

Austrian Market Report 2019

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

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Directorate-General III – Forestry and Sustainability

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1. General economic situation

Economic outlook for 2019 and 2020: Cyclical Activity Slackening, But No Recession¹

Economic growth in Austria is gradually decelerating to a moderate pace over the forecast period. The lack of dynamism in the global economy dampens exports and manufacturing output. Yet, favourable financing conditions, fiscal stimulus and resilient private consumption provide support to economic activity. GDP is expected to grow by 1.7% in 2019 and 1.4% in 2020.

Global economic activity slackened further in spring 2019. The smouldering trade conflict between the US and China and the uncertain outcome of the Brexit negotiations dampen investment activity on an international scale, with negative repercussions on industrial production and global trade.

World GDP growth is set to moderate further over the forecast period. Notably manufacturing industry may not have reached the lower turning point yet. While growth remains robust in the US and many Emerging Market economies, it suffers in the euro area from sluggishness in German export branches.

An imminent worldwide recession appears nevertheless unlikely. The continued expansionary monetary policy offers benign financing conditions, fiscal policy provides stimulus in some instances, and private consumption remains in many countries on a firm upward path. The risk of a strong increase in oil prices appears limited.

Cyclical activity slackened during spring 2019 also in Austria. Total output gained 0.3% in the 2nd quarter from the previous period, the smallest increase since 2015. Exports in particular lost considerable momentum, whereas private consumption continued its stable upward trend. Compared with Germany, the Austrian economy has so far proved rather robust.

Prospects for the second half of 2019 are subdued. Business confidence in Austria's manufacturing sector has dropped markedly, according to the WIFO business survey; several indicators even suggest a decline in output. Sentiment remains on the whole positive in the construction sector and the service industries. Aggregate demand is sustained by private consumption, driven by favourable developments in employment and household incomes, as well as by fiscal incentives.

In line with the international environment, the economy should reach the lower turning point of the cycle around the end of the year. In 2020, activity is expected to stabilise, while remaining moderate. GDP is projected to grow at an annual rate of 1.7% in 2019 and 1.4% 2020. Productive capacity utilisation for the overall economy, while receding somewhat, remains above the longer-term trend.

The slowdown of the output cycle will end the recovery on the labour market. Thanks to the still robust job creation in the first six months, the unemployment rate should still ease to 7.4% on annual average 2019, before edging up to 7.5% in 2020. Consumer price inflation remains firmly under control, at projected rates of 1.6% and 1.7% in 2019 and 2020 respectively. With tax revenues growing lively, the general government balance will reach a surplus equivalent to 0.6% of GDP in 2019, abating to 0.4% of GDP next year on account of recently adopted fiscal measures.

¹ Source: Austrian Institute of Economic Research (WIFO), 4/10/2019

2. Policy measures

Federal Government

In May 2019 the government coalition between the Austrian People's Party (ÖVP) and the Austrian Freedom Party (FPÖ), in office since December 2017, was prematurely terminated by Federal Chancellor Sebastian Kurz (ÖVP) as a consequence of the Ibiza Affair. Since early June a transitional "expert government" has been in office. The Federal Ministry for Sustainability and Tourism is now headed by Maria Patek, formerly Head of the Directorate-General for Forestry and Sustainability. On September 29, early elections of the National Council took place, in which the ÖVP gained 37.5% of all votes and thus topped the poll again. The coalition negotiations are going on.

The Austrian Forest Strategy 2020+

Carrying out the working programme to implement the "Austrian Forest Strategy 2020+" adopted in 2016, is well underway. Information about all measures of the working programme and the current level of implementation are available in a database that is publicly accessible (<https://bfw.ac.at/ws/strat2020public.starten>). In the context of the Austrian Forest Dialogue current topics like the increasing damage to forests caused by climate change, the contribution of forests to the bioeconomy and the Protective Forest Action Programme adopted at the Council of Ministers in May 2019 were addressed.

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 € 40 million annually are granted for forest-related measures, altogether € 280 million for the seven-year programme period, provided by the EU, the Federal Government and the nine Federal Provinces. The implementation of the programme started in 2015.

National Forest Inventory

The Austrian Forest Inventory switched to permanent surveying. Whereas formerly (for the last time from 2007 to 2009) a three-year period of surveying used to be followed by a period without any surveys, such surveys are conducted every year from 2016 onwards – for always one sixth of the random sample plots. [First interim results](#) based on the 2016-2018 surveys show a further slow increase of the total forest area (4.02 million ha), while the forest available for wood supply declined slightly (3.34 million ha). The growing stock increased (1173 million m³, 351 m³/ha), the annual increment decreased slightly (29.7 million m³) and the harvests increased slightly (26.2 million m³).

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 forests. The forest owner association of greatest relevance to roundwood supply is the Austrian Forest Owner Cooperative (Waldverband Österreich, www.waldverband.at). Under its eight provincial associations about 70,000 forest owners are organised in local forest owner cooperatives. In 2018 totally 3.30 million m³ of timber were marketed. The Austrian Forest Owner Cooperative organised 336 training and further education events with over 10,000 participants.

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

FHP (www.forstholzpapier.at) is a coordination and communication platform of Austria's forestry and wood industry as well as of the paper and pulp industry. It is a platform for lobbying and organising 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 contributions of all participating industries.

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 2019 the image campaign "Holz ist genial" (meaning "wood is ingenious") launched in 2017 has been continued. With surprising facts on wood, the campaign highlights the performance of sustainable forest management as well as positive effects of building with wood (www.holzistgenial.at). Other activities include a series of seminars dealing with multi-storey timber construction, a proHolz Austria youth campaign aimed to recruit junior employees for the timber industry (www.genialerstoff.at), the granting of timber construction awards and many more.

3. Market drivers

The weakness of the global economy is dampening the Austrian business cycle. Export growth slowed noticeably in the second quarter, and GDP growth eased to +0.3% compared to the previous quarter. Private household consumption, however, continued to increase and supported overall growth. The prospects for the Austrian economy stabilised recently. GDP is expected to grow by 1.7% in 2019.

The assessments of Austria's construction industry have remained better than average and largely stable. According to the current "Holzkurier" survey in Germany and Austria the mood is good among timber construction companies as well, also in respect of the order situation for the fourth quarter of the year.

Due to the favourable economic situation and driven by the high quantities of calamity wood in parts of Austria and in Austria's neighbouring countries almost all sectors of the wood-processing industry achieved a growth in production and exports in 2018. Also in 2019 the level of production is high.

On the other hand, forest enterprises suffer from the high calamity wood accruals and the price erosion for timber caused by the surplus of roundwood from the calamity areas in Austria and its neighbouring countries. After an 8.8% increase in timber harvesting (2018), a further rise is expected for 2019; also roundwood imports are still at a high level.

