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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 2018 the Gross Domestic Product of Poland increased 5.1%, in real terms, meaning that the increase was 0.2 percentage point higher than in 2017. As in previous years, the GDP increase was primarily stimulated by domestic demand (its share in GDP creation is estimated at 5.3 percentage point) which increased 5.5% (compared to 4.9% in 2017). Both public consumption and private consumption, in the household sector, increased (4.7% and 4.5%, respectively). Gross accumulation increased significantly and, in real terms, it was 9.6% higher than in the previous year (when the increase was 7.9%), of which gross outlay on fixed assets increased 8.7% (while in 2017 the increase reached 4.0%). Gross added value increased 5.1%, in real terms, while the last year's increase was 4.8%, and in industry it increased 5.6% (compared to 2.5% in 2017). The important thing for the forestry-wood sector was the fact that construction, which is the main consumer of wood materials and products in Poland, demonstrated the highest growth dynamics (17.1% compared to 6.8% in the previous year). At the same time, the dynamics of Polish export and import decreased, while the import's dynamics (7.1%) was higher than the export's (6.3%), which had a negative bearing on the GDP growth, in real terms (i.e. -0.2 percentage point). Due to the anticipated slowdown in the global economy and the EU economy, it is forecasted that the Poland's economic growth rate will also suffer from a slowdown in the period 2019-2020 (to 4.0% and 3.7%, respectively). Domestic demand will remain the primary stimulus of growth and it is anticipated that the demand will increase 4.2% in 2019 and 3.8% in 2020, in real terms (of which private consumption will increase 4.0% and 3.8%, respectively). The growth of the share of investments within GDP is also forecasted (in connection with the growing consumption of the EU funds). The investment demand should also be intensified by factors such as: relatively low cost of capital, increase in innovativeness and productivity of the economy, and high consumption demand, while the existing production capacities are used.

In 2018 sold production of Polish industry increased 5.8%, in real terms, in relation to the previous year, and of manufacturing 5.7%. In the wood sector, sold production reached PLN 142.8 billion ($ 39.5 billion, € 33.5 billion), and, as in previous years, it was approximately 9% in relation to industry and 10.5% of sold production of manufacturing. Production of the pulp and paper industry (together with paper processing) was characterised by the highest growth dynamics (8.6%), while the growth dynamics of the furniture industry was 6.1% and of the wood industry 4.8%. The branch structure of sold production of the wood industry was similar to that observed in previous years, i.e. it was dominated by furniture production and the pulp and paper industry (together with paper processing), whose shares were 35% and 34% (respectively), while the share of the wood industry was 31%. The results of 2019 so far indicate that, despite the favourable general economic conditions, in the near future the increase in sold production of the wood sector may be lower than in 2018 and reach 3%-4% annually (depending on the industry).

The year 2018 was characterised by further decrease in unemployment in Poland, i.e. at the end of the year registered unemployment rate was 5.8% (it was 6.6% in December 2017). In the last quarter of 2018 harmonised unemployment rate (as per the Eurostat definition) also decreased to 3.8% (from 4.5% in 2017). In 2018 average employment in industry was 2.9 million people, which meant a 2.1% increase in relation to the previous year (average employment in manufacturing was 2.5 million people, meaning a 2.4% increase). It is estimated, that in 2018 the wood sector employed 356 thou. people, which accounted for 12% of the employed in industry and for 14% of the employed in manufacturing. The largest number of people (178 thou. people, almost 51% of the employed in the wood sector,) was employed in the furniture industry, while the wood industry employed 116 thou. people (31% of the

employed in the sector) and the pulp and paper industry (together with paper processing) 63 thou. people (19%). On the other hand, forestry employed approximately 45 thou. people (employment in the State Forests amounted to 26.4 thou. people). The nearest future is to bring to Polish labour market further reduction of the unemployment rate (to 5.5% in 2019 and 5.1% in 2020) and an increase in employment in the economy (2.2% and 0.5%, respectively). In the coming years, the wood sector should also experience further growth of employment (approximately 1% annually), while the employment rate in forestry should remain unchanged.

In 2018 Poland's turnover of foreign trade increased to PLN 951 billion ($ 265 billion, € 224 billion) in export (6.3%, in real terms) and to PLN 971 billion ($ 270 billion, € 228 billion) in import (7.1%). As a result, the negative balance of foreign trade was maintained and equalled PLN 19.5 billion ($ 5.4 billion, € 4.6 billion). Poland's trade partners, both in export and import, were primarily the European Union states (with the shares of 81% and 59%, respectively), and among them mainly Germany, and from outside the EU – China and Russia (primarily in import). It is estimated, that wood and wood products accounted for approximately 9% of the export value and 4% of the import value in 2018. Furniture was still one of the major commodity group in Polish exports (with a share of almost 5%). It is forecasted that in the near future the negative balance of foreign trade will be reduced. Export may increase 5.3% in 2019 and 4.8% in 2020, and import 6% and 5.1%, respectively.

In 2018 the growth of price index of consumer goods and services was relatively insignificant (1.6% compared to 2% in the previous year). The greatest increase was observed for the prices of some food types, transport (including fuels), health services, and fuel. A price drop was observed for, inter alia, clothing, footwear, and communications. Inflation in Poland is under a large influence of the prices on the global markets in energy raw materials and agricultural raw materials. It is anticipated, that in the near future inflation rate will slightly increase to 1.8% in 2019 and 2.5% in 2020.

In the coming years the growth of Polish economy will be largely dependent on the situation in the global economy and the European economy, especially the EU economy. There still is some uncertainty connected with the "creeping" Brexit, the intensifying trade war between the US and China, and the Iranian crisis. The climate crisis and possible escalation of conflicts in the Middle East and Ukraine also pose significant threats to the global economy.

## 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 basis for setting the main directions of the socio-economic policy for the near future, also in relation to the forestry-wood sector, is the *Multiannual Financial Plan for Poland for the period 2019-2022*. This document contains an assessment of current macroeconomic situation in Poland and a medium-term forecast of economic growth (till 2022), identifies possible risk factors and analyses the stability of the state finance. The goals of the economic policy defined in the *Plan* are in line with the priorities set forth in the *Strategy for Responsible Growth till 2020 (with a time horizon till 2030)*, which are to support the inclusive economic growth, while maintaining long-term stability of public finance. The *National Programme of Reforms. Revision 2019/2020* is also consistent with the *Strategy*. The *Programme* sets lines of actions to be taken by the state to achieve the goals of the strategy *"Europe 2020*" and addresses the challenges of current *European Semester*. It also determines the actions necessary to support investments, improve the regulative environment and digitalisation of the state, necessary for health care, the employment growth, the development of R&D, climate protection, the development of education, and counteracting poverty and exclusion. Moreover, the *Programme*

also presents solutions which are to help maintain the economic growth in case of the anticipated slowdown in the European economy, keep appropriate redistribution of income, intensify private consumption, and increase vocational activity of society.

