

2018
2019



Annual Report of the European Sawmill Industry

“A sustainable European bioeconomy is necessary to build a carbon neutral future in line with the Climate objectives of the Paris Agreement. In the construction sector engineered wood offers great environmental benefits as well as excellent economic opportunities.”

European Commission, A sustainable Bioeconomy for Europe: Strengthening the connection between economy, society and the environment. COM(2018) 673 final

Mjøstårnet – completed in March 2019 – by Voll Arkitekter in Brumunddal, Norway, is the world's tallest timber building. The 85.4 m high multi-functional tower was built using glued laminated timber (glulam).

Timber specialist Moelven Limtre installed the building's timber structure, including elevator shafts made from CLT and load bearing structure made entirely from glulam and produced locally.

Moelven is a member of the EOS Norwegian Member Treindustrien.

Picture: Courtesy of Moelven



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Foreword

by Sampsa J. Auvinen, EOS President

PROMOTING SUSTAINABLE WOOD FOR A SUSTAINABLE FUTURE

Between the 22nd and 25th of May, the citizens of the European Union had the opportunity to vote for their representatives in the European Parliament and shaping the future of Europe. From this moment, a whole chain-reaction of events will be triggered. This will reach its climax in November when a new Commission enters office. This new political set-up will govern Europe for the next five years. During the second semester of 2019, the new Members of the European Parliament, 27 new European Commissioners and the new European Council President will be appointed and frame the new political priorities that will be translated into political actions and legislation through an active participation of interested stakeholders. The European Organisation of the Sawmill Industry is one of the many Brussels-based organisations voicing the concerns of the manufacturing sector in Europe and striving for an industry-oriented Europe able to compete on a global level playing field. In doing so, EOS actively participates in the European consultations and working groups; it is one of the organisers of the Club du Bois - *cross-party discussion forums aiming to create a sustained dialogue with Members of the European Parliament on all EU legislative issues affecting the sector in Europe* - and it regularly consults its Members. Adopting its position papers and visions on unanimous basis, EOS has been and continues to be the voice of the sawmill Industry in Europe.

The past year has been favorable to our industry in many levels; demand has been strong in all major markets, production volumes have developed positively with available raw material and the industry has started to invest in improving efficiencies. Building from wood particularly with new engineered wood products is growing across the globe and also at our home market in



Europe and this is increasing demand for our products. Overseas markets have been for some time important for the European sawmills and they have a profound impact on our industry and its future. Past few years new Asian markets have grown and also the United States market has come back to pre-crisis level. Nevertheless, as the global sawn timber supply - demand balance remains sensitive, the recent storms and beetle damages in Central Europe are affecting the markets. Going forward the industry will have to be ready to react locally but act globally to the market disturbances the weather anomalies create.

At EOS, we are very satisfied that on 1st February 2019, the EU and Japan's Economic Partnership Agreement entered into force. Japan is European sawmill industries' long standing and important market and now tariffs on all wood products will be progressively fully eliminated, with seven years staging for the most important priorities. Most tariffs on wood products will be dropped immediately, with some less important tariff lines being scrapped after 10 years. Traditionally, Japan has a high propensity to use wood as a building material. Wooden housing starts in Japan hover around 55-58% of total housing starts (for comparison, precise figures for Europe are missing, but estimates suggest that wooden housing starts make up around 10% of total housing starts). Together with Egypt, China, and the United States, Japan is the largest extra-European market for the European sawmill industry as regards traditional sawn timber products. Japan is also an important importer of engineered wood-products such as cross laminated timber and glue laminated timber.

The European Union plays a growing role in many areas affecting the building sector and in the perception of



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wooden materials. This is why EOS actively participates in all EU discussions and policy areas that might open opportunities to boost the competitiveness of the sawmill industries and reinforce the recognition of wood as an environmentally-friendly building material.

Unlike other building materials which generate a large amount of carbon dioxide during production, wood sequesters the carbon dioxide absorbed during growth even after it has been turned into lumber. Among the major construction materials, wood provides the lowest life-cycle impact, and architects and engineers have increasingly turned their attention to using it to lessen the environmental burdens associated with the building sector. Our Organisation warmly welcomed the recent update of the EU Bio-economy Strategy, where it is emphasised that a greater use of wood in the construction industry as a substitute for more energy-intensive non-renewable building materials plays an important role in developing the bio-economy.

EOS strongly believes that the European policy should not disregard the 2015 Paris Agreement on climate change objectives. To accomplish these goals by 2050, the European legislation should be oriented to favour sustainable products that contribute to decarbonise the economy and at the same time comply with the circular economy objectives. The European sawmill industry recognises that it is imperative to combat climate change and at the same time avoid curbing economic and social

development. EOS advocates for European policies that balance environmental, social and economic aspects. Sustainably managed forests and products derived from these forests play an essential role in mitigating climate change by reducing greenhouse gases emissions and contribute to an environmental-friendly economic growth. The positive effects of using wood from sustainably managed forests can be strengthened if actions are taken to use more long-life wood products. For this reason, on the 21st of March 2019 our organisation celebrated the International Forest Day by co-hosting a high-level discussion where representatives of the industry and of green interests confirmed together their commitment to identifying solutions for a sustainable and environmentally-friendly economic growth.

EOS is engaged together with all its Members in the European dialogue to achieve a sustainable bio-based and environmentally-friendly future. To all the Members of the European Organisation of the Sawmill Industry, I express gratitude for the continued support and collaboration.

Sampsa J. Auvinen

EOS President

1. General Economic Situation

The information of this chapter has been taken from the European Commission Economic Forecast Winter 2019 and from OECD (Organisation for Economic Co-operation and Development) Economic Outlooks

1.1 Global Overview with focus on the EU

1.1.1 Global Growth Slows Amid High Uncertainty

The global economy is slowing down following a period of sustained above-potential growth in many major economies. Global growth moderated to 0.8% quarter-on-quarter (henceforth q-o-q) in the third quarter of 2018 (from 0.9% q-o-q in the second quarter) and continued to vary across countries and regions. Activity in some advanced economies was weaker than expected, especially in the euro area and Japan, and signs of a slowdown in China became more apparent. On the other hand, economic growth in the US, India and emerging Asia remained solid. High frequency indicators paint a mixed picture of the global growth outlook in the short term, with robust global services PMI (purchasing managers index) readings on the one hand and a downward trend in global manufacturing output on the other. **Global GDP (excluding the EU) is estimated to have grown by 3.9% in 2018**, 0.1 percentage points lower than projected at the end of 2018.

The US economy is expected to grow above potential in 2019 on the back of a buoyant labour market and fiscal stimulus. However, the political gridlock in Congress that brought the government to a partial shutdown for more than a month is expected to weigh on consumer sentiment and growth in the beginning of the year. In 2020, the pace of growth is set to moderate as support from macroeconomic policies fades. **In China, recent data confirm a loss of growth momentum**, with uncertainty about the outcome of US-China trade negotiations (at this writing in April 2019, it is impossible to predict the outcome of these talks) and about the effectiveness of domestic policy stimulus weighing on the short-term outlook. The Chinese economy is thus expected to continue cooling, amid moderating consumption growth, weaker export growth and a slowdown in the property sector. Economic activity in other emerging market economies is expected to remain differentiated. Growth in Latin America and South Africa is expected to pick up following a weak 2018, while **the decline in oil prices since the autumn has worsened prospects for oil**

exporters such as Russia and the OPEC.

For 2019 and 2020, global import growth (excluding the EU) is likely to moderate to 3.9% and 3.6% respectively, reflecting unresolved trade tensions as well as indications of declining global manufacturing output and, more broadly, the rising uncertainty over global growth in the medium-term. On the positive side, trade agreements that entered into force recently such as the bilateral agreement between the EU and Japan or the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) should support global trade

1.1.2 Financial Markets Continue to Adjust Amid High Volatility

While monetary policy normalisation in the US went on last year, expectations of further tightening have been significantly fading in recent months. The US Federal Reserve raised the target range for the Fed funds rate to 2.25%-2.50% in December 2018, tightening its policy rate for the fourth time in a year. In January, the US Federal Reserve kept its Fed funds rate unchanged and took a more dovish tone on the path of interest rates and showed willingness to slow the unwinding of its balance sheet.

Market-implied policy rate expectations have moved lower, suggesting that no additional interest rate hikes are expected in the US in 2019.

In the euro area, the ECB's monetary policy has remained highly accommodative. While the ECB decided to end its net asset purchases in December 2018, significant monetary policy stimulus was still considered necessary to support the further build-up of domestic price pressures and inflation over the medium term. The necessary degree of monetary accommodation will be provided by the forward guidance on the ECB policy rates and the reinvestments of the sizeable stock of acquired assets going forward. Thus, **key ECB interest rates are expected to remain at their present levels at least through the summer of 2019.**

Also, the nature of the ECB's forward guidance, which is both data and state-dependent, should help provide additional accommodation if necessary (i.e. should the economic outlook worsen in the euro area).

Global financial market prices have shown high volatility over the last few months, reflecting evolving perceptions of the mix of data and policy news. Market sentiment has been soured by concerns about global growth in a context of high indebtedness, trade tensions and policy uncertainty. On the back of the re-assessment of the underlying global economic outlook and more dovish messages from key central banks, investors shifted from riskier assets to safer ones, driving equity markets and sovereign bond yields lower. The volatility in asset prices notwithstanding, financing conditions have remained very benign overall. Lending flows to households and nonfinancial corporations (NFCs) in the euro area have been robust. The annual growth rate of loans to non-financial corporations stood at 4.0% in December 2018, while that to households stood at 3.3%. Overall, households and NFCs are expected to continue to benefit from supportive financing conditions in 2019 and 2020. Also, the euro area corporate sector continues to run funding surpluses generating sizeable internal funds, which could be used to finance investment.

1.1.3 The Expansion Loses Steam

The euro area economy finished 2018 on a weak footing, having failed to rebound from the drop in growth over the summer. As a result, euro area and EU GDP growth in the second half of last year turned out lower than expected in autumn 2018.

After four quarters of 0.7% (q-o-q) GDP growth in 2017, growth moderated to 0.4% in the first two quarters of 2018. The slowdown intensified in 2018-Q3, with GDP expanding by 0.2% in the euro area. In the EU, GDP expanded by 0.3% in the third quarter compared to 0.5% in the second. While a moderation of growth was already in the cards, the slowdown in the second half of 2018 turned out to be more pronounced than expected. In 2018-Q3, Member States fared quite differently with, most notably, a contraction of activity in Germany (-0.2%) and Italy (-0.1%). According to Eurostat's preliminary flash estimate for 2018-Q4, euro area GDP ended the year on a weak note, growing by 0.2% (q-o-q) for the second consecutive quarter. Preliminary flash estimates were available for seven Member States, with only Italy registering a contraction (-0.2%).

Much of the euro area's loss of growth momentum can be attributed to fading support from the external environment, including slower global trade growth and high uncertainty regarding trade policies. However, there have also been a number of domestic factors at play. The European manufacturing sector has suffered from some specific factors. Car production was significantly disrupted in the third quarter. During the last quarter of the year, economic activity remained weak amid social tensions and budgetary-policy uncertainty in some Member States, while car production only partially recovered. Euro area industrial production, however, was weak in 2018 and dropped sharply across sectors at the end of the year. As a result, the weakness of economic growth in the second half of 2018 cannot entirely be blamed on sector-specific or temporary factors.

For the year 2018 as a whole, GDP is estimated to have grown by 1.9% in both the euro area and the EU.

Private consumption in the euro area lost some momentum in 2018-Q3 when its pace of growth slipped to 0.1% from 0.2% in the previous quarter. This reflects slower employment creation, a decrease in consumer confidence, and an uptick in the saving rate. The slowdown of private consumption was, however, not broad-based across the largest economies. While private consumption contracted in both Germany and Italy in the third quarter, it rebounded in France, Spain and the Netherlands following a soft patch in the previous quarter.

Investment weakened in the euro area in 2018-Q3 (from 1.6% q-o-q in 2018-Q2 to 0.7%), mainly as a result of a sharp drop in non-construction investment in Italy, a fall in construction spending in the Netherlands, and a slowdown in both France and Spain.

Euro area export growth weakened throughout 2018. Given the geographical orientation of external trade and its product specialisation, the euro area appears to be particularly impacted by the softening/deceleration of world trade growth. Import growth also slowed, but more gently than exports.

The recent string of weak hard and survey data coupled with the softening of world trade and possibly protracted sector- and country-specific weaknesses in the euro area suggest that the strong momentum enjoyed throughout 2017 is now behind us. While the economy is shifting into a lower gear after having peaked

in 2017, the fundamentals for continued growth remain in place. The European economy continues to benefit from improving labour market conditions, a slightly expansionary fiscal policy stance, and supportive financing conditions, as the pace of monetary policy normalisation is expected to be very gradual. Over the forecast horizon, growth is projected to continue benefiting from a rotation towards domestic growth drivers. While the current weakness in economic activity is likely to extend into 2019, the growth momentum is expected to be stronger than in the second half of last year, as some of the temporary factors that weighed on growth during that period should fade. Private consumption should remain the main growth driver, benefiting from continued but slower labour market improvements and a pick-up in wage growth. However, as spending tends to be more sensitive to changes in employment than in wages, households are expected to become gradually less inclined to consume additional labour income. Household purchasing power is also set to benefit from lower energy prices, while disposable incomes are expected to receive support from expansionary fiscal measures in a number of Member States. These factors, however, may not translate into more dynamic consumption patterns in the short term due to waning consumer confidence, which could lead to higher precautionary savings. Investment is set to continue growing faster than GDP this year and next.

Business investment should continue to enjoy financing conditions that are favourable by historical standards, even accounting for the recent pick-up in the risk premium. High capacity utilisation rates in manufacturing and tight supply conditions in some Member States should also support business investment. Pressure from high labour utilisation rates can also be expected to encourage firms to invest, smoothing the impact of more binding supply constraints, with positive effects on productivity growth. Moreover, the Investment Plan for Europe is expected to continue to boost investment through improved access to financing. At the same time, residential investment should find support from the continued dynamism in real house prices and positive income prospects. The impact of these supportive factors, however, is likely to be partly offset by rising supply hindrances, particularly in the construction sector and the end of targeted fiscal incentives in some Member States. **Weaker sentiment, mounting uncertainty regarding the global outlook and lower demand growth are likely to weaken the impetus for investment, particularly in export-oriented sectors and countries.**

Although a non-escalation of trade disputes is assumed, trade policy uncertainty and tensions are expected to weaken global trade growth. The euro area is particularly vulnerable due to its trade openness and the current tensions are undermining business investment and slowing down the momentum of existing supply chains, with spill-overs to the economy's long-term growth potential.

BREXIT

Overall, the growth outlook for this year and next has been revised downwards compared to the autumn. Member States. GDP is now expected to grow by 1.3% this year in the euro area (1.5% in the EU). The slowdown should be especially pronounced in Germany and Italy, the two largest economies of the EU which are more likely to suffer from global trade tensions.

1.1.4 Labour Market Conditions Remain a Bright Spot in a Darkening Picture

The euro area labour market improved further in the first three quarters of 2018. Employment rose by 0.2% q-o-q in 2018-Q3, following 0.4% growth in the two preceding quarters, implying an annual increase of 1.6%. The number of employed persons has reached the highest level ever recorded in the euro area, and is now about 27% above the pre-crisis peak observed in the first quarter of 2008.

Recently, the strongest increase in employment has been seen in the construction sector, whereas employment creation in manufacturing has come to a standstill.

Despite this overall positive development in the euro area, the total number of hours worked in the economy remains below its pre-crisis level (by about 1% as compared to the first quarter of 2008) despite continuing to rise in line with job creation. This reflects the change in the composition of employment towards a higher share of part-time employment.

In December 2018, the unemployment rate in the euro area stood at 7.9%, its lowest level since October 2008. Unemployment continues to fall by more than the growth rate of the economy would suggest. In recent years, labour market conditions have improved across all Member States.

At the same time, there are signs of labour shortages in some Member States and sectors, implying that employment growth in these economies will moderate.