4. Developments in forest-products market sectors

A. Wood raw materials

With a share of 47.9% of the federal territory and about 140,000 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. As the Austrian wood and paper industry has high capacities, wood and sawmill by-products are used to a considerable extent for energy generation and imports of roundwood are required (2018: 10.7 million m³, above all from the Czech Republic and Germany), mobilising available domestic resources is a major goal of Austria's forest policy. However, a growing oversupply of both domestic and imported calamity wood has been observed for two years and puts a strain on the market, which results in declining roundwood prices.

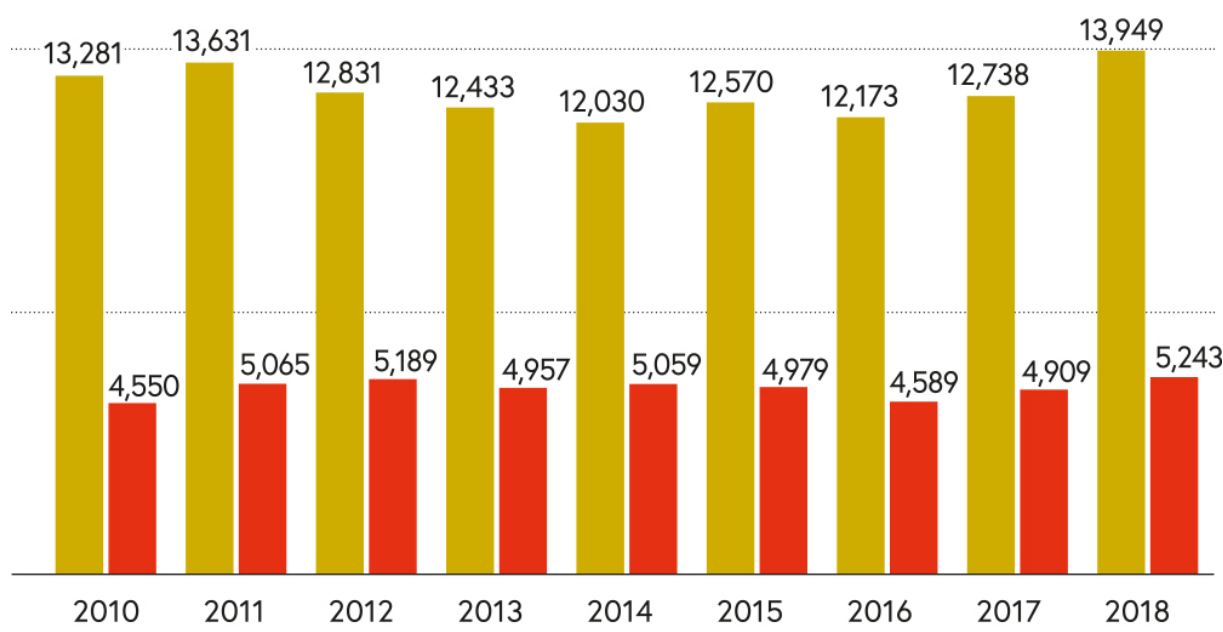
2018: Extreme weather events like heat, storms and drought as well as a massive spread of bark beetle, suffered above all in the north of Austria, marked the development in forestry in 2018. The strong increase in calamity wood stepped up timber harvesting. At the same time, timber prices got under pressure. Due to the higher quantities felled, the production value of the domestic forestry went up by 3.1% compared to the preceding year. In line with the higher amount of timber felled also the expenditure in the economic sector of forestry increased. In addition, the volume of wood removed exceeded the increment in commercial forests. This had a negative impact on the gross value added.

Altogether 19.19 million cubic metres under bark were utilised in 2018, 8.8% more than in the year before, 8.5% more than the ten-year average. Sawlogs accounted for 54.2%, pulpwood and other industrial roundwood for 18.5%, fuelwood and chippings from forests for 27.3% of the quantity felled. 13.95 million m³ were assigned to material use, 5.24 million m³ were used for energy generation. The share of coniferous wood in the total volume felled amounted to 83.6%. Small forest owners (forest area < 200 hectares) harvested 11.34 million m³ in total in 2018 (+9.4%), the owners of forests larger than 200 hectares 6.23 million m³ (+9.2%) and the Austrian Federal Forests 1.62 million m³ (+2.9%). The percentage of wood harvested due to damage increased by 53.3%, thus reaching 9.93 million m³, which is 51.7% of the total removals. The major causes of damage were bark beetles and storms.

Removal—raw timber by material and energetic use

in 1,000 cubic metres of timber harvested, without bark

■ Material use ■ Energetic use



Source: BMNT 2019

In 2018 Austria's forests suffered the most significant damage caused by bark beetle ever recorded (5.2 million m³). The two northern Federal Provinces, Upper and Lower Austria, were most seriously affected. Due to the lower precipitation and the higher temperatures, many trees were so weakened that they could hardly ward off pests, especially the bark beetle, and died over a large area. Particularly spruce was affected, but increasingly also white pine and fir. The reforestation after the salvaging of calamity timber should now focus on stable mixed stands, taking into account the changing climate. Storms, especially cyclone Vaia at the end of October, caused great damage, especially in the south of Austria.

Roundwood imports increased by totally 14.9% in 2018, thus reaching 10.7 million m³. The import of industrial roundwood (sawlogs + pulpwood) increased to 10.1 million m³ (+14.6%). The import of coniferous sawlogs and veneer logs increased by 19.5% to 7.3 million m³, those of coniferous pulpwood by 14.7% to 1.8 million m³. Wood fuel imports rose to 539,000 m³ (+20.6%). Roundwood exports increased by 8.8% to 968,000 m³, thereof 548,000 m³ coniferous sawlogs and veneer logs (+47.5%) and 239,000 m³ pulpwood (-32.6%).

On annual average the 2018 prices of roundwood (incl. fuelwood) were 1.4% below those of 2017. This is mainly a result of the lower prices for softwood sawlogs. On annual average, sawmills paid € 88.15 per cubic metre of sawlog spruce/fir, Cat. B, Media 2b, 2.8% less than in 2017; the annual maximum of € 91.05 was paid in March, the annual minimum of € 82.65 in December. The 2018 mixed pulpwood/mechanical pulpwood price for spruce/fir was with € 36.39 per m³ 0.2% above the average for the preceding year – pulpwood € 33.00 (+/-0%), mechanical pulpwood € 44.42 (+1.0%). The production value of domestic forestry (according to the European Forest Account

methodology, which includes the net increment of standing timber) reached the total of € 2.411 billion in 2018, after € 2.338 billion in 2017. The increase by 3.1% is a consequence of the higher harvest volumes.