At present, a strategic document concerning the regional policy of Poland till 2030, i.e. the *National Strategy of Regional Development 2030*, is in consultation. The *Strategy* sets lines of changes in the regional policy and its priorities, as well as defines actions to achieve these goals. There is also a draft of the *Strategy for Sustainable Development of Rural Areas, Agriculture and Fishery 2030.* The main goal of the *Strategy* is to increase the cohesion of Polish rural areas in social, economic, environmental and territorial terms. Both documents, i.e. the *National Strategy of Regional Development 2030* and the *Strategy for Sustainable Development of Rural Areas, Agriculture and Fishery 2030*, as instruments of the state policy, will influence the development of the forestry-wood sector, for it plays a special role in regional development as an important tool of solving socio-economic issues at a local level. This role stems from the strong functional connections of the sector with a given natural space. The significance of the sector as a stimulus of entrepreneurship at a local level is primarily a derivative of its production functions, but it is also implicated by its social tasks, i.e. generation of favourable health and recreational conditions for people (largely on rural areas), facilitation of the development of culture, science and ecological education of society, and the labour market development (especially at a local level).

The latest strategic document concerning the environment and water management, which also largely addresses the forestry-wood sector, is the *Ecological policy of Poland 2030*. The main goal of this strategy is to ensure the ecological safety of Poland and the growth of people's quality of life. Its detailed objectives concern, inter alia, the support for multifunctional and sustainable forest management, the development of a zero-waste economy (circular economy), the implementation of eco-innovations, counteracting climate change, ecological education, and the development of sustainable consumption. Actions described in the document aim at building an innovative economy, with all the principles of sustainable development observed. Presently, the authorities are also preparing the *National programme of air pollution reduction*, whose purpose is to guarantee that Poland, as an EU Member State, fulfils its commitments concerning the reduction of air pollution. This *Programme* is also to supply a framework for coordination of the national policy on air quality with others policies, e.g. on agriculture, industry and transport.

The *National plan for energy and climate for the period 2021-2030* will also be important for the development of Polish forestry-wood sector (the final version of this document, allowing for the remarks of the European Union, is to be completed by the end of 2019). Preparation of such plan is the obligation of each European Community Member State resulting from the directive on the governance of the energy union and climate action. The draft describes assumptions and goals, as well as actions for realization of five dimensions of the energy union (energy security; the internal energy market; energy efficiency; decarbonisation; and research, innovation and competitiveness).

On the 1st of April 2019 another step of the comprehensive reform of the education system in Poland was taken, namely the establishment of the *Łukasiewicz Research Network*. The network is made up of 38 research institutes (including Wood Technology Institute) and its main goal is to conduct application research and development that are important for the implementation of the state's economic, innovation, and science policies. The establishment of the network is to improve the transfer of knowledge from science to economy as well as cooperation between the institutes. The network is also to facilitate coordination of research themes and concentration of knowledge and resources within individual theme areas.

## 3. MARKET DRIVERS

The quality of business environment has a great bearing on the operation of Polish companies, including those in the wood sector, which is a significant element of Polish economy. There are new regulations that should stimulate the development of companies, such as: •the *SMEs set*, which introduces changes in the tax law and economic law that facilitate the operation of micro, small and medium-sized companies (e.g. the acknowledgement of the value of spouse's work as a tax deductible expense, the possibility of a one-off settlement of tax loss up to a defined amount, shortening of the storage time of approved financial statements); •the *Friendly Law Set*, which reduces the regulative burden for entrepreneurs (by, inter alia, lengthening the time for the settlement of VAT in import, consumer protection for companies registered in the *Central Registration and Information on Business*, introducing the right to make a mistake for the first year of operation of a SME sector company, facilitating craftsmanship when establishing company); •the *Small ZUS (Social Insurance Institution)*, which introduces preferential social security premiums for companies of the lowest income and commencing business; •the law, whose aim is to *limit payment bottlenecks* threatening financial liquidity of companies; •an amendment to the *Civil Proceedings Code*, which streamlines proceedings in economic cases; and •changes in the tax law (reduced rate of CIT for tax payers with lower income; tax relief called *Innovation Box* (i.e. preferential taxation of income from, inter alia, sold intellectual property rights obtained in the course of R&D activity); taxation of income from unrealised profits (so-called *exit tax*), taxation of income from virtual currencies, and changes in regulations concerning transfer prices).

If the international competitiveness of Polish economy and the forestry-wood sector is to be increased, then entrepreneurship and innovativeness must be continuously stimulated. New aiding tools in this respect are offered by, inter alia, the capital group of the *Polish Development Fund (PDF)*, including the *Polish Agency for Entrepreneurship Development*. The programmes are targeted at •start-ups (e.g. *PDF Mentor Network* – a mentoring programme supporting building of business competences; *Acceleration Programmes* – which finance the development and testing of innovative products; *Enterprising Poland* – accelerators targeted at the chosen industries, inter alia, bioeconomy) and •future entrepreneurs in the new technologies industries (*PDF Pioneer School*). The development of competences is facilitated by the *Academy of Innovation Manager* and the programme called *Competences for sectors* (co-financing of training, consultancy and post-graduate studies, including those in the construction sector). The aid is also addressed to companies in crisis (*Early Warning* – a consultancy programme) and to entrepreneurs who did not succeed in former business (*Fresh Start* – a training-consultancy programme).

The new project *"Vogue for Export"*, which is especially important for Polish furniture industry (which is largely internationalised), is to increase the internationalisation of companies through, inter alia, building a knowledge base on Polish export, stimulating motivation and improving export competences of entrepreneurs, support in search for business partners, a reform of financing instruments and export insurance tools, promotion of the brand of Polish economy, and streamlining the internationalisation process in terms of information and administration. The *Accelerator of the Furniture Industry Export*, initiated in 2018, falls within the scope of the project. The *Accelerator* is dedicated to furniture companies with a dominant share of Polish capital, which have experience in trade fair, significant production capacities, and promote original product under their own brand. The participants of the *Accelerator* can benefit from, inter alia, training, a network of foreign contacts, financing of participation in trade fairs etc., a tailor-made offer of supporting instruments, and a possibility of participation in the creation of export policy.

If Polish industry (also forest-wood sector) is to cope with the global competition better

than now, then it has to transform into industry 4.0 and companies have to become intelligent factories. The *Future Industry Platform Foundation* is to be one of the pillars of the new economic model of Poland. Its task is to guide Polish entrepreneurs through the fourth industrial revolution by proposing new business models, strategic consultancy, building cooperation networks, creation of legal and regulatory environment, and integrating and supporting initiatives strengthening digital transformation of Poland.

The availability of appropriately skilled staff is of special importance for the development of Polish economy, including the wood sector. To this end, an amendment to the *Education Law* was made, which introduced, inter alia, a series of new solutions in the area of vocational education (change of profession classification and of financing of trade and technical schools, a possibility for schools of organising additional courses of vocational skills, education with high involvement of employers). On the other hand, higher education institutions can apply for financing within the framework of call entitled *"Integrated Programmes of Higher Education Institutions"* (*Knowledge Education Growth Operational Programme*). This financing is to improve the competences of scientific personnel, ensure a better level of education and adaptation of education programmes to the needs of socio-economic environment. A new solution in science is also the creation of a mechanism of financing of R&D and its commercialisation from the *Polish Science Fund* in a novel formula of the *Virtual Research Institute*. The institute is a form of organisation of work of selected research teams, which are competitive on the international level and conduct research with a high potential of socio-economic applications.

