Austrian Market Report 2017

Statement submitted by the Austrian Delegation to the Joint Session of the

ECE Committee on Forests and the Forest Industry (75th session) and the FAO European Forestry Commission (39th session)

Warsaw, 9-13 October 2017

Federal Ministry of Agriculture, Forestry, Environment and Water Management
Forestry Department

Vienna, October 2017

1. General economic situation

Economic outlook for 2017 and 2018: Strongest Economic Growth in Six Years [1]

After an acceleration of economic activity in the first half of 2017, latest business surveys do not suggest a further strengthening for Austria. GDP is expected to grow by 2.8% in 2017, the highest rate in six years. Despite the appreciation of the euro and a slowing growth momentum in third countries, the euro area should keep a firm upward trend in 2018, driven by the expansionary monetary policy of the ECB and a still untightened fiscal stance. The Austrian economy may grow in 2018 at the same rate as in 2017. From a cyclical perspective, further extension of the current expansionary fiscal policy would not be appropriate.

The Austrian business sector expresses great optimism on current economic conditions and the outlook for the months to come. Also in the USA and in other European countries, sentiment indicators have climbed to high levels. While the US economy has now reached an advanced stage of the business cycle, demand and output are still gathering pace in Europe, where the upswing is spreading across regions and sectors. Business conditions in the emerging markets are more uneven. While the situation is improving in Brazil and Russia, activity is unlikely to strengthen further in China in 2018, where the current investment boom is uncertain to last.

In 2016, the Austrian economy has benefitted mainly from domestic demand forces. The tax reform helped to overcome the backlog emerged from the sluggishness of private consumption of past years, and investment recovered from the extended slackness. Only towards the end of 2016, foreign demand regained strong momentum, which continued in early 2017.

The current upswing in Austria is broadly based across economic sectors. Apart from the cyclically sensitive manufacturing industry, it is also supported by construction, trade and business-related services. The tourism sector also benefits from lively economic activity in Austria and abroad.

In spite of the high utilisation of the capital stock and lively labour demand, inflationary pressure arises for the time being neither in the USA nor in the euro area. Central banks in both regions hesitate to steer monetary policy back to a normal course. Austria's inflation rate remains high by EU standards.

With the cyclical recovery, the situation on the Austrian labour market is improving. The stronger pace of job creation in 2017 should broadly be maintained in 2018. The "Employment Bonus" and the “Initiative 20,000” will provide additional stimulus.

Higher tax revenues resulting from stronger economic activity provide relief for the government accounts. The general government deficit in the Maastricht definition is set to narrow to 0.6% of GDP in 2017 and will be reduced further in 2018. However, the benign outlook is entirely due to the cyclical "bonus" and favourable financing conditions, rather than being the result of a lasting improvement in budgetary fundamentals. A tightening of the fiscal stance that would restore budgetary leeway and create scope for investment in favour of future-oriented areas would not put at risk the resilience of the current cyclical upswing.

[1] Source: Austrian Institute of Economic Research (WIFO), Economic Outlook September 2017

2. Policy measures

Government Programme

After differences of opinion between the Social Democratic Party and the Austrian People's Party, governing parties since 2013, it was agreed that early parliamentary elections should be held on 15 October 2017. It is unlikely that Austria would have a new government before the end of 2017; only then will become clear how firmly sustainable forest management and timber use will be enshrined in a new government programme.

The Austrian Forest Strategy 2020+

To implement the "Austrian Forest Strategy 2020+" adopted in 2016, a working programme with over 200 measures prepared in the framework of the Austrian Forest Dialogue was adopted in May 2017. For the presentation of sustainable forest management and the evaluation of the Forest Strategy the set of indicators from the Forest Dialogue was further developed. Actual figures and targets were set by mutual agreement for almost all of the 65 indicators, which also attracts great international attention. (www.walddialog.at)

Forest subsidisation

Practically all subsidies of relevance to forestry in Austria are bundled in the national programme of the EU Rural Development Regulation. The Austrian Rural Development Programme 2014-2020 was approved by the European Commission in December 2014. Funds in the amount of € 38.4 million annually are provided for forest-related measures, altogether € 269 million for the seven-year programme period, provided by the European Union, the Federal Government and the nine Federal Provinces. The implementation of the new programme started in 2015.

"Climate-fit forests"

Climate change causes higher temperatures and changes in the distributions of precipitation. Forests need to adapt to the changes and must be able to meet a multitude of challenges. In October 2016 the BMLFUW along with the Cooperation Platform Forest-Wood-Paper ("Kooperationsplattform Forst Holz Papier") launched the campaign "Using wood is good for the climate - We make our forests fit for climate change!". The campaign is aimed at supporting forest owners in the sustainable management of their forests and at motivating the general public to use more wood. This is done by means of media awareness campaigns and concrete projects along the entire value chain of timber. The efficient use of wood as a renewable, climate-friendly raw material and source of energy contributes significantly to the saving of anthropogenic carbon dioxide emissions. One cubic metre of wood stores a whole tonne of CO_2 and can fix it for the long term, for example in buildings made of wood. At the same time, active forest management enhances the adaptation of forests to climate change.

National Forest Inventory

The Austrian Forest Inventory is in process of being put on the basis of permanent surveying: Whereas formerly, for the last time from 2007-2009, a three-year period used to be followed by a period without surveys, surveys are from 2016 carried out for each year, one sixth of the random sample plots annually. First results will be available for publication in late 2018; after that, they will be updated every year.

Joint timber marketing

Numerous forest owners, especially owners of small (private) forests are organised in forest owner cooperatives. The level of organisation focuses primarily on cooperation in roundwood sales, loose machinery alliances and collaborative forest operations. Also consulting for forest owners and the preparation of forest management plans as well as training and further education opportunities are important services. In some cases local forest owner cooperatives ('Waldwirtschaftsgemeinschaften') even manage the forests of some of their members. For urban forest owners, the services offer a way to manage their forest. The forest owner association of greatest relevance to roundwood supply is the Austrian Forest Owner Cooperative (Waldverband Österreich, www.waldverband.at). Under its 8 provincial associations about 66,200 forest owners are organised in 158 local forest owner cooperatives. In 2016 totally 2.74 million m³ of timber were marketed.