1.1.5 Energy Prices Drive Inflation Lower

After standing above 2% in the third quarter of 2018, headline inflation in the euro area dropped considerably in December to 1.6%, in line with movements in global energy prices. Energy price inflation went down from a high of 10.7% in October to 5.5% in December. Besides energy, inflation of food components also fell throughout the fourth quarter compared to the previous quarter. Headline inflation in the euro area averaged 1.9% in the fourth quarter of 2018, slightly below what was expected in autumn. For the year as a whole, euro area inflation averaged 1.7% in 2018.

Core inflation – which excludes energy and unprocessed food prices – remained muted with no discernible trend in 2018. The forecast for headline inflation in the euro area this year is revised lower compared to autumn mainly due to lower technical assumptions about the future price of oil and the resulting base effects. As a result, headline inflation is projected to follow a downward path in 2019 and to pick up very gradually in 2020. **On average, inflation is forecast to moderate to 1.4% in 2019.**

1.2 Japan¹

Economic growth is projected to remain around 1% in 2018-19, as record-high corporate profits and labour shortages drive business investment. In addition, stronger wage gains will support a pick-up in private consumption in 2019. Although the October 2019 consumption tax hike will temporarily reduce demand, growth is projected to resume in early 2020, buoyed by additional government spending and the 2020 Olympic Games in Tokyo. Sustained growth, combined with higher oil prices, is expected to boost inflation to 1% per cent (excluding the impact of the consumption tax hike) in 2020. Government debt relative to GDP, which is the highest ever recorded in the OECD area, poses serious risks. Achieving fiscal sustainability requires a detailed consolidation programme that includes gradual hikes in the consumption tax, beginning with the planned increase in 2019, and measures to control spending in the face of rapid population ageing. With the working-age population declining, additional policies to sustain employment and structural reforms to boost productivity are a priority. Monetary policy needs to remain expansionary until the 2% inflation target is achieved.

Growth has been led by private consumption and business investment. The accelerating decline in the working-age population is exacerbating labour shortages, particularly

in services. The unemployment rate is around 2% per cent, while the ratio of job openings to applicants has risen to its highest level since 1974. Wage growth has been sustained by an 8.6% rise in summer bonuses in 2018 in large firms and by tax incentives, thereby supporting private consumption. Labour shortages, combined with capacity shortages and the record high level of corporate profits in 2018, is stimulating business investment.

Japan's gross general government debt has risen to 226% of GDP. With a primary deficit of around 3% of GDP in 2018, the target of a primary surplus has been pushed back from 2020 to 2025. However, large-scale government bond purchases by the Bank of Japan, which now owns 45% of the outstanding stock of government bonds, has mitigated the impact of high government debt.

Output growth is projected to remain around 1%, in line with Japan's potential rate, in 2018-19 before slowing to 0.7% in 2020 following the 2019 tax hike. However, the impact of the consumption tax rise will be temporary and partially offset by planned fiscal measures. Growth depends significantly on wage developments. While the jump in bonus payments in 2018 is a positive sign, larger increases in basic wages are important to sustain private consumption.

1.3 China²

After having held up well into 2018, growth has recently weakened and is projected to decline in 2019-20. Signs of

slowdown include the weakening of industrial production, profits and revenues. Foreign trade flows will lose some

¹ The information in this chapter has been taken from the OECD Economic Forecast for Japan

² The information in this chapter has been taken from the OECD Economic Forecast for China

momentum following the escalation of trade tensions. The slowdown of activity also reflects the cutback of infrastructure investment, as local government debt has been subject to greater scrutiny, though it could rebound following the recent acceleration of debt issuance and announcement of new projects.

Monetary conditions are now being eased to support economic activity. The escalation of trade tensions, particularly with the United States, resulted in a fall of the exchange rate, which was halted by government interventions, and a decline in stock prices. Fiscal policy will remain supportive to counteract the weakening of growth. Government spending efficiency will benefit from newly introduced comprehensive performance budgeting, but capital allocation efficiency needs to be improved by gradually removing implicit guarantees to state-owned enterprises and other government entities. Measures introduced recently to lower average tariffs are welcome and should continue alongside further easing of the operation of foreign companies. Overall, the economy has remained relatively unscathed by rising global uncertainties. Uncertainty is high, though.

Domestic demand, in particular consumption, has remained robust and will continue to be a stable driver of growth thanks to rising disposable incomes. Infrastructure investment has slowed following restrictions imposed on shadow banking, a major source of infrastructure financing. Excess capacity still plagues a number of industrial sectors, weighing on business investment. Services, in contrast, are

expanding steadily, especially in the digital and sharing economies. Monetary policy was tightened somewhat by the restrictions put on shadow banking, which were necessary to maintain financial stability. Going forward, moderate easing of monetary policy is envisaged to reduce the debt burden.

Growth is projected to slow modestly, which will ease producer price inflation. Goods exports and imports will slow somewhat, though import tariff cuts recently introduced by China and an increased VAT refund on exported products will mitigate the impact of trade tensions. In processing industries, where the share of intermediate inputs is high and value-added is low, this will significantly strengthen competitiveness. Reining in shadow banking would enhance financial stability and transparency, but may cause funding difficulties for smaller firms. Acceleration in corporate deleveraging is necessary to restore balance sheets amid rising debt service costs. Slow deleveraging would result in stronger growth in the short term, but increases imbalances later. A weaker fiscal stimulus might adversely affect growth, but would reduce the risk of a further build-up of implicit government liabilities. Infrastructure investment is mainly financed by public funds, but only partly from the budget, thereby reducing transparency. Trade frictions may disproportionately affect smaller firms that are less able to squeeze profit margins to accommodate the tariff hikes and some geographical regions that are more reliant on exports for their growth. The exchange rate may again depreciate, which will provide some cushion against export restrictions

1.4 Russia³

Growth is projected to remain robust, as private consumption will benefit from rising wages, household credit and employment, the latter following a bold pension reform. Large infrastructure projects will boost both public and private investment. The VAT increase in early 2019 will dent growth temporarily as disposable incomes fall. Export growth will decline as foreign demand weakens, while imports will rebound in 2020. A weaker rouble and the VAT increase will raise inflation temporarily above the 4% target.

Unemployment will increase as employment demand will only partly match higher labour supply following the rise of the retirement age. Monetary policy should be tightened in response to upward-trending inflation expectations. Despite a strong increase in public spending, fiscal policy remains tight to rebuild the fiscal position, increasing the room to respond in event of a future shock. More targeted public spending, in particular a rise in minimum pensions, could mitigate the impact of higher VAT on income inequality. Structural reforms to improve the business environment would boost longer-term growth.

³ The information in this chapter has been taken from the OECD Economic Forecast for Russia

Growth is picking up, supported by private consumption, as real disposable incomes are increasing after several years of gradual decline. Rising consumer and mortgage credit also sustain consumption. Higher oil prices are driving export revenues, while growing uncertainty about future sanctions and the higher cost of funding for emerging markets are reducing investment growth and imports of capital goods. The rouble depreciated in April 2018 and August 2018 amid expectations of potential new sanctions, and capital moved abroad upon turmoil in emerging markets.

The government has adopted an ambitious investment programme for the years 2019-2024, aimed at increasing the share of investment in GDP from 21% to 25%. The programme should help improve transport infrastructure,

accelerate the digitalisation of the economy, deepen financial markets and complement the pay-as-you-go pension system with a system based on capitalisation. The economy is projected to grow by 1.5% in 2019 and 1.8% in 2020, driven by a boost to household consumption from higher real wages and by public investment. Exports will slow as oil prices are no longer rising. The current account will remain in surplus. The VAT hike, tighter monetary policy and more moderate household credit growth will dent growth in 2019 temporarily. However, the pension reform and the infrastructure programme will help boost growth in 2020. Substantial uncertainty remains about future sanctions and counter-sanctions, which could dent exports and trigger a new wave of capital outflows and further rouble depreciation.

1.5 USA⁴

Growth is projected to slow in the coming two years as macroeconomic policy becomes less supportive. While employment growth slows, consumption growth remains solid, supported by wage growth picking up as the labour market tightens further. Strong business investment in 2019 and 2020 is underpinned by the recent tax reform and supportive financial conditions. A weaker global outlook and already introduced trade measures weigh on activity. The large fiscal stimulus enacted in 2017 and 2018 is continuing, albeit more weakly, in 2019; the budget will have a broadly neutral impact on activity in 2020. Monetary policy will tighten to ensure that inflation remains near the target of 2% and that inflation expectations stay well anchored. Further restraints on imports should be avoided as this would weaken domestic growth.

The long expansion has largely eliminated the remaining pockets of slack in the labour market and capacity utilisation is rising. With strong job creation and demographic pressures arising from an ageing population, labour shortages are beginning to emerge.

Trade growth has recovered from the past appreciation of the dollar, but the outlook is uncertain as external demand is weak and the possibility exists of further trade measures being introduced. In these projections, already implemented tariff measures are assumed to remain in



place, but no additional actions are taken. The existing measures have a small upward impact on inflation and create a small drag on growth. At this writing (beginning of 2019), there remains huge uncertainty regarding the outcome of the trade tensions.

As the fiscal boost fades and monetary policy tightens, growth will slow. Against a backdrop of weakening external demand, export growth is projected to remain muted. The trade deficit widens as import demand remains strong due to strong investment growth, notwithstanding the introduction of tariffs. These developments coupled with a decline in national saving due to the fiscal loosening will contribute to a rising current account deficit.

⁴ The information in this chapter has been taken from the OECD Economic Forecast for the United States



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1.6 Exchange Rates

The exchange rate between two currencies is an important driver of trade. Other things being equal, a strong currency in country A (relative to trade partners) will favour importers of country A, while a weak currency in country A will favour exporters of country A.

Exchange rate fluctuations thus affect trade and industries, and the European sawmill industry is no exception to this. It is therefore useful to include an overview of exchange rates in this chapter.

In the figures below, we provide the exchange rate of the EUR vs various currencies over the last two years (data updated in April 2019).

The euro vis-à-vis the US dollar has appreciated in 2017 and remained overall stable at the beginning of 2018. Over the last year it has slightly depreciated. On March 30, 2019 EUR 1 = USD 1.1235 (the EUR was at its strongest over the last two years in Feb 2018, when EUR 1 = USD 1.25)

Fig. 1.1 EUR vs USD, April 2017 – April 2019



Source: European Central Bank, 2019

Overall, considering the Brexit-related instability, the EUR-GBP exchange rate has not been dramatically affected in 2018. Since the beginning of 2019, the GBP has been appreciating vis-à-vis the euro but any outcome of the Brexit process will probably have a clearer impact on the exchange rate.

Fig. 1.2 EUR vs GBP, April 2017 – April 2019



Source: European Central Bank, 2019

At the beginning of summer 2018 the euro commenced to appreciate against the Chinese yuan, but since a peak of EUR 1= CNY 8.1 in October 2018 a constant depreciation trend ensued, with EUR 1 = CNY 7.55 at the beginning of April 2019.

Fig. 1.3 EUR vs CNY, April 2017 – April 2019



Source: European Central Bank, 2019

Over the course of 2018 the euro tended to depreciate against the Japanese Yuan after a peak of EUR 1 = JPY 137 in February 2018. At the beginning of 2019 the euro has been tending to slightly appreciate with the exchange rate at EUR 1 = JPY 124 at the beginning of April

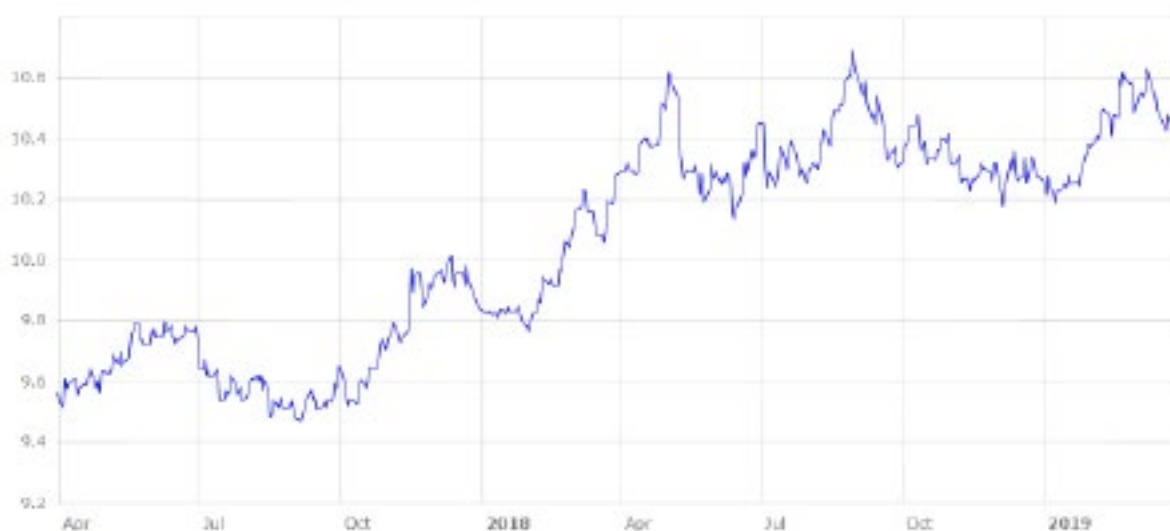
Fig. 1.4 EUR vs JPY, April 2017 – April 2019



Source: European Central Bank, 2019

The euro has been appreciating against the Swedish krona since summer 2012. Over the last year, however, the weakening of the SEK seems to have come to a halt. SEK remains historically weak. At the beginning of April, EUR 1 = SEK 10.4

Fig. 1.5 EUR vs SEK, April 2017 – April 2019



Source: European Central Bank, 2019

As a result of geopolitical tensions, over the last few years the rouble has been very volatile. It remains historically quite weak vis-à-vis the euro but since the beginning of 2019 a slow appreciation has been taking place. At the beginning of April 2019, EUR 1 = RUB 72.8

Fig. 1.6 EUR vs RUB, April 2017 – April 2019



Source: European Central Bank, 2019

When the Egyptian authorities stopped controlling the value of the Egyptian pound in November 2016, the pound lost 50% of its value vs the euro. The euro has kept appreciating until the beginning of 2018 when it reached EUR 1 = EGP 22, but over the last year the EGP has gained ground: at the beginning of April 2019 EUR 1= EGP 19.5.

Fig. 1.7 EUR vs EGP, April 2017 – April 2019



Source: www.xe.com

Overall, since the beginning of 2019 the euro has been getting weaker vis-à-vis most foreign currencies relevant for the sawmill industry, with the exception of the Japanese yen. The Swedish and the Russian currencies remain relatively weak. At this writing (beginning of April 2019), it is impossible to predict the long-term effects of Brexit-related turmoil on the EUR – GBP exchange rate.

2. The woodworking industries in the European Union (EU-28)

2.1 Introduction

Since 1990, NACE (Nomenclature of Economic Activities in the European Community) provides a harmonised statistical classification of economic activities in the EU. Contrary to the Combined Nomenclature (CN) and the Harmonised System (HS), providing a classification according to trade, the NACE system classifies economic activities in terms of production

corresponding to the nature of goods and services produced or by the nature of the production process used. Several small modifications to the classification system were carried out since 1990. However, in 2007, the system was submitted to radical changes.

Table 2.1: The NACE classification system

| NACE Code (new) | Definition |
|-----------------|---|
| 16 | Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials |
| 16.1 | Sawmilling and planing of wood |
| 16.2 | Manufacture of products of wood, cork, straw and plaiting materials |
| 16.21 | Manufacture of veneer sheets and wood-based panels |
| 16.22 | Manufacture of assembled parquet floors |
| 16.23 | Manufacture of other builders' carpentry and joinery |
| 16.24 | Manufacture of wooden containers |
| 16.29 | Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials |
| 31 | Manufacture of furniture |
| 31.01 | Manufacture of shop- and office furniture |
| 31.02 | Manufacture of kitchen furniture |
| 31.03 | Manufacture of mattresses |
| 31.09 | Manufacture of other furniture |

Source: Eurostat

It is important to note that the NACE category for wood and products of wood and cork (NACE 16) consists of two categories: one for sawmilling and planing of wood (NACE 16.1) and one for the remaining wood products (NACE 16.2). Within this last category, the sub-category "Manufacture of veneer sheets and wood-based panels" (NACE 16.21) consists of:

- veneer sheets thin enough to be used for veneering, making plywood or other purposes: smoothed, dyed, coated, impregnated, reinforced (with paper or fabric backing) or made in the form of motifs;
- plywood, veneer panels and similar laminated wood boards and sheets;
- OSB and other particleboard;
- MDF and other fibreboard;

- densified wood;
- glue laminated wood, laminated veneer wood.

