

Austrian Market Report 2016

**Statement submitted by the Austrian Delegation
to the 74th session of the
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Federal Ministry of Agriculture, Forestry, Environment and Water Management
Forestry Department

Vienna, October 2016

1. General economic situation

Economic outlook for 2016 and 2017 ¹

With +1.7% Austria's economic performance will grow substantially more strongly than it did over the past four years. As a result, the growth gap compared to the average of the euro area and Germany will disappear. While the external contribution still puts a strain on economic growth this year, domestic demand is increasing strongly. Investments are noticeably enhanced and, the consumption in private households is growing again for the first time in three years. In 2017 the domestic economic performance will gradually decline; foreign trade will have a stabilising influence. The real GDP will grow by 1.5% in Austria.

For the first time in three years the consumption of Austria's private households has increased again this year. With +1.5% it provides an important impetus for Austria's economic performance. Both the tax reform and the surge in demand caused by the population growth contribute to this development. In 2017, however, the consumer demand will lose some momentum again (+1.2%) as these special effects will disappear.

As early as in 2015 the demand for investment goods, in particular for equipment, increased in Austria. This trend continued during the first two quarters of 2016. As economic prospects continue to be subdued, these were probably replacement investments in antiquated tools and devices rather than investments aimed at boosting capacities.

The construction industry, too, appears to have overcome its crisis and recovered in late 2015 already. The favourable trend continued this year; during the first quarter of the year the sector also benefited from the mild weather. The most rapidly growing segment was other structural engineering. In addition, housing construction was expanded, although the measures of the government's housing initiative had not yet come to fruition. By contrast, no improvement was noticed in the field of civil engineering. After a growth of 1.6% in real terms was observed in construction investments in 2016, an increase by another 1.4% is expected for 2017.

The global economic downturn puts a strain on Austria's national economy this year. In the U.S.A. growth has been slower than in the EU since autumn 2015. In threshold countries, too, the economic situation continues to be difficult, even though there are first signs of recovery. Austria's exports will therefore rise by only 2.8% this year, after +3.6% last year. In 2017, too, the development will with +2.8% remain subdued. Domestic export markets do not grow more dynamically than they did in 2015 (2016 +2.7%, 2017 +3.0%). The Brexit referendum upset the market temporarily only; the current forecast expects only a minor impact on the Austrian economy. Adverse effects will occur in 2017 rather than in 2016.

With 1% the inflation rate will remain very low in 2016, although the upsurge of prices by far exceeds the average figures of the euro area. As has been assumed, the price of crude oil will, after the decline in recent years, rise again in 2017. As a result, the inflation rate will reach 1.7% in Austria.

Thanks to the revival compared to previous years Austria will again be able to enhance its level of employment. The number of active employees rises by 1.4% this year, a more pronounced growth than in 2015 (+1%), and it will rise by more than 1% again in 2017. Not even this more dynamic employment plus is sufficient to reduce unemployment, but Austria managed to curb the rise in unemployment experienced in recent years. According to the national computation method the unemployment rate will rise from 9.1% last year to 9.2% in 2016 and 9.4% in 2017.

¹ Source: Austrian Institute of Economic Research (WIFO), Economic Outlook September 2016

2. Policy measures

Government Programme

Since late 2013 Austria has again been ruled by a coalition of the Social Democratic Party and the Austrian People's Party. They reached a coalition agreement for five years. The Government Programme includes also objectives of relevance to forestry and timber management, among them the promotion of sustainable timber use in domestic forests as well as the provision and use of renewable energy sources in order to reduce fossil ones.

The Austrian Forest Strategy 2020+

The primary objective of the “Austrian Forest Strategy 2020+”, which was adopted in May 2016, is to ensure and optimise the ecological, economic and social dimensions of sustainable forest management in a well-balanced way. Since 2014 the Forest Strategy has been developed within the framework of the Austrian Forest Dialogue to provide a basis for all forest-related activities. The fields of action include the contributions of forests to climate change adaptation, the health and vitality of forests, the economic aspects, biodiversity, the protective effect of forests, social and national economic dimensions as well as Austria's international responsibility for sustainable forest management. The next step is now to elaborate a working programme to implement the strategy (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.

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

The instrument of joint timber marketing has been applied for about 50 years in Austria to strengthen the market force of private forest owners. In recent years these activities have been intensified. One of the reasons has been the increasing demand for timber. An always more significant challenge are the rising numbers of forest owners whose forest properties, due to the structural change in agriculture and forestry, are located at some distance from their places of residence (urban forest owners). Nowadays numerous owners of small (private) forests are organised in forest owner cooperatives. The current 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 are important services. In some cases local forest owner cooperatives ('Waldwirtschaftsgemeinschaften') even manage the forests of some of their members. 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 63,000 forest owners are organised in 228 local forest owner cooperatives. In 2015 totally 2.75 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 budget for 2015 amounted to € 2.5 million. 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. With its internationalisation programme proHolz Austria works actively to raise people's appreciation of wood and to increase the use of timber by creating advertising cooperations in selected target markets, in particular in Central and Southern/Eastern Europe, by deepening expert knowledge by means of know-how transfer and education in Italy (www.promolegno.com), and by the roadshow "Wood.Building the Future" with the mobile exhibition element WOODBOX (www.wooddays.eu).

3. Market drivers

Austria's GDP grew by 1.0% in 2015, picking up slightly from 2013 and 2014. The recovery was supported by a moderate expansion of consumption spending and a revival of investment. Export growth and manufacturing output were dampened by weak business activity abroad, while the trade and distribution sector as well as tourism provided positive demand incentives. Labour supply once again rose more than employment, driving up registered unemployment particularly in the first half of the year. On annual average, the jobless rate climbed from 8.4% in 2014 to 9.1%. Lower energy prices brought the rate of inflation down to 0.9% in 2015.

Corresponding to the general economic situation also the overall production figures of the wood-processing industry as well as the volume felled were increasing in 2015. The prices of roundwood fell by 4% and, together with the lower energy prices, helped relieve the cost pressure on the timber industry.

Having grown at a robust pace last year, economic activity accelerated further in 2016. The growth spurt was mainly driven by domestic demand. The development of roundwood prices until August was stable. The expected strong increase in damage caused by bark beetle infestation did not occur to the extent feared. Roundwood imports increased in the first half of the year. Most branches of the timber processing industry are expecting an overall increase in production figures for 2016.