Cooperation Platform Forest-Wood-Paper ("Kooperationsplattform Forst Holz Papier", FHP)

FHP is a coordination and communication platform of Austria's forestry and timber industry as well as of the paper and pulp industry. It is a platform for lobbying and organizing improved frame conditions and aims at achieving the highest possible value added for wood in all industries. FHP itself is not involved in any sales operations. Its fields of activity comprise the provision of wood (automated takeover of timber at the mill, wood flow, timber harvesting, transport and logistics), wood as (construction) material (research, standardisation), wood energy, wood balance (data service) and wood promotion (see below). The joint activities are funded through the FHP cooperation contribution of all participating industries. (www.forstholzpapier.at)

Wood promotion

"proHolz Austria" (www.proholz.at) is a working group of the Austrian forestry and timber industry. Its objective is the effective marketing of wood and wood products in the domestic market and abroad. The activities of proHolz Austria are financed from the FHP contributions. Marketing, publicity and information on wood are the instruments applied to attain this goal. In February 2017 a new image campaign started. The campaign follows the proven motto "Holz ist genial" (meaning "wood is ingenious") and, with surprising facts on wood, highlights the performances of sustainable forest management as well as positive effects of building with wood (www.holzistgenial.at).

3. Market drivers

In 2016, economic growth in Austria further accelerated to 1.5%, powered by a strong demand for consumer goods and an increase of investments. Given the weak global economy, exports grew at a sluggish rate only. Manufacturing and construction industry were going well. Trade and tourism provided positive stimuli, too. Inflation was 0.9%, same as in 2015. With the economy in good condition, employment rates grew as well. Nevertheless, unemployment did not decline, since the supply of labour increased once again, and the unemployment rate remained at a constant 9.1 percent.

Corresponding to the general economic situation also the overall production figures of the wood-processing industry were increasing in 2016. Contrary to the trend the quantities felled in Austria declined by 4%, the prices of roundwood by 2%. In turn, roundwood imports increased by 14%.

The favourable overall economic trend continued and became even more pronounced in 2017. Consequently, the wood-processing industry is optimistic about the current marketing year. Forest owners' assessments are overshadowed by the fact that, especially in the northern parts of Austria, damage due to bark beetle has risen dramatically since August. The prices of roundwood, which in some areas still increased slightly until summer, are under pressure now.

4. Developments in forest-products market sectors

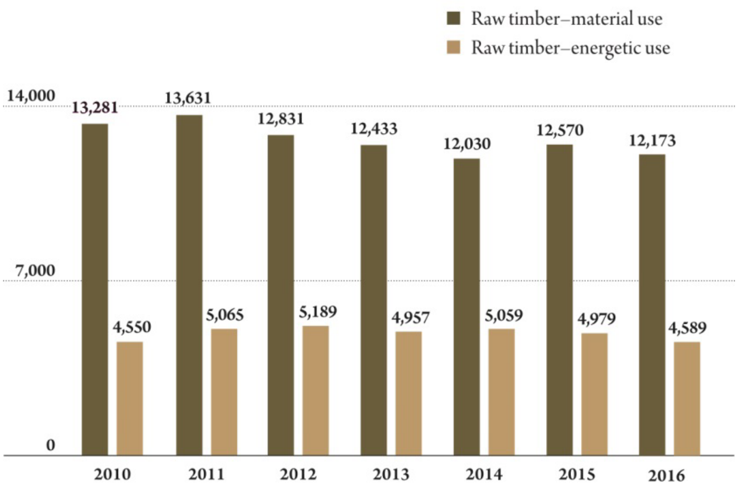
A. Wood raw materials

With a share of 47.6% of the federal territory and about 145,000 forest land owners forests play an important part in Austria, especially in rural areas. Maintaining and increasing the yield of forests are thus of high significance not only for forest owners but also for wood-processing enterprises. In view of the large processing capacities of the wood and paper industry in Austria, the increasing use of wood and sawmill by-products for energy generation and the required imports of roundwood (2016: 9.7 million m³, mostly from the Czech Republic and Germany) mobilizing the available domestic resources has become a major goal of Austrian forest policy.

2016: Fears and predictions of bark beetle calamities made forest owners act cautiously with regard to regular use. The fact that the quantities of damaged wood were ultimately smaller than expected was reflected in total removals. Altogether, 16.76 million cubic metres under bark were utilised in 2016. Removals thus remained 4.5% below the previous year, 3.5% below the five-year average and 8.5% below the ten-year average. Sawlogs accounted for 53.7%, pulpwood and other industrial roundwood for 18.9%, fuelwood and chippings from forests for 27.4% of the quantity felled. The share of coniferous wood in the total fellings

REMOVAL

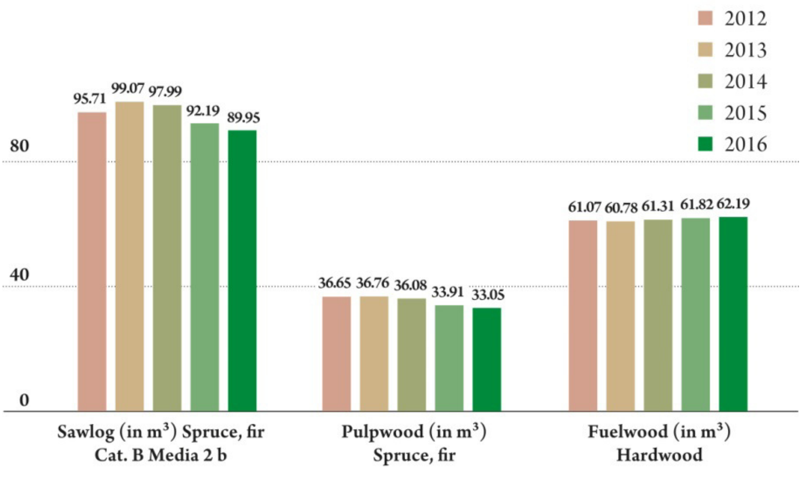
in 1,000 cubic metres of timber harvested, under bark



Source: BMLFUW 2017

TIMBER PRICE DEVELOPMENT IN AUSTRIA

in euros per (solid) cubic metre



Source: Statistics Austria 2017

amounted to 82.7%. Altogether, small forest owners (forest area < 200 hectares) felled 9.64 million m³ in 2016 (-3.7%), the owners of forests larger than 200 hectares 5.52 million m³ (-6.5%) and the Austrian Federal Forests 1.60 million m³ (-1.9%). The percentage of damaged wood decreased markedly by 27.9% to a total of 5.36 million m³, which is 32.0% of the total removals. The volume of damaged wood was 16.6% lower than the average of the past ten years. The most important causes of damage were bark beetles and storms.