Potential consumption, including of the products manufactured in the forestry-wood sector, is influenced by the social policy of the state (continuation of the programme *Family 500+*, continuation of the support for the development of children care institutions dealing with children under 3 years of age (*Toddler+*), and a parent supplemental benefit *Mother 4+*). Consumption is also stimulated by the changes of personal income tax (PIT), i.e. the reduction of the basic rate from 18% to 17%, the increase in tax deductible expense, and a tax relief for people younger than 26 years of age.

## 4. DEVELOPMENTS IN FOREST PRODUCTS MARKETS SECTORS

### 4. (A) Wood raw materials

In 2018 roundwood removals in Poland were 3% higher than in 2017 and amounted to 46.7 million $m^3$ (net, without bark). 98% of the removals was roundwood from forest (45.9 million $m^3$ of roundwood was harvested, including forest chips). Additionally, 0.9 million $m^3$ of roundwood from afforested areas was harvested (i.e. from production and protective planting of trees and shrubs on public and private areas, outside forests and green areas within cities), i.e. over 8% more than in the previous year. As in former years, the structure of removals was dominated by roundwood from public forests (95%, 44.4 million $m^3$), mainly from forests stewarded by the State Forests National Forest Holding (93%, 43.6 million $m^3$). Only 2.3 million $m^3$ of roundwood (approximately 5%) originated from private forests (however, it was 12% more than in the previous year). Softwood species accounted for almost 77% of harvested roundwood (35.9 million $m^3$). Approximately 89% of total removals (41.4 million $m^3$, 3% more than in 2017) was industrial roundwood, of which pulpwood was 55% (22.6 million $m^3$, 7% more than in the previous year) and sawlogs 43% (together with veneer logs it equalled to 17.8 million $m^3$, similarly to the previous year). 0.9 million $m^3$ of other industrial roundwood was also harvested (the amount was similar to the previous year's) as was 5.4 million $m^3$ of fuelwood (2% more than in 2017).

In 2018 Poland imported 1.1 million $m^3$ of roundwood (2% of domestic removals), which

meant a great decrease (35%) compared to the previous year. The imports were dominated by industrial roundwood (94%, 1.1 million $m^3$). Major imported softwood species was pine, while hardwood imports were dominated by birch (1 thou. $m^3$ of tropical species was also imported to Poland). Fuelwood import remained at a level close to that of the previous year and amounted to 63 thou. $m^3$. Roundwood export in 2018 was 88% higher than in 2017 and equalled 5.6 million $m^3$ (compared to 3.0 million $m^3$ in 2017), which was 12% of domestic removals. 96% of exports was industrial roundwood (5.3 million $m^3$), dominated by softwood, mainly pinewood. Exports of hardwood species encompassed mainly beech and birch. 0.2 million $m^3$ of fuelwood was also exported (and it was a 43% increase in relation to 2017).

There is a possibility that in the period 2019-2020 in Poland roundwood removals will decrease to 44.4 million $m^3$ and 45.4 million $m^3$, respectively (i.e. 5% and 3%, respectively, in relation to 2018), because the volume of removals in previous years, to some extent, resulted from the necessity of managing large quantities of wood from windfalls (which occurred in 2017). Industrial roundwood will continue to dominate the structure of removals (39.2 million $m^3$ in 2019 and 40.0 million $m^3$ in 2020), itself being dominated by pulpwood (anticipated removals till 2020 should be 21-22 million $m^3$) and sawlogs (removals, together with veneer logs and peeler logs, may be 16.8 million $m^3$ and 17.3 million $m^3$, respectively, in the period 2019-2020). In the analysed period, removals of other industrial roundwood should be 1.0 million $m^3$, and fuelwood harvesting may increase to 5.3 million $m^3$ and 5.4 million $m^3$, respectively. An increase in roundwood import, to 1.7 million $m^3$ in 2020, is also anticipated. Most of the imports will be industrial roundwood, while fuelwood should still account for an insignificant part of the imports. On the other hand, approximately 8% of roundwood harvested in Poland may be exported in the period 2019-2020 (3.4-3.6 million $m^3$, respectively). As in the case if imports, exports will be dominated by industrial roundwood, while fuelwood export should not exceed 0.3 million $m^3$.

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

Production of renewable energy in Poland has grown systematically. In the period 2015-2017 it grew from 8.9 million toe to 9.1 million toe, i.e. 2.4%. Compared to the year 2000 (3.8 million toe), the growth was more than two-fold. The share of renewable energy within total energy generation increased to over 14% in 2017, and its share within energy consumption to 8.7%. Biomass is of the greatest significance among renewable energy carriers. In 2017 6.2 million toe was obtained from biomass, which was 68% of total energy obtained from all renewable energy sources. It is estimated that solid biomass dominates the biomass (it is more than 70%), and majority of it is wood biomass.

In August 2019 the amended law on renewable energy sources (RES) came into force in Poland. The main objectives of the amendments are to increase the energy safety of Poland and to accelerate the investments in RES, so that in 2020 Poland achieves a 15% share of renewable energy within gross final consumption of energy; as well as to stimulate the development of community power (citizen-owned renewable energy) and to increase the share of prosumer RES within the energy balance of Poland. These include new solutions for power cooperatives (which produce electric energy, biogas or heat, in installations using renewable energy sources, to satisfy the needs of their own and their members) supporting and promoting establishment of such cooperatives, especially in rural areas and rural-town areas, where the threat of energy poverty is the greatest. The new regulations broaden the former definitions/status of prosumer to encompass small and medium-sized enterprises (households can also be prosumers). These entities will be able to produce electric energy in micro installations and benefit from a system of discounts. The regulations also make it possible to balance energy over longer cycles, modify the rules of former auction system, and introduce new support mechanisms for small producers of electric energy from renewable sources. Moreover, they modify the so-called distance law

on permissions to build wind turbines. In mid-2019 a programme of financial support for photovoltaic installations (*"My current"*) was also launched in Poland. This tool is targeted at households and its main objective is to increase the production of energy from photovoltaic micro sources (it is assumed that 200 thou. of such installations, of total power of 1000 MW, will be fit), especially on under-urbanised areas.

According to the assumptions of the presently consulted draft of the *Energy policy of Poland till 2040*, the development of renewable energy sources is one of the major ways of mitigating the negative effect that the power sector has on the environment (through decreasing the sector's emissions) and diversifying the structure of energy generated in Poland. It is assumed that the mechanisms of support and promotion of energy from RES will be tailored to the market needs (e.g. solutions ensuring maximum time flexibility, and solutions meeting local energy needs), and their form will depend on the energy source and its size (e.g. priority in access to the network, auctions, a system of guaranteed rates, subsidies, returnable aid). The use of biomass, including biomass from the forestry sector, is becoming crucial, but it should be effectively managed within the shortest possible distance from its origin.