4. Developments in forest-products market sectors

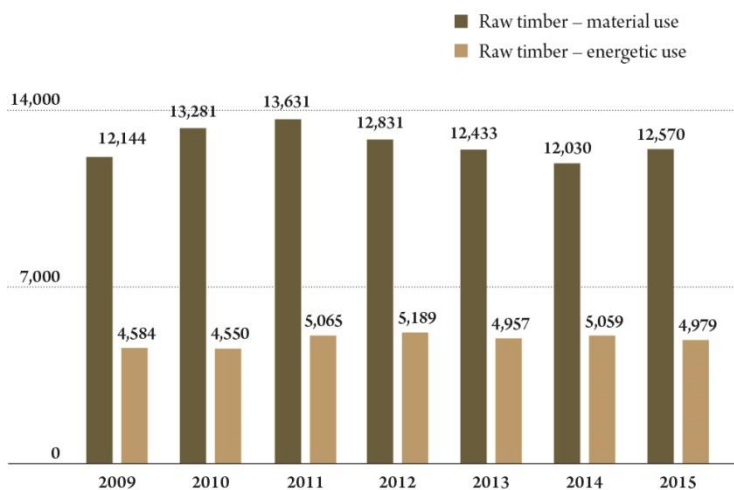
A. Wood raw materials

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 (2015: 8.5 million m³, mostly from the Czech Republic and Germany) mobilizing the available domestic resources has become a major goal of Austrian forest policy.

In 2015, 17.55 million cubic metres under bark were harvested. The harvest volume was 2.7% above the previous year, 1.1% below the five-year average and 5.4% below the ten-year average. Sawlogs accounted for 54.1%, pulpwood and other industrial roundwood for 17.5%, fuelwood and chippings from forests for 28.4% of the quantity felled. The share of coniferous wood in the total fellings amounted to 83.0%. Altogether, small forest owners (forest area < 200 hectares) felled 10.01 million m³ in 2015 (+1.3%), the owners of forests larger than 200 hectares 5.91 million m³ (+6.1%) and the Austrian Federal Forests 1.63 million m³ (-0.0%). The percentage of damaged wood increased markedly by 58.0% to a total of 7.43 million m³, which is 42.3% of the total removals. The volume of damaged wood was 13.9% higher than the average of the past ten years. The most important causes of damage were storms, bark beetles and snow and icing.

LOGGING

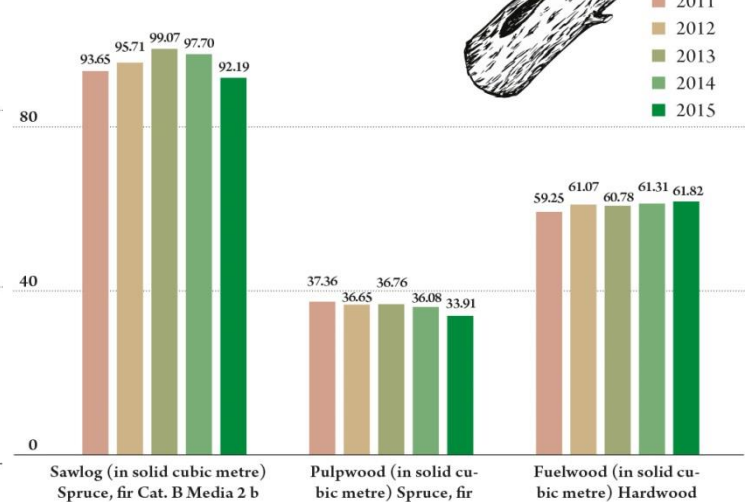
in 1,000 cubic metres of timber harvested, under bark



Source: BMLFUW 2016

TIMBER PRICE DEVELOPMENT IN AUSTRIA

in euros per (solid) cubic metre



Source: Statistics Austria 2016

Roundwood imports increased by totally 5.2% in 2015, thus reaching 8.5 million m³. The imports of fuelwood went down by 22.2% and amounted to 664,000 m³, the imports of sawlogs increased to 5.67 million m³ (+14.8%), those of pulpwood decreased to 2.18 million m³ (-5.2%). Exports amounted to 13,000 m³ of fuelwood (-78.3%), 501,000 m³ of sawlogs (+24.4%) and 329,000 m³ of pulpwood (+10.0%).

On annual average the prices of roundwood (incl. fuelwood) were in 2015 4.4% below those of 2014. This is mainly a result of the lower prices for coniferous sawlogs and coniferous pulpwood. On annual average, sawmills paid € 92.19 per cubic metre of sawlog spruce/fir, Cat. B, Media 2b, 5.9% less than in 2014; the annual maximum of € 97.14 was paid in January, the annual minimum of € 87.98 in December. The 2015 mixed pulpwood/mechanical pulpwood price for spruce/fir was with € 36.99 per m³ 5.3% lower than the average of the preceding year – pulpwood € 33.91 (-6.0%), mechanical pulpwood € 44.29 (-4.6%). The production value of domestic forestry (incl. forest-related services and non-separable non-forestry subsidiary activities) reached the total of € 1.619 billion in 2015, after € 1.621 billion in 2014. The decline by 0.2% is a consequence of the lower wood prices.

2016: The roundwood market has remained rather stable so far, the sawmill industry was in most cases well supplied; only during springtime delays in the transportation of wood from forests were incurred as a result of heavy precipitation. The volume of bark-beetle damaged timber was high, though significantly lower than expected, which dampened felling in some regions. With rather low stocks of roundwood a stronger demand for fresh wood was observed from the summer months onward. Until early autumn the prices of roundwood were rather stable, with a slightly ascending trend for sawlogs and a small decline in industrial wood. For 2016 forest owners expect the quantities felled to remain stable compared to the preceding year, with a small shift from sawlogs to pulpwood. Roundwood imports are expected to increase in 2016.