2019 has so far been marked by high calamity wood accruals. As the situation is equally bad in Austria's neighbouring countries Czechia and Germany, the domestic timber market is additionally burdened by roundwood imports. As a consequence, the prices of roundwood are declining. The price of sawlogs spruce/fir, Cat. B, Media 2b, had its annual high to date in January 2019 (€ 81.47), and has been declining since then. The most recently available price for August amounted to € 74.40. The large quantities of domestic calamity wood were caused by the bark beetle infestation, above all in the north of Austria, as well as by storms and heavy snow loads in the past autumn and winter. Prices therefore varied according to region. While they dropped substantially in the Federal Provinces most seriously affected, Lower Austria and Upper Austria, declines were less serious in Styria or Salzburg. Forest owners assume that this year's logging in Austria will rise again after the increase in the previous year, namely by 6% to 20.4 million m³.

The roundwood market in October 2019: Due to the accrual of calamity wood in Central Europe, the locations of Austria's sawmill industry continue to be very well stocked with coniferous sawlogs. In regions where take-over is subject to quotas there are wood transportation delays of several weeks. Exports to China which can help relieve the market are becoming more difficult. In the areas affected by bark beetle roundwood prices are still under pressure – also for fresh wood although, overall, a slight rise in the demand for fresh coniferous sawlogs is observed. As prices are low in general, normal logging is at a very low level. In Vorarlberg, the demand for sawlog even exceeds present supply. In the chief assortment of spruce Cat. B, 2b the prices for fresh wood differ widely – from € 60 to € 82 per m³ o.b. – depending on the extent of calamities. Rigid sorting, especially in respect of crack formation, has led to reductions of up to € 35/m³ o.b. or take-over at pulpwood prices.

Storage capacities – including outdoor storage – of the pulp, paper and board industry are in most cases exhausted. It is therefore hardly ever possible to sell coniferous industrial roundwood outside contracts. In combination with strict supply quotas large amounts of wood remain in forests, especially in the areas suffering damage. Prices are still under pressure and in some regions have decreased by about € 4.00 per m³ o.b. in the fourth quarter. Also pulpwood of common beech can be sold at reduced prices only.

Due to the high pressure on the supply side wood for energetic purposes can more or less be supplied only within the framework of existing long-term contracts. The locations having eco-electricity feed-in tariffs are very well stocked. Companies which presently do not obtain eco-electricity subsidisation have been temporarily shut or already changed to fossil fuels. The demand for high-quality household fuel wood is lively, however.

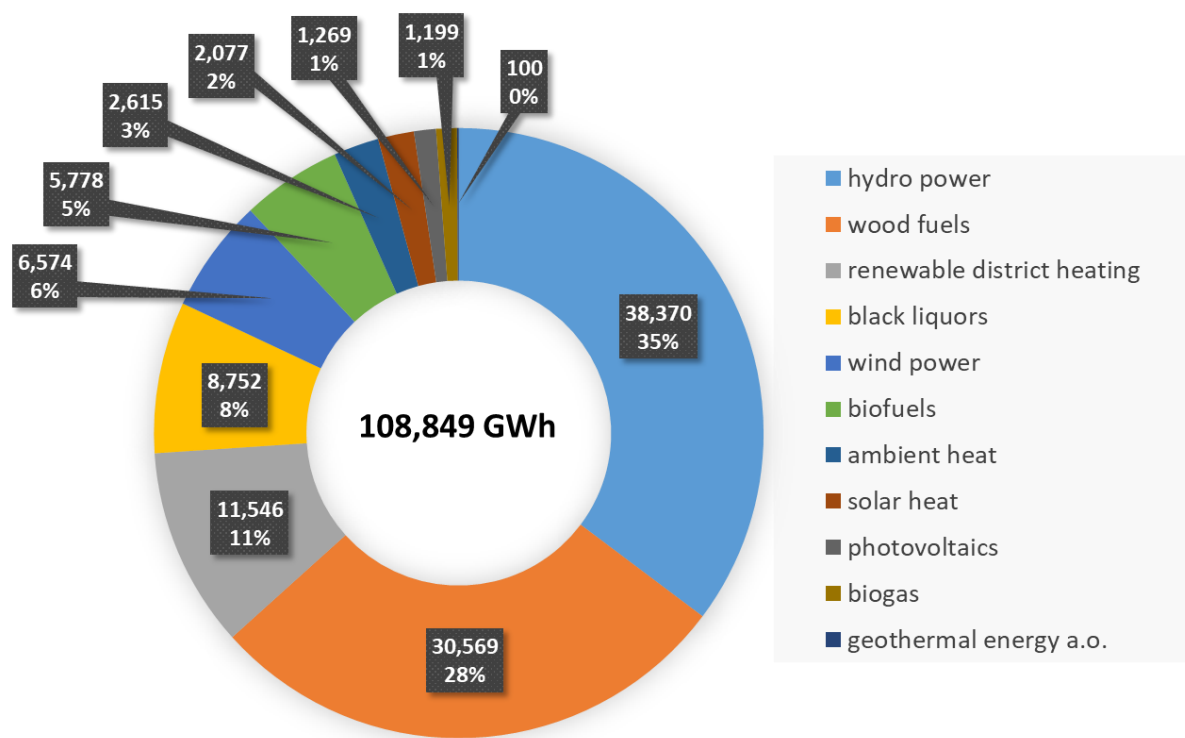
Considerable amounts of wood damaged by bark beetle are expected to accrue also in 2020. In the areas affected the price situation will probably remain tense. Moreover, adverse effects caused by the declining economic activity cannot be excluded.

B. Wood energy

In 2017, the Austrian gross domestic energy consumption amounted to 1,442 PJ or 401 TWh, thus being 2.0% higher than in 2016. The increase is due to additional consumption in industry, transport and households, the main reason of the extra consumption being the economic growth. The share of renewable energy (acc. to the EU Renewables Directive 2009/28/EC) was 32.6%.

In 2017, the largest contributions of renewable energy in Austria's final energy consumption came from wood fuels, including district heating from wood fuels, with 41,718 GWh and from hydropower with 38,370 GWh. Together, these two groups of energy sources account for a share of 73.6% of the total renewable final energy consumption in Austria. Other branches with significant contributions included black liquors with a share of 8.0%, wind energy with 6.0% and biofuels with 5.3%. From 2016 to 2017 the total final energy consumption provided by renewable energy increased by 0.3%, thus reaching 108,849 GWh. This increase was mainly due to a rise in wind energy (+25.7% or +1,342 GWh) caused by new installations and the weather conditions and a production-related rise in the use of black liquors (+6.3% or +516 GWh). On the other hand, the amount of electricity from hydropower (-3.8% or -1,532 GWh) and energy from biofuels (-12.8% or -850 GWh) fell.

FINAL ENERGY CONSUMPTION PROVIDED BY RENEWABLE ENERGY 2017



According to the official removals statistics 5.24 million m³ of fuelwood and chippings from forests were harvested in 2018, which corresponds to a 27.3% share in the total removal and a rise of 6.8% compared to 2017. Fuelwood accounted for 2.32 million m³ (1.30 million m³ of coniferous wood, 1.02 million m³ hardwood), wood chips from forests for 2.92 million (solid) m³. With € 62.69 per m³ of stacked wood (with bark, without turnover tax) the price of non-coniferous fuelwood in 2018 rose by 0.6% compared to 2017, that of coniferous fuelwood rose by 0.8%, thus reaching € 42.25. All in all there were hardly any fluctuations. This stable trend with slightly rising prices has continued throughout the year 2019 so far.