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

For many years in Poland the conformity of forest operations with adopted regulations has been confirmed by two certification systems of forests and wood products, i.e. PEFC (*Programme for the Endorsement of Forest Certification Schemes*) and FSC (*Forest Stewardship Council*).

444 entities in Poland (as in August 2019) have valid certificates of forest management consistent with the PEFC standard. These entities are: all State Forests Regional Directorates (17), 425 forest inspectorates, and 2 forest companies. The area of PEFC certified forests is 7.2 million hectares, i.e. more than 78% of total forest area in Poland. At the same time, it is also 6.5% of PEFC certified forests in Europe and more than 2% in the world. In mid-2019, there were 373 PEFC certificates of wood products – CoC (*Chain of Custody*) – registered in Poland, of which 272 were active. Majority of CoC certificates is held by production companies, i.e. manufacturers of sawnwood at various processing stages, pallets, flooring materials, and wood-based panels, wood pulp, paper and paperboard, paper products, and also furniture.

On the other hand, 16 out of 17 State Forests Regional Directorates and 2 Forest Experimental Stations (in Rogów and Siemianice) have forest certificates according to the FSC standards (as in August 2019), which means that in Poland the total area of FSC certified forests is 7 million hectares, i.e. it is almost 76% of total forest area in Poland and, at the same time, 6.8% of FSC certified forests in Europe and 3.4% in the world. As in August 2019, there were also 3964 FSC-CoC certificates registered in Poland, of which 2569 (65%) were active. These certificates are largely owned by production companies, mainly the producers of sawnwood at various processing stages, wood garden products, wooden accessories, furniture, and furniture elements. Among the valid certificates, 341 concern controlled wood (FSC-CW – *FSC Controlled Wood*), and 74 certificates confirm that their holders implemented the due diligence system and trades in wood in a controlled manner according to the FSC system (*CW Due Diligence*).

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

In Poland, the category of value-added wood products encompasses primarily furniture, builder's carpentry and joinery products, packaging, and also paper products.

Furniture production has systematically grown in Poland. In 2018 its value was PLN 42.9 billion ($ 11.9 billion, € 10.1 billion) and was more than 5% higher than in the previous year (in fixed prices). Majority of it was wooden furniture (69%) – its production value exceeded PLN 29 billion ($ 8.2 billion, € 7 billion), meaning an 3% increase, in real terms, in relation to

2017. 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 elements (PLN 3 billion, $ 0.8 billion, € 0.7 billion). The demand for Polish furniture is largely driven by foreign consumers. In 2018, 77% of wooden furniture was exported (PLN 22.9 billion, $ 6.3 billion, € 5.4 billion), which was a more than a 5% increase in relation to the previous year (in current prices, in national currency). The exports, as the production, were dominated by upholstered furniture for sitting and furniture for bedrooms, dining rooms and living rooms. Similarly to previous years, in 2018 import of wooden furniture was relatively insignificant in relation to its production value and amounted to approximately 7%. In money terms, Polish imports value was PLN 2 billion ($ 0.6 billion, € 0.5 billion), which meant a increase in import (12%) compared to the previous year. The value structure of imported wooden furniture was dominated by furniture for bedrooms, dining rooms and living rooms, and furniture elements.

Builder's carpentry and joinery products are another significant part of Polish wood product market. In 2018 their production value was PLN 8.6 billion ($ 2.4 billion, € 2 billion), and was 3% higher, in real terms, than in 2017. Among other products, 64.3 million $m^2$ of wooden floor panels was manufactured (meaning a 7% decrease compared to the previous year), as well as 20.2 million $m^2$ of windows and doors (meaning a more than 3% increase in the production compared to year-to-year), including 3.5 million pieces of windows and 10.7 million pieces of doors. The value of manufactured prefabricated wooden houses was PLN 0.3 billion ($ 0.08 billion, € 0.07 billion), i.e. it was 14% lower than in the previous year (in fixed prices). More than 61% of manufactured products within this group was exported – in money terms, the export equalled PLN 5.3 billion in 2018 ($ 1.5 billion, € 1.2 billion) and it was value similar to that of the previous year. Main exports were windows and doors. Almost all of prefabricated wooden houses manufactured in Poland were exported (they accounted for 6% of the export value of products within this group). On the other hand, the value of Polish import of builder's carpentry and joinery products was PLN 0.6 billion ($ 0.2 billion, € 0.2 billion), which meant a 57% increase in their import compared year-to-year (in current prices, in national currency). The value of import was 7% in relation to the production value. The value structure of builder's carpentry and joinery products imported to Poland was dominated by windows, and prefabricated wooden houses were of relatively low importance (their share was approximately 2%).

In 2018 in Poland, production of wooden packaging was 6% higher in relation to the previous year, and amounted to PLN 2.5 billion ($ 0.7 billion, € 0.6 billion). Its assortment structure was dominated by pallets, whose production amounted to almost 2 million tonnes, i.e. 141.7 million pieces (16% more than in 2017). Production of crates, boxes and similar packaging equalled 59.5 thou. tonnes; however, it was 64% of the production volume of 2017. 83% of manufactured packaging was exported (PLN 2.1 billion, $ 0.6 billion, € 0.5 billion) and that meant a 25% increase in its export compared to the previous year (in current prices, in national currency). Main exports were pallets. On the other hand, Poland imported small quantities of wooden packaging – in 2018 the value of import was PLN 0.3 billion ($ 0.08 billion, € 0.07 billion), which was 18% higher than in 2017 (in current prices, in national currency) and, in terms of value, imports accounted for 12% of the production. Imports of wooden packaging, like its exports, were dominated by pallets.

In Poland, paper products (i.e. products of paper and paperboard at various processing stages) are very important in the group of value-added wood products. In 2018, their production was 3% higher, in real terms, than in 2017 and amounted to PLN 27.5 billion ($ 7.6 billion, € 6.4 billion). Its value structure was dominated by corrugated paper and paperboard, packaging of paper and paperboard, household articles, and toilet and sanitary products. 36% of products of paper and paperboard manufactured in Poland (in terms of value) was exported (PLN 9.8

billion, $ 2.7 billion, € 2.3 billion). In relation to 2017, export increased 10% (in current prices, in national currency), and it mainly consisted of packaging of paper and paperboard, special coated papers, and paper products for households and sanitary purposes. Domestic production of paper products was supplemented with imports in 20%. In 2018 the value of import was PLN 5.4 billion ($ 1.5 billion, € 1.3 billion), but it was 4% higher than in the previous year and its structure was dominated by packaging of paper and paperboard, and special coated papers.

### **4.** (E) **Sawn softwood**

In Poland, sawn softwood is a primary product. In 2018 it accounted for 88% of total production of sawnwood, which was 5 million $m^3$ (including railway and tram sleepers). Production of sawn softwood amounted to 4.4 million $m^3$. While its import to Poland, amounting to 1.0 million $m^3$, was 27% higher than in the previous year and accounted for 22% of the production volume. 19% of sawn softwood manufactured in Poland was exported (0.8 million $m^3$, i.e. 17% more than in 2017).