The roundwood market in September 2016: The Austrian sawmill industry is usually very well supplied with coniferous sawlogs. Sometimes imports are restricted, which is also due to the higher import volumes from the calamity-stricken areas of Slovenia and the Czech Republic. Due to the surplus, prices for lower qualities are partly under pressure. The demand for fresh coniferous sawlogs is higher. Their prices are stable or have slightly risen; there are places where delivery premiums are offered. The demand for coniferous industrial roundwood is but weak as, also due to the surplus of sawnwood residues, the sites of the pulp, paper and board industry are very well stocked. There are partly stringent quotas for the delivery of timber; selling additional quantities is quite difficult. Prices are stable. With excellent stocking, pulpwood from European beech is in demand at stable prices. Sales difficulties are observed for ash pulpwood. The situation on the wood-for-energy market is still very calm. Thermal power stations are excellently supplied with raw material. In most cases only the contractually fixed amounts can be sold. It is hard, or next to impossible, to sell additional quantities.

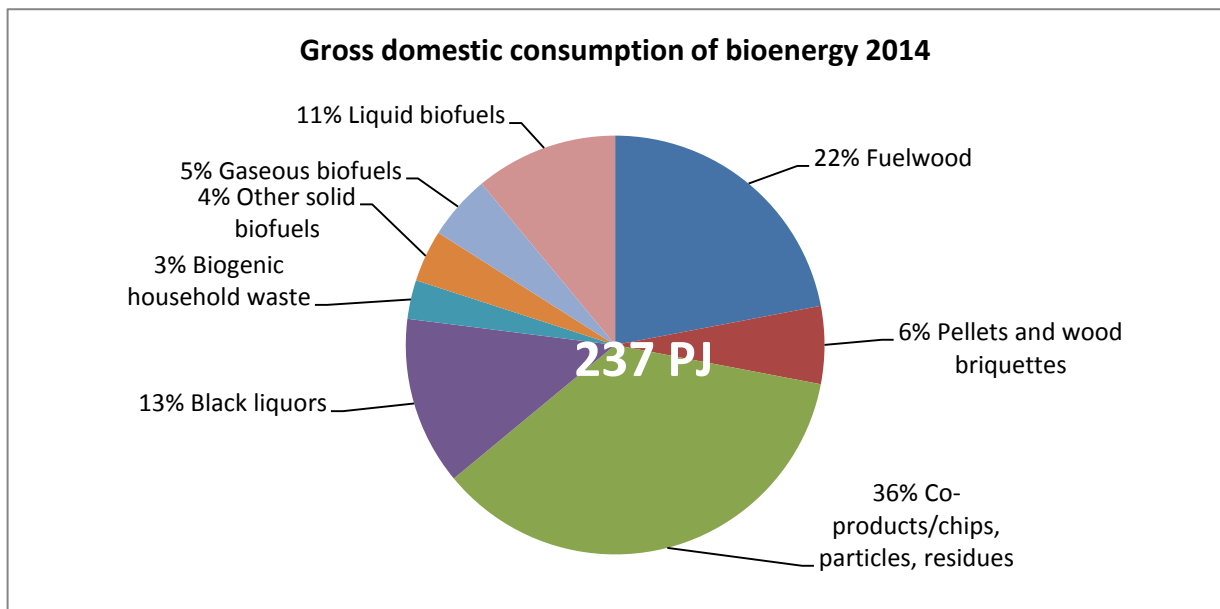
In late October Agriculture and Environment Minister Rupprechter will launch the initiative “Using wood is good for the climate – we make our forests fit for climate change”. The initiative is supported by the entire forest and timber sector; it aims at motivating forest owners to practice sustainable forest management with a view to climate change adaptation and at encouraging the general public to use more, or to continue to use, wood and timber products. Special attention will be paid to private forest owners, in particular to those whose forest properties are located at some distance from their places of residence (“urban” forest owners).

2017: According to recent economic projections most industries of the wood-processing sector are expecting stable or slightly increasing production figures for 2017. Contrary to this, Austria's forest owners are optimistic and expect increasing removals.

B. Wood energy

In 2014 the gross domestic consumption of energy totalled approximately 1,381 petajoule (PJ) in Austria, a reduction by 3% (-46 PJ) compared to the preceding year. The gross domestic consumption of bio-energy amounted to about 237 PJ and dropped as well (-7 PJ). Over the long term, however, the 11% share of bio-energy in the Austrian GDP recorded in 2005 rose to over 17% in 2014, which, in absolute figures, is a growth by 83 PJ. Biogenic sources of energy are thus Austria's most important renewable sources of energy, even more important than hydropower.

Woody by-products covered about 36% 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 22%, fuelwood has the second-biggest share; it is almost exclusively used for heating in private households. The consumption of this energy wood segment dropped by more than 10 PJ compared to the preceding year, which was a major reason for the overall decline in the consumption of bioenergy. Waste liquors from the paper and pulp industry covered about 13% 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 approximately 6%. Next to one quarter of the consumption relates to biogenic household waste, liquid and gaseous as well as other biogenic energy sources. Slight shifts were observed between the different fuel categories. While the consumption of wood-based fuels decreased, especially that of gaseous and liquid energy sources rose.



According to the official removals statistics 4.98 million m³ of fuelwood and chippings from forests were harvested in 2015, which corresponds to a 28.4% share in the total removal and a loss of 1.2% compared to 2014. Fuelwood accounted for 2.48 million m³ (1.35 million m³ of coniferous wood, 1.13 million m³ hardwood), wood chips from forests for 2.50 million (solid) m³. With € 61.82 per m³ of stacked wood (with bark, without turnover tax) the price of non-

coniferous fuelwood in 2015 rose by 0.8% compared to 2014, that of coniferous fuelwood rose by 0.9%, thus reaching € 41.55. All in all there were hardly any fluctuations. This stable trend has continued throughout the year 2016 so far.

Wood pellets are currently produced at 38 sites in Austria, predominantly by the sawmill industry. The production capacity thereby rose above 1.5 million tonnes. In 2015 real production amounted to 1,000,000 tonnes (+5.8% compared to the preceding year); 368,000 tonnes were imported, above all from Romania, Germany and the Czech Republic; 559,000 tonnes were exported, mainly to Italy. The domestic consumption increased by 3.7% and amounted to about 840,000 tonnes. In 2016 the Austrian pellet production is expected to increase by 5% to 1,050,000 tonnes. Depending on the next winters, future production might rise significantly, due to a production capacity of 1.5 million tonnes. In 2015 only 2,400 new furnaces and around 5,000 new pellet boilers were installed. For 2016 the installation of furnaces is expected to stay stable or even to increase, that of pellet boilers to further decrease. The reason for this negative trend is the low oil price leading to no willingness to invest in pellets. The price survey done by proPellets Austria (www.propellets.at) resulted in an average price of 22.29 cent/kg of (bulk) wood pellets (incl. turnover tax) in September 2016. Compared to September 2015 this means a fall in prices of 2.8%. Wood pellets in bags (when ordered by the pallet) cost an average of € 3.78 per 15 kg sack (25.21 cent/kg, -1.4%).