Wood pellets are currently produced at 42 sites in Austria, predominantly by the sawmill industry. The production capacity increased to 1.63 million tonnes. In 2018, real production amounted to 1,345,000 tonnes (+10% compared to the preceding year); 360,000 tonnes (-11%) were imported, above all from the Czech Republic, Romania and Germany; 804,000 tonnes were exported (+20%), mainly to Italy. According to proPellets Austria the domestic consumption decreased by 4% and amounted to 920,000 tonnes due to the warm winter of 2017/18. The estimated production for 2019 amounts to 1.4 million tonnes. Depending on the next winters, future

production might rise significantly as a result of the higher production capacity. The number of newly installed pellet boilers (< 100 kW) remained stable in 2018 at around 5,100. The price survey done by proPellets Austria (www.propellets.at) resulted in an average price of 23.37 cent/kg of (bulk) wood pellets (incl. turnover tax) in September 2019. Compared to September 2018 this means a price decline of 1.2%. Wood pellets in bags (when ordered by the pallet) cost an average € 4.01 per 15 kg sack (26.74 cent/kg, -0.4%).

C. Certified forest products

PEFC Austria was founded in 1999. 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. Currently, about 74,000 forest owners holding over 3 million hectares effectively take advantage of the certification and 493 CoC certificates are valid.

Forest Stewardship Council (FSC): In Austria, 587 hectares of forest are currently certified according to FSC. There are 304 valid CoC certificates.

D. Value-added wood products

In addition to 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 Austria’s wood industry.

2018’s sold production in the construction sector amounted to € 2.70 billion, an increase of 2.5% compared to the previous year. The individual sectors of the construction-related industries show different trends. Glued structural components’ production increased to a total of € 849 million (+6.6%). The production of windows rose to € 438 million (+5.1%) and the production of doors by 4.0% to € 244 million. In contrast, the production of prefabricated wooden houses declined to € 422 million (-17.6%). Exports of wooden floors (€ 218 million, +2.2%) and doors (€ 43 million, +1.5%) increased; exports of windows (€ 74 million) remained at the same level; laminated wood exports fell to € 467 million (-1.9%). The most important foreign markets for wooden floors, windows and doors were Germany and Switzerland. The largest portion of the laminated wood was exported to Italy (37%), although exports to Italy dwindled by 11.6%. Germany (21%) and Japan (11%) followed in the ranking.

The Austrian furniture industry comprises 49 industrial plants with about 6,000 employees – most of them are privately owned medium-sized companies. The furniture industry was able to increase its production level in 2018 (€ 2.1 billion, +4.9%). With a production increase to € 243 million (+10.9%), shopfitting recorded the highest growth rate. Kitchen and office furniture too, saw increases (+5.2%, € 296 million and +2.3%, € 275 million). In contrast, wooden bedroom furniture, dining room furniture and living room furniture as well as seating furniture recorded a loss of production volume (-2.5%, € 365 million and -2.1%, € 208 million).

Exports did well again in 2018; Austria’s furniture producers were again able to increase their exports, by 3.9% to € 938 million. The main export market was Germany (€ 390 million, +2.9%). Furniture imports to Austria fell by 4.9% to € 1.76 billion. The bulk of the imported furniture came from Germany (€ 811 million, -7.2%). Imports from Poland, Italy and other European countries also declined. Imports from China increased (+8.3%, € 165 million).

E. Sawn softwood

With about 1,000 companies and nearly 6,000 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 40 largest companies generate around 90% of the total production volume. 98% of the total production is sawn softwood, mainly spruce and fir. About 60% of the total sawn softwood production is designated for the export. In absolute terms Austria is among the top 6 world-wide as regards the export of sawn softwood.

2018 was an excellent business year for Austria's sawmill industry. Production increased for the fourth consecutive year and for the first time since 2008 more than 10 million m³ of sawnwood was produced again. The sawmill industry profited from the favourable economic situation on nearly all sales markets. The summer of 2018 was marked by large quantities of calamity wood in Central Europe and lower purchasing prices for the sawmills. This allowed the sawmill industry to expand international market shares.

The production of sawnwood amounted to 10.4 million m³ (2017: 9.8 million m³), of which 10.2 million m³ were sawn softwood. The production value of the Austrian sawmill industry recorded an 8% increase, thus amounting to € 2.38 billion. In 2018, processed roundwood accounted for 17.7 million solid cubic metres, including 7.3 million solid m³ of imported coniferous sawlogs. Most of the sawlog imports were from the Czech Republic (3.6 million solid m³, +24%), from Germany (2.0 million solid m³, +19.5%) and from Slovenia (1.1 million solid m³).

5.92 million m³ of sawn softwood were exported in 2018 – an increase by 8.6% compared to the previous year (5.45 million m³). Exports to the main market, Italy, stagnated at 2.6 million m³. This means that 44% of the total sawn softwood exports were shipped to Italy. Exports to Germany increased by 7.4% to 1.0 million m³, exports to the countries of the Levant by 16% to 925,000 m³. Imports of sawn softwood increased by 6.0% compared to the previous year in 2018 and totalled 1.89 million m³.

2019: The windthrow damage caused by last year's autumn storms in Northern Italy and Southern Austria as well as the still high damage caused by bark beetle in Lower and Upper Austria, in Czechia and Germany have led to a surplus of sawlogs. Prices have further declined in the course of the year, which strengthens the competitiveness of the sawmill industry and drives up its production. The Austrian sawmill industry assumes that their production of sawn softwood will, after 10.2 million m³ in 2018, grow to about 10.4 million m³ this year. The demand for fresh coniferous sawlogs is expected to grow during the fourth quarter.

For 2020 large quantities of calamity wood are expected to accrue again which need to be sold on the market. In this context, the supply with fresh roundwood will play an important role. The sawmill industry is expecting the high production level of 2019 again.

F. Sawn hardwood

The production of hardwood sawmills went up to 180,000 m³ in 2018 (+3%). The demand for oak sawnwood increased over the past few years; presently, the roundwood supply for oak, beech and ash is good in Central Europe. The Croatian transport ban for oak roundwood and fresh sawnwood has been lifted. Hardwood sawmills were satisfied with the rising demand experienced in 2018/19.

G. Wood-based panels

For Austria's board industry, 2018 was a positive business year. Production capacities were fully exhausted; the production volume of particle boards even increased slightly. Domestic sales, too, showed a small plus compared to the previous year. Sales figures developed favourably as well. Exports ranged at a similarly high level as in 2017. The export quota has been very high for years, amounting to about 80%. The foreign trade surplus amounted to € 760 million. The most important sales markets are located in Europe, notably in Germany, Italy, Czech Republic and Poland.