In the near future a growth of sawn softwood production may be expected – to 4.5 million $m^3$ in 2020. Trends in foreign trade in this material should remain unchanged. It is assumed that in 2020 sawn softwood export will amount to 0.9 million $m^3$, and import to approximately 1.0 million $m^3$.

### **4.** (F) **Sawn hardwood**

In 2018 in Poland, production of sawn hardwood amounted to 0.6 million $m^3$ (which was a level similar to that of the previous year). Domestic supply of this material was increased by import which amounted to 0.3 million $m^3$ (yet, it was 8% lower than in 2017) and was 47% in relation to the production. Main imports were sawn oakwood and birchwood, but 17 thou. $m^3$ of sawn tropical wood was also imported. Over $^2/_3$ of sawn hardwood production was consumed in Poland, and 30% of it was exported (0.2 million $m^3$, and it was 2% more than in the previous year).

According to assumptions, sawn hardwood production should slowly increase in the near future – approximately 1-2% annually (to 0.6 million $m^3$ in 2020). Polish market in sawn hardwood will be supplemented by its import (in the amount of 0.3 million $m^3$ annually), while sawn hardwood export should not exceed 0.2 million $m^3$in the period 2019-2020.

### **4.** (G) **Veneer sheets**

In 2018 in Poland, production of veneers amounted to 59 thou. $m^3$ and decreased 9% compared to the previous year. 52% of it were hardwood veneers. Poland imported 74 thou. $m^3$ of veneers, i.e. 1% lower than in 2017. Import accounted for 125% of domestic production of veneers. 93% of imports were hardwood veneers (import of tropical veneers was insignificant and amounted to 0.2 thou. $m^3$). On the other hand, 12 thou. $m^3$ of veneers manufactured in Poland was exported (21% of the production, 92% of it were hardwood veneers), and it was 10% less than in the previous year.

It is estimated that in the period 2019-2020 veneer production may increase - to 65 thou. $m^3$ in 2020. It is also anticipated that there will be an increase in veneer import - to 80 thou. $m^3$, as well as in its export – to 15 thou. $m^3$ in 2020.

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

In 2018 11.4 million $m^3$ of wood-based panels, i.e. 3% more than in 2017, was produced in Poland. The assortment structure of production was dominated by particleboards with a 52% share (their production amounted to 5.9 million $m^3$, i.e. was 4% higher than in the previous year), of which 17% were OSBs (1.0 million $m^3$, 7% more than in 2017). Fibreboards accounted

for 43% of total production of wood-based panels (their production amounted to 5.0 million $m^3$, meaning a 1% increase year-to-year). Majority of manufactured fibreboards were dry-process boards (71%), whose production amounted to 3.5 million and was 1% lower than in the previous year). In 2018, 0.6 million $m^3$ of plywood was also produced in Poland (i.e. 7% more than in 2017). Domestic production of wood-based panels was supplemented by their import in the amount of 3.1 million $m^3$, which, however, was 1% lower than in 2017. Imported panels accounted for 28% of their total production. More than 65% of imported panels were particleboards (their import was 2.1 million $m^3$, including 0.1 million $m^3$ of OSBs). Nevertheless, the import decreased 5% in relation to 2017. Another Polish imports in 2018 were fibreboards (0.7 million $m^3$, 14% more compared to the previous year; majority of imports were dry-process fibreboards) and plywood in the amount of 0.4 million $m^3$ (plywood import decreased 4% in relation to the previous year). More than 27% of domestic production of wood-based panels was exported (3.1 million $m^3$, 2% less than in 2017). The structure of exported panels, as in previous years, was dominated by fibreboards with a 62% share (2.0 million $m^3$). These were primarily dry-process boards and wet-process porous boards. The share of particleboards within total export of wood-based panels was 27% (0.8 million $m^3$; while their export decreased 6% in relation to 2017), of which 47% were OSBs (0.4 million $m^3$). 0.4 million $m^3$ of plywood was also exported (including furniture panels and similar layer panels) and that was 9% more than in 2017.

It is forecasted that in the period 2019-2020 wood-based panel production will increase approximately 1% annually – to 11.7 million $m^3$. Particleboards will continue to dominate the production structure (primarily OSB production is anticipated to continue to grow) together with fibreboards (primarily dry-process boards). It is also assumed that, within the analysed period, there will be an increase in import of wood-based panels (to 3.4 million $m^3$ in 2020) and in its export (in 2020 3.2 million $m^3$ of Polish wood-based panels may be exported).

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

In 2018 in Poland wood pulp production amounted to 1.3 million tonnes (the amount was similar to the previous year's). As in previous years, the production structure was dominated by cellulose with a share of 76% (1 million tonnes), while semi-chemical wood pulp and mechanical wood pulp accounted for more than 17% (0.2 million tonnes), and cellulose pulp for chemical processing for 6% (0.1 million tonnes). In 2018 Poland imported 1.2 million tonnes of wood pulp. Its import was 13% higher than in 2017 and accounted for 92% of domestic production. Approximately 94% of import was cellulose. As in previous years, wood pulp export was relatively insignificant, i.e. 12% of domestic production was exported (i.e. 0.1 million tonnes, which meant a 21% decrease in relation to the previous year). Similarly to imports, almost all exports was cellulose.

No significant increase in wood pulp production is anticipated in the period 2019-2020. The production should remain at a level of approximately 1.3 million tonnes. Former trends in foreign trade should also continue – import of wood pulp in the amount of 1.2 million tonnes is assumed in 2020 and export should remain insignificant (it should not exceed 0.2 million tonnes in the analysed period).

In 2018 4.9 million tonnes of paper and paperboard was produced in Poland, i.e. 2% more than in 2017. The assortment structure of manufactured paper was dominated by packaging paper with a 67% share (its production amounted to 3.3 million tonnes and it was a 2% increase in relation to the previous year) and graphic paper (with an 17% share; production volume of 0.8 million tonnes, i.e. 6% lower than in the previous year). Domestic production of paper and paperboard was significantly supplemented by import of these products in the amount of 4.3 million tonnes (88% of the production), which, at the same time, was 3% higher than in the previous year. Primary imports was packaging paper – 2.8 million tonnes (66% of total

imported paper) and graphic paper – 1.3 million tonnes (with a 30% share within total import). Almost half of domestic production of paper and paperboard (2.4 million tonnes) was exported (it was 6% more than in 2017), and it was primarily packaging paper (1.8 million tonnes; accounting for 73% of total export of paper and paperboard) and graphic paper – 0.6 million tonnes (24%).

It is estimated that in the near future production of paper and paperboard will continue to grow (to 5.1 million tonnes in 2020). As to foreign trade in paper and paperboard, an increase in import (to 4.4 million tonnes in the period 2019-2020) and export (to 2.6 million tonnes) is anticipated.