Unfortunately, Eurostat fails to provide up-to-date information on the activities within the woodworking and the furniture industries in many countries on 3-digit level.

When analysing the figures, one should keep in mind that most national statistical systems tend to underestimate the figures for small and medium-sized industrial sectors. This is clearly the case for the woodworking industries. The underestimation is particularly important for the employment figures, since the official statistics often only cover enterprises with at least 20 persons employed whereas the woodworking industries is a typical SME sector.

2.2 Production

The total production value of the woodworking industries in the European Union (EU) peaked in 2007 at 237 billion EUR before falling under 190 billion EUR in 2008 and 2009 as a result of the global economic crisis. The production value upturned in 2010 and grew further in 2011 but dropped

again in 2012 and 2013 when it reached again a level below the 200 billion EUR threshold. In the 5 years to 2017 the production value grew every year: altogether it has risen by 15% reaching almost 230 billion EUR in 2017.

Table 2.2: Production in the woodworking industries in million EUR, 2013-2017 (NACE 16 & 31)

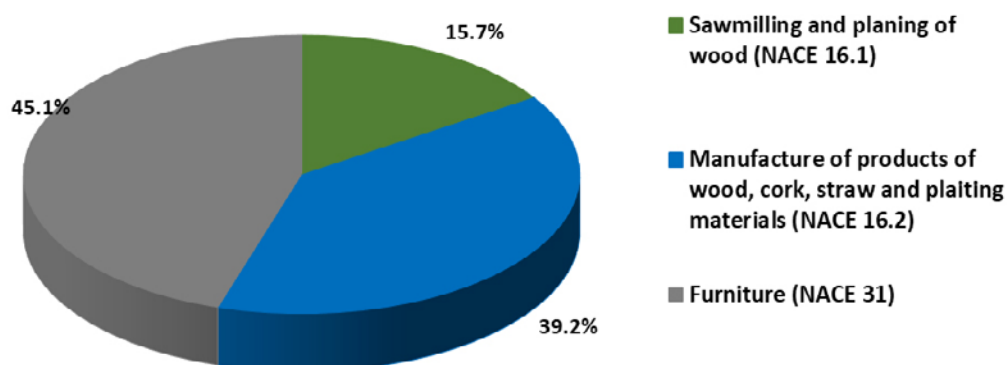
| Production (excl VAT) | 2013 | 2014 | 2015 | 2016 | 2017 | 17/13 | 17/16 |
|-----------------------|----------------|----------------|----------------|----------------|----------------|--------------|-------------|
| 16.1 | 32,981 | 35,321 | 35,490 | 35,178 | 36,047 | 9.3% | 2.5% |
| 16.2 | 79,222 | 83,149 | 86,698 | 86,356 | 90,075 | 13.7% | 4.3% |
| Subtotal 16 | 112,203 | 118,470 | 122,188 | 121,534 | 126,121 | 12.4% | 3.8% |
| 31 | 87,733 | 92,118 | 97,317 | 100,454 | 103,786 | 18.3% | 3.3% |
| Total 16 + 31 | 199,935 | 210,588 | 219,504 | 221,988 | 229,908 | 15.0% | 3.6% |

Source: Eurostat

In 2017, the production value of sawmill products (NACE 16.1) increased by 2.5%. The value of other woodworking products (NACE 16.2) increased instead by 4.3%. Consequently, the value of the woodworking industries *stricto sensu* (NACE 16) rose by 3.8%. The production value in the furniture sector

(NACE 31) also increased by 3.3%. Over a 5-year period (2013-2017) all of the three subcategories recorded a good growth, ranging from 9.3% for sawmill products to 18.3% in the furniture sectors.

Figure 2.1: Production 2017 – Relative importance of the sub-sectors

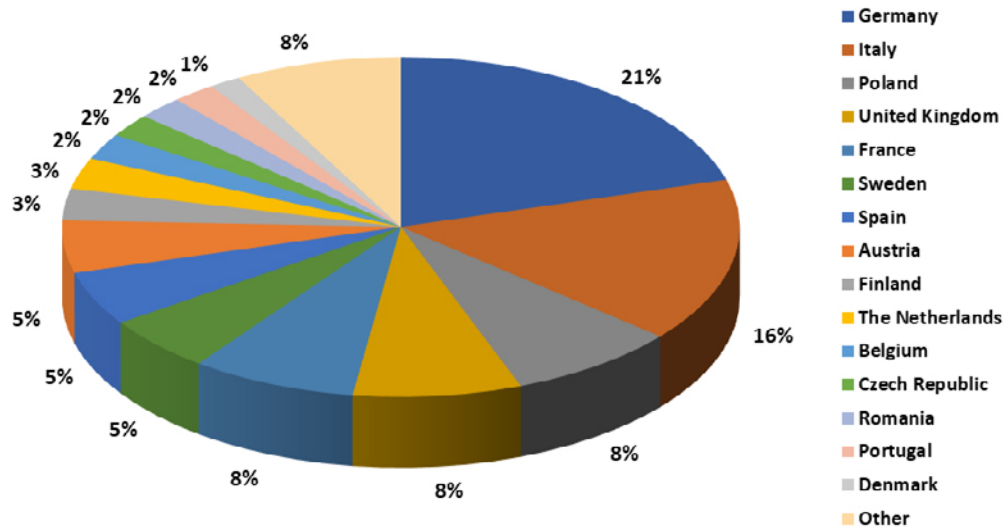


Source: Eurostat

The share of the furniture sector (NACE 31) was 45.1% while other woodworking industries (NACE 16.2) represented 39.2% of the production and the sawmilling and planing of wood (NACE 16.1) 15.7%.

Production per Country

Figure 2.2: Production 2017 – Relative importance of the EU Member States (NACE 16 and 31)



Source: Eurostat

Within the overall woodworking industries, Germany confirms its leading position thanks to a slightly but constantly increasing production value (+1.2% vs 2016), which exceeded 47 billion EUR in 2017. Italy also did well with a growth of 2.8% to almost 36 billion EUR in 2017. The production value of both Germany and Italy grew by around 10% in the 5 years to 2017. Poland keeps outgrowing all of the big producing countries having grown by 9.5% in 2017

to 18.7 billion EUR – remarkably it grew by more than 30% in the five years to 2017. The fourth largest producing country is the UK with a production value of 18.4 billion EUR (-6.1% vs 2016), followed by France with 18.1 billion EUR (+1.7%).

Sweden (+5.6% to 12.2 billion EUR), Spain (+7.8% to 11.9 billion EUR) and Austria (+4.5% to 11.4 billion EUR) are also large producing countries.



Table 2.3: Production value per EU Member State in million EUR, 2013-2017

| Production (excl VAT) | 2013 | 2014 | 2015 | 2016 | 2017 | 17/13 | 17/16 |
|-----------------------|----------------|----------------|----------------|----------------|----------------|--------------|-------------|
| Austria | 10,288 | 10,299 | 10,623 | 10,956 | 11,444 | 11.2% | 4.5% |
| Belgium | 5,114 | 5,291 | 5,354 | 5,296 | 5,728 | 12.0% | 8.2% |
| Bulgaria | 844 | 898 | 963 | 987 | 1,050 | 24.4% | 6.4% |
| Croatia | 933 | 1,011 | 1,086 | 1,245 | 1,421 | 52.2% | 14.1% |
| Cyprus | 134 | 129 | 128 | 139 | 156 | 16.9% | 12.2% |
| Czech Republic | 4,276 | 4,293 | 4,538 | 4,756 | 5,070 | 18.6% | 6.6% |
| Denmark | 3,193 | 3,214 | 3,324 | 3,438 | 3,444 | 7.9% | 0.2% |
| Estonia | 1,974 | 2,198 | 2,359 | 2,472 | 2,701 | 36.9% | 9.3% |
| Finland | 6,502 | 6,392 | 6,258 | 6,554 | 6,941 | 6.8% | 5.9% |
| France | 17,264 | 18,556 | 18,062 | 17,818 | 18,120 | 5.0% | 1.7% |
| Germany | 42,643 | 43,824 | 45,778 | 46,620 | 47,166 | 10.6% | 1.2% |
| Greece | 699 | 702 | 716 | 758 | 763 | 9.2% | 0.7% |
| Hungary | 1,224 | 1,327 | 1,475 | 1,549 | 1,685 | 37.6% | 8.7% |
| Ireland | 1,310 | 1,464 | 1,503 | 1,487 | 1,730 | 32.1% | 16.4% |
| Italy | 32,680 | 33,093 | 33,702 | 34,973 | 35,939 | 10.0% | 2.8% |
| Latvia | 2,041 | 2,198 | 2,196 | 2,311 | 2,474 | 21.2% | 7.0% |
| Lithuania | 2,082 | 2,446 | 2,527 | 2,618 | 2,829 | 35.9% | 8.0% |
| Luxembourg | 209 | 207 | 214 | 216 | 225 | 7.9% | 4.4% |
| Malta | 51 | 56 | 62 | 63 | 67 | 30.5% | 6.4% |
| Poland | 14,269 | 15,938 | 17,064 | 17,017 | 18,637 | 30.6% | 9.5% |
| Portugal | 3,791 | 4,081 | 4,380 | 4,408 | 4,750 | 25.3% | 7.7% |
| Romania | 4,482 | 4,730 | 4,879 | 4,890 | 5,026 | 12.1% | 2.8% |
| Slovakia | 1,514 | 1,955 | 2,084 | 1,851 | 2,017 | 33.2% | 9.0% |
| Slovenia | 922 | 997 | 1,049 | 1,102 | 1,186 | 28.7% | 7.6% |
| Spain | 9,494 | 9,857 | 10,631 | 10,995 | 11,854 | 24.8% | 7.8% |
| Sweden | 11,362 | 11,783 | 11,548 | 11,572 | 12,221 | 7.6% | 5.6% |
| The Netherlands | 5,119 | 5,319 | 5,803 | 6,254 | 6,816 | 33.2% | 9.0% |
| United Kingdom | 15,523 | 18,330 | 21,200 | 19,642 | 18,447 | 18.8% | -6.1% |
| EU 28 | 199,935 | 210,588 | 219,504 | 221,988 | 229,908 | 15.0% | 3.6% |

Source: Eurostat

With the exception of the UK, no country recorded a negative growth rate, with double-digit growth observed in smaller countries such as Ireland (+16%) and Croatia (+14%). In the five years to 2017 every EU country has seen their production value grow with percentage increases ranging from 5% (France) to 52% (Croatia).

The production value of the woodworking industries *stricto sensu* for the 28 countries of the EU rose by 3.8% in 2017 to 126 billion EUR exceeding the 125 billion milestone which

was last achieved in 2008. The largest producer remains Germany with a production value of 24.2 billion EUR (+0.4% vs 2016), followed by Italy, which recorded a production value of 13.3 billion EUR (+2.5% vs 2016) and France (production value of 11 billion EUR, -2.5% vs 2016). Sweden and the UK both achieved a production value of 9.6 billion EUR, albeit with diverging trends (Sweden +7.4%, UK -5.8%). Overall the top five countries account for 53% of EU production. With the exception of Denmark, France and the UK production value grew in all countries where there is significant production.

Table 2.4: Production value per EU Member State in million EUR – wood industries *stricto sensu*, 2013-2017

| Production (excl VAT) | 2013 | 2014 | 2015 | 2016 | 2017 | 17/13 | 17/16 |
|-----------------------|----------------|----------------|----------------|----------------|----------------|--------------|-------------|
| Austria | 7,443 | 7,454 | 7,756 | 7,962 | 8,341 | 12.1% | 4.8% |
| Belgium | 2,942 | 3,101 | 3,165 | 3,191 | 3,588 | 22.0% | 12.5% |
| Bulgaria | 416 | 440 | 480 | 475 | 511 | 22.9% | 7.6% |
| Croatia | 593 | 677 | 714 | 794 | 944 | 59.1% | 18.9% |
| Cyprus | 89 | 86 | 88 | 95 | 108 | 21.8% | 13.6% |
| Czech Republic | 3,045 | 3,043 | 3,204 | 3,313 | 3,509 | 15.2% | 5.9% |
| Denmark | 1,438 | 1,471 | 1,483 | 1,488 | 1,425 | -0.9% | -4.3% |
| Estonia | 1,554 | 1,765 | 1,867 | 1,950 | 2,166 | 39.4% | 11.1% |
| Finland | 5,466 | 5,386 | 5,258 | 5,520 | 5,890 | 7.8% | 6.7% |
| France | 10,579 | 11,462 | 11,059 | 11,261 | 10,984 | 3.8% | -2.5% |
| Germany | 23,406 | 24,158 | 25,116 | 24,064 | 24,157 | 3.2% | 0.4% |
| Greece | 309 | 290 | 311 | 321 | 336 | 8.7% | 4.5% |
| Hungary | 682 | 752 | 826 | 872 | 976 | 43.1% | 11.8% |
| Ireland | 738 | 852 | 903 | 887 | 1,130 | 53.1% | 27.5% |
| Italy | 13,224 | 12,993 | 12,713 | 12,969 | 13,295 | 0.5% | 2.5% |
| Latvia | 1,829 | 1,964 | 1,957 | 2,067 | 2,214 | 21.1% | 7.1% |
| Lithuania | 902 | 1,070 | 1,114 | 1,152 | 1,187 | 31.7% | 3.1% |
| Luxembourg | 192 | 190 | 197 | 200 | 209 | 0.0% | 0.0% |
| Malta | 10 | 13 | 13 | 17 | 15 | 62.1% | -10.5% |
| Poland | 6,944 | 7,687 | 8,055 | 7,616 | 8,491 | 22.3% | 11.5% |
| Portugal | 2,506 | 2,681 | 2,854 | 2,819 | 3,008 | 20.0% | 6.7% |
| Romania | 2,851 | 2,945 | 2,980 | 2,857 | 2,938 | 3.1% | 2.8% |
| Slovakia | 804 | 1,150 | 1,218 | 1,022 | 1,113 | 38.5% | 8.9% |
| Slovenia | 610 | 646 | 693 | 720 | 766 | 25.6% | 6.5% |
| Spain | 4,999 | 5,288 | 5,887 | 5,982 | 6,676 | 33.5% | 11.6% |
| Sweden | 8,584 | 9,164 | 8,931 | 8,933 | 9,597 | 11.8% | 7.4% |
| The Netherlands | 2,208 | 2,341 | 2,587 | 2,798 | 2,944 | 33.3% | 5.2% |
| United Kingdom | 7,842 | 9,405 | 10,760 | 10,191 | 9,605 | 22.5% | -5.8% |
| EU 28 | 112,203 | 118,470 | 122,188 | 121,534 | 126,121 | 12.4% | 3.8% |

Source: Eurostat

The European furniture industry realised a total production value of almost 104 billion EUR in 2017 (+3.3% vs 2016). Despite this further increase in production, the level was still below to the 2007 and 2008 peaks which exceeded 110 billion EUR. Germany and Italy remain by far the two largest producers in the furniture industry. The former recorded a production value of 23 billion EUR (+2% vs 2016), while the latter of 22.6

billion EUR (+2.9% vs 2016). Together they account for around 45% of total EU furniture production. Poland has now clearly established itself as the third largest producer in the furniture industry with a production value of 10.2 billion EUR (+7.9% vs 2016). The UK production declined by 6.4% to 8.8 billion EUR. Sweden is the only other relatively large producer which recorded a negative growth rate.