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 2.4 million m³ in 2018, of which about 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 2018 the quantity of the raw material used comprised 1.50 million m³ of roundwood (type "Plattenholz"; +13%) and 1.44 million m³ of sawing by-products and shavings (+4%), plus the use of recycled wood. The import share for the roundwood used amounted to 26%, that for sawing by-products and shavings to 19%.

For 2019, the situation appears to change slightly. After the global economy exceeded its peak in 2018, a weakening in growth is generally forecast for 2019 which, however, is still at a very high level in Austria. The available 2019 figures for the board industry do not yet indicate a decline for 2019. According to the forecast for the last quarter of the year the situation is becoming more challenging, even though the board industry is still optimistic.

2020: As regards geopolitical challenges like Brexit, China, U.S.A., but also Turkey and Italy, the development is hard to predict. Austria's board industry has so far always been able to adapt rather swiftly to new conditions and therefore looks positively to the future. It is not planned to further increase the existing production capacities in Austria, but investments are made in digitisation activities, efficiency enhancement and research. These future expenses are important also for the development of the around 40 additional locations in Europe and overseas.

H. Pulp and paper

In Austria 24 mills produce pulp and paper. In 2018 they employed 7,903 (+0.9%) personnel. Paper production increased by 4.0% to 5.1 million tonnes. The total turnover grew to € 4.3 billion (+8.2%) due to the additional volumes and higher pulp and paper sales prices. Consistent cost management of the paper mills helped to keep the results positive. The consumption of paper products in Austria rose slightly by 0.7% and reached 1.9 million tonnes. The export rate remained high at 87.4%.

The solid results were mainly due to the increased capacity utilisation of 93%. At the same time, the missing volume in Steyrermühl due to decommissioning was more than compensated by expansion of a paper machine in Laakirchen. The graphic business shrank by 6.0% to a volume of 2.4 million tonnes, while packaging paper continued to grow by 17.1% to 2.3 million tonnes. However, this volume change cannot be explained by actual market trends, but is mainly a result of a change of grades at the large PM 10 in Laakirchen. The speciality paper sector also rose by 2.4% to 320,000 tonnes.

Some major projects contributed to an overall investment of € 220 million in 2018. The works on the new PM 3 in Pöls are now well advanced. Other noteworthy features include the conversion of the PM 9 in Gratkorn and the completely rebuilding of the Danzermühl power plant at the Laakirchen mill.

With paper exports of roughly € 3.0 billion the paper industry made a positive contribution to Austria's trade balance. Total paper exports increased by 3.3% to 4.43 million tonnes. The largest delivery markets, alongside the 638,000 tonnes domestic market (+6.6%), remain Germany (1.02 million t, +0.1%) and Italy (525.000 t, +12.1%). In 2018 a total amount of 1.31 million tonnes of paper were imported into Austria.

Pulp: In 2018, the Austrian volume trend for virgin fibre was positive overall, with production reaching 2.1 million tonnes (+1.3%). The chemical pulp production increased to 1,323,000 tonnes (+4.3%). By contrast, the production of mechanical wood pulp as well as the production of dissolving pulp (for textile fibres) fell to 304,000 (-7.4%) and 456,000 tonnes (-0.6%), respectively. The amount of wood used by the Austrian paper industry increased by 1.6% to 8.78 million solid cubic metres in 2018; 4.15 million m³ accounted for roundwood (+1.4%) and 4.63 million m³ for sawing by-products (+1.6%). Purchases of domestic roundwood increased by 4.2% to 2.56 million m³, imports by 7.9% to 1.68 million m³. For sawing by-products, domestic purchases amounted to 3.68 million m³ (+3.7%) and imports accounted for 1.01 million m³ (+7.0%). The production of secondary pulp (2.24 million tonnes, +13.1%) increased significantly in 2018. 2.60 million tonnes of paper for recycling were used (+13.8%), of which 1.11 million tonnes came from domestic sources. The paper recovery rate was again on a very high level (76.1%).

1st half of the year 2019: In terms of quantity, the market development in Europe has weakened compared to the previous year. This is particularly true for graphic and coated paper. Austria has seen a decrease for paper by almost 50,000 tonnes compared to the first half of 2018, which is, among other things, the result of closures due to restructuring work. However, by means of the 3rd paper machine in Pöls, which was recently put into operation, additional amounts of packaging paper will be produced. In the pulp market demand was still good enough to compensate a lower integrated demand by larger exports. Moreover, Lenzing now completed its capacity building process for textile pulp.

Outlook: Wood availability and sustainability, energy costs and efficiency, research and innovation, digitalisation and biorefinery as well as human resources and work safety will continue to be important issues for the association of the Austrian paper industry, Austropapier (www.austropapier.at). Due to the general economic downturn, the paper industry expects a slight decline (-1.8%) of its production in 2019, and an increase of 1% is forecasted for 2020 due to increased capacities. The shift in demand and production from graphic to packaging paper will continue.

I. Innovative wood products

To strengthen the timber sector and to enhance its competitive and innovative power actual 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. This year's network meeting of the platform took place in Vienna in October.

In a great number of ERA-NET projects Austrian scientists are involved in research work on innovative wood products. Research issues include new concepts for high-strength cellulose composite materials or connection solutions for wooden components made of hardwood.

As a follow-up project after the awarding of eight Schweighofer Prizes, the "Evergreen Innovation Camp" will be carried out for the first time in November 2019, a hackathon where students and young professionals have 48 hours to work out solutions on a current topic. This year's challenge is: "How can wood be tracked from the forest to the sawmill?" (<https://www.evergreen-innovationcamp.io/>)

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 24-storey high-rise timber building "[HoHo Wien](#)" (84 m high) in Vienna.

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](#).

Taking the total useable area created, the share of wooden structures amounted to 24% in Austria in 2018 (1998: 14%), wooden structures being defined as buildings in which more than 50% of the load-bearing structures are made of wood or wood-based materials. 53% of the share of wooden structures account for residential buildings (newly built one- or multi-family homes as well as extensions and conversions), 29% for functional agricultural buildings, 11% for commercial and industrial buildings, and 7% for public buildings. Both in multi-family homes and in public buildings almost exclusively pre-fabricated wooden components are used; especially the solid wood construction method with cross-laminated timber has increased strongly. See also [4D Value-added wood products](#).

Gerhard Schickhofer, head of the Institute of Timber Engineering and Wood Technology at Graz University of Technology, was awarded the [2019 Marcus Wallenberg Prize](#) for his role in the development of cross-laminated timber (CLT). His work has been the key factor in the marked expansion of construction activities in multi-storey wood buildings.