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

At present in Poland the category of innovative wood materials primarily encompasses high-quality multifunctional materials with hydrophobic properties, that are highly durable, fire-resistant, receptive to shaping and finishing, and have a broader application range. These materials bestow innovative character upon final wood products made with their use. Thereby, these products are also characterised by higher quality, lightness, ergonomics, functionality and durability, rich pallet of colours and well design, as well as by adaptation to individual needs of consumers. More and more often these products are so-called "targeted" products, i.e. their features are directly connected with their function, place of use or they imitate nature perfectly (e.g. decors with a 3D effect).

In 2017 outlay on innovative activity in Polish wood sector amounted to PLN 2.8 billion, accounted for 13% of the outlay value in manufacturing, and, at the same time, was more than 66% higher than in the previous year (in current prices). The highest outlay was observed in the pulp and paper industry and paper processing, where its value equalled PLN 1.7 billion (which was 61% of total outlay in the sector). This meant an over two-fold increase in the outlay compared to 2016. In 2017 the outlay on innovative activity in the wood industry was PLN 0.7 billion (it was 41% higher than in the previous year and accounted for 24% of its total value in the sector). On the other hand, the outlay in the furniture industry was 2% lower than in the previous year and amounted to PLN 0.4 billion (which was 15% of total outlay in the wood sector). The outlay on innovative activity in wood companies primarily concerned purchases of machines and technical devices (73%), and the source of financing were primarily own resources of companies (70%). The levels of outlay on innovative activity per one company (which incurred such expenses) were significantly diverse in the wood sector, i.e. in the pulp and paper industry and paper processing the outlay was PLN 12.6 million, in the wood industry PLN 4.8 million, and in the furniture industry PLN 2.3 million (while the average outlay in manufacturing was PLN 4.9 million).

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

In 2018 in Poland construction and assembly production increased 13.7% (in real terms; compared to 10.7% in 2017) and amounted to PLN 206.2 billion ($ 57.1 billion, € 48.4 billion). In terms of value, the best results were achieved in the category "specialist construction work" (sales of this type of production amounted to over PLN 78 billion ($ 21.6 billion, € 18.3 billion)). Nevertheless, "erection of buildings" was characterised by the highest year-to-year dynamics (in fixed prices the increase was 26%). The increase in sold production in the category "construction of civil engineering facilities" was also significant and reached 22% (in fixed prices). In 2018, 636 thou. people were employed in construction, i.e. 3.6% more than in the previous year.

In 2018 favourable economic conditions were observed in housing. The number of dwellings completed (185 thou.) was 3.8% higher than in the previous year. The greatest

number of dwellings completed was recorded in the area of individual construction (66.2 thou.); however, it was 2% less than in the previous year. It was favourable that some former upward trends continued, i.e. the number of dwellings whose construction had been started increased 7.7%, the number of dwellings under construction increased 4.9%, and the number of dwellings with issued construction permits increased 2.7%.

General business situation in construction, including housing, is still evaluated as relatively well. The results of the first half of 2019 indicate further growth of construction and assembly production (more than 6% in relation to corresponding period of the previous year), yet, this growth is noticeably lower than in mid-2018, when it was almost 24%. It is a favourable fact that the number of dwellings completed increased 14% (while in the first half of 2018 it was approximately 6%). On the other hand, it may be disturbing that the dynamics of increase in the number of dwellings under construction and dwellings whose construction was commenced is lower than in the previous year (3% compared to 4% and less than 2% compared to over 7%, respectively). In mid-2019 the use of production capacities in construction was similar to the level of the year 2018 and reached approximately 87%. High employment costs and shortage of appropriately skilled staff is most often pointed to as barriers to construction business. Companies anticipate an increase in prices of construction work.

In Poland, construction business is to be facilitated by subsequent amendments to the *Building Law*. The law is to be pro-civic and de-regulative. The new regulations simplify and shorten procedures connected with construction work (reduce bureaucracy), they are to reduce the costs incurred by investors and ensure stability of decisions issued by offices. To satisfy the still high housing demand from society, the development of housing is supported within the framework of the *National Housing Programme*. There are few programmes in place, such as *"Apartment for a start"* (state aid regarding housing expenses in the first years of rental), *"Apartment plus"* (construction of dwellings intended for rental with the option of eventual ownership; with the option of subsidy to rental), and a support programme for *Social Tenement Housing* (based on preferential returnable financing granted by bank; it concerns not only new investments, but also refurbishments and adaptation of existing buildings). Self-governments executing housing investments are supported statutorily (construction of public housing and social housing).

Table 1

## Economic indicators

| Indicator | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|
| | % change on previous year (in real terms) | | | | | |
| Gross Domestic Product | 101.4 | 103.3 | 103.8 | 103.1 | 104.9 | 105.1 |
| Sold production of industry | 101.8 | 104.1 | 106.0 | 103.6 | 106.2 | 105.8 |
| Construction and assembly production | 94.1 | 105.9 | 103.7 | 97.6 | 110.9 | 113.7 |
| Dwellings completed | 94.9 | 98.6 | 103.2 | 110.6 | 109.2 | 103.8 |
| Dwellings under construction | 97.5 | 100.7 | 103.0 | 101.5 | 103.8 | 104.9 |
| Average paid employment | | | | | | |
| - total | 98.4 | 101.4 | 101.3 | 103.1 | 102.9 | 102.0 |
| - in the enterprises sector | 99.0 | 100.6 | 101.3 | 102.8 | 104,5 | 103.5 |
| Registered unemployment rate (*at the end of the year*)[1] | 13.4 | 11.4 | 9.7 | 8.2 | 6.6 | 5.8 |
| Average monthly gross real wages and salaries | | | | | | |
| - total | 102.8 | 103.2 | 104.5 | 104.3 | 103.7 | 105.3 |
| - in the enterprises sector | 102.0 | 103.7 | 104.5 | 104.4 | 103.9 | 105.4 |
| Price indices of consumer goods and services (*inflation*) | 100.9 | 100.0 | 99.1 | 99.4 | 102.0 | 101.6 |
| Investment outlays | 98.8 | 109.5 | 107.1 | 88.8 | 106.5 | 112.2 |
| **Trade** | | | | | | |
| **millions of PLN, current prices** | | | | | | |
| Exports | 647878.8 | 693471.6 | 750835.8 | 803477.8 | 882619.5 | 951324.2 |
| Imports | 656098.2 | 704567.5 | 740973.3 | 786470.1 | 880078.4 | 970830.8 |
| Balance of trade | -8219.4 | -11095.9 | +9862.5 | +17007.7 | +2541.1 | -19506.6 |
| **millions of USD, current prices** | | | | | | |
| Exports | 206138.0 | 222339.4 | 200342.8 | 205047.7 | 231591.3 | 264786.0 |
| Imports | 208780.4 | 225898.5 | 197682.1 | 200672.4 | 231034.9 | 270157.6 |
| Balance of trade | -2642.4 | -3559.1 | +2660.7 | +4375.3 | +556.4 | -5371.6 |
| **millions of EUR, current prices** | | | | | | |
| Exports | 154994.0 | 165773.6 | 179578.2 | 184842.9 | 206647.3 | 223596.4 |
| Imports | 156978.0 | 168432.3 | 177232.9 | 180924.6 | 206084.4 | 228172.3 |
| Balance of trade | -1984.0 | -2658.7 | +2345.3 | +3918.3 | +562.9 | -4575.9 |

