	0,065	0	0,255		
	Apparent consumption	1000 m <sup>3</sup>	3,401	4	3,102	4	
	PLYWOOD						
	Production	1000 m <sup>3</sup>	462,272	<b>500</b> C	546,467		
	Imports	1000 m <sup>3</sup>	310,048	370 C	401,728	420	
	Exports	1000 m <sup>3</sup>	257,056	<b>312</b> C	307,308	310	
	Apparent consumption	1000 m <sup>3</sup>	515,264	557	640,887	670	
I.NC.T	of which, tropical plywood						
	Production	1000 m <sup>3</sup>	2,000	3	2,737	3	
	Imports	1000 m <sup>3</sup>	17,274	6	6,273	9	
	Exports	1000 m <sup>3</sup>	18,806	<b>19</b> R	0,361	3	
	Apparent consumption	1000 m <sup>3</sup>	0,468	-9	8,649	9	
2	PARTICLE BOARD (including OSB)	1300 111	3,700	~	0,043	3	
	Production	1000 m <sup>3</sup>	5 417,388	5 584	5 616,863	5 690	
			1 708,929				
	Imports	1000 m <sup>3</sup>		2 210	2 175,029		
	Exports	1000 m <sup>3</sup>	795,248	963	884,321		
	Apparent consumption	1000 m <sup>3</sup>	6 331,069	6 830	6 907,571	6 980	
2.1	of which, OSB						
	Production	1000 m <sup>3</sup>	919,757	1 100	911,404		
	Imports	1000 m <sup>3</sup>	96,072	117	134,845		
	Exports	1000 m <sup>3</sup>	334,647	364	373,214	380	
	Apparent consumption	1000 m <sup>3</sup>	681,182	853	673,035	710	
3	FIBREBOARD						
	Production	1000 m <sup>3</sup>	4 522,724	4 750 C	4 853,780	4 990	
	Imports	1000 m <sup>3</sup>	498,553	<b>597</b> C	617,373	640	
	Exports	1000 m <sup>3</sup>	1 847,940	1 975 C	1 986,094	1 930	
	Apparent consumption	1000 m <sup>3</sup>	3 173,337	3 372	3 485,059		
1.1	Hardboard	1000 111	2 11 2,001	V V			
	Production	1000 m <sup>3</sup>	118,473	150	114,853	120	
	Imports	1000 m <sup>3</sup>	179,859	181	165,113		
	1	1000 m <sup>3</sup>	366,863	419	402,937		
	Exports Apparent consumption						
	P. P. C. C. C. C. P. C. C.	1000 m <sup>3</sup>	-68,531	-88	-122,971	10	
3.2	MDF/HDF (Medium density/high density)	4 3	2.254.252	0.750	2 511 25-	2018  76	
	Production	1000 m <sup>3</sup>	3 354,359	3 750	3 511,098		
	Imports	1000 m <sup>3</sup>	303,907	407	443,514		
	Exports	1000 m <sup>3</sup>	767,053	789	813,478		
	Apparent consumption	1000 m <sup>3</sup>	2 891,213	3 367	3 141,134	3 190	
.3	Other fibreboard						
	Production	1000 m <sup>3</sup>	1 049,892	850	1 227,829	1 300	
	Imports	1000 m <sup>3</sup>	14,787	9	8,746	10	
	Exports	1000 m <sup>3</sup>	714,024	766	769,679		
)	Apparent consumption	1000 m <sup>3</sup>	350,655	93	466,896		
	WOOD PULP		.,				
	Production	1000 m.t.	1 156,005	1 236 C	1 262,563	1 270	
	Imports	1000 m.t.	1 043,148	944 C	1 024,832		
	Exports	1000 m.t.	178.975	164 C	189.405		
	Apparent consumption	1000 m.t.	2 020,178	2 015	2 097,990		
12	PAPER & PAPERBOARD	. 500	,	20.0	_ 50.,550	2 .10	
	Production	1000 m.t.	4 637,000	4 748 C	4 779,031	4 850	
	Imports	1000 m.t.	3 773,405	3 953 C	4 168,603		
	Exports	1000 m.t.	2 202,960	2 309 C	2 301,736		
	Apparent consumption	1000 m.t.	6 207,445	6 391	6 645,898		
5.1	WOOD PELLETS	1000 m.t.	0 207,445	0 391	0 045,898	b /50	
		1000 1	900 000 11	000	000.000	000	
	Production	1000 m.t.	800,000 N	900	900,000		
	Imports Exports	1000 m.t. 1000 m.t.	64,969 266,260	66 287	74,150 338,917		

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Sawnwood - production exluding shop lumber, with sleepers (impregnated and non-impregnated)

Trade turnover is based only on data from the SAD document and Intrastat declaration; real data, without estimation of values of trade turnover realized by those parties which are released from the reporting obligation