Roundwood imports increased by totally 14.2% in 2016, thus reaching 9.7 million m³. The imports of sawlogs went up by 15.6% and amounted to 6.55 million m³, those of pulpwood increased to 2.63 million m³ (+20.8%), only the imports of fuelwood went down, by 20.2% to 530,000 m³. Exports amounted to 512,000 m³ of sawlogs (+2.2%), 367,000 m³ of pulpwood (+11.7%) and 12,000 m³ of fuelwood (-9.2%).

On annual average the prices of roundwood (incl. fuelwood) were in 2016 1.7% below those of 2015. This is mainly a result of the lower prices for sawlogs and pulpwood. On annual average, sawmills paid € 89.95 per cubic metre of sawlog spruce/fir, Cat. B, Media 2b, 2.4% less than in 2015; the annual maximum of € 91.59 was paid in October, the annual minimum of € 88.26 in May. The 2016 mixed pulpwood/ mechanical pulpwood price for spruce/fir was with € 36.40 per m³ 1.6% lower than the average of the preceding year – pulpwood € 33.05 (-2.6%), mechanical pulpwood € 43.95 (-0.8%). The production value of domestic forestry (incl. forest-related services and non-separable non-forestry subsidiary activities) reached the total of € 1.518 billion in 2016, after € 1.614 billion in 2015. The decline by 5.9% is a consequence of the lower harvest volumes and wood prices.

2017: In the first half of the year the roundwood market has remained rather stable, the sawmill industry was in most cases well supplied. As a result of the good sales situation on the sawnwood market, the demand of the sawmill industry, especially that for healthy fresh wood, was lively. Until July the prices of roundwood were quite stable, with a slightly ascending trend for sawlogs. With the rising quantities of damaged wood after storm events in summer and the abrupt increase in the damage caused by bark beetles since August, prices are tending to fall now.

The roundwood market in September 2017: As regards the market for coniferous sawlogs, distinctions have to be made. Due to the drought and heat periods in the Waldviertel and the Mühlviertel considerable amounts of damaged wood accrued in these areas during specific periods of time. The situation has aggravated due to the accrual of bark-beetle infested and windfallen wood in Lower Bavaria and Czechia; import pressure is strong. Presently, the storage capacities of sawmills are nearly exhausted, in particular for poorer qualities. All market actors try hard to provide additional storage and transport capacities. Nevertheless the entire constellation has meanwhile caused a backlog of timber extraction of up to six weeks. In the areas most seriously affected sawlog prices have already declined significantly, with the strongest decreases for blue-stained timber and blocks infested by brown or red rot (bark-beetle infested timber). In accordance with the situation for coniferous sawlogs the market for industrial wood is meanwhile very tense as well. Warehouses are full and capacities have been exhausted. In the areas affected by bark beetle infestation, smaller dimensions are assigned to industrial wood to relieve sawlogs. Quantities that go beyond those fixed in existing contracts cannot be sold there at the moment. For common beech, the situation is much more relaxed; prices are stable.

The Ministry assigned additional funds for the package of bark-beetle control measures. The competent forest authorities and the forest consultants are working with full commitment.

Material which is infested or threatened by infestation has to be dealt with and removed from forests quickly to prevent the spread of the beetle. Additional stores outside the forest are established. In line with the initiative “Using wood is good for the climate - We make our forests fit for climate change!” reforestation after the salvaging of damaged timber is to focus on stable mixed stands.

Taking everything into account, forest owners are expecting a 7% increase in removals for 2017.

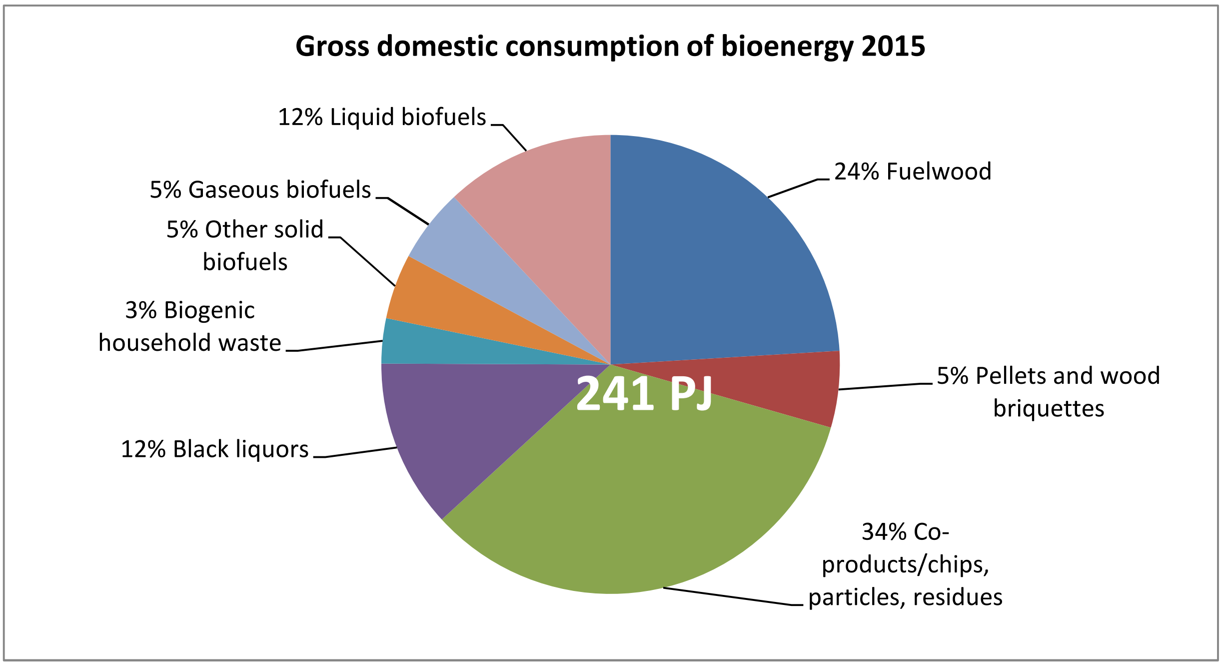
2018: According to recent economic projections most industries of the wood-processing sector are expecting stable or slightly increasing production figures for 2018. In line with this, Austria’s forest owners expect slightly increasing removals.