5. Charts

Economic indicators (WIFO, Economic Outlook, 04/10/2019)

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|-----------------------------|---------------------------------------|-------|-------|-------|-------|-------|
| | Percentage changes from previous year | | | | | |
| GDP Volume | + 1.0 | + 2.1 | + 2.5 | + 2.4 | + 1.7 | + 1.4 |
| GDP Value | + 3.3 | + 3.8 | + 3.6 | + 4.2 | + 3.6 | + 3.2 |
| Export of goods Volume | + 3.1 | + 2.7 | + 5.4 | + 6.4 | + 2.0 | + 2.5 |
| Export of goods Value | + 2.4 | + 1.8 | + 6.9 | + 7.8 | + 2.7 | + 2.8 |
| Import of goods Volume | + 4.2 | + 3.4 | + 4.4 | + 4.0 | + 1.8 | + 2.2 |
| Import of goods Value | + 1.3 | + 1.6 | + 7.9 | + 6.3 | + 2.3 | + 2.5 |
| Consumer prices | + 0.9 | + 0.9 | + 2.1 | + 2.0 | + 1.6 | + 1.7 |
| Active dependent employment | + 1.0 | + 1.6 | + 2.0 | + 2.5 | + 1.6 | + 1.0 |

Wood resources

| Product | Year | Production | Imports | Exports |
|--|------|----------------------|---------------------|-------------------|
| | | 1,000 m ³ | | |
| Sawlogs, pulpwood and other industrial roundwood | 2017 | 12.738 | 8.825 | 876 |
| | 2018 | 13.949 | 10.113 | 948 |
| | 2019 | 14.917 | 10.070 | 950 |
| | 2020 | 14.700 | 10.120 | 900 |
| Wood residues, chips, particles | 2017 | 6.777 | 2.192 ²⁾ | 652 ²⁾ |
| | 2018 | 7.083 | 2.719 ²⁾ | 728 ²⁾ |
| | 2019 | 7.300 | 2.500 ²⁾ | 600 ²⁾ |
| | 2020 | 7.300 | 2.500 ²⁾ | 650 ²⁾ |
| Fuelwood | 2017 | 4,909 ¹⁾ | 447 | 14 |
| | 2018 | 5,243 ¹⁾ | 539 | 20 |
| | 2019 | 5,440 ¹⁾ | | |
| | 2020 | 5,450 ¹⁾ | | |

¹⁾ incl. chippings from forests

²⁾ incl. recovered post-consumer wood

Sawnwood

| Product | Year | Production | Imports | Exports |
|-------------------------|------|----------------------|---------|---------|
| | | 1,000 m ³ | | |
| Coniferous sawnwood | 2017 | 9,675 | 1,779 | 5,449 |
| | 2018 | 10,221 | 1,886 | 5,919 |
| | 2019 | 10,400 | 1,900 | 6,050 |
| | 2020 | 10,400 | 1,800 | 6,100 |
| Non-coniferous sawnwood | 2017 | 174 | 178 | 165 |
| | 2018 | 180 | 202 | 182 |
| | 2019 | 184 | 200 | 183 |
| | 2020 | 189 | 200 | 183 |



TF1

TIMBER FORECAST QUESTIONNAIRE Roundwood

| | | | |
|---|-----------------------------|-------|--------------------|
| Country: | Austria | Date: | 18.Okt |
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| Product Code | Product | Unit | Historical data 2017 | Revised 2018 | Estimate 2019 | Forecast 2020 |
|--------------|--|------------------------|-------------------------|-----------------|------------------|------------------|
| 1.2.1.C | SAWLOGS AND VENEER LOGS, CONIFEROUS | | | | | |
| | Removals | 1000 m ³ ub | 9,237 | 10,070 | 10,850 | 10,500 |
| | Imports | 1000 m ³ ub | 6,089 | 7,277 | 7,200 | 7,200 |
| | Exports | 1000 m ³ ub | 371 | 548 | 550 | 500 |
| | Apparent consumption | 1000 m ³ ub | 14,954 | 16,799 | 17,500 | 17,200 |
| 1.2.1.NC | SAWLOGS AND VENEER LOGS, NON-CONIFEROUS | | | | | |
| | Removals | 1000 m ³ ub | 299 | 326 | 320 | 350 |
| | Imports | 1000 m ³ ub | n.a. | n.a. | n.a. | n.a. |
| | Exports | 1000 m ³ ub | n.a. | n.a. | n.a. | n.a. |
| | Apparent consumption | 1000 m ³ ub | | | | |
| 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 | 2,485 | 2,751 | 3,024 | 3,000 |
| | Imports | 1000 m ³ ub | 1,606 | 1,842 | 1,880 | 1,920 |
| | Exports | 1000 m ³ ub | 355 | 239 | 240 | 240 |
| | Apparent consumption | 1000 m ³ ub | 3,736 | 4,354 | 4,664 | 4,680 |
| 1.2.2.NC | PULPWOOD (ROUND AND SPLIT), NON-CONIFEROUS | | | | | |
| | Removals | 1000 m ³ ub | 718 | 802 | 723 | 850 |
| | Imports | 1000 m ³ ub | n.a. | n.a. | n.a. | n.a. |
| | Exports | 1000 m ³ ub | n.a. | n.a. | n.a. | n.a. |
| | Apparent consumption | 1000 m ³ ub | | | | |
| 1.2.NC | Sawlogs & Veneer logs + Pulpwood, NON-CONIFEROUS | | | | | |
| | Removals | 1000 m ³ ub | 1,017 | 1,128 | 1,043 | 1,200 |
| | Imports | 1000 m ³ ub | 1,131 | 994 | 990 | 1,000 |
| | Exports | 1000 m ³ ub | 150 | 161 | 160 | 160 |
| | Apparent consumption | 1000 m ³ ub | 1,997 | 1,961 | 1,873 | 2,040 |
| 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 | 2,873 | 3,218 | 3,340 | 3,350 |
| 1.1.NC | WOOD FUEL, NON-CONIFEROUS | | | | | |
| | Removals | 1000 m ³ ub | 2,036 | 2,026 | 2,100 | 2,100 |
| 1 | TOTAL REMOVALS | 1000 m ³ ub | 17,647 | 19,192 | 20,357 | 20,150 |
| 3 | WOOD CHIPS, PARTICLES AND RESIDUES | | | | | |
| | Domestic supply | 1000 m ³ | 6,777 | 7,083 | 7,300 | 7,300 |
| | Imports incl. Recovered Post-Consumer Wood | 1000 m ³ | 2,192 | 2,719 | 2,500 | 2,500 |
| | Exports incl. Recovered Post-Consumer Wood | 1000 m ³ | 652 | 728 | 600 | 650 |
| | Apparent consumption | 1000 m ³ | 8,317 | 9,075 | 9,200 | 9,150 |
| 5.1 | WOOD PELLETS | | | | | |
| | Production | 1000 m.t. | 1,225 | 1,345 | 1,420 | 1,450 |
| | Imports | 1000 m.t. | 403 | 360 | 340 | 340 |
| | Exports | 1000 m.t. | 671 | 804 | 840 | 840 |
| | Apparent consumption | 1000 m.t. | 957 | 901 | 920 | 950 |