Table 2.5: Production value per EU Member State in million EUR – furniture industry, 2013-2017

| Production (excl VAT) | 2013 | 2014 | 2015 | 2016 | 2017 | 17/13 | 17/16 |
|-----------------------|---------------|---------------|---------------|----------------|----------------|--------------|-------------|
| Austria | 2,845 | 2,845 | 2,867 | 2,994 | 3,103 | 9.1% | 3.6% |
| Belgium | 2,173 | 2,190 | 2,189 | 2,106 | 2,140 | -1.5% | 1.6% |
| Bulgaria | 428 | 458 | 483 | 512 | 539 | 25.9% | 5.3% |
| Croatia | 340 | 334 | 373 | 451 | 477 | 40.3% | 5.8% |
| Cyprus | 45 | 43 | 40 | 44 | 48 | 7.3% | 9.3% |
| Czech Republic | 1,232 | 1,250 | 1,334 | 1,443 | 1,561 | 26.8% | 8.2% |
| Denmark | 1,754 | 1,744 | 1,841 | 1,950 | 2,020 | 15.1% | 3.6% |
| Estonia | 419 | 434 | 492 | 522 | 536 | 27.7% | 2.6% |
| Finland | 1,036 | 1,006 | 1,000 | 1,034 | 1,051 | 1.4% | 1.7% |
| France | 6,685 | 7,094 | 7,003 | 6,556 | 7,136 | 6.8% | 8.8% |
| Germany | 19,237 | 19,666 | 20,662 | 22,556 | 23,010 | 19.6% | 2.0% |
| Greece | 390 | 413 | 406 | 437 | 428 | 9.7% | -2.2% |
| Hungary | 543 | 575 | 648 | 677 | 709 | 30.7% | 4.7% |
| Ireland | 571 | 612 | 600 | 600 | 600 | 5.0% | 0.0% |
| Italy | 19,456 | 20,101 | 20,989 | 22,004 | 22,644 | 16.4% | 2.9% |
| Latvia | 212 | 233 | 239 | 244 | 260 | 22.7% | 6.4% |
| Lithuania | 1,181 | 1,377 | 1,413 | 1,467 | 1,642 | 39.1% | 12.0% |
| Luxembourg | 17 | 18 | 17 | 16 | 16 | -8.1% | -0.6% |
| Malta | 42 | 44 | 48 | 46 | 51 | 23.3% | 12.7% |
| Poland | 7,325 | 8,251 | 9,009 | 9,401 | 10,146 | 38.5% | 7.9% |
| Portugal | 1,284 | 1,400 | 1,527 | 1,590 | 1,742 | 35.6% | 9.6% |
| Romania | 1,631 | 1,785 | 1,900 | 2,033 | 2,088 | 28.0% | 2.7% |
| Slovakia | 711 | 805 | 866 | 829 | 904 | 27.2% | 9.1% |
| Slovenia | 312 | 351 | 355 | 383 | 420 | 34.8% | 9.7% |
| Spain | 4,495 | 4,569 | 4,743 | 5,014 | 5,177 | 15.2% | 3.3% |
| Sweden | 2,778 | 2,619 | 2,617 | 2,639 | 2,624 | -5.5% | -0.6% |
| The Netherlands | 2,911 | 2,978 | 3,216 | 3,457 | 3,872 | 33.0% | 12.0% |
| United Kingdom | 7,681 | 8,925 | 10,440 | 9,451 | 8,843 | 15.1% | -6.4% |
| EU 28 | 87,733 | 92,118 | 97,317 | 100,454 | 103,786 | 18.3% | 3.3% |

Source: Eurostat

2.3 Extra-EU Imports

This chapter monitors the trade flows of the 28 Member States of the EU. Only extra-EU trade is taken into account due to a lack of reliable figures for trade between the 28 members of the EU, although these flows are most important in absolute terms.

The total EU-28 imports of woodworking products exceeded 36 billion EUR in 2017, reflecting an increase of 5.2% compared to 2016. Both the other woodworking products *stricto sensu* and the furniture industry experienced large increases of imports (+5.9% and +6.1% respectively), while the imports of the sawmill industry fell by 3.1%.

Table 2.6: Extra-EU imports in million EUR, 2013-2017

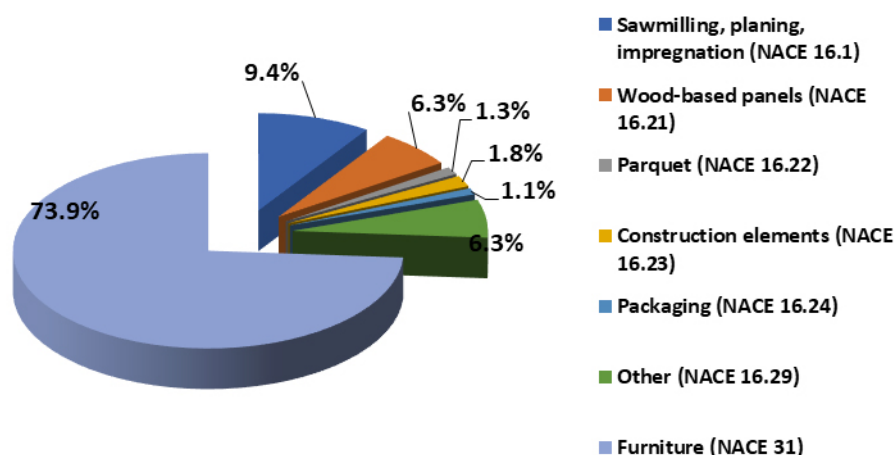
| NACE code | 2013 | 2014 | 2015 | 2016 | 2017 | 17/13 | 17/16 |
|----------------------|---------------|---------------|---------------|---------------|---------------|--------------|-------------|
| 16.1 | 2,879 | 3,156 | 3,429 | 3,506 | 3,399 | 18.1% | -3.1% |
| 16.2 | 4,476 | 5,030 | 5,691 | 5,725 | 6,061 | 35.4% | 5.9% |
| 16.21 | 1,589 | 1,830 | 2,017 | 2,035 | 2,278 | 43.4% | 11.9% |
| 16.22 | 383 | 422 | 451 | 422 | 456 | 19.1% | 8.1% |
| 16.23 | 504 | 522 | 638 | 660 | 662 | 31.3% | 0.3% |
| 16.24 | 207 | 269 | 361 | 351 | 385 | 86.0% | 9.7% |
| 16.29 | 1,793 | 1,987 | 2,224 | 2,257 | 2,280 | 27.2% | 1.0% |
| Subtotal 16 | 7,355 | 8,186 | 9,120 | 9,231 | 9,460 | 28.6% | 2.5% |
| 31 | 18,572 | 20,962 | 24,363 | 25,226 | 26,775 | 44.2% | 6.1% |
| Total 16 + 31 | 25,927 | 29,148 | 33,483 | 34,457 | 36,235 | 39.8% | 5.2% |

Source: Eurostat

Imports of other woodworking industries *stricto sensu* (NACE 16.2) rose further in 2017 (+5.9%) and all sub-sectors were concerned by these positive developments. The main increases of imports are observed for veneer sheets and wood-based panels (NACE 16.21, +11.9%), packaging (NACE 16.24, +9.7%) and wood flooring (NACE 16.22, +8.1%).

Furniture (NACE 31) accounted for 74% of the extra-EU imports of woodworking products in 2017. Sawmilling products (NACE 16.1) accounted for 9% of imports and other wood products (NACE 16.2) for 17%.

Figure 2.3: Extra-EU Imports 2017 – Relative importance of the NACE sub-sectors

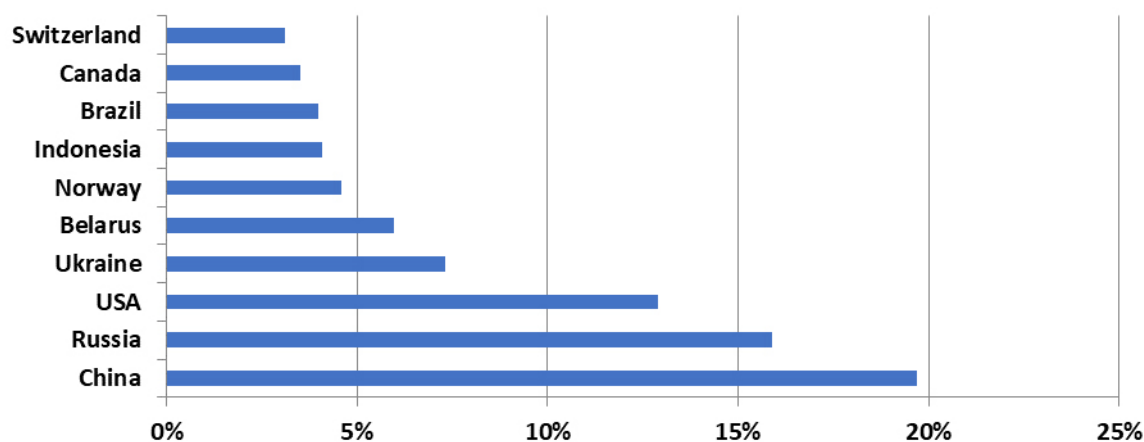


Source: Eurostat

In 2017, China and Russia continued to be the largest Extra-EU suppliers of wood products to the EU, with market shares of 20% and 16% respectively. The United States were the third largest trading partner with a stable market share of 13%. Imports from American countries such as Brazil

and Canada amounted together to approximately 7.5% of the market while 7.7% of imports came from Norway and Switzerland together. 7% came from Ukraine and 6% from Belarus. Finally, Indonesia accounted for 4% of EU imports.

Figure 2.4: Extra-EU imports 2017 - Relative importance of main countries of origin



Source: Eurostat

2.4 Extra-EU Exports

Table 2.7: Extra-EU exports in million EUR, 2013-2017

| NACE code | 2013 | 2014 | 2015 | 2016 | 2017 | 17/13 | 17/16 |
|----------------------|---------------|---------------|---------------|---------------|---------------|--------------|-------------|
| 16.1 | 4,799 | 5,140 | 5,053 | 4,974 | 5,629 | 17.3% | 13.2% |
| 16.2 | 5,571 | 5,421 | 5,600 | 5,709 | 6,207 | 11.4% | 8.7% |
| 16.21 | 2,755 | 2,624 | 2,641 | 2,674 | 2,948 | 7.0% | 10.2% |
| 16.22 | 444 | 448 | 460 | 498 | 533 | 20.0% | 7.0% |
| 16.23 | 1,429 | 1,376 | 1,424 | 1,434 | 1,536 | 7.5% | 7.1% |
| 16.24 | 530 | 524 | 553 | 568 | 650 | 22.6% | 14.4% |
| 16.29 | 413 | 449 | 522 | 535 | 540 | 30.8% | 0.9% |
| Subtotal 16 | 10,370 | 10,561 | 10,653 | 10,683 | 11,836 | 14.1% | 10.8% |
| 31 | 20,399 | 21,115 | 22,333 | 22,183 | 23,481 | 15.1% | 5.9% |
| Total 16 + 31 | 30,769 | 31,676 | 32,986 | 32,866 | 35,317 | 14.8% | 7.5% |

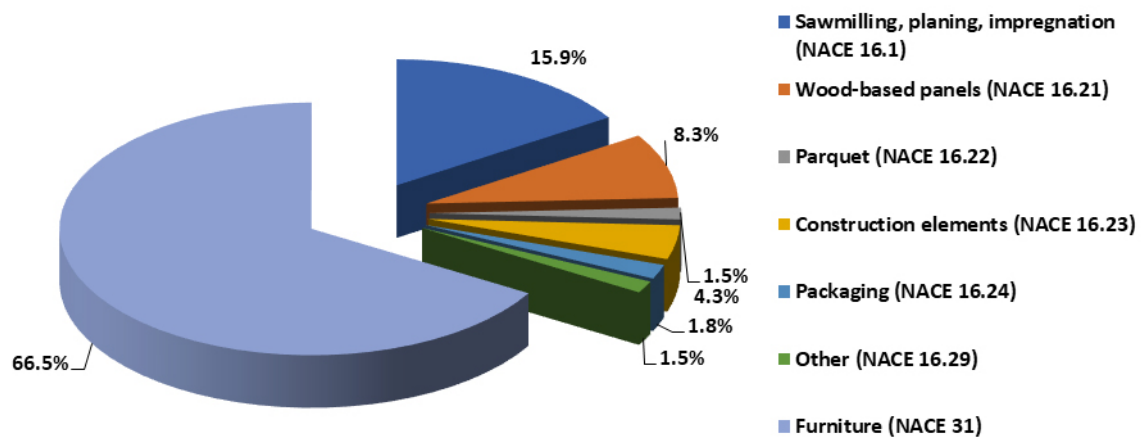
Source: Eurostat

The overall value of EU-28 exports of woodworking products exceeded 35 billion EUR in 2017 which was 7.5% more than in 2016. Exports of woodworking products *stricto sensu* continued to grow but at a higher speed by 8.7% in 2017, reflecting increases of exports of all sub-sectors, and especially of veneer and wood-based panels (NACE 16.21) and packaging (NACE 16.24).

Exports of the furniture industry and of sawmilling, planing and impregnation upturned by 5.9% and 13.2% respectively.

Furniture (NACE 31) accounted for 66.5% of the extra-EU exports of woodworking products in 2017. Sawmilling products (NACE 16.1) accounted for a share of 15.9% of exports and other wood products (NACE 16.2) for a share of 17.6%.

Figure 2.5: Extra-EU exports 2017 - Relative importance of the NACE sub-sectors



Source: Eurostat

If one does not take transit trade into consideration, the 28 Member States exports outside the EU amounted to 15.4% of their overall production in 2017. The woodworking

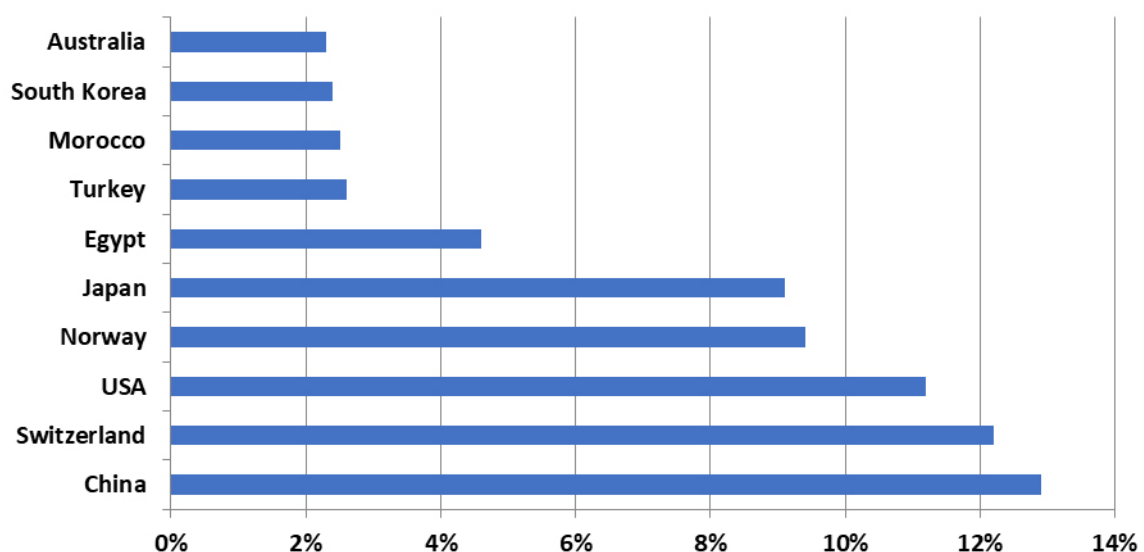
industries *stricto sensu* exported about 9.4% while the furniture sector sold 22.6% of its production outside the EU.

2.5 Destination of Exports

In 2017, the EU woodworking industries exported primarily to China, Switzerland, the USA, Norway and Japan which accounted for shares of 12.9%, 12.2%, 11.2%, 9.4% and 9.1% of extra-EU exports respectively. Egypt followed with 4.6%

of the extra-EU exports. Turkey, Morocco, South Korea and Australia accounted for more than 2% each and completed the top ten destinations of extra-EU exports.