B. Wood energy

In 2015 the Austrian gross domestic energy consumption amounted to 1,409 PJ, thus being 2.6% higher than in 2014. The increase is due to additional consumption in households, transport and industry, the reasons of the extra consumption being the total heating degree amounts, which were by 11.6% higher in 2015, the lower fuel prices and the slightly growing economy.

The gross domestic consumption of bio-energy amounted to about 241 PJ and increased as well (+4 PJ). Biogenic sources of energy are thus Austria’s most important renewable sources of energy (59% of total gross domestic renewable energy consumption), even more important than hydropower (32%).

Woody by-products covered about 34% of the gross domestic consumption of bioenergy. They include, among others, shavings, chips and bark. In most cases they are turned to electricity and heat by heating plants and thermal power stations. With about 24%, fuelwood has the second-biggest share; it is almost exclusively used for heating in private households. Waste liquors from the paper and pulp industry covered about 12% of the bioenergy consumption. In most cases they are used to generate process heat in combination with electrical energy. Pellets and wood briquettes accounted for 5.4%, mainly used in individual



house heating systems. One quarter of the consumption relates to biogenic household waste, liquid and gaseous as well as other biogenic energy sources. In total, more than three quarters of energetically used biomass in Austria are wood-based fuels (including black liquors).

According to the official removals statistics 4.59 million m³ of fuelwood and chippings from forests were harvested in 2016, which corresponds to a 27.4% share in the total removal and a loss of 7.8% compared to 2015. Fuelwood accounted for 2.26 million m³ (1.23 million m³ of coniferous wood, 1.03 million m³ hardwood), wood chips from forests for 2.33 million (solid) m³. With € 62.19 per m³ of stacked wood (with bark, without turnover tax) the price of non-coniferous fuelwood in 2016 rose by 0.6% compared to 2015, that of coniferous fuelwood rose by 0.8%, thus reaching € 41.88. All in all there were hardly any fluctuations. This stable trend has continued throughout the year 2017 so far.

Wood pellets are currently produced at 41 sites in Austria, predominantly by the sawmill industry. The production capacity thereby rose above 1.5 million tonnes. In 2016 real production amounted to 1,071,000 tonnes (+7.1% compared to the preceding year); 392,000 tonnes were imported, above all from Romania, Czechia and Germany; 610,000 tonnes were exported, mainly to Italy. According to proPellets Austria the domestic consumption increased by 6.5% and amounted to about 895,000 tonnes. In 2017 the Austrian pellet production is expected to increase by 7.5% to 1,150,000 tonnes. Depending on the next winters, future production might rise significantly, due to the higher production capacity. In 2016 only 4,320 new pellet boilers and about 2,500 stoves were installed. The reason for this continuing negative trend was the low oil price leading to low willingness to invest in pellets. For 2017, 5,200 new pellet boiler installations are expected. The price survey done by proPellets Austria (www.propellets.at) resulted in an average price of 22.86 cent/kg of (bulk) wood pellets (incl. turnover tax) in September 2017. Compared to September 2016 this means an increase in prices of 2.6%. Wood pellets in bags (when ordered by the pallet) cost an average of € 3.92 per 15 kg sack (26.14 cent/kg, +3.7%).

C. Certified forest products

PEFC Austria: Since September 2000 the Austrian PEFC certification system has been applied. Both forest certification by means of the regional model and the "Chain of Custody" (CoC) certification have been developed so as to suit the specific requirements of small- and medium-sized enterprises in Austria. Since October 2014 the third revision process of the Austrian PEFC system has been ongoing. The updated standards of PEFC Austria are to enter into force in 2018. Currently, about 48,000 forest owners holding about 3,1 million hectares effectively take advantage of the certification and 573 CoC-certificates are valid.

Forest Stewardship Council (FSC): In Austria 587 hectares of forest are currently certified according to FSC. CoC certificates: 288.

D. Value-added wood products

Apart from the sawmill and board industries (see E, F, G), also the construction sector, the furniture industry, and the ski industry represent important lines of business of the Austrian wood industry.

According to preliminary figures 2016's sold production in the construction sector amounted to € 2.58 billion, an increase of 8.7% compared to the previous year. The individual sectors of the construction-related industries show different trends. The production of windows remained almost unchanged at € 408 million (-0.2%). The production of prefabricated wooden houses rose to € 534 million (+2.4%) and the production of doors by 4.9% to € 226 million. Glued strucural components' production increased significantly to a total amount of € 745 million (+25.3%). The exports of wooden floors (€ 222 million, +9.6%), doors (€ 43 million, +9.0%) and windows (€ 75 million, +10.9%) increased markedly, exports of laminated wood reached € 449 million (+12.4%). The most important foreign market for wooden floors was Germany (market share: 63%) and Switzerland. These two countries were also the major destinations for exports of windows and doors. Most of the laminated wood was exported to Italy (45%), although exports to Italy dwindled by 2.7%. Germany (18%), Japan (11%) and Switzerland (8%) followed in the ranking.

The Austrian furniture industry comprises 50 industrial plants with about 6,000 employees – most of them privately owned medium-sized companies. 2016 was a successful year; the furniture industry increased its production by 8.8% to € 2.0 billion. The producers of home furniture made a big contribution to this growth (+12.5%, € 916.4 million). Also the sectors of office furniture (+7.5%, € 288.2 million), kitchen furniture (+8.8%, € 284.9 million) and, at an above-average level, shopfitting (+13.5%, € 177.7 million) made gains in 2016. Seating furniture and mattresses did not benefit from the positive overall development.