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

UNECE

# TF1

**TIMBER FORECAST QUESTIONNAIRE**
**Roundwood**


Country: Poland | Date: 4.10.2019

Name of Official responsible for reply:
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| Product Code | Product | Unit | Historical data 2017 | Historical data 2018 | Revised 2018 | Estimate 2019 | Forecast 2020 |
|---|---|---|---|---|---|---|---|
| 1.2.1.C | SAWLOGS AND VENEER LOGS, CONIFEROUS | | | | | | |
| | Removals | 1000 $m^3$ ub | 15 005,713 | 14 975 | 14 963,692 | 14 000 | 14 300 |
| | Imports | 1000 $m^3$ ub | 170,884 | 170 # | 140,075 | 200 | 250 |
| | Exports | 1000 $m^3$ ub | 1 064,994 | 1 100 # | 1 625,860 | 1 000 | 1 100 |
| | Apparent consumption | 1000 $m^3$ ub | 14 111,603 | 14 045 | 13 477,907 | 13 200 | 13 450 |
| 1.2.1.NC | SAWLOGS AND VENEER LOGS, NON-CONIFEROUS | | | | | | |
| | Removals | 1000 $m^3$ ub | 2 873,692 | 2 813 | 2 830,018 | 2 800 | 2 950 |
| | Imports | 1000 $m^3$ ub | | 80 R# | | | |
| | Exports | 1000 $m^3$ ub | | 150 R# | | | |
| | Apparent consumption | 1000 $m^3$ ub | | 2 743 | | | |
| 1.2.1.NC.T | of which, tropical logs | | | | | | |
| | Imports | 1000 $m^3$ ub | 1,686 | 2 E | 0,780 | 1 | 2 |
| | Exports | 1000 $m^3$ ub | 0,946 | 1 E | 0,066 | 0 | 0 |
| | Net Trade | 1000 $m^3$ ub | 0,740 | 1 | 0,714 | 1 | 2 |
| 1.2.2.C | PULPWOOD (ROUND AND SPLIT), CONIFEROUS | | | | | | |
| | Removals | 1000 $m^3$ ub | 16 364,694 | 17 334 | 17 378,632 | 16 400 | 16 550 |
| | Imports | 1000 $m^3$ ub | 598,796 | 650 # | 358,700 | 600 | 650 |
| | Exports | 1000 $m^3$ ub | 1 424,355 | 1 650 # | 3 076,274 | 1 600 | 1 700 |
| | Apparent consumption | 1000 $m^3$ ub | 15 539,135 | 16 334 | 14 661,058 | 15 400 | 15 500 |
| 1.2.2.NC | PULPWOOD (ROUND AND SPLIT), NON-CONIFEROUS | | | | | | |
| | Removals | 1000 $m^3$ ub | 4 828,100 | 5 271 | 5 261,586 | 5 000 | 5 200 |
| | Imports | 1000 $m^3$ ub | | 560 R# | | | |
| | Exports | 1000 $m^3$ ub | | 75 R# | | | |
| | Apparent consumption | 1000 $m^3$ ub | | 5 756 | | | |
| 3 | WOOD CHIPS, PARTICLES AND RESIDUES | | | | | | |
| | Domestic supply | 1000 $m^3$ | 10 199,102 N | 10 300 C | 10 523,775 | 10 700 | 10 900 |
| | Imports | 1000 $m^3$ | 1 607,857 | 1 878 C | 2 155,120 | 2 200 | 2 250 |
| | Exports | 1000 $m^3$ | 845,778 | 884 C | 868,682 | 880 | 900 |
| | Apparent consumption | 1000 $m^3$ | 10 961,181 | 11 294 | 11 810,213 | 12 020 | 12 250 |
| 1.2.3.C | OTHER INDUSTRIAL ROUNDWOOD, CONIFEROUS | | | | | | |
| | Removals | 1000 $m^3$ ub | 939,271 | 873 N | 875,421 | 900 | 950 |
| 1.2.3.NC | OTHER INDUSTRIAL ROUNDWOOD, NON-CONIFEROUS | | | | | | |
| | Removals | 1000 $m^3$ ub | 52,950 | 60 N | 58,370 | 60 | 60 |
| 1.1.C | WOOD FUEL, CONIFEROUS | | | | | | |
| | Removals | 1000 $m^3$ ub | 2 607,537 | 2 596 N | 2 679,046 | 2 650 | 2 700 |
| 1.1.NC | WOOD FUEL, NON-CONIFEROUS | | | | | | |
| | Removals | 1000 $m^3$ ub | 2 640,676 | 2 665 N | 2 672,760 | 2 600 | 2 650 |

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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**