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. Currently, about 43,000 forest owners holding about 2.8 million hectares effectively take advantage of the certification and 558 CoC certificates are valid.

Forest Stewardship Council (FSC): In Austria 587 hectares of forest are currently certified according to FSC. CoC certificates: 287.

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 2015's sold production in the construction sector amounted to € 2.37 billion, an increase of 1.6% compared to the previous year. The individual sectors of the construction-related industries show very inhomogeneous trends. The production of windows dropped to € 407.6 million (-13.1%). The production of prefabricated wooden houses rose to € 518.6 million (+3.3%) and the production of doors decreased by 4.0%, thus amounting to € 215.2 million. Glued structural components' production increased to a total amount of € 594,5 million (+2.9%). The exports of wooden floors (€ 202.7 million, +2.2%) and doors (€ 39.2 million, +7.1%) increased, whereas exports of laminated wood (€ 399 million, -10.7%) and windows (€ 67,3 million, -8.4%) declined. The most important foreign markets for wooden floors were Germany (market share: 59.6%) and Switzerland (14.8%). Most of the laminated wood was exported to Italy (50.5%), Germany (14.3%), Japan (11.6%) as well

as Switzerland (7.2%). There has been a significant decrease of laminated wood exports to United Kingdom (-19.0%), France (-13.8%), Japan (-13.5%) and Italy (-9.4%).

The Austrian furniture industry comprises 53 industrial plants with about 6,700 employees – most of them privately owned medium-sized companies. The year 2015 started very well but finally the sector finished with a total production of € 1.84 billion (-0.9%), which, however, is a much smaller decline compared to the previous year (-3.2%). Overall growth was achieved with the productions of wooden furniture for bathrooms (+5.4%, € 27.2 million), office furniture (+2.7%, € 267.3 million) and seating furniture (+1.8%, € 213.6 million). Most other sectors decreased: shopfitters -4.9% (€ 156.9 million), household furnishing sector (wooden furniture for the bedroom, dining room and living room) -4.0% (€ 325.1 million), kitchen furniture -2.7% (€ 261.6 million) and mattresses -1.4% (€ 121.2 million).

Furniture exports increased by 4.9% to € 829.5 million in 2015. The main export market was Germany (€ 339.7 million, +3.8%). Furniture imports to Austria rose by 0.7% and resulted in a total value of € 1.69 billion. The bulk of the imported furniture came from Germany (€ 843.2 million, -0.9%). Imports from Poland increased by 6.0% (€ 139.3 million), imports from China by 4.8% (€ 138.6 million) and from Italy by 2.7% (€ 124.1 million).

E. Sawn softwood

With more than 1,000 companies and close to 10,000 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 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 both production and export of sawn softwood among the top 7 in the world.

In 2015 the sawnwood markets were stable. The production of sawnwood amounted to 8.81 million m³ (2014: 8.46 million m³), of which 8.68 million m³ were sawn softwood. The production value of the Austrian sawmill industry increased by 2% to € 1.96 billion. In 2015, processed roundwood accounted for approximately 15.16 million solid m³, including 5.3 million solid m³ of imported coniferous sawlogs. Most of the sawlog imports were from the Czech Republic (+2.4%, 1.9 million solid m³) and from Germany (+81.7%, 1.6 million solid m³). The imports from Slovenia increased by 6.2% to 847,000 solid m³.

In 2015, 5.04 million m³ of sawn softwood were exported – an increase of 3% compared to the previous year (4.88 million m³). After 7 years of declining export figures, 2014 exports to Italy rose by 1% and reached 2.4 million m³ and stayed roughly the same in 2015. This means that approximately 50% of the total sawn softwood exports were shipped to Italy. Due to a housing shortage and therefore an increase in demand of wood, export volumes to Germany rose by 8% (2015: 741,000 m³). Exports to Levant increased by 6% to 890,000 m³. In 2015, imports of sawn softwood increased by 1% compared to the previous year. Imports totalled 1.63 million m³. In terms of value, the volume of imports amounted to € 340 million.

2016: Stable to slightly rising market opportunities in the sawnwood markets were the characteristic features of the first six months of 2016. The market in Germany keeps sales processes running. Also the market in Japan improved, one important reason being the positive currency development. The lasting uncertain political situation in the Levant states cause difficult conditions which are reflected in the slightly negative sales trend. Nevertheless

the Levant remains interesting for the the Austrian sawmill industry. Italy took last year's impetus to the first quarter of 2016; the second quarter of the year proved to be more difficult. Conclusion: A small plus in Austria's exports to our southern neighbour country. To sum up, the sales markets in Austria and Germany saw a very positive development; the timber processing industry reports a very good capacity level for prefabricated wooden structures. The share of timber construction is constantly rising. The sawmill industry is with 8.89 million m³ expecting a slight increase in the total sawn softwood production for 2016.

For 2017 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

The 2015 production of the sawmills specialized in hardwood continued to decrease and reached 126,000 m³. Exports of sawn hardwood increased by 3%, thus accounting for 143,000 m³ and € 86 million in 2015. Imports amounted to 170,000 m³ and € 109 million.

G. Wood-based panels

As in recent years Austria's board industry remained stable despite a difficult economic environment. This is evident especially in a very high export quota (approx. 80%) and the trade surplus of about € 700 million. Both parameters 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. The investments made related in most cases to maintenance rather than to renewal, a development which the board industry attributes to difficult socio-political framework conditions in Austria.

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 2.2 million m³ in 2015, 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 2015 the quantity of the raw material used comprised 1.48 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 34%, that for sawing by-products and shavings to 14%.

For 2016, Austria's board industry expects a 5% increase in production figures. In order to back Austrian sites also in the future through investments, the Austrian board industry focuses not only on raw material supply but also attaches importance to transport logistics and social policy circumstances. In this context, the development of innovative products and services is a necessary asset of the board industry to be able to survive in the market.