Figure 2.6: Extra-EU exports 2017 - Relative importance of main destinations



Source: Eurostat

2.6 Trade Balance

The trade balance for the woodworking industries is different according to the products. In total, the EU trade balance increased from -1.6 billion EUR in 2016 to -918 billion EUR in 2017. The woodworking industries *stricto sensu* (NACE 16) ended 2017 with a surplus of 2.4 billion EUR while the

furniture industry (NACE 31) registered a negative balance of 3.3 billion EUR. In 2017, all sub-sectors of the woodworking industries *stricto sensu* have positive trade balances except other woodworking products (NACE 16.29) whose balance remained, as usual, negative.

Table 2.8: Trade balance in million EUR, 2013-2017

| NACE code | 2013 | 2014 | 2015 | 2016 | 2017 |
|----------------------|--------------|--------------|-------------|---------------|-------------|
| 16.1 | 1,920 | 1,984 | 1,624 | 1,468 | 2,230 |
| 16.2 | 1,095 | 391 | -91 | -16 | 146 |
| 16.21 | 1,166 | 794 | 624 | 639 | 670 |
| 16.22 | 61 | 26 | 9 | 76 | 77 |
| 16.23 | 925 | 854 | 786 | 774 | 874 |
| 16.24 | 323 | 255 | 192 | 217 | 265 |
| 16.29 | -1,380 | -1,538 | -1,702 | -1,722 | -1,740 |
| Subtotal 16 | 3,015 | 2,375 | 1,533 | 1,452 | 2,376 |
| 31 | 1,827 | 153 | -2,030 | -3,043 | -3,294 |
| Total 16 + 31 | 4,842 | 2,528 | -497 | -1,591 | -918 |

Source: Eurostat

2.7 Apparent Consumption

Apparent consumption of wood products grew further by 3.2% in 2017 compared to 2016 and exceeded 230 billion EUR. The consumption of products from the woodworking industries *stricto sensu* increased by 3.1%, while the

apparent consumption of furniture rose by 3.5%. The other woodworking products (NACE 16.2) improved by 4.1% in 2017 while the sawmill, planing and impregnation products (NACE 16.1) sector remained stable.

Table 2.9: Apparent consumption per sub-sector in million EUR, 2013-2017

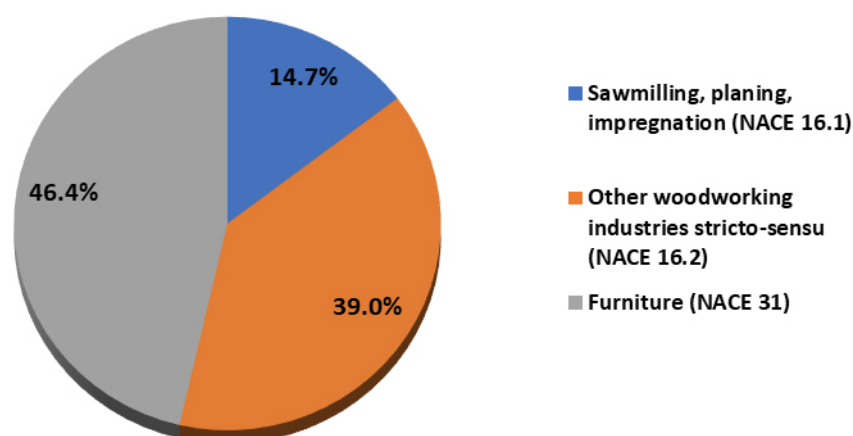
| NACE code | 2013 | 2014 | 2015 | 2016 | 2017 | 17/13 | 17/16 |
|----------------------|----------------|----------------|----------------|----------------|----------------|--------------|-------------|
| 16.1 | 31,061 | 33,337 | 33,866 | 33,710 | 33,817 | 8.9% | 0.3% |
| 16.2 | 78,127 | 82,758 | 86,789 | 86,372 | 89,929 | 15.1% | 4.1% |
| Subtotal 16 | 109,188 | 116,095 | 120,655 | 120,082 | 123,746 | 13.3% | 3.1% |
| 31 | 85,906 | 91,965 | 99,347 | 103,497 | 107,080 | 24.6% | 3.5% |
| Total 16 + 31 | 195,093 | 208,061 | 220,002 | 223,579 | 230,826 | 18.3% | 3.2% |

Source: Eurostat

In this analysis, the consumption of sawmill products (NACE 16.1) amounted to 33.8 billion EUR and accounted for 14.7% of the total consumption of wood products in 2017. The consumption of other woodworking products (NACE 16.2)

almost reached 90 billion EUR and represented 39% of the total consumption of wood products while the consumption of furniture (NACE 31) exceeded 107 billion EUR, meaning a relative consumption of 46.4%.

Figure 2.7: Apparent consumption 2017 - Breakdown per NACE sub-sector



Source: Eurostat

2.8 Employment

The figures on employment in the woodworking sector provide an indication of the overall employment, although it should be borne in mind that some countries do not take into account firms with less than 20 employees. Thus, the global figures tend to substantially underestimate the

employment in small and medium-sized industrial sectors. Given the SME structure of the woodworking industries, the actual total number of employees in the EU-28 wood industries should be estimated at substantially more than 2 million in 2017.

Table 2.10: Employment in the EU woodworking industries, 2013-2017

| NACE code | 2013 | 2014 | 2015 | 2016 | 2017 | 17/13 | 17/16 |
|---------------|-----------|-----------|-----------|-----------|-----------|-------|-------|
| 16.1 | 244,649 | 249,178 | 248,062 | 244,526 | 238,677 | -2.4% | -2.4% |
| 16.2 | 722,215 | 732,080 | 726,810 | 726,997 | 731,417 | 1.3% | 0.6% |
| Subtotal 16 | 966,864 | 981,258 | 974,872 | 971,523 | 970,094 | 0.3% | -0.1% |
| 31 | 972,649 | 954,857 | 974,931 | 1,006,386 | 1,018,896 | 4.8% | 1.2% |
| Total 16 & 31 | 1,939,513 | 1,936,115 | 1,949,803 | 1,977,909 | 1,988,990 | 2.6% | 0.6% |

Source: Eurostat

According to the Eurostat data, employment in the woodworking industries rose by 0.6% in 2017 but remained below the 2 million threshold. Employment increased both in the woodworking industries *stricto sensu* (+0.3%) and

in the furniture sector (+4.8%). Within the woodworking industries *stricto sensu*, decrease of employment was observed in the sawmill sector (-2.4%) while employment increased by 0.6% in the other woodworking industries.



Table 2.11: Employment in the EU woodworking and furniture industries per EU Member State, 2013-2017

| number of employees | 2013 | 2014 | 2015 | 2016 | 2017 | 17/13 | 17/16 |
|---------------------|------------------|------------------|------------------|------------------|------------------|-------------|-------------|
| Austria | 62,009 | 61,013 | 60,433 | 59,997 | 60,673 | -2.2% | 1.1% |
| Belgium | 24,573 | 25,002 | 23,785 | 23,492 | 24,711 | 0.6% | 5.2% |
| Bulgaria | 38,376 | 38,787 | 39,041 | 39,347 | 39,505 | 2.9% | 0.4% |
| Croatia | 26,635 | 26,121 | 26,486 | 27,750 | 28,833 | 8.3% | 3.9% |
| Cyprus | 2,942 | 2,690 | 2,619 | 2,715 | 2,885 | -1.9% | 6.3% |
| Czech Republic | 81,707 | 80,338 | 80,431 | 80,469 | 80,209 | -1.8% | -0.3% |
| Denmark | 20,053 | 20,298 | 20,476 | 17,505 | 17,521 | -12.6% | 0.1% |
| Estonia | 23,118 | 24,290 | 25,126 | 25,373 | 25,794 | 11.6% | 1.7% |
| Finland | 30,030 | 28,776 | 27,957 | 27,838 | 26,787 | -10.8% | -3.8% |
| France | 121,815 | 116,883 | 109,228 | 104,758 | 104,500 | -14.2% | -0.2% |
| Germany | 279,440 | 274,914 | 282,699 | 278,867 | 277,205 | -0.8% | -0.6% |
| Greece | 14,874 | 15,325 | 15,669 | 18,026 | 17,593 | 18.3% | -2.4% |
| Hungary | 33,402 | 34,024 | 35,899 | 36,745 | 37,101 | 11.1% | 1.0% |
| Ireland | 8,208 | 8,644 | 8,984 | 9,445 | 9,528 | 16.1% | 0.9% |
| Italy | 263,847 | 249,913 | 239,251 | 237,872 | 240,846 | -8.7% | 1.3% |
| Latvia | 30,825 | 32,390 | 32,113 | 32,225 | 31,712 | 2.9% | -1.6% |
| Lithuania | 46,264 | 49,856 | 50,610 | 51,485 | 50,821 | 9.8% | -1.3% |
| Luxembourg | 169 | 159 | 163 | 166 | 173 | 2.4% | 4.2% |
| Malta | 1,203 | 1,277 | 1,314 | 1,282 | 1,558 | 29.5% | 21.5% |
| Poland | 264,642 | 282,015 | 297,638 | 310,779 | 316,457 | 19.6% | 1.8% |
| Portugal | 57,000 | 57,140 | 58,476 | 59,985 | 61,569 | 8.0% | 2.6% |
| Romania | 119,796 | 118,471 | 120,613 | 120,606 | 116,531 | -2.7% | -3.4% |
| Slovakia | 33,828 | 37,659 | 39,122 | 35,835 | 37,799 | 11.7% | 5.5% |
| Slovenia | 14,306 | 14,262 | 14,259 | 14,541 | 14,736 | 3.0% | 1.3% |
| Spain | 108,634 | 102,839 | 102,491 | 105,724 | 111,140 | 2.3% | 5.1% |
| Sweden | 47,121 | 47,390 | 49,077 | 48,257 | 48,886 | 3.7% | 1.3% |
| The Netherlands | 37,327 | 35,828 | 36,540 | 38,057 | 39,693 | 6.3% | 4.3% |
| United Kingdom | 147,369 | 149,811 | 149,303 | 168,768 | 164,224 | 11.4% | -2.7% |
| EU 28 | 1,939,513 | 1,936,115 | 1,949,803 | 1,977,909 | 1,988,990 | 2.6% | 0.6% |

Source: Eurostat

Among the 28 Member States, and thanks to a further increase of 1.8%, Poland consolidated its leading position in the employment ranking in the woodworking industries (NACE 16 + 31). Poland is above the 300,000 jobs threshold since 2016. Malta (+21.5%), Cyprus (+6.3%), Slovakia (+5.5%),

Belgium (+5.2%) and Spain (+5.1%) showed the most significant increases while Finland (-3.8%) and Romania (-3.4%) experienced the largest decreases in employment in 2017.

Table 2.12: Employment in the EU woodworking and furniture industries per EU Member State, 2017

| number of employees | 16 | 16.1 | 16.2 | 31 | 16 + 31 |
|---------------------|----------------|----------------|----------------|------------------|------------------|
| Austria | 33,433 | 10,701 | 22,732 | 27,240 | 60,673 |
| Belgium | 12,155 | 1,774 | 10,381 | 12,556 | 24,711 |
| Bulgaria | 16,775 | 6,492 | 10,283 | 22,730 | 39,505 |
| Croatia | 17,998 | 7,677 | 10,321 | 10,835 | 28,833 |
| Cyprus | 1,951 | 10 | 1,941 | 934 | 2,885 |
| Czech Republic | 54,303 | 7,813 | 46,490 | 25,906 | 80,209 |
| Denmark | 8,246 | 1,038 | 7,208 | 9,275 | 17,521 |
| Estonia | 17,982 | 5,421 | 12,561 | 7,812 | 25,794 |
| Finland | 20,101 | 5,696 | 14,405 | 6,686 | 26,787 |
| France | 59,100 | 17,800 | 41,300 | 45,400 | 104,500 |
| Germany | 131,652 | 24,956 | 106,696 | 145,553 | 277,205 |
| Greece | 6,820 | 1,008 | 5,812 | 10,773 | 17,593 |
| Hungary | 18,264 | 4,210 | 14,054 | 18,837 | 37,101 |
| Ireland | 5,200 | 1,111 | 4,089 | 4,328 | 9,528 |
| Italy | 104,277 | 13,507 | 90,770 | 136,569 | 240,846 |
| Latvia | 24,748 | 12,885 | 11,863 | 6,964 | 31,712 |
| Lithuania | 21,471 | 7,215 | 14,256 | 29,350 | 50,821 |
| Luxembourg | 0 | 0 | 0 | 173 | 173 |
| Malta | 285 | 0 | 285 | 1,273 | 1,558 |
| Poland | 127,382 | 37,029 | 90,353 | 189,075 | 316,457 |
| Portugal | 29,075 | 4,983 | 24,092 | 32,494 | 61,569 |
| Romania | 51,537 | 26,254 | 25,283 | 64,994 | 116,531 |
| Slovakia | 23,741 | 9,772 | 13,969 | 14,058 | 37,799 |
| Slovenia | 8,708 | 2,455 | 6,253 | 6,028 | 14,736 |
| Spain | 52,319 | 7,126 | 45,193 | 58,821 | 111,140 |
| Sweden | 34,015 | 11,627 | 22,388 | 14,871 | 48,886 |
| The Netherlands | 14,526 | 1,592 | 12,934 | 25,167 | 39,693 |
| United Kingdom | 74,030 | 8,525 | 65,505 | 90,194 | 164,224 |
| EU 28 | 970,094 | 238,677 | 731,417 | 1,018,896 | 1,988,990 |

Source: Eurostat

In terms of employment, the furniture industry represented half of the jobs (51%), the sawmill industry accounted for 12% of the employment while the other sub-sectors accounted for 37%. Again this year, in the sawmill industry

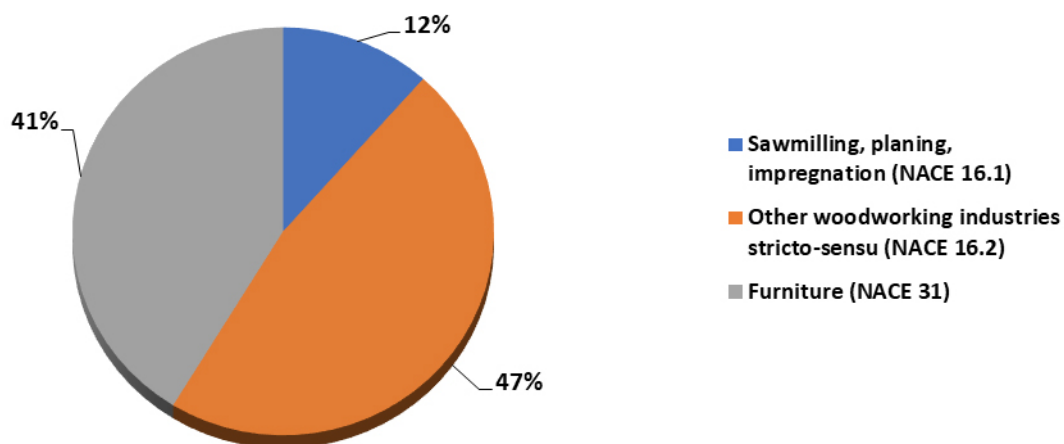
(NACE 16.1) and the furniture sector (NACE 31), most people were employed in Poland. Germany continues to dominate the other sub-sectors (NACE 16.2).

2.9 Number of Enterprises

According to Eurostat, the woodworking industries counted almost 300,567 companies in 2017, meaning an increase of about 11,991 companies compared to 2016. Among these 300,567 companies, 120,000 were active in the furniture business (NACE 31) while the sawmill industry (NACE 16.1) and the other sub-sectors of woodworking products (NACE 16.2) accounted for roughly 33,721 and 134,855 companies

respectively. These figures remain underestimations since small companies are not necessarily taken into account given the Member States' reporting. In the furniture and the construction elements sectors, the number of small companies is considerable and therefore, the real number of firms could be estimated at more than 350,000 companies.