The trend reversal regarding exports in 2015 continued: This time Austria's furniture producers were able to increase their exports significantly, by 5.1% to almost € 880.4 million. The main export market was Germany (€ 359 million, +5.3%). However, also the import pressure on Austria's furniture producers increased. Furniture imports to Austria rose by 6.5% and resulted in a total value of € 1.81 billion. The bulk of the imported furniture came from Germany (€ 914 million, +8.8%). Imports from Poland increased by 21.9% (€ 175 million), imports from China by 3.3% (€ 145 million). Imports from Italy decreased by 9.0% (€ 116 million).

E. Sawn softwood

With more than 1,000 companies and about 8,400 employees the Austrian sawmill industry is the biggest processor of wood in Austria (see wood flow diagram, page 17). It mainly consists of small- and medium-sized enterprises. However, the eight largest companies generate half of the total production volume, its 40 largest companies almost 90%. About 60% of the total sawnwood production is designated for the export. 98% of the total production is sawn softwood, mainly spruce and fir. In absolute terms Austria is in export of sawn softwood among the top 7 in the world.

In 2016 the sawnwood markets experienced a positive trend in almost all sales markets. The production of sawnwood amounted to 9.26 million m^3 (2015: 8.75 million m^3), of which 9.06 million m^3 were sawn softwood. The production value of the Austrian sawmill industry increased by 3% to € 2.02 billion. In 2016, processed roundwood accounted for approximately 15.3 million solid m^3, including 6.2 million solid m^3 of imported coniferous sawlogs. Most of the sawlog imports were from the Czech Republic (+37%, 2.6 million solid m^3) and from Germany (1.6 million solid m^3). The imports from Slovenia increased by 45% to 1.3 million solid m^3.

In 2016, 5.32 million m^3 of sawn softwood were exported – an increase of 5% compared to the previous year (5.06 million m^3). Exports to the main market Italy rose by 1% to 2.4 million m^3. This means that 45% of the total sawn softwood exports were shipped to Italy. Another remarkable, 24% increase in the exports to Germany to 915,000 m³ (2015: 740.000 m³) is due to the continued strong purchasing power and the housing initiatives. In spite of the continued political uncertainty in the countries of the Levant a small, 3% increase to approximately 940,000 m³ was observed there in 2016. In 2016, imports of sawn softwood increased by 10% compared to the previous year. Imports totalled 1.81 million m³. In terms of value, the volume of imports amounted to € 375 million.

2017: During the first half-year of 2017 the sawmill industry generated a slight plus in the production of sawnwood compared to the reference period of the previous year. After 2016 had been a good year already, Germany's economic upswing has had a positive influence on the demand in the neighbouring countries in 2017 again - a good increase in the share of wooden structures has been observed. Italy remains the main market for Austria's sawmills. After positive results in 2016, an export plus was recorded also for the first months of 2017. The domestic sales market, too, is developing satisfactorily and the timber processing industry reports a very good level of capacity. The positive signs promise a good demand for the second six-month period.

The sawing industry is expecting a very high production level for the second half year again and anticipates that the good supply with raw timber will persist. As a consequence of the calamities due to storm and bark beetle the quality of the roundwood leaves much to be desired, however.

Taking everything into account, the sawing industry is expecting a production of coniferous sawnwood of 9.5 million m³ for 2017, which would be an increase by almost 5%.

For 2018 Austrian sawmills expect a stable production level. The supply with raw materials throughout the year will be a key to success also in the future. The sawmill industry will continue to launch wood mobilisation activities together with the forestry sector.

F. Sawn hardwood

After the declines of the three years before, the production of hardwood sawmills went up again in 2016, by 21% to 153,000 m³. The demand for oak sawnwood continued to grow in recent years; in Central Europe the roundwood supply for this type of wood was good in 2016/17. Also in the first half-year of 2017 the sawing industry has been pleased with the rising demand.

G. Wood-based panels

For Austria's board industry, 2016 was a positive business year with a production increase along with a slight increase in sales in Austria and abroad. This is evident especially in a very high export quota (>80%) and the trade surplus of about € 750 million. The most important sales markets are located in Europe, notably Germany. The successful export developments demonstrate the efficiency and competitiveness of Austrian locations. Austria's board industry is managed by Austrian owner families. This family background is a vital element of the sustainable development of enterprises. Due to the international orientation of the sector (more than 40 locations all over Europe) the competition for business locations within business groups is highly transparent.

The Austrian enterprises of the particle, MDF and fibre board industries produced at seven Austrian premises and employed about 3,000 persons. The largest portion of the turnover was made with particle boards. Particle board production amounted to about 2.3 million m³ in 2016, of which more than 80% were exported.

Ensuring the long-term supply of wood as a raw material is a key issue for Austria's wood-based panel industry. In 2016 the quantity of the raw material used comprised 1.36 million m³ of roundwood (type "Plattenholz") and 1.37 million m³ of sawing by-products and shavings, plus the use of recycled wood. The import share in the roundwood used amounted to 32%, that for sawing by-products and shavings to 16%.

The Austrian board industry is seeing encouraging signs for the near future. The economic forecasts make it confident; a revival of domestic demand, but also rising non-domestic sales can be felt. For 2017, Austria's board industry expects a further moderate increase in production figures. The board industry will stick to its strategy of responding swiftly to changing market conditions, if necessary, as this approach has proved successful in the past.

H. Pulp and paper

In Austria 24 mills produce pulp and paper. In 2016 they employed 7,967 persons (+0.8%). 2016 is the third year in a row with a growth in production. The volume of paper grew by 0.6% to 5.0 million tonnes. The total turnover increased to € 3.9 billion (+2.5%).

In 2016 the average prices for a tonne of paper dropped by € 10 to € 680. Usually a situation like this is a challenge for any kind of industry, but this time several cost factors happened to develop favourably for the paper industry. For one, the market for industrial woods on the demand side was slightly easier, whereas on the energy market the supply side was favoured. Prices for the pre-product pulp in 2016 stayed at 800 dollars per tonne of reference grade Northern bleached softwood kraft. Into the new year 2017 prices have started to edge up a little.