H. Pulp and paper

In Austria 24 mills produce pulp and paper. In 2015 they employed 7,878 persons. Following the trend of 2014, the total 2015 production volume increased by 2.0% and rose to 5.0 million tonnes of paper. The total turnover stagnated at € 3.8 billion in 2015 (+0.8%).

Average prices for a tonne of paper dropped by € 10 to € 670. Usually this is an alarming trend but this year the prices of several input factors dropped as well. First, there was more supply on the energy market, which resulted in lower costs, and, second, the industrial roundwood market relaxed, which also led to reduced prices. Prices for the pre-product pulp dropped to \$ 800 per tonne of reference grade Northern bleached softwood kraft (NBSK) in 2015. Around the turn of the year 2016 the price dropped further to \$ 790 in response to the market decline.

In 2015, investments increased to roughly € 210 million and reached the level that is necessary to remain technologically state-of-the-art (up to € 200 million per year). Large projects were completed at Sappi in Gratkorn, where the paper machine PM11 was modernised, and at Mayr-Melnhof in Frohnleiten where the cardboard machine KM3 was converted to novel paper grade.

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 2015, which means a slight growth of 2.0% against the European trend (-0.4%). The graphic sector increased by 0.2% to 2.7 million tonnes, the packaging sector by 4.9% to 1.9 million tonnes and specialty papers by 1.5% to 280,000 tonnes. Thus the utilised capacity of machinery rose to roughly 93%, even though Austrian paper consumption declined domestically. This is for one due to the industry's far higher exports than domestic sales (export quota of paper increased to 87%), but also due to the tendency of international corporations to shift production volumes between their sites to wherever unit costs are lowest, a practice which is often to Austria's advantage.

The paper and pulp industry contributed positively to Austria's trade balance with exports of € 2.9 billion. Total paper exports increased by 3.8% to 4.3 million tonnes. The largest delivery markets, alongside the 641,000 tonnes domestic market, remain Germany (1.06 million t, +4.3%) and Italy (452.000 t). In 2015 a total amount of 1.3 million tonnes of paper were imported to Austria.

Virgin fibre pulp production fell by 6.8% to total 1.8 million tonnes. The main reason for the decrease of the production of bleached chemical pulp (-22.2%, 445,000 tonnes) can be attributed to two mills in Styria, which were temporarily shut down due to construction work. The production of unbleached chemical pulp (+1.3%, 559,000 tonnes), mechanical pulp (-3.9%, 358,000 tonnes) and textile fibres (+0.8%, 451.000 tonnes) experienced relatively stable numbers. The amount of wood used by the Austrian paper industry decreased by 8.1% to 7.34 million solid cubic metres in 2015; 3.53 million m³ accounted for roundwood (-12.7%) and 3.81 million m³ for sawing by-products (-3.3%). Purchases of domestic roundwood decreased by 5.1%, thus reaching 2.30 million m³; imports dropped by 16.9% and reached 1.41 million m³. In the case of sawing by-products, domestic purchases amounted to 3.30 million m³ (+13.4%) and imports accounted for 0.65 million m³ (-36.6%). In Austria, the importance of secondary pulp (2.04 million tonnes) is a little higher than that of primary pulp (1.81 million tonnes). 2015 saw 2.36 million tonnes of waste paper used (+2.5%), but despite a very good collection rate of 76.7%, domestic sources could only supply 1.13 million tonnes of waste paper (-0.9%).

Outlook: The production of paper and paperboard is expected to decline slightly in 2016 (-1%); the pulp industry will be able to make up for the loss suffered last year (+11%). As the comprehensive reconstruction work at Pöls, Gratkorn and Laakirchen has been completed, the entire capacity is available this year. It is expected that the quantity of wood purchased

by the business line will be significantly above eight million cubic metres. Yields are currently stable in this sector.

The efficiency enhancements that are required at numerous sites lead to a further decline in the number of persons employed; presently there are still as many as about 7,800. Investments are made above all to keep up with state-of-the-art processes. Mayr-Melnhof announced the construction of a new power station at Frohnleiten; the Heinzl group invests € 100 million in the extension and conversion of its paper production at Laakirchen. As a part of the “Roadmap 2050” of the Confederation of European Paper Industry (CEPI) consortia have developed which work to allow the commercial implementation of ground-breaking innovations for a low-carbon branch; Austria participates in some of them. In Graz, the cooperative project “Flipp” carries on research on new possibilities in the field of bio-refinery from cellulose lye.

The association of the Austrian paper industry, Austropapier (www.austropapier.at), deals with wood availability, eco-electricity regime and energy efficiency and supports a cascading use strategy. Due to the export situation the paper industry expects a slight decrease in production (-1%) for 2017.

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 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 (NSG) brings together national concerns and communicates them to the FTP. In 2015 NSG Austria conducted a survey for the research priorities in the forest-wood-paper-board sector that are of importance in Austria. The National Support Group will present the new Austrian research agenda that was developed in this context in Brussels.

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

See also [4D Value-added wood products](#).

Over the past years wood has become a high-tech construction material which increasingly finds its way into urban areas. With its initiative “Wooddays“ and the road show across European cities with the compact and mobile exhibition element WOODBOX, proHolz Austria draws the attention to the potentials of wood construction. Fifty international projects demonstrate new dimensions to the possibilities in building with wood. (www.wooddays.eu)

According to a [study](#) commissioned by proHolz the share of wooden structures in Austria has within 15 years increased from 25 to 43% as regards the number of buildings and from 14 to 22% in terms of volume. The most important segment for wood used as a building material, single-family houses and two-family houses, will experience a moderately positive trend in the coming years. A more pronounced upswing is expected for multi-storey residential buildings until 2018. In Vienna, the construction of the 24-storey high-rise timber building “HoHo Wien” (84 m high) has started in October 2016 (www.hoho-wien.at).

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](#).