Figure 2.8: Number of enterprises 2017 - Breakdown per NACE sub-sector



Source: Eurostat



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3. Economic overview of the wood markets

3.1 Wood raw materials

In the UNECE Region (Europe, Commonwealth of Independent State Countries and North America) in 2017 total removals of wood in the rough reached 1.35 billion m³. This figure was projected to rise to 1.367 billion m³ in 2018 and 1.37 billion m³ in 2019.

Wood fuel represents overall 16.7% of total removals of wood in the rough in the UNECE region. This figure was expected to slightly increase to 16.8% in 2018. There are however significant differences at regional and country level.

In Europe, up to 23.5% of wood removed in the rough was used for fuel. Such figure was expected to slightly decline to 23.4% in 2018 and remain stable in 2019. At country level, the variance is considerable: wood fuel represents a remarkable 93% of total wood removed in Albania, 85% in North Macedonia, 83% in Serbia, while in Western Europe the wood fuel share is especially high in Italy (a remarkable 83%), Denmark (58%), and France (51%). Conversely, in countries such as the UK (19%), Germany (also 19%), Finland (12%), Sweden (10%), and Slovakia (6%) the wood fuel share is much lower.

In the CIS region in 2017 the wood fuel share was 14.7%, a figure which might slightly decline, while in North America the wood fuel share is at around 11.7%, a figure which is projected to remain stable in 2018 and 2019. Differences within North America are significant, as Canada's share is just 1.3% while the US share is 15.3%.

However, UNECE/FAO recommends taking these data with a pinch of salt: "Estimates of roundwood volumes removed

from forests for fuel are highly unreliable because few countries have consistent methods for collecting relevant data for this increasingly important end use; nevertheless, it is clear that a fairly large share of forest removals are used for energy purposes." (UNECE/FAO Forest Products Annual Market Review 2016-2017). Overall, "data on woodfuel removals from forests are underreported in many countries" (UNECE/FAO Forest Products Annual Market Review 2017-2018).

Forestry accounts for more than 60% of all EU domestic biomass supplied for energy purposes: in 2016, direct supply of woody biomass from forests and other wooded land contributed 32.5% (44 Mtoe), and indirect supply of wood contributed another 28.2% (38 Mtoe) (Source: JRC, Brief on biomass for energy in the European Union).

As regards industrial roundwood, it makes up slightly more than 83% of total removals of wood in the rough in the UNECE region, with significant differences across the region. Indeed, in Europe its share is 76.5%, while in the CIS region is 85% and in North America 88%. Of the total industrial roundwood removals of 1.129 billion m³ in the UNECE in 2017 (+1% vs 2016, a further increase of around 1% was expected in 2018), 60% was accounted for by logs (the rest is mainly accounted for by pulpwood). This figure is expected to remain stable over the next couple of years. At regional level there are differences: the logs share in Europe is around 56% (projected to remain stable), in the CIS Countries 67% (also projected to remain stable) and in North America 60% (expected to somewhat increase in 2019).

Table 3.1: Industrial Roundwood main indicators, UNECE Region, 2013-2018 (1,000 m³)

| UNECE region | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 17/16 | 18/17 |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-------|-------|
| Removals | 1,069,277 | 1,097,135 | 1,104,744 | 1,126,639 | 1,129,471 | 1,138,775 | 0.3 | 0.8 |
| Imports | 62,098 | 61,696 | 59,774 | 62,137 | 60,261 | 55,043 | -3.0 | -8.7 |
| Exports | 90,012 | 91,840 | 83,760 | 87,383 | 89,740 | 85,964 | 2.7 | -4.2 |
| Net trade | 27,914 | 30,144 | 23,986 | 25,247 | 29,479 | 30,921 | | |
| Consumption | 1,041,364 | 1,066,991 | 1,080,758 | 1,101,392 | 1,099,992 | 1,107,853 | -0.1 | 0.7 |

Source: FAO 2018 and EOS re-elaboration, 2018 data are estimates

In general, the demand for wood (both industrial roundwood and wood fuel) is growing across the Eurasian landmass, though in 2019 the pace of growth is expected to significantly slow down in Europe. Total log use rose in Europe and the CIS region, but in North America it was expected to fall in 2018 and slightly rebound in 2019.

Table 3.1 shows the main market indicators in the last 6 years in the UNECE region (2018 forecasts, data are shown in 000 m³). Apparent consumption has stagnated in 2017 but was expected to grow in 2018.

The consumption of industrial roundwood in the UNECE region has followed a similar trend to that of production in the last five years, with consumption increasing steadily for softwood logs and remaining fairly flat for hardwood logs. The global trade of softwood logs increased in 2016 and 2017 to reach its second-highest level in ten years. An estimated 84 million m³ of softwood logs were traded internationally in 2017, of which the UNECE region exported 75%. However, preliminary results for 2018 show that UNECE countries seem to have traded less logs than in 2017.

3.1.1. Europe – Industrial Roundwood

Table 3.2: Industrial Roundwood main indicators, Europe, 2013-2018 (1,000 m³)

| Europe | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 17/16 | 18/17 |
|-------------|---------|---------|---------|---------|---------|---------|-------|-------|
| Removals | 366,929 | 383,446 | 388,422 | 396,055 | 400,973 | 403,277 | 1.2 | 0.6 |
| Imports | 55,729 | 55,972 | 53,424 | 54,240 | 52,136 | 46,918 | -3.9 | -10.0 |
| Exports | 43,132 | 44,399 | 40,782 | 41,707 | 44,297 | 41,045 | 6.2 | -7.3 |
| Net trade | -12,598 | -11,573 | -12,643 | -12,533 | -7,839 | -5,874 | | |
| Consumption | 379,526 | 395,019 | 401,065 | 408,587 | 408,812 | 409,151 | 0.1 | 0.1 |

Source: FAO 2018 and EOS re-elaboration, 2018 data are estimates

Industrial roundwood (which includes mainly logs and pulpwood, and a residual category made up of pitprops, poles, posts) removals in 2017 in Europe reached 401 million m³, a figure somewhat higher than previously forecast, up 1.2% vs the previous year. A further growth was expected in 2018. From the sawmill industry point of view, it is interesting to note that this increase is mainly due to a growth in softwood logs removals (+ 1% to 196 million m³ in 2018). Early projections for 2018 point to stable removals. Hardwood logs removals are instead steady, with the only significant growth taking place in Turkey. Pulpwood softwood removals were also growing.

Sweden occupied the first place in the industrial roundwood removals ranking in 2017, accounting for 65.3 million m³ (of which 36.7 million m³ of logs). A distant second came Finland (55.5 million m³, of which 24.7 million m³ of logs), followed by Germany (43.5 million m³, of which 29.8 million m³ of logs), Poland (40 million m³, of which 17.8 million m³ of logs) and France (25.3 million m³, of which 16.7 million m³ of logs). It is interesting to note that in the five years to 2017 industrial roundwood removals were overall up 4% in France and Germany, while there was a double digit

increase in Poland (+19%) and Finland (+12%). Sweden's removals were up 7% in the same period. Consumption has been instead stable both in 2017 and was expected to remain so also in 2018 at around 409 million m³, having recorded significant growth in the years 2013-2016 and up by 68 million m³ from the trough of 341 million m³ observed in 2009.

When it comes to trade, Europe continues to be a net importer of industrial roundwood, though the deficit is reducing. A higher and higher reliance on intra-European materials is noticeable: in the six years to 2018 imports decreased by more than 8 million m³, whereas exports were down by 2 million m³. Both imports and exports decreased in 2018. Regarding logs, UNECE/FAO reports that "Germany has become a major importer of softwood logs in the past ten years. It imported record-high log volumes in 2016 and 2017 to supply its expanding sawmilling sector. The two major exporters of sawlogs to Germany are the Czech Republic and Norway, together supplying more than 50% of the import volume in the last five years". The most important intra-European trade flow remains the export of Czech Republic softwood logs to Austria, which are part of

the same industrial region in the sawmill sector. Germany and Austria are the second and third largest logs importers in the world after China. At 4.5 million m³ Czech exports of softwood logs are three times as much as the second largest European exporter, Norway (1.5 million m³ in 2018). Finland's logs imports have declined substantially in the last decade, and the Finnish forest industry is now much less reliant than it once was on imported wood raw materials. Sweden's softwood log imports increased for the second consecutive year in 2017, to 5.6 million m³.

When it comes to hardwood logs, France and Germany remain the largest exporters accounting for 44% of export logs. A significant chunk of these exports is directed to Asian countries such as China, and over the last few years, some European countries have observed a rise in exports to China also of softwood logs. France, Belgium, and Germany are the countries most affected. In 2017 of all traded logs (so the ones processed within the borders of the country where they are harvested are not included in this calculation) in

Europe, 2.5% of spruce logs were exported to China, 6% of pine logs, 30% of oak logs, 22% of beech logs. In 2018 data is still very tentative. But it looks like around 5% of spruce logs were exported to China, 12% of pine logs, 31% of oak logs, 23% of beech logs (Eurostat, 2019).

It is worth emphasizing the high amount of damaged wood in Europe in 2017-2018, when the continent started to be ravaged by a series of storms in between frequent drought. Bug infestation also took a heavy toll on the forests. Overall, from the summer of 2017 until the end of 2018 the amount of storm-damaged wood was about 57 million m³ (Germany 20 million m³, Italy 15, Poland 12, Austria 4, Czech Republic 3). Drought and insect infestation caused a volume of damaged wood equal to 20-25 million m³ in Czech Republic, followed by Germany with 10-12 million m³. So, these calamities resulted in more than 100 million m³ of damaged wood in Europe in 2017-2018 (EUWID, 2019). Calamities look set to hit Europe hard once again in 2019.

3.1.2 CIS Region – Industrial Roundwood

The timber harvest in the CIS region – which includes, *inter alia*, Russia, Ukraine, and Belarus – has been growing for a number of years. In the six years to 2018 production of the region rose by 25 million m³.

However, the figures below shall be taken with a pinch of salt as Ukraine did not provide any data since 2014, while in Russia, in addition to official figures, the Government has

acknowledged the existence of undocumented removals. What is more, the amount of illegal harvesting remains unclear and estimates of the illegal harvest vary substantially. The undocumented removals seem to particularly affect the Russian Far East. However, according to the UNECE/FAO, “there is general consensus that non-documented harvest is declining in the Russian Federation, the result of stricter controls”.

Table 3.3: Industrial Roundwood main indicators, CIS Region, 2013-2018 (1,000 m³)

| CIS | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 17/16 | 18/17 |
|-------------|---------|---------|---------|---------|---------|---------|-------|-------|
| Removals | 199,660 | 208,051 | 210,286 | 219,304 | 220,219 | 224,894 | 0.4 | 2.1 |
| Imports | 571 | 553 | 542 | 464 | 479 | 479 | 3.3 | 0.0 |
| Exports | 25,158 | 26,782 | 25,357 | 25,457 | 23,876 | 23,353 | -6.2 | -2.2 |
| Net trade | 24,587 | 26,229 | 24,815 | 24,993 | 23,397 | 22,874 | | |
| Consumption | 175,074 | 181,822 | 185,471 | 194,311 | 196,822 | 202,020 | 1.3 | 2.6 |

Source: FAO 2018 and EOS re-elaboration, 2018 data are estimates

Based on the available and official figures, removals of both softwood and hardwood logs are increasing in Russia – this is the trend that determines the overall growth in the region. Removals of softwood logs was set to reach 120.2 million m³ in 2018, up from 117.9 million m³. The Russian timber harvest of 2017 set a 20-year record high volume. The Russian government expects the country's timber

harvest to increase by 50% by 2050 (EUWID, 2018). It is interesting to note that the increase in timber removals was uneven across the Russian Federation: courtesy of a strong Chinese demand, log production and consumption have particularly increased in the Far East. Also, most investments in industry capacity in recent years have been in the provinces of Siberia and Russia Far East. In the period

2013-2017, the harvest volume increased by 30% in Siberia and the Far East, was practically unchanged in the Russian North West, and fell in the central provinces. However, Russia supplied in 2017 about 10 million m³ of softwood sawlogs to the Chinese market compared with 25 million m³ in 2007. According to preliminary statistics, Russian exports of softwood sawlogs to China further decreased in 2018 to 9.2 million m³ (EUWID, 2019). Overall, exports of softwood logs are around 15 million m³. The Russian Federation is the world's second-largest exporter of softwood logs after New Zealand and the largest exporter of hardwood logs. Russian hardwood log exports trended upward in the eight years to 2017, to 7.5 million m³, with more than 90% going to Finland and China (mainly birch).

Belarus, due to its geographical proximity, is an interesting country for Europe. Removals of industrial roundwood look like being in the region of 14.5 million m³, making it a relatively large producer. Removals seem to be on the rise and are projected to further increase. Logs' production stands at 7.6 million m³. In 2015, the President of Belarus signed a law banning export sales of pulpwood, veneer and saw-logs, which has entered into force in 2016. The President himself, by decree, can make exceptions. While there is evidence that such decrees were issued (for a certain species, diameter class, and quality) since the ban is in place, there is obviously a lack of predictability that discourages aspiring purchasers of Belarusian unprocessed logs. Politically, it looks like Belarus is tentatively opening to Western Europe. According to an article of *The Economist* (January 2019), President Lukashenko is allowing the

development of a real private sector and wants to mend fences with the United States. Mr Lukashenko has also turned to China, luring its investors and lenders. However, Russia remains Belarus' largest trading partner, so the delicate balancing act is expected to continue.

Data from Ukraine has not been updated for some years. Removals of logs seem to be around 7 million m³ (softwood 5.8 million m³, hardwood 1.3 million m³). Under the existing Ukrainian legislation, log exports from the country are banned for ten years as of 1 November 2015, with the exception of pine log exports, which were banned from January 2017. It remains to be seen for how long the ban will be in force. The EU Commission and Ukraine are holding talks, but with presidential and parliamentary elections in Ukraine in 2019 the situation is unlikely to change any soon. While the ban represents an infringement of the Deep and Comprehensive Free Trade Agreement between the EU and Ukraine, Ukraine's path toward democracy remains the key priority for the EU and the EU financial support aims at helping Ukraine in implementing democratic mechanisms, the rule of law, and human rights in addition to reduce poverty and create jobs in Ukraine. Indeed, on 30 November, the European Commission, on behalf of the EU, approved the disbursement of the first €500 million of the new Macro-Financial Assistance (MFA) programme to Ukraine. With this disbursement, the total Macro-Financial Assistance extended to Ukraine by the EU since 2014 will reach €3.3 billion, the largest amount of such assistance directed at any non-EU country.

3.1.3 North America – Industrial roundwood

Table 3.4: Industrial Roundwood main indicators, North America, 2013-2018 (1,000 m³)

| North America | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 17/16 | 18/17 |
|---------------|---------|---------|---------|---------|---------|---------|-------|-------|
| Removals | 502,688 | 505,637 | 506,036 | 511,280 | 508,279 | 510,604 | -0.6 | 0.5 |
| Imports | 5,798 | 5,171 | 5,807 | 7,433 | 7,646 | 7,646 | 2.9 | 0.0 |
| Exports | 21,723 | 20,658 | 17,621 | 20,219 | 21,567 | 21,567 | 6.7 | 0.0 |
| Net trade | 15,925 | 15,487 | 11,814 | 12,786 | 13,921 | 13,921 | | |
| Consumption | 486,764 | 490,150 | 494,222 | 498,494 | 494,358 | 496,683 | -0.8 | 0.5 |

Source: FAO 2018 and EOS re-elaboration, 2018 data are estimates

In North America industrial roundwood removals over the last few years peaked in 2016. Overall in 2018 they were set to remain stable. Relatively to their huge harvest, imports and exports do not account for a big percentage, though the US and Canada do remain the third and fourth largest

exporters in the world of industrial roundwood.

The US accounts for more than 69% of total North America' removals; the US share has been somewhat declining over the last couple of years.