UNECE

# TF2

**TIMBER FORECAST QUESTIONNAIRE**
**Forest products**


**Country:** Poland | **Date:** 4.10.2019

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| Product Code | Product | Unit | Historical data 2017 | Historical data 2018 | Revised 2018 | Estimate 2019 | Forecast 2020 |
|---|---|---|---|---|---|---|---|
| 6.C | SAWNWOOD, CONIFEROUS | | | | | | |
| | Production | 1000 $m^3$ | 4 419,476 | 4 550 | 4 400,468 | 4 450 | 4 500 |
| | Imports | 1000 $m^3$ | 774,214 | 953 | 983,939 | 990 | 990 |
| | Exports | 1000 $m^3$ | 705,135 | 827 | 822,360 | 850 | 880 |
| | Apparent consumption | 1000 $m^3$ | 4 488,555 | 4 677 | 4 562,047 | 4 590 | 4 610 |
| 6.NC | SAWNWOOD, NON-CONIFEROUS | | | | | | |
| | Production | 1000 $m^3$ | 611,916 | 640 | 612,375 | 620 | 630 |
| | Imports | 1000 $m^3$ | 309,966 | 288 | 285,477 | 290 | 300 |
| | Exports | 1000 $m^3$ | 179,770 | 181 | 183,622 | 190 | 200 |
| | Apparent consumption | 1000 $m^3$ | 742,112 | 748 | 714,230 | 720 | 730 |
| 6.NC.T | of which, tropical sawnwood | | | | | | |
| | Production | 1000 $m^3$ | 0,006 | 0 | 0,012 | 0 | 0 |
| | Imports | 1000 $m^3$ | 15,291 | 16 | 16,553 | 17 | 18 |
| | Exports | 1000 $m^3$ | 1,923 | 2 | 1,859 | 2 | 2 |
| | Apparent consumption | 1000 $m^3$ | 13,374 | 14 | 14,706 | 15 | 16 |
| 7 | VENEER SHEETS | | | | | | |
| | Production | 1000 $m^3$ | 64,582 | 68 C | 59,077 | 60 | 65 |
| | Imports | 1000 $m^3$ | 74,419 | 82 C | 73,843 | 75 | 80 |
| | Exports | 1000 $m^3$ | 13,639 | 15 C | 12,310 | 14 | 15 |
| | Apparent consumption | 1000 $m^3$ | 125,362 | 135 | 120,610 | 121 | 130 |
| 7.NC.T | of which, tropical veneer sheets | | | | | | |
| | Production | 1000 $m^3$ | 3,005 | 3 N | 0,565 | 2 | 2 |
| | Imports | 1000 $m^3$ | 0,352 | 0 | 0,202 | 1 | 1 |
| | Exports | 1000 $m^3$ | 0,255 | 0 | 0,025 | 0 | 0 |
| | Apparent consumption | 1000 $m^3$ | 3,102 | 3 | 0,742 | 3 | 3 |
| 8.1 | PLYWOOD | | | | | | |
| | Production | 1000 $m^3$ | 546,467 | 555 C | 583,166 | 590 | 600 |
| | Imports | 1000 $m^3$ | 401,728 | 374 C | 385,342 | 390 | 400 |
| | Exports | 1000 $m^3$ | 307,308 | 362 C | 335,983 | 340 | 350 |
| | Apparent consumption | 1000 $m^3$ | 640,887 | 566 | 632,525 | 640 | 650 |
| 8.1.NC.T | of which, tropical plywood | | | | | | |
| | Production | 1000 $m^3$ | 2,737 | 3 | 3,124 | 3 | 3 |
| | Imports | 1000 $m^3$ | 6,273 | 5 | 5,450 | 6 | 6 |
| | Exports | 1000 $m^3$ | 0,361 | 0 | 0,422 | 0 | 0 |
| | Apparent consumption | 1000 $m^3$ | 8,649 | 8 | 8,152 | 9 | 9 |
| 8.2 | PARTICLE BOARD (including OSB) | | | | | | |
| | Production | 1000 $m^3$ | 5 616,863 | 5 830 | 5 863,518 | 5 900 | 5 950 |
| | Imports | 1000 $m^3$ | 2 175,029 | 2 051 | 2 063,037 | 2 100 | 2 150 |
| | Exports | 1000 $m^3$ | 884,321 | 827 | 829,857 | 850 | 880 |
| | Apparent consumption | 1000 $m^3$ | 6 907,571 | 7 054 | 7 096,698 | 7 150 | 7 220 |
| 8.2.1 | of which, OSB | | | | | | |
| | Production | 1000 $m^3$ | 911,404 | 980 | 975,394 | 990 | 1 000 |
| | Imports | 1000 $m^3$ | 134,845 | 136 | 110,367 | 120 | 130 |
| | Exports | 1000 $m^3$ | 373,214 | 385 | 386,511 | 400 | 410 |
| | Apparent consumption | 1000 $m^3$ | 673,035 | 732 | 699,250 | 710 | 720 |
| 8.3 | FIBREBOARD | | | | | | |
| | Production | 1000 $m^3$ | 4 853,780 | 4 970 C | 4 921,938 | 5 020 | 5 130 |
| | Imports | 1000 $m^3$ | 617,373 | 721 C | 700,804 | 780 | 800 |
| | Exports | 1000 $m^3$ | 1 986,094 | 1 981 C | 1 936,989 | 1 870 | 1 930 |
| | Apparent consumption | 1000 $m^3$ | 3 485,059 | 3 711 | 3 685,753 | 3 930 | 4 000 |
| 8.3.1 | Hardboard | | | | | | |
| | Production | 1000 $m^3$ | 114,853 | 120 | 117,013 | 120 | 130 |
| | Imports | 1000 $m^3$ | 165,113 | 165 | 156,260 | 190 | 190 |
| | Exports | 1000 $m^3$ | 402,937 | 405 | 416,640 | 300 | 300 |
| | Apparent consumption | 1000 $m^3$ | -122,971 | -120 | -143,367 | 10 | 20 |
| 8.3.2 | MDF/HDF (Medium density/high density) | | | | | | |
| | Production | 1000 $m^3$ | 3 511,098 | 3 600 | 3 485,279 | 3 550 | 3 600 |
| | Imports | 1000 $m^3$ | 443,514 | 544 | 535,083 | 580 | 600 |
| | Exports | 1000 $m^3$ | 813,478 | 789 | 719,361 | 750 | 780 |
| | Apparent consumption | 1000 $m^3$ | 3 141,134 | 3 355 | 3 301,001 | 3 380 | 3 420 |
| 8.3.3 | Other fibreboard | | | | | | |
| | Production | 1000 $m^3$ | 1 227,829 | 1 250 | 1 319,646 | 1 350 | 1 400 |
| | Imports | 1000 $m^3$ | 8,746 | 12 | 9,461 | 10 | 10 |
| | Exports | 1000 $m^3$ | 769,679 | 787 | 800,988 | 820 | 850 |
| | Apparent consumption | 1000 $m^3$ | 466,896 | 475 | 528,119 | 540 | 560 |
| 9 | WOOD PULP | | | | | | |
| | Production | 1000 m.t. | 1 262,563 | 1 371 C | 1 258,282 | 1 280 | 1 300 |
| | Imports | 1000 m.t. | 1 024,832 | 1 165 C | 1 161,964 | 1 190 | 1 230 |
| | Exports | 1000 m.t. | 189,405 | 145 C | 149,384 | 160 | 180 |
| | Apparent consumption | 1000 m.t. | 2 097,990 | 2 392 | 2 270,862 | 2 310 | 2 350 |
| 12 | PAPER & PAPERBOARD | | | | | | |
| | Production | 1000 m.t. | 4 779,031 | 4 859 C | 4 856,027 | 4 950 | 5 050 |
| | Imports | 1000 m.t. | 4 168,603 | 4 290 C | 4 288,355 | 4 350 | 4 400 |
| | Exports | 1000 m.t. | 2 301,736 | 2 471 C | 2 449,097 | 2 550 | 2 600 |
| | Apparent consumption | 1000 m.t. | 6 645,898 | 6 679 | 6 695,285 | 6 750 | 6 850 |
| 5.1 | WOOD PELLETS | Pellets and briquettes, of pressed and agglomerated wood and vegetable waste and scrap (CPA 16.29.15) | | | | | |
| | Production | 1000 m.t. | 807,208 | 1 000 R | 688,671 | 850 | 900 |
| | Imports | 1000 m.t. | 132,304 | 122 | 188,643 | 200 | 200 |
| | Exports | 1000 m.t. | 610,468 | 362 | 751,194 | 700 | 680 |
| | Apparent consumption | 1000 m.t. | 329,044 | 761 | 126,120 | 350 | 420 |

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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

Sawnwood - 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

Plywood (product code 8.1) - no bamboo plywood

Wood pulp (product code 9) is reported in metric tonnes (no air-dry weight)

Wood pulp - excluding pulp from fibres other than wood and excluding pulp from recovwered fibre pulp

**red colour - corrected data**