5. Charts

Economic indicators (WIFO, Economic Outlook, 29.09.2016)

	2012	2013	2014	2015	2016	2017
	Percentage changes from previous year					
GDP Volume	+ 0.7	+ 0.1	+ 0.6	+ 1.0	+ 1.7	+ 1.5
GDP Value	+ 2.7	+ 1.7	+ 2.4	+ 2.9	+ 3.6	+ 3.1
Export of goods Volume	+ 0.5	+ 2.8	+ 2.7	+ 3.7	+ 2.8	+ 3.0
Export of goods Value	+ 1.5	+ 1.8	+ 1.8	+ 2.7	+ 1.7	+ 3.8
Import of goods Volume	- 0.9	- 0.2	+ 0.7	+ 5.7	+ 4.5	+ 3.0
Import of goods Value	+ 0.7	- 1.0	- 0.7	+ 2.8	+ 1.9	+ 4.5
Consumer prices	+ 2.4	+ 2.0	+ 1.7	+ 0.9	+ 1.0	+ 1.7
Active dependent employment	+ 1.4	+ 0.6	+ 0.7	+ 1.0	+ 1.4	+ 1.1


Wood resources


Product	Year	Production	Imports	Exports
		1,000 m ³		
Sawlogs, pulpwood and other industrial roundwood	2014	12,030	7,239	702
	2015	12,571	7,849	830
	2016	12,543	8,646	827
	2017	13,110	8,070	679
Wood residues, chips, particles	2014	5,772	2,068	511
	2015	5,928	1,724	578
	2016	6,075	1,950	600
	2017	6,100	2,050	600
Fuelwood	2014	5,059 ¹⁾	853	61
	2015	4,979 ¹⁾	664	13
	2016	4,910 ¹⁾		
	2017	4,900 ¹⁾		

¹⁾ incl. chippings from forests

Sawnwood

Product	Year	Production	Imports	Exports
		1,000 m ³		
Coniferous sawnwood	2014	8,327	1,615	4,884
	2015	8,681	1,641	5,059
	2016	8,888	1,800	5,250
	2017	8,900	1,800	5,300
Non-coniferous sawnwood	2014	133	161	139
	2015	126	170	143
	2016	135	180	150
	2017	140	180	155

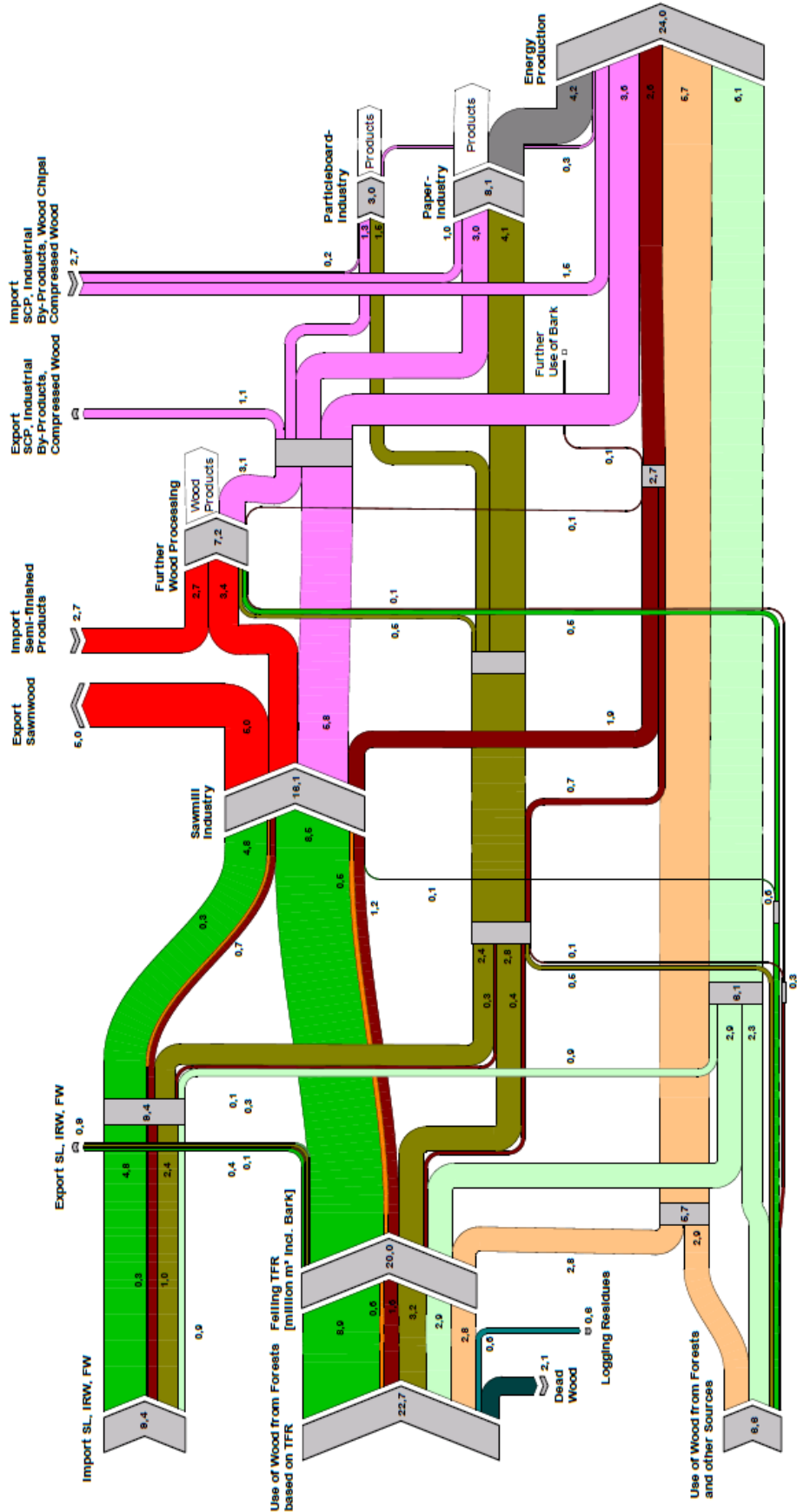
 UNECE TF1 TIMBER FORECAST QUESTIONNAIRE Roundwood		Country: Austria		Date: 06.Okt		
		Name of Official responsible for reply:				
		Johannes Hangler				
		Official Address (in full):				
		Federal Ministry of Agriculture, Forestry, Environment and Water Management 1030 Vienna, Marxergasse 2				
		Telephone: +43 1 71100 7309		Fax: +43 1 71100 607399		
E-mail: johannes.hangler@bmlfuw.gv.at						
Product Code	Product	Unit	Historical data 2014	Revised 2015	Estimate 2016	Forecast 2017
1.2.1.C	SAWLOGS AND VENEER LOGS, CONIFEROUS					
	Removals	1000 m ³	8.585	9.194	9.108	9.500
	Imports	1000 m ³	4.588	5.268	5.546	5.500
	Exports	1000 m ³	337	415	360	315
	Apparent consumption	1000 m ³	12.837	14.047	14.294	14.685
1.2.1.NC	SAWLOGS AND VENEER LOGS, NON-CONIFEROUS					
	Removals	1000 m ³	270	297	285	290
	Imports	1000 m ³	351	400	354	340
	Exports	1000 m ³	66	86	89	60
	Apparent consumption	1000 m ³	555	611	550	570
1.2.1.NC.T	of which, tropical logs					
	Imports	1000 m ³	0	0	0	0
	Exports	1000 m ³	0	0	0	0
	Net Trade	1000 m ³	0	0	0	0
1.2.2.C	PULPWOOD (ROUND AND SPLIT), CONIFEROUS					
	Removals	1000 m ³	2.483	2.378	2.426	2.600
	Imports	1000 m ³	1.241	1.250	1.675	1.230
	Exports	1000 m ³	272	310	340	270
	Apparent consumption	1000 m ³	3.451	3.318	3.761	3.560
1.2.2.NC	PULPWOOD (ROUND AND SPLIT), NON-CONIFEROUS					
	Removals	1000 m ³	692	702	724	720
	Imports	1000 m ³	1.059	931	1.071	1.000
	Exports	1000 m ³	27	19	38	34
	Apparent consumption	1000 m ³	1.724	1.614	1.757	1.686
3	WOOD CHIPS, PARTICLES AND RESIDUES					
	Domestic supply	1000 m ³	5.772	5.928	6.075	6.100
	Imports	1000 m ³	2.068	1.724	1.950	2.050
	Exports	1000 m ³	511	578	600	600
	Apparent consumption	1000 m ³	7.329	7.074	7.425	7.550
1.2.3.C	OTHER INDUSTRIAL ROUNDWOOD, CONIFEROUS					
	Removals	1000 m ³	0	0	0	0
1.2.3.NC	OTHER INDUSTRIAL ROUNDWOOD, NON-CONIFEROUS					
	Removals	1000 m ³	0	0	0	0
1.1.C	WOOD FUEL, CONIFEROUS					
	Removals	1000 m ³	2.854	2.999	2.988	2.900
1.1.NC	WOOD FUEL, NON-CONIFEROUS					
	Removals	1000 m ³	2.205	1.980	1.922	2.000
1	TOTAL REMOVALS	1000 m ³	17.089	17.550	17.453	18.010
4.1	WOOD PELLETS					
	Production	1000 m.t.	948	1.000	1.025	1.050
	Imports	1000 m.t.	344	368	395	390
	Exports	1000 m.t.	485	559	570	570
	Apparent consumption	1000 m.t.	807	809	850	870