In a similar fashion to Europe, pest infestations have been taking a heavy toll on Canadian forests. The UNECE/FAO reports that “About 50% of Canada’s timber harvest is in the province of British Columbia (BC). According to the British Columbian Ministry of Forest’s 2015 assessment, the more-than-decade-long pine beetle infestation there has killed more than 730 million m³ of merchantable pine volume (about 54% of the province’s total merchantable pine timber inventory). In the Central Interior, the worst-hit region, beetles have destroyed 80-90% of the pine forests.” Overall, BC sawlog harvests in 2020 will be 20% below 2000 levels. Canada’s roundwood harvest peaked in the 2000s and is now shrinking. The long-term sustainable harvest is expected to somewhat decline. As a result, lumber output is expected to be relatively flat in the coming years (Russ Taylor, 2018).

As far as the US is concerned, “the UNECE/FAO (2018) data on US timber harvest (removals of industrial roundwood) was about 355 million m³ in 2017, practically the same as

in the previous four years. This appears to be too low given the high log demand in the US forest industry; it might also be expected that the timber harvest in 2017 would be higher than in 2013 because forest industry production increased significantly over the period. In contrast to the official data, expert analysis based on derived log consumption by the forest industry and net log trade indicates that actual removals of industrial roundwood in 2017 were closer to 396 million m³, 4.2% higher than in 2013”.

Regarding trade, Canada’s exports of softwood logs declined in 2017 to 7.4 million m³, down from 7.6 million m³ in 2016. Deliveries to Japan and to the US dropped (in the latter case, to their lowest level in six years). China continued to be the major market for Canadian logs, with shipments reaching 3.6 million m³, the second-highest volume on record. China remains the main market even for US logs. Overall, softwood log exports from the US increased by 11.5% in 2017, to 10.8 million m³. The US South is becoming a more and more important region in the export of pine logs.

3.1.4 Global Focus and Extra Unece region – Industrial Roundwood

Table 3.5: World largest producers, exporters and importers of roundwood, 2017, m³

| Removals | | Exports | | Imports | |
|--------------------------|-------------|--------------------------|------------|--------------------------|------------|
| United States of America | 355,208,132 | Russian Federation | 19,422,941 | China | 55,259,750 |
| Russian Federation | 197,610,892 | New Zealand | 19,246,931 | Germany | 8,680,584 |
| China | 161,711,200 | United States of America | 13,483,453 | Austria | 8,649,038 |
| Canada | 153,070,600 | Canada | 8,083,247 | Sweden | 7,695,283 |
| Brazil | 145,102,000 | Czechia | 6,583,336 | Canada | 6,491,400 |
| Indonesia | 74,041,000 | Australia | 4,322,698 | India | 4,898,178 |
| Sweden | 68,469,599 | France | 4,084,920 | Finland | 4,830,686 |
| Finland | 55,330,267 | Germany | 3,963,309 | Republic of Korea | 3,715,161 |
| India | 49,517,000 | Norway | 3,544,337 | Belgium | 3,636,878 |
| Chile | 45,987,000 | Papua New Guinea | 3,261,294 | Japan | 3,265,702 |
| Germany | 43,561,600 | Solomon Islands | 3,156,000 | Italy | 2,357,077 |
| Poland | 40,099,400 | Poland | 2,821,842 | Portugal | 2,000,368 |
| Australia | 33,143,094 | Latvia | 2,651,872 | Czechia | 1,898,137 |
| New Zealand | 29,097,000 | Malaysia | 2,571,843 | Poland | 1,703,972 |
| France | 25,324,000 | Estonia | 2,556,752 | Viet Nam | 1,504,097 |
| Japan | 22,645,000 | Slovenia | 2,536,010 | Romania | 1,477,512 |
| Viet Nam | 20,153,820 | Belarus | 1,975,700 | Latvia | 1,228,879 |
| Turkey | 19,462,000 | Slovakia | 1,955,283 | France | 1,223,712 |
| Czechia | 17,011,000 | Lithuania | 1,558,693 | Indonesia | 1,172,765 |
| Spain | 14,642,343 | Cameroon | 1,420,371 | United States of America | 1,154,212 |

Source: FAO 2018 and EOS re-elaboration

Outside the UNECE region, China, Brazil, and Indonesia are major producers. It is interesting to notice that at around 162 million m³ in 2017 Chinese removals slightly declined compared to 2016. Conversely imports increased by more than 5% in 2016 and further rose in 2017 (more information on this is provided below).

Regarding exports, New Zealand is together with Russia the world largest exporter (at 19.2 million m³). This increase has been driven by Chinese appetite for softwood logs. In 2017 exports to China kept going up. Newsroom reports that the New Zealand state is trying to find solutions to break free from the commodity log trap. The Minister of Forests and

Regional Economic Development underlines that processing in New Zealand needs to increase and that New Zealand is “the last major supplier to allow unfettered exports of logs” (Source: <https://www.newsroom.co.nz/2018/11/01/302618/oram-feeding-chinas-insatiable-appetite-for-logs>). In a similar fashion to New Zealand, even Australia has seen its exports to China soar. Overall, Australia has rapidly become a major exporter of softwood logs and was the world’s sixth largest log exporter in 2017. In 2012, Australia’s annual exports totaled only 1.2 million m³. The table below is about the Chinese imports of softwood logs in the 5 years to 2017. It is evident that the two Oceanian countries are the ones which are supplying more and more logs to China.

Table 3.6: World’s largest exporters of softwood logs to China, 2013 and 2017, million m³

| COUNTRY/YEAR | 2013 | 2017 | % Change |
|--------------------|------|------|----------|
| New Zealand | 11.3 | 13.4 | 19 |
| Russian Federation | 9.3 | 8.7 | -6 |
| United States | 5.3 | 4.8 | -9 |
| Australia | 1.6 | 4.2 | 163 |
| Canada | 2.7 | 2.8 | 4 |
| Other | 2.8 | 3 | 7 |
| Total | 32.9 | 36.9 | 12 |

Source: UNECE/FAO, 2018

Other large non-UNECE exports include Papua New Guinea, which is the tenth largest roundwood export country (in 2017 it exported 3.2 million m³, 600,000 m³ less than in 2016) while the Solomon Islands are the eleventh. Czech Republic remains a very important exporter – the largest in Europe. In 2017 its exports reached 6.6 million m³, much higher than in 2016.

Regarding imports, China remains by far the largest world importer with 42% of total industrial roundwood imports; it is impressive to notice that the countries ranked from second to tenth (Germany, Austria, Sweden, Canada, India, Finland, South Korea, Belgium, Japan) imported overall 51 million m³ of industrial roundwood, less than China. Thus, it is evident that the market dynamics of roundwood trade are strongly influenced by China. One key factor leading to this situation – along with the dynamism of the Chinese economy – is the decision of the Chinese government to completely stop commercial logging in natural forests (as opposed to plantations), as reported by the Chinese State Forestry Administration in March 2017. Chinese demand, according to some observers, is expected to remain buoyant over the next few years. Others are a bit warier.

Other relevant non-UNECE roundwood importers include India (4.9 million m³ imported in 2017 vs 5.5 million m³ in 2016), South Korea (3.7 million in 2017 vs more than 4 million in 2016), Japan (3.26 million m³ in 2017 vs 3.65 in 2016).



3.2. Sawn Softwood

The table below shows the main market indicators of the last 6 years in the UNECE region (2018 data are estimates; data are shown in 1000 m³). Overall in the last few years sawn softwood production has been constantly growing. In

2018 the pace of growth was expected to slow down, but that remains to be confirmed. It is interesting to notice the progression of all indicators in the period 2013-2017 with production gaining more than 34 million m³.

Table 3.7: Sawn softwood main indicators, UNECE Region, 2013-2018 (1,000 m³)

| UNECE region | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 17/16 | 18/17 |
|--------------|---------|---------|---------|---------|---------|---------|-------|-------|
| Production | 225,784 | 234,172 | 241,591 | 252,127 | 259,502 | 261,221 | 2.9 | 0.7 |
| Imports | 56,957 | 60,936 | 63,274 | 68,816 | 70,259 | 70,161 | 2.1 | -0.1 |
| Exports | 98,135 | 103,188 | 106,381 | 114,293 | 117,905 | 119,101 | 3.2 | 1.0 |
| Net trade | 41,178 | 42,252 | 43,107 | 45,478 | 47,646 | 48,940 | | |
| Consumption | 184,606 | 191,920 | 198,484 | 206,649 | 211,855 | 212,281 | 2.5 | 0.2 |

Source: FAO 2018 and EOS re-elaboration, 2018 data are estimates

The construction industry traditionally plays an important role in determining the market trends of the sawn softwood industry.

In the United States, the construction markets have been growing for some years and look set to rise even in the next couple of years, which bodes well for sawnwood consumption. On the other hand, while the economic cycle is quite mature, US housing starts remain at relatively low level compared with their historic average. Also, there is significant uncertainty on this forecast as in the first quarter of 2019 US housing starts have been below expectations.

At their 86th Conference in Paris, Euroconstruct forecasted that total construction output in Europe in 2018 grow by 2.8% and slow down to a pace of 1.6% in 2019.

In issuing the new forecast, Euroconstruct noted that “In the very short term, confidence for households is reaching a peak in 2018 fuelling the new-residential sector. On a more structural point of view, the 2021 construction market volume would stay still 15 % behind 2007’s level for the EC 19 countries, but when eliminating the extrema situations in Ireland, Spain and Portugal, the level of output would be recovered for the sum of the other countries.”

Furthermore, “The favourable development in construction demand is partly due to robust economic growth and its

positive implications for household income, corporate profits and the state of public finances. Moreover, the low interest rate level, immigration and internal migration flows, as well as the investment backlog that has accumulated in areas like infrastructure since the financial crisis is supporting the upswing. There are also clear constraints on the public sector’s scope to take action.”

Central-Eastern Europe grew faster (+13%) than Western Europe (+2%). The pace of growth is expected to slightly slow down in the next few years. The latest news on the general economy side, however, points to a marked slowdown in the pace of GDP growth which could have an effect also on the construction market.

As far as the construction industry in Russia is concerned, “given the low base effect established after four consecutive years of reductions, along with the increasing political determination to carry out multi-billion initiatives to modernise and expand the country’s civil engineering infrastructure, and to support the renovation and construction of non-residential public buildings, an upward trend is expected to re-emerge in the construction industry in 2019, after an 11% cumulative reduction between 2014 and 2017, followed by a predicted 3% fall in 2018” (Source: <https://www.pmr-cr.com/en/russian-construction-industry-set-to-drop-3-in-2018/>, December 2018).

3.2.1 Europe – Sawn Softwood

Table 3.8: Sawn softwood main indicators, Europe, 2013-2018 (1,000 m³)

| Europe | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 17/16 | 18/17 |
|-------------|--------|---------|---------|---------|---------|---------|-------|-------|
| Production | 98,111 | 102,300 | 105,119 | 108,665 | 109,952 | 110,821 | 1.2 | 0.8 |
| Imports | 31,446 | 34,159 | 34,642 | 36,003 | 37,837 | 37,576 | 5.1 | -0.7 |
| Exports | 45,269 | 47,302 | 47,816 | 49,781 | 51,470 | 51,940 | 3.4 | 0.9 |
| Net trade | 13,823 | 13,142 | 13,174 | 13,778 | 13,632 | 14,364 | | |
| Consumption | 84,287 | 89,158 | 91,945 | 94,887 | 96,320 | 96,458 | 1.5 | 0.1 |

Source: FAO 2018 and EOS re-elaboration, 2018 data are estimates

This sub-chapter is focused on the European countries which are not members of EOS. The EOS countries will be thoroughly analysed subsequently. However, the largest producers of sawn softwood are all members of EOS. Therefore, in order to provide a full picture of the sawn softwood markets in Europe, they need to be mentioned.

Sawn softwood production in Europe has been growing in the period 2012-2018. While there are some significant regional differences which will be analysed more in depth in the EOS market survey, it is worth remarking that the sawn softwood markets looked in a good shape in 2017 and for two thirds of 2018. Subsequently there was a noticeable slowdown. Exports have been doing well for many years but there was a slowdown observed in many countries at the end of 2018. In the five years to 2017 European producers were able to export more than 6 million m³. Overall, the mood in the sector in 2018 was high due to a satisfactory level of sales prices: in some countries a slight decline in production and exports was more than made up for by an increase in sales expressed in value.

Consumption has been on the rise in the observed period. Recovering European construction markets underpinned an increase of over 12 million m³ in the period to 2017. Consumption was set to grow even in 2018.

As said, the major European producers are all EOS countries: Germany, Sweden, Finland, Austria, France. Relatively big non-EOS European producers also include Poland (where, according to the UNECE/FAO, production was expected to slightly grow to 4.5 million m³ in 2018), and Czech Republic, which has a stable production at 4 million m³.

The UNECE/FAO reports that: "Sawmilling capacity in Europe is still capable of increasing production. Investment continues to focus on upgrading existing sawmills rather than initiating greenfield operations."

Regarding consumption, as mentioned above the UK remains a very relevant user in spite of Brexit-related turmoil. At this writing (early April 2019), it is difficult to predict the effect of the Brexit negotiations on the European sawmill industry. The UK will at any rate remain one of the world's largest importer of sawn softwood; long-established seller-customer relationships and geographical proximity will ensure that European producers will continue to have a prominent role in the market. However, a decline of deliveries to the UK – at least in the short-term – cannot be ruled out. In Italy consumption reached 4.9 million m³ but was expected to slow down in 2018-2019 to 4.7 million m³. The five largest consumers of sawn softwood in Europe account for 52% of total consumption in the sub-region – Germany, the UK, France, Austria, Sweden. The Nordic Countries and Austria have the highest per capita consumption of sawn softwood.

As far as overseas exports are concerned, the main markets of European sawn softwood are China, Japan, Egypt and the United States. In 2017 there was a huge increase in exports to China (from the Nordic countries mainly), which reached 3.4 million m³, and to the United States (Germany and Sweden, but also other EU countries) which more than doubled to 1.3 million m³. Japan and Egypt also remain very important markets with Japan absorbing more than 3 million m³ (slightly more than in 2016) and Egypt 2.8 million, down 2% vs 2016. However, there was a marked drop of exports to China in 2018, while the upward march of deliveries to the US continued in the first part of 2018: in H1 2018 US imports of European sawn softwood were twice as high as in H1 2017. Scandinavian exports to Japan decreased in 2018 compared with 2017 and in the second part of 2018 the US market was weaker.

Regarding European imports, flows are mainly intra sub-regional; extra sub-regional imports account for about 20% of imports. Sawn softwood to Europe is imported mainly from CIS countries. Overseas imports to Europe remained marginal in 2017 and early projections show that this trend has continued in 2018.

3.2.2 CIS Region – Sawn Softwood

Table 3.9: Sawn softwood main indicators, CIS Region, 2013-2018 (1,000 m³)

| CIS | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 17/16 | 18/17 |
|-------------|--------|--------|--------|--------|--------|--------|-------|-------|
| Production | 35,198 | 36,178 | 37,318 | 39,674 | 43,790 | 45,048 | 10.4 | 2.9 |
| Imports | 5,224 | 4,981 | 4,621 | 4,781 | 4,985 | 4,985 | 4.3 | 0.0 |
| Exports | 22,186 | 23,902 | 26,048 | 29,099 | 32,470 | 33,740 | 11.6 | 3.9 |
| Net trade | 16,962 | 18,921 | 21,427 | 24,317 | 27,485 | 28,755 | | |
| Consumption | 18,236 | 17,256 | 15,891 | 15,357 | 16,305 | 16,293 | 6.2 | -0.1 |

Source: FAO 2018 and EOS re-elaboration, 2018 data are estimates

Russia accounts for around 87% of total sawn softwood production in the CIS region. Over the period 2013-2018 the region added almost 10 million m³ to production. The region is clearly extremely export-oriented due to the amount of forest resources and relatively low population. Exports have been growing throughout the last 5 years and the trade surplus keeps increasing. As a result of a stronger ruble, the sawmill industry margins in Russia shrank.