Investments increased in 2016 to roughly 240 million euros, large projects were completed in Lenzing, where the pulp mill has been expanded, in Frohnleiten Mayr-Melnhof is constructing a new power plant, and in Nettingsdorf where Smurfit Kappa is renovating PM 6. Generally, industrywide investments of up to 200 million euros per year are necessary to keep installations up-to-date.

Production: 2006, with its 5.2 million tonnes produced, remained the Austrian paper industry's record year. As mentioned before the total production of paper summed up to 5.0 million tonnes in 2016, which means a slight growth of 0.6% against the European trend (-0.1%). The graphic sector increased by 0.3% to 2.7 million tonnes, the packaging sector by 1.1% to 1.9 million tonnes and specialty papers by 0.9% to 310,000 tonnes. Thus the utilised capacity of machinery rose to roughly 93%, even though paper consumption declined domestically. This is due to the industry's far higher exports than domestic sales (export quota of paper: 87.1%). Strict cost management, product quality and customer service strengthen this position.

The paper industry contributed positively to Austria's trade balance with paper exports of € 2.8 billion. Total paper exports decreased by 0.7% to 4.3 million tonnes. The largest delivery markets, alongside the 641,000 tonnes domestic market, remain Germany (1.05 million t, -0.7%) and Italy (471.000 t, +4.1%). In 2016 a total amount of 1.3 million tonnes of paper were imported to Austria.

Pulp: The Austrian volume trend for virgin fibre was positive, with an increase of 16.8% to 2.1 million tonnes. This increase can be attributed to two mills in Styria which are now working at their normal capacities following construction work in 2015. The bleached chemical pulp production increased strongly to 694,000 tonnes (+55.9%), the production of unbleached chemical pulp (+4.9%, 586,000 tonnes), mechanical pulp (+4.7%, 375,000 tonnes) and textile fibres (+2.4%, 462.000 tonnes) experienced moderately higher numbers. The amount of wood used by the Austrian paper industry increased by 19.1% to 8.74 million solid cubic metres in 2016; 4.46 million m^3 accounted for roundwood (+26.4%) and 4.28 million m^3 for sawing by-products (+12.3%). Purchases of domestic roundwood increased by 13.9%, thus reaching 2.62 million m^3; imports rose by 25.3% and reached 1.77 million m^3. In the case of sawing by-products, domestic purchases amounted to 3.50 million m^3 (+6.1%) and imports accounted for 0.90 million m^3 (+37.6%). The importance of secondary pulp in Austria (1.95 million tonnes, -4.4%) declined somewhat in 2016. 2.32 million tonnes of waste paper were used (-1.4%), of which 1.06 million tonnes from domestic sources. The waste paper collection rate was again on a very high level (78.6%).

Outlook: The production of paper and paperboard is expected to remain at the same level in 2017. Austria is an important and competitive paper country; its export quota of 87 percent reflects this fact. For the future, numerous enterprises are seeking new opportunities to yield more value added from fibres and other wood components through a broadly conceived biorefinery. In Steyrermühl, the paper machine PM 3 was closed in March 2017, but investments are undertaken in other areas.

The association of the Austrian paper industry, Austropapier (www.austropapier.at), deals with wood availability, energy efficiency, work safety, research and other forward-looking topics. Due to the generally positive economic outlook and export situation the paper industry expects a slight increase in production (+0.5%) for 2018.

I. Innovative wood products

To strengthen the timber sector and to enhance its competitive and innovative power concrete measures have been taken in Austria for years, among them the establishment of timber clusters in several Federal Provinces, the initiation of institutes and chairs for timber engineering and timber technology at several universities, targeted research promotion, and the use of international, in particular European, aid programmes.

The Forest-based Sector Technology Platform (FTP) is a joint initiative of the European associations of forestry, the wood industry and the paper industry. For important research topics the FTP is the mouthpiece of these branches vis-à-vis the European Commission. The National Support Group brings together national concerns and communicates them to the FTP.

Another initiative to promote innovations and strengthen the competitiveness of the European forest-based sector is the Schweighofer Prize. It is awarded for innovative ideas, technologies, products and services which concern the whole value chain. (www.schweighofer-prize.org)

J. Housing and construction

Over the past years wood has become a high-tech construction material which increasingly finds its way into urban areas. One current highlight in Austria is the construction of the 24-

storey high-rise timber building “HoHo Wien” (84 m high) in Vienna, which is to be completed in 2018.

Some Federal Provinces grant timber construction awards to strengthen the awareness for the high design qualities of timber construction and its ecological and climate-protecting properties. proHolz Austria offers comprehensive information about the building with wood. See also *2 Wood promotion*.

According to a study by Interconnection Consulting the Austrian prefabricated-house segment has recovered strongly. After sales slumps of 10% suffered in the period from 2012 to 2015, the general upswing of the construction industry and rising average prices have led to a 7.0% increase in turnover in 2016. As a whole, almost 4,800 residential units, worth € 777 million, were built. The share of prefabricated houses accounted for a little less than 35%. For 2017, an increase by almost the same size is expected.

See also *4D Value-added wood products*.

5. Charts

Economic indicators (WIFO, Economic Outlook, 29.09.2017)

	2013	2014	2015	2016	2017	2018
	Percentage changes from previous year					
GDP Volume	+ 0.0	+ 0.8	+ 1.1	+ 1.5	+ 2.8	+ 2.8
GDP Value	+ 1.6	+ 2.8	+ 3.4	+ 2.6	+ 4.8	+ 4.8
Export of goods Volume	+ 2.8	+ 2.7	+ 3.7	+ 0.9	+ 6.1	+ 5.3
Export of goods Value	+ 1.8	+ 1.8	+ 2.7	- 0.3	+ 8.3	+ 7.0
Import of goods Volume	- 0.2	+ 1.3	+ 5.4	+ 3.3	+ 5.7	+ 4.2
Import of goods Value	- 1.0	- 0.7	+ 2.8	+ 1.6	+ 8.0	+ 5.9
Consumer prices	+ 2.0	+ 1.7	+ 0.9	+ 0.9	+ 1.9	+ 1.8
Active dependent employment	+ 0.6	+ 0.7	+ 1.0	+ 1.6	+ 2.0	+ 1.8