 UNECE TF2 TIMBER FORECAST QUESTIONNAIRE Forest products		Country: Austria		Date: 06.Okt		
		Name of Official responsible for reply:				
		Johannes Hangler				
		Official Address (in full):				
		Federal Ministry of Agriculture, Forestry, Environment and Water Management 1030 Vienna, Marxergasse 2				
		Telephone: +43 1 71100 607309		Fax: +43 1 71100 607399		
E-mail: johannes.hangler@bmlfuw.gv.at						
Product Code	Product	Unit	Historical data		Estimate	Forecast
			2014	2015	2016	2017
5.C	SAWNWOOD, CONIFEROUS					
	Production	1000 m ³	8.327	8.681	8.888	8.900
	Imports	1000 m ³	1.615	1.641	1.800	1.800
	Exports	1000 m ³	4.884	5.059	5.250	5.300
	Apparent consumption	1000 m ³	5.058	5.263	5.438	5.400
5.NC	SAWNWOOD, NON-CONIFEROUS					
	Production	1000 m ³	133	126	135	140
	Imports	1000 m ³	161	170	180	180
	Exports	1000 m ³	139	143	150	155
	Apparent consumption	1000 m ³	155	152	165	165
5.NC.T	of which, tropical sawnwood					
	Production	1000 m ³	0	0	0	0
	Imports	1000 m ³	7	5	5	5
	Exports	1000 m ³	1	1	1	1
	Apparent consumption	1000 m ³	6	4	4	4
6.1	VENEER SHEETS					
	Production	1000 m ³	8	8	7	7
	Imports	1000 m ³	44	51	58	57
	Exports	1000 m ³	17	17	17	17
	Apparent consumption	1000 m ³	35	43	48	47
6.2	PLYWOOD					
	Production	1000 m ³	n.a.	n.a.	n.a.	n.a.
	Imports	1000 m ³	160	190	177	175
	Exports	1000 m ³	346	298	345	340
	Apparent consumption	1000 m ³	n.a.	n.a.	n.a.	n.a.
6.3	PARTICLE BOARD (including OSB)					
	Production	1000 m ³	2.200	2.190	2.300	2.275
	Imports	1000 m ³	428	427	425	425
	Exports	1000 m ³	1.814	1.839	1.900	1.900
	Apparent consumption	1000 m ³	815	779	825	800
6.3.1	of which, OSB					
	Production	1000 m ³	0	0	0	0
	Imports	1000 m ³	171	166	170	168
	Exports	1000 m ³	7	9	8	8
	Apparent consumption	1000 m ³	163	157	162	160
6.4	FIBREBOARD					
	Production	1000 m ³	650	615	650	640
	Imports	1000 m ³	246	258	280	270
	Exports	1000 m ³	557	524	560	550
	Apparent consumption	1000 m ³	339	349	370	360
6.4.1	Hardboard					
	Production	1000 m ³	100	85	93	91
	Imports	1000 m ³	23	26	27	26
	Exports	1000 m ³	74	59	66	64
	Apparent consumption	1000 m ³	49	53	54	53
6.4.2	MDF/HDF (Medium density/high density)					
	Production	1000 m ³	550	530	557	549
	Imports	1000 m ³	148	161	175	168
	Exports	1000 m ³	471	456	487	479
	Apparent consumption	1000 m ³	227	235	245	238
6.4.3	Other fibreboard					
	Production	1000 m ³	0	0	0	0
	Imports	1000 m ³	76	70	78	76
	Exports	1000 m ³	12	9	7	7
	Apparent consumption	1000 m ³	64	61	71	69
7	WOOD PULP					
	Production	1000 m.t.	1.944	1.812	2.020	2.050
	Imports	1000 m.t.	796	828	814	795
	Exports	1000 m.t.	348	309	525	540
	Apparent consumption	1000 m.t.	2.392	2.331	2.309	2.305
10	PAPER & PAPERBOARD					
	Production	1000 m.t.	4.865	4.965	4.900	4.850
	Imports	1000 m.t.	1.402	1.342	1.360	1.360
	Exports	1000 m.t.	4.127	4.285	4.255	4.215
	Apparent consumption	1000 m.t.	2.140	2.021	2.005	1.995