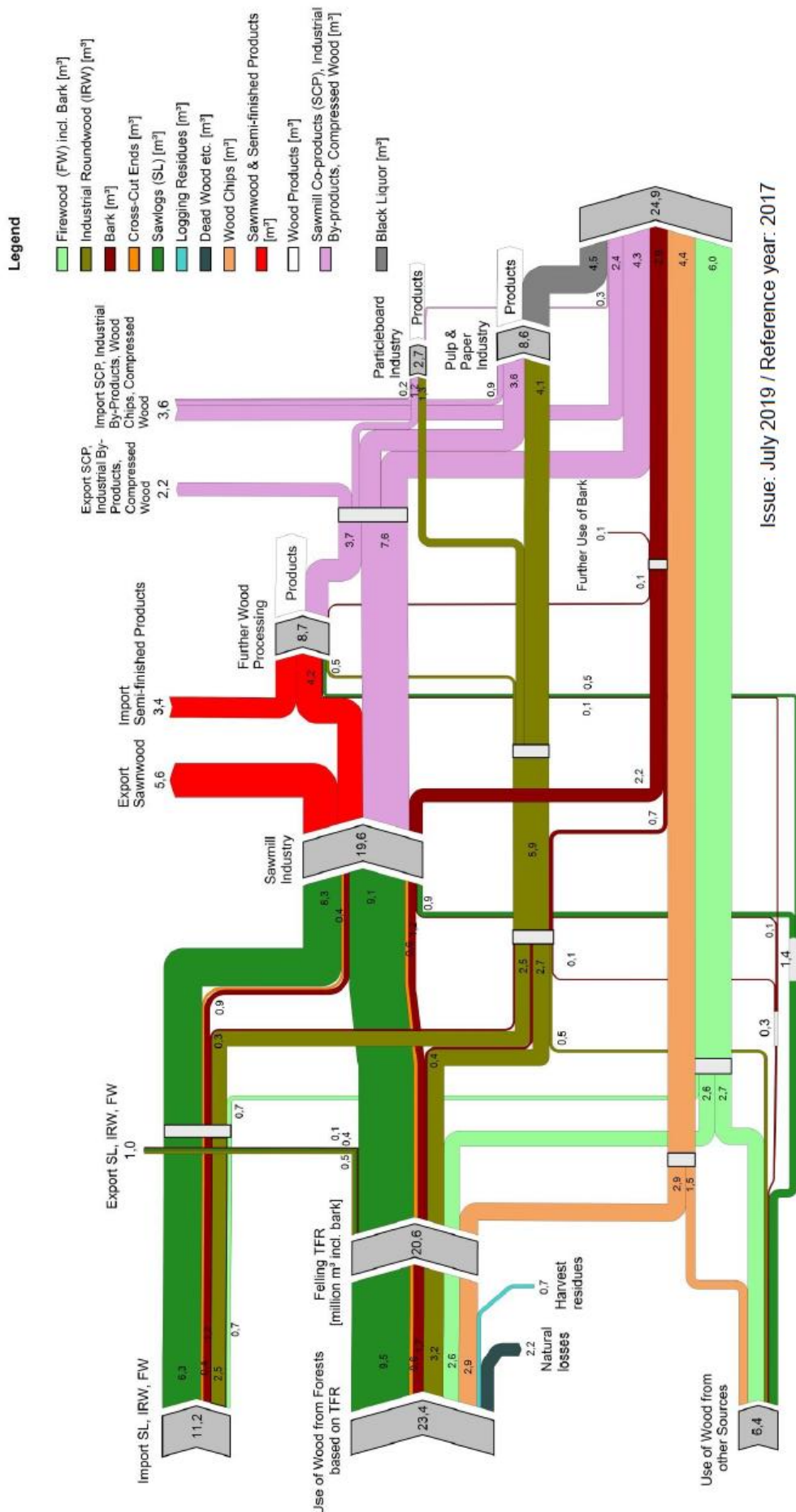
TF2

TIMBER FORECAST QUESTIONNAIRE
Forest products

| | |
|---|--------------------------------|
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| Product Code | Product | Unit | Historical data 2017 | Revised 2018 | Estimate 2019 | Forecast 2020 |
|--------------|---------------------------------------|---------------------|-------------------------|-----------------|------------------|------------------|
| 6.C | SAWNWOOD, CONIFEROUS | | | | | |
| | Production | 1000 m ³ | 9,675 | 10,221 | 10,400 | 10,400 |
| | Imports | 1000 m ³ | 1,779 | 1,886 | 1,900 | 1,800 |
| | Exports | 1000 m ³ | 5,449 | 5,919 | 6,050 | 6,100 |
| | Apparent consumption | 1000 m ³ | 6,005 | 6,187 | 6,250 | 6,100 |
| 6.NC | SAWNWOOD, NON-CONIFEROUS | | | | | |
| | Production | 1000 m ³ | 174 | 180 | 184 | 189 |
| | Imports | 1000 m ³ | 178 | 202 | 200 | 200 |
| | Exports | 1000 m ³ | 165 | 182 | 183 | 183 |
| | Apparent consumption | 1000 m ³ | 187 | 200 | 201 | 206 |
| 6.NC.T | of which, tropical sawnwood | | | | | |
| | Production | 1000 m ³ | 0 N | 0 | 0 | 0 |
| | Imports | 1000 m ³ | 7 | 7 | 7 | 7 |
| | Exports | 1000 m ³ | 1 | 1 | 1 | 1 |
| | Apparent consumption | 1000 m ³ | 6 | 6 | 6 | 6 |
| 7 | VENEER SHEETS | | | | | |
| | Production | 1000 m ³ | 7 N | 8 | 8 | 8 |
| | Imports | 1000 m ³ | 58 | 58 | 54 | 53 |
| | Exports | 1000 m ³ | 18 | 21 | 19 | 18 |
| | Apparent consumption | 1000 m ³ | 47 | 44 | 43 | 43 |
| 8.1 | PLYWOOD | | | | | |
| | Production | 1000 m ³ | n.a. | n.a. | n.a. | n.a. |
| | Imports | 1000 m ³ | 231 | 242 | 210 | 210 |
| | Exports | 1000 m ³ | 348 | 300 | 316 | 310 |
| | Apparent consumption | 1000 m ³ | | | | |
| 8.2 | PARTICLE BOARD (including OSB) | | | | | |
| | Production | 1000 m ³ | 2,390 | 2,419 | 2,415 | 2,410 |
| | Imports | 1000 m ³ | 542 | 503 | 580 | 550 |
| | Exports | 1000 m ³ | 1,957 | 1,939 | 1,990 | 1,960 |
| | Apparent consumption | 1000 m ³ | 975 | 983 | 1,005 | 1,000 |
| 8.2.1 | of which, OSB | | | | | |
| | Production | 1000 m ³ | 0 | 0 | 0 | 0 |
| | Imports | 1000 m ³ | 173 | 176 | 176 | 175 |
| | Exports | 1000 m ³ | 10 | 9 | 6 | 6 |
| | Apparent consumption | 1000 m ³ | 162 | 168 | 170 | 169 |
| 8.3 | FIBREBOARD | | | | | |
| | Production | 1000 m ³ | 636 C | 600 | 600 | 598 |
| | Imports | 1000 m ³ | 324 | 330 | 324 | 314 |
| | Exports | 1000 m ³ | 508 | 484 | 465 | 457 |
| | Apparent consumption | 1000 m ³ | 452 | 446 | 459 | 455 |
| 8.3.1 | Hardboard | | | | | |
| | Production | 1000 m ³ | 72 N | 71 | 70 | 70 |
| | Imports | 1000 m ³ | 29 | 26 | 28 | 26 |
| | Exports | 1000 m ³ | 57 | 56 | 55 | 54 |
| | Apparent consumption | 1000 m ³ | 44 | 40 | 43 | 42 |
| 8.3.2 | MDF/HDF (Medium density/high density) | | | | | |
| | Production | 1000 m ³ | 555 N | 529 | 530 | 528 |
| | Imports | 1000 m ³ | 164 | 174 | 166 | 160 |
| | Exports | 1000 m ³ | 444 | 422 | 400 | 395 |
| | Apparent consumption | 1000 m ³ | 276 | 281 | 296 | 293 |
| 8.3.3 | Other fibreboard | | | | | |
| | Production | 1000 m ³ | 10 N | 0 | 0 | 0 |
| | Imports | 1000 m ³ | 130 | 131 | 130 | 128 |
| | Exports | 1000 m ³ | 8 | 5 | 10 | 8 |
| | Apparent consumption | 1000 m ³ | 132 | 125 | 120 | 120 |
| 9 | WOOD PULP | | | | | |
| | Production | 1000 m.t. | 2,056 | 2,083 | 2,120 | 2,130 |
| | Imports | 1000 m.t. | 752 | 671 | 670 | 670 |
| | Exports | 1000 m.t. | 424 | 461 | 510 | 520 |
| | Apparent consumption | 1000 m.t. | 2,384 | 2,293 | 2,280 | 2,280 |
| 12 | PAPER & PAPERBOARD | | | | | |
| | Production | 1000 m.t. | 4,860 | 5,055 | 4,950 | 5,000 |
| | Imports | 1000 m.t. | 1,409 | 1,327 | 1,300 | 1,300 |
| | Exports | 1000 m.t. | 4,150 | 4,233 | 4,200 | 4,250 |
| | Apparent consumption | 1000 m.t. | 2,120 | 2,150 | 2,050 | 2,050 |