Wood resources

Product	Year	Production	Imports	Exports
		1,000 m³		
Sawlogs, pulpwood and other industrial roundwood	2015	12,571	7,849	830
	2016	12,173	9,188	879
	2017	12,924	9,240	940
	2018	13,070	8,900	870
Wood residues, chips, particles	2015	6,018	1,724	578
	2016	6,600	1,814	592
	2017	6,940	1,840	1,180
	2018	6,900	1,850	1,000
Fuelwood	2015	4,979 [1)]	664	13
	2016	4,590 [1)]	530	12
	2017	5,003 [1)]		
	2018	5,000 [1)]		

[1)] incl. chippings from forests

Sawnwood

Product	Year	Production	Imports	Exports
		1,000 m³		
Coniferous sawnwood	2015	8,605	1,641	5,059
	2016	9,063	1,809	5,320
	2017	9,500	1,750	5,500
	2018	9,500	1,800	5,500
Non-coniferous sawnwood	2015	127	170	143
	2016	153	192	141
	2017	160	185	140
	2018	170	190	150

Country: Austria		**Date:**	**20.Sep**
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TF1

TIMBER FORECAST QUESTIONNAIRE
Roundwood

Product Code	Product	Unit	Historical data 2015	Historical data 2016	Estimate 2017	Forecast 2018
1.2.1.C	SAWLOGS AND VENEER LOGS, CONIFEROUS					
	Removals	1000 m^3 ub	9.194	8.686	9.546	9.600
	Imports	1000 m^3 ub	5.268	6.207	6.070	6.000
	Exports	1000 m^3 ub	415	421	440	440
	Apparent consumption	1000 m^3 ub	14.047	14.471	15.176	15.160
1.2.1.NC	SAWLOGS AND VENEER LOGS, NON-CONIFEROUS					
	Removals	1000 m^3 ub	297	321	288	300
	Imports	1000 m^3 ub	400	347	230	250
	Exports	1000 m^3 ub	86	91	60	60
	Apparent consumption	1000 m^3 ub	611	577	458	490
1.2.1.NC.T	of which, tropical logs					
	Imports	1000 m^3 ub	0	0	0	0
	Exports	1000 m^3 ub	0	0	0	0
	Net Trade	1000 m^3 ub	0	0	0	0
1.2.2.C	PULPWOOD (ROUND AND SPLIT), CONIFEROUS					
	Removals	1000 m^3 ub	2.378	2.459	2.462	2.470
	Imports	1000 m^3 ub	1.250	1.732	1.780	1.700
	Exports	1000 m^3 ub	310	303	330	300
	Apparent consumption	1000 m^3 ub	3.318	3.888	3.912	3.870
1.2.2.NC	PULPWOOD (ROUND AND SPLIT), NON-CONIFEROUS					
	Removals	1000 m^3 ub	702	708	628	700
	Imports	1000 m^3 ub	931	902	1.160	950
	Exports	1000 m^3 ub	19	65	110	70
	Apparent consumption	1000 m^3 ub	1.614	1.546	1.678	1.580
3	WOOD CHIPS, PARTICLES AND RESIDUES					
	Domestic supply	1000 m^3	6.018	6.600	6.940	6.900
	Imports	1000 m^3	1.724	1.814	1.840	1.850
	Exports	1000 m^3	578	592	1.180	1.000
	Apparent consumption	1000 m^3	7.164	7.822	7.600	7.750
1.2.3.C	OTHER INDUSTRIAL ROUNDWOOD, CONIFEROUS					
	Removals	1000 m^3 ub	0	0	0	0
1.2.3.NC	OTHER INDUSTRIAL ROUNDWOOD, NON-CONIFEROUS					
	Removals	1000 m^3 ub	0	0	0	0
1.1.C	WOOD FUEL, CONIFEROUS					
	Removals	1000 m^3 ub	2.999	2.710	3.002	3.000
1.1.NC	WOOD FUEL, NON-CONIFEROUS					
	Removals	1000 m^3 ub	1.980	1.880	2.001	2.000
1	TOTAL REMOVALS	1000 m^3	17.550	16.763	17.927	18.070
4.1	WOOD PELLETS					
	Production	1000 m.t.	1.000	1.071	1.150	1.200
	Imports	1000 m.t.	368	392	490	500
	Exports	1000 m.t.	559	610	730	750
	Apparent consumption	1000 m.t.	809	854	910	950

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TF2
TIMBER FORECAST QUESTIONNAIRE
Forest products