http://www.klimaaktiv.at/erneuerbare/energieholz/holzstr_oesterr.html



WOOD FLOWS in AUSTRIA



LEGEND (All values are given in million m³; values <0.1 million m³ are not shown; numerical values partially rounded)

- Sawlogs (SL)
- Industrial Wood (IRW)
- Firewood (FW) Incl. Bark
- Logging Residues
- Bark
- Cross-Cut Ends
- Wood Chips
- Black Liquor
- Dead Wood etc.
- Sawwood & Semi-finished Products
- Import Sawwood
- Export Sawwood
- Import Semi-finished Products
- Export Semi-finished Products
- Import SCP, Industrial By-Products, Compressed Wood
- Export SCP, Industrial By-Products, Compressed Wood
- Import SCP, Industrial By-Products, Wood Chips, Compressed Wood
- Export SCP, Industrial By-Products, Wood Chips, Compressed Wood
- Further Wood Processing Wood Products
- Particleboard-Industry Products
- Paper-Industry Products
- Energy Production
- Use of Wood from Forests and other sources
- Dead Wood
- Logging Residues

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Reference year: 2014



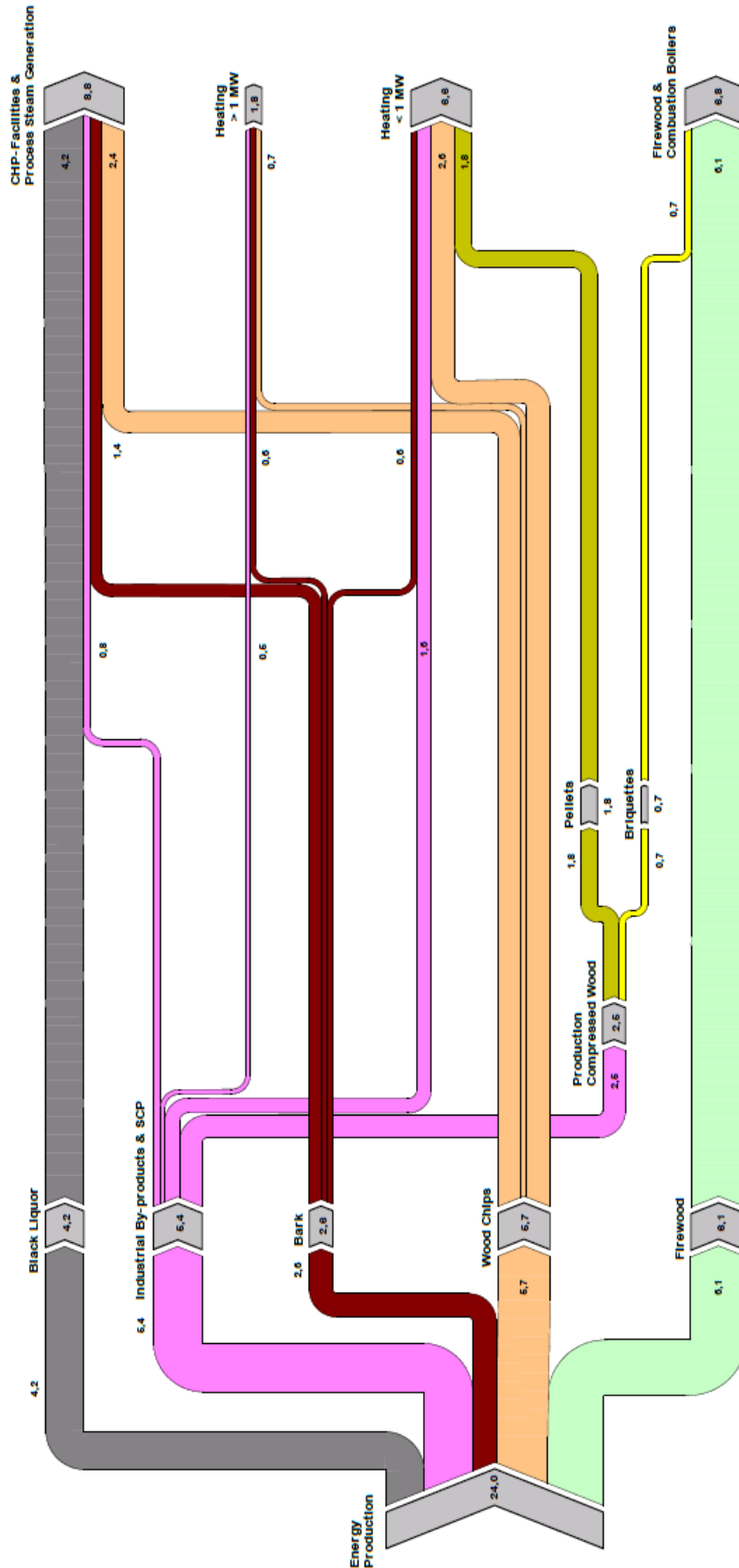
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WOOD FLOWS in AUSTRIA

Energy Production

http://www.klimaaktiv.at/erneuerbare/energieholz/holzstr_oesterr.html



LEGEND (All values are given in million m³; values <0.1 million m³ are not shown; numerical values partially rounded)

- Black Liquor
- Briquettes
- Bark
- Wood Chips
- Industrial By-products & Sawmill Co-products (SCP)
- Pellets
- Firewood Incl. Bark

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