These data are flagged with E, R, N or C for secretariat estimate, repeat, national estimate or calculated totals (from subitems).

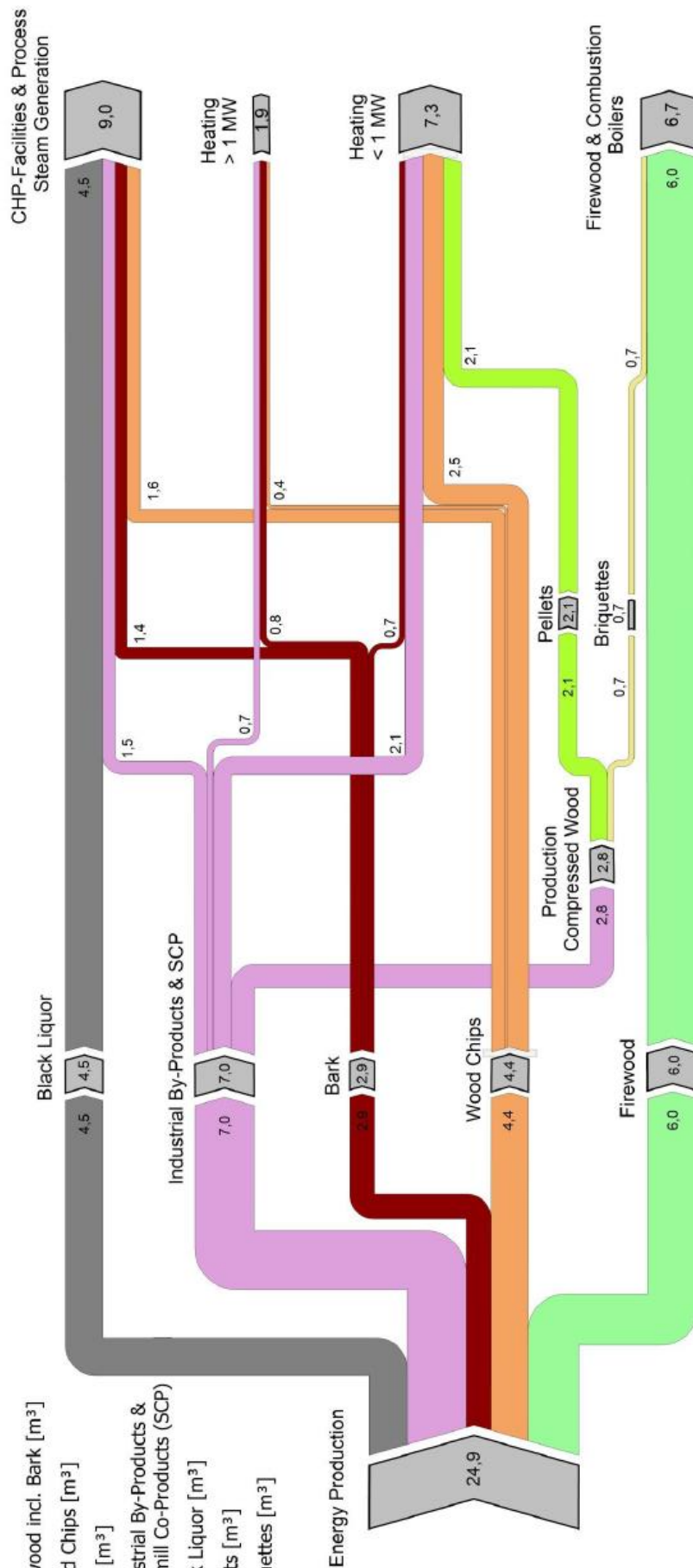


All values given in million m³; values <0.1 million m³ are not shown; numerical values partially rounded

This illustration is based on the current state of knowledge and information, and has been compiled to the best of the authors' knowledge and experience. However, the authors accept no liability whatsoever for errors or omissions and reserve the right to incorporate latest findings.
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Legend

- █ Firewood incl. Bark [m³]
- █ Wood Chips [m³]
- █ Bark [m³]
- █ Industrial By-Products & Sawmill Co-Products (SCP)
- █ Black Liquor [m³]
- █ Pellets [m³]
- █ Briquettes [m³]



Issue: July 2019 / Reference year: 2017

All values given in million m³, values <0.1 million m³ are not shown; numerical values partially rounded

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