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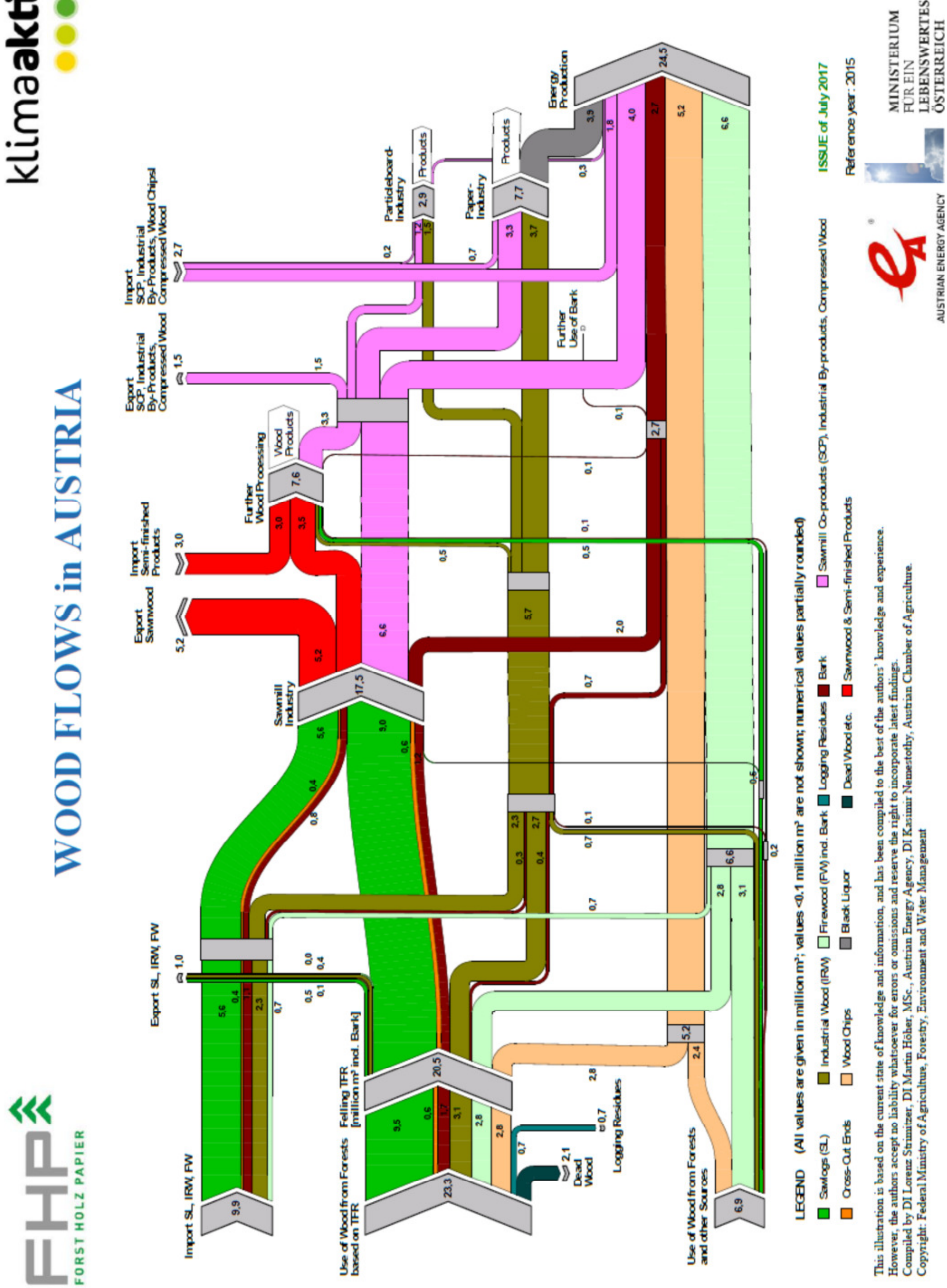
Product Code	Product	Unit	Historical data 2015	Historical data 2016	Estimate 2017	Forecast 2018
5.C	SAWNWOOD, CONIFEROUS					
	Production	1000 m^3	8.605	9.063	9.500	9.500
	Imports	1000 m^3	1.641	1.809	1.750	1.800
	Exports	1000 m^3	5.059	5.320	5.500	5.500
	Apparent consumption	1000 m^3	5.187	5.552	5.750	5.800
5.NC	SAWNWOOD, NON-CONIFEROUS					
	Production	1000 m^3	127	153	160	170
	Imports	1000 m^3	170	192	185	190
	Exports	1000 m^3	143	141	140	150
	Apparent consumption	1000 m^3	153	204	205	210
5.NC.T	of which, tropical sawnwood					
	Production	1000 m^3	0	0	0	0
	Imports	1000 m^3	5	6	6	6
	Exports	1000 m^3	1	1	1	1
	Apparent consumption	1000 m^3	4	5	5	5
6.1	VENEER SHEETS					
	Production	1000 m^3	8	7	7	7
	Imports	1000 m^3	51	53	60	62
	Exports	1000 m^3	17	16	19	20
	Apparent consumption	1000 m^3	43	44	48	49
6.2	PLYWOOD					
	Production	1000 m^3	n.a.	n.a.	n.a.	n.a.
	Imports	1000 m^3	190	181	200	200
	Exports	1000 m^3	298	340	370	370
	Apparent consumption	1000 m^3	n.a.	n.a.	n.a.	n.a.
6.3	PARTICLE BOARD (including OSB)					
	Production	1000 m^3	2.190	2.300	2.370	2.400
	Imports	1000 m^3	427	413	430	440
	Exports	1000 m^3	1.839	1.906	1.960	1.970
	Apparent consumption	1000 m^3	779	808	840	870
6.3.1	of which, OSB					
	Production	1000 m^3	0	0	0	0
	Imports	1000 m^3	166	161	170	170
	Exports	1000 m^3	9	10	11	11
	Apparent consumption	1000 m^3	157	152	159	159
6.4	FIBREBOARD					
	Production	1000 m^3	615	644	650	650
	Imports	1000 m^3	258	294	300	300
	Exports	1000 m^3	524	547	540	540
	Apparent consumption	1000 m^3	349	391	410	410
6.4.1	Hardboard					
	Production	1000 m^3	85	88	90	90
	Imports	1000 m^3	26	25	26	26
	Exports	1000 m^3	59	60	60	60
	Apparent consumption	1000 m^3	53	54	56	56
6.4.2	MDF/HDF (Medium density/high density)					
	Production	1000 m^3	530	556	560	560
	Imports	1000 m^3	161	174	167	167
	Exports	1000 m^3	456	482	470	470
	Apparent consumption	1000 m^3	235	248	257	257
6.4.3	Other fibreboard					
	Production	1000 m^3	0	0	0	0
	Imports	1000 m^3	70	94	107	107
	Exports	1000 m^3	9	5	10	10
	Apparent consumption	1000 m^3	61	90	97	97
7	WOOD PULP					
	Production	1000 m.t.	1.812	2.116	2.120	2.100
	Imports	1000 m.t.	828	822	840	850
	Exports	1000 m.t.	309	418	435	450
	Apparent consumption	1000 m.t.	2.331	2.519	2.525	2.500
10	PAPER & PAPERBOARD					
	Production	1000 m.t.	4.965	4.995	4.995	5.020
	Imports	1000 m.t.	1.342	1.315	1.325	1.360
	Exports	1000 m.t.	4.285	4.250	4.270	4.330
	Apparent consumption	1000 m.t.	2.021	2.060	2.050	2.050

http://www.klimaaktiv.at/english/renewable_energy/woodflows_austria.html



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