Russia is continuing to take advantage of the booming Chinese demand. According to the UNECE/FAO “the export volume of Russian sawn softwood set a new record in 2017 of 28.0 million m³ (+10%, year-on-year). This was the highest growth rate in 12 years (export sales had increased by 17% in 2005, year-on-year, to 14.78 million m³). Sales grew by an average of 5.6% per year in 2006-2016. Export growth was due largely to China, which was the largest consumer of Russian sawn softwood in 2017, increasing purchases by 20% (year-on-year), to 16.1 million m³”. Growth in exports to China have been supported mostly by the establishment of new sawmills and ramp up of existing production capacities. Russian exports were set to be on the rise also in 2018: Timber-online reports that between in the period Jan-Aug 2018, Russia exported 20 million m³ of softwood lumber. Compared to the same period of last year, the growth rate is 7%. The largest increases were registered for neighbouring countries. Exports to China were up 6% to 11.5 million m³ (Source: <https://www.timber-online.net/schneitholz/2018/10/softwood-lumber-exports-russia-january-till-august-2018.html>).

Russian exports to Europe also increased in 2017 with deliveries to the three largest markets (Estonia, Finland and Germany) between 500,000 and 600,000 m³.

Regarding Belarus, investments to add capacity and efficiency have been taking place over the last couple of years. It seems that the strong limitations on export of logs have helped the local industry. According to EUWID, Belarusian exports of softwood lumber keep increasing. Having grown 55% in 2017 compared to 2016, for 2018 the Belarusian Ministry of Forestry forecasted a further 30% growth to around 3 million m³. Some consolidated data until Q3 2018 are available: in the period Jan-Sep 2018, Belarusian exports of softwood lumber increased by 56% to 2.52 million m³ compared to the corresponding period of 2017. Of this, 2.1 million was exported to the EU with Germany, Latvia and Lithuania remaining the main markets: they all imported slightly less than 500,000 million m³. The increase was especially noticeable in Latvia and Lithuania.

Regarding Ukraine, production seems to be at around 2.9 million m³ in 2017, an increase of 400,000 m³ compared with 2016, though the 2017 data are estimates. Ukraine, in spite of a relatively large population of around 45 million people, consumes just around 300,000 m³, thus having one of the lowest sawn softwood consumption pro capita in Europe. The remainder of Ukraine production is exported to Europe and, increasingly, to China.

3.2.3 North America – Sawn Softwood

Table 3.10: Sawn softwood main indicators, North America, 2013-2018 (1,000 m³)

| North America | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 17/16 | 18/17 |
|---------------|--------|--------|--------|---------|---------|---------|-------|-------|
| Production | 92,475 | 95,694 | 99,153 | 103,788 | 105,759 | 105,351 | 1.9 | -0.4 |
| Imports | 20,287 | 21,796 | 24,011 | 28,031 | 27,436 | 27,600 | -2.1 | 0.6 |
| Exports | 30,680 | 31,984 | 32,517 | 35,413 | 33,965 | 33,421 | -4.1 | -1.6 |
| Net trade | 10,393 | 10,189 | 8,506 | 7,382 | 6,529 | 5,821 | | |
| Consumption | 82,083 | 85,506 | 90,648 | 96,405 | 99,230 | 99,530 | 2.9 | 0.3 |

Source: FAO 2018 and EOS re-elaboration, 2018 data are estimates

Production in North America has been healthily growing for a number of years in the five years to 2017 on the back of strong consumption. 13 million m³ have been added over the period 2013-2017. Production is strong on the back of lively markets: consumption increased by around 20 million m³ over the least five years; net trade surplus has massively shrunk with imports increasing faster than exports.

US sawn softwood output was 57.6 million m³ in 2017, up by 3.5% over 2016. Production gains were highest in the US South (+5.1%), followed by the Midwest and Northeast regions (+4.2%) and the US West (+3.0%). Output figures were strong on the back of brisk demand. US softwood lumber consumption has been rising steadily since 2009 from increasing housing starts, repair & remodelling, and overall strong demand (Russ Taylor, 2018). The UNECE/FAO reports that “Demand in North American sawn softwood markets increased steadily in 2017 and the first half of 2018. US housing starts continued to improve but at a slower rate than in previous years, reaching 1.2 million units in 2017 (up by 3.0% compared with 2016; US Census Bureau, 2018).” Single-family housing was on the rise (+9%) whereas multi-family housing fell by 10%. Single-family housing consumes three times as much softwood lumber than multi-family housing. In 2018 housing starts were still strong, but there was mixed news in the second part of the year. The National Association of Home Builders has estimated the full-year total for single-family starts in 2018. The Washington-based lobby group projects last year’s starts came to 876,000, a 3% increase over 2017. While there are signs of slowdown in the market, production is still expected to grow by around 3% in 2019, thanks once again to the US South (Marc Brinkmeyer, International Softwood Conference 2018). A major hindrance is housing construction labour shortages. The broader economic context is difficult to gauge. While the economy still looks strong and jobs are still being created,

the trade tensions with China and general uncertainty at the end of 2018 sent jitters down the spine of markets: the US stock exchange recorded a bad end of the year. Based on all these elements, while growth in the lumber market is expected also in 2019, there is much more uncertainty on the positive outlook as there was for 2018.

Regarding trade, US sawn softwood exports increased by 4.0% in 2017, to 2.9 million m³, with the largest volumes directed to Canada (502,000 m³) and Mexico (490,000 m³). Imports to the US are predominantly from Canada (more than 95%), but European countries such as Sweden and Germany have seen their deliveries to the US soar.

Canadian sawn softwood production was unchanged in 2017, at 48.2 million m³. Canadian softwood lumber production is not projected to increase in the medium-term as the supply of logs will not be increasing. A decades-long spat with the U.S. over lumber is starting to burn Canadian producers. While the first half of 2018 was marked by record prices, the picture now seems less rosy. Prices have plunged 47% from their highs in May, and could fall another 15% in 2019 amid tepid housing starts in the U.S. Meanwhile, Canadian producers are paying average tariffs of more than 20% on timber shipments to the U.S., their biggest customer. The end of the nine-year US–Canada Softwood Lumber Agreement in mid-October 2015 resulted in an 18-month window of duty-free Canadian lumber exports to the US. Preliminary countervailing duties on Canadian lumber came into effect in late April 2017 and antidumping duties in late June 2017. The ruling on injury from the U.S. International Trade Commission came into effect in December 2017, which means that final countervailing (CVD) and anti-dumping duties (AD) on Canadian lumber shipments to the US are in effect as of that date. The combined CVD/AD duty paid by most Canadian exporters is 20.23% (Random

Lengths, January 2018). A new softwood lumber agreement has yet to be negotiated but at present Canadian producers are looking at other export markets with growing interest, particularly in the Western state of British Columbia (B.C.). B.C. lumber producers are bracing for a tough 2019 amid concerns over Canada-China trade, the U.S. housing market and American tariffs on Canadian softwood. The long-term opportunity for boosting lumber exports to China remains

huge, despite recent trade tensions, B.C. forestry executives say (Random Lengths, January 2019). However, in 2018 Canada exports of softwood lumber to China declined by 15% (Forest Executive Advisors, February 2019), which is partly due to strong competition from Russia. Canadian exports of softwood lumber slightly declined in 2017 and in early 2018 they were expected to decline by 1-2%.

3.2.4 Global Focus and Extra Unece region – Sawn Softwood

Table 3.11: World largest producers, exporters and importers of sawn softwood, 2017, m³






| Production | | Exports | | Imports | |
|--------------------------|------------|--------------------------|------------|--------------------------|------------|
| United States of America | 57,600,000 | Canada | 31,075,582 | United States of America | 26,695,038 |
| Canada | 48,159,258 | Russian Federation | 27,971,388 | China | 25,054,522 |
| China | 38,328,000 | Sweden | 13,110,654 | United Kingdom | 7,079,193 |
| Russian Federation | 37,819,636 | Finland | 9,357,517 | Japan | 6,124,313 |
| Germany | 22,050,255 | Germany | 7,519,050 | Germany | 4,738,011 |
| Sweden | 18,310,000 | Austria | 5,449,450 | Italy | 4,201,914 |
| Finland | 11,700,000 | Chile | 3,099,737 | Egypt | 4,005,326 |
| Austria | 9,439,000 | United States of America | 2,889,844 | Netherlands | 2,825,200 |
| Japan | 8,606,000 | Latvia | 2,878,126 | Republic of Korea | 2,495,578 |
| Brazil | 8,600,000 | Ukraine | 2,611,000 | France | 2,445,403 |
| Chile | 8,025,300 | Brazil | 2,299,373 | Uzbekistan | 2,164,215 |
| France | 6,604,000 | Belarus | 2,295,700 | Algeria | 2,148,000 |
| Turkey | 5,604,800 | Czechia | 1,827,295 | Austria | 1,751,480 |
| Australia | 4,577,568 | New Zealand | 1,824,060 | Mexico | 1,588,000 |
| Poland | 4,570,000 | Romania | 1,259,464 | Denmark | 1,535,000 |
| New Zealand | 4,234,000 | Belgium | 1,078,000 | Saudi Arabia | 1,532,000 |
| Czechia | 4,070,000 | Estonia | 976,997 | Belgium | 1,481,000 |
| Romania | 4,043,000 | France | 886,857 | Estonia | 1,221,940 |
| United Kingdom | 3,728,180 | Ireland | 803,025 | Turkey | 1,081,000 |
| Latvia | 3,283,766 | Poland | 730,151 | Morocco | 1,060,000 |

Source: FAO 2018 and EOS re-elaboration

Outside the UNECE area, the largest producer remains China. China's production sharply increased in 2017 compared with 2016 (38.5 million m³ vs 34 million in 2016) on the back of a strong construction industry. The Chinese economy is expected to somewhat slow down in the coming years: growth rates of GDP are set to hover around 6-7%, while in the previous decade they reached double-digit figures. However, many observers reckon that government policies are more and more geared to foster domestic consumption,

which is expected to push up consumption of wood products. The Chinese consumption market remains strong, but observers believe that China will attempt to become more and more independent from imports (International Softwood Conference, 2018). Imports soared again in 2017 to 25 million m³ (vs 15 million m³ in 2015 and 21 in 2016). But in 2018 there was a massive slowdown as figures presented at the International Softwood Conference 2018 by Mathias Fridholm show:

Table 3.12: China sawn softwood imports, Jan-Jul 2018, million m³

| Rank | Country | Volume millions (m ³) | Market Share |
|-------|---|-----------------------------------|--------------|
| 1 |  Russia | 9.98 | +6 |
| 2 |  Canada | 2.64 | -20% |
| 3 |  Finland | 0.69 | -36% |
| 4 |  Sweden | 0.44 | -19% |
| 5 |  U.S.A. | 0.43 | +38% |
| Other | | 0.68 | +18% |
| Total | | 14.9 | -3% |

Source: International Softwood conference 2018

China's imports from Russia have consistently grown in the first part of 2018 reaching almost 10 million m³ (+6%). An interesting development has been taking place in Ukraine which has seen its imports to China increase by 305% to 235,000 m³ in Jan-Jul 2018. Scandinavian producers are instead struggling to keep up with 2017 record exports level to China. Currency difficulties, trade tensions and Chinese legislation aiming at fostering development more inland are some of the contributing factors which are holding back European producers in China. Chinese imports of Finnish softwood lumber declined by 36% and of Swedish softwood lumber declined by 19%.

Preliminary figures for the whole year 2018 regarding China imports of sawn softwood are available. According to Forest Economic Advisors, China's total lumber imports in 2018 showed a small decrease of 2% as compared to 2017. China's total lumber imports (softwood and hardwood) in 2018 were 36.7 million m³ - 24.9 million m³ were softwood (-1% as compared to 2017) and 11.9 million m³ were hardwood (-3%). The largest softwood lumber importing countries to China were Russia (63% share), followed by Canada (17%), Finland (5%), Sweden (3%) and Chile (3%). The largest increases in softwood lumber imports in 2018 vs. 2017 were Russia (+10%), Brazil (+8%) and Chile (+4%). Conversely, moderate declines were recorded, led by Finland (-32%), Germany (-24%), USA (-23%), Sweden (-22%) and Canada (-15%). The three largest softwood importers - Russia, Canada and New Zealand - accounted for 66% of China's softwood log imports and 81% of China's softwood lumber imports. For further information on China, see the Special Focus dedicated to China and other East Asian markets authored by Woodstat.

Japan is the second largest producer and importer outside the UNECE region. Japanese sawn softwood production

seemed stable in 2017 at around 8.6 million m³. Japan imports of sawn softwood reached 6.1 million in 2017, slightly above 2016. While Japanese long-term demographic prospects are not bright, in the short-term the Japanese market remains a reliable destination for many exporters all over the world with a stable political context and traditional passion for building with wood: wooden housing starts traditionally make up a relevant share – in 2017 their share was expected to be around 57%.

The Middle East North Africa (MENA) area, and especially Egypt and Algeria, remain very relevant sawn softwood importers. Algerian imports were held back in 2017 because of a license system for importers which was in place in the second part of the year. The system was discontinued at the beginning of 2018 and shipments sharply increased as a result. Egypt was in 2017 the seventh largest world importer of sawn softwood with 4 million m³ (vs 4.4 million in 2016). Ibrahim Elshal at the International Softwood Conference 2018 showed that in the period Jan-Jul 2018 imports were 4% up vs Jan-Jul 2017. The economic context was foreseen to be more stable at the beginning of 2019 – at least in the short-term – compared to the turmoil of the previous years, while a young and dynamic population in need of housing ensures that the long-term market potential of Egypt remains impressive.

The only significant exporters of sawn softwoods outside the UNECE region in 2017 were Chile, Brazil, New Zealand and Australia (in descending order, by volume). The UNECE/FAO reports that: "Chile's export markets are diversified, with significant volumes shipped to Asian, Latin American and Middle Eastern markets. Brazil's exports of sawn softwoods continued to increase strongly in 2017 in response to sustained sawn softwood demand in the US. New Zealand's major markets in 2017 were predominantly in the Asia-Pacific region – China, the US, Australia, Viet Nam, Thailand and the Republic of Korea (in descending order, by volume)".



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3.3 Sawn Hardwood

The table below shows the main market indicators for the last six years in the UNECE region. Overall at UNECE level

production is somewhat slowly increasing, with production inching along by 0.5-0.6% a year over the last few years.

Table 3.13: Sawn hardwood main indicators, UNECE Region, 2013-2018 (1,000 m³)

| UNECE region | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 17/16 | 18/17 |
|--------------|--------|--------|--------|--------|--------|--------|-------|-------|
| Production | 37,505 | 39,834 | 41,187 | 41,468 | 41,730 | 41,931 | 0.6 | 0.5 |
| Imports | 5,984 | 6,556 | 6,591 | 6,586 | 6,402 | 6,544 | -2.8 | 2.2 |
| Exports | 9,755 | 11,421 | 11,917 | 12,504 | 13,708 | 13,857 | 9.6 | 1.1 |
| Net trade | 3,771 | 4,865 | 5,327 | 5,918 | 7,305 | 7,313 | | |
| Consumption | 33,734 | 34,969 | 35,861 | 35,550 | 34,424 | 34,618 | -3.2 | 0.6 |

Source: FAO 2018 and EOS re-elaboration, 2018 data are estimates

Consumption (which is always calculated as apparent consumption: production + imports – exports) of sawn hardwood in the UNECE region was 34.4 million m³ in 2017, a 3% drop compared with 2016. In general, it looks like that trends apparent in the last few years (expanding sawn

softwood markets, relatively stagnating sawn hardwood markets) are continuing, at least in the short-term.

The UNECE region has a trade surplus which has increased over the years to surpass 7 million m³ in 2017.

3.3.1 Europe – Sawn Hardwood

Table 3.14: Sawn hardwood main indicators, Europe, 2013-2018 (1,000 m³)

| Europe | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 17/16 | 18/17 |
|-------------|--------|--------|--------|--------|--------|--------|-------|-------|
| Production | 12,953 | 13,043 | 13,631 | 13,986 | 13,952 | 13,979 | -0.2 | 0.2 |
| Imports | 4,396 | 4,712 | 4,789 | 4,918 | 4,924 | 5,036 | 0.1 | 2.3 |
| Exports | 4,743 | 5,545 | 5,843 | 5,835 | 6,308 | 6,339 | 8.1 | 0.5 |
| Net trade | 347 | 833 | 1,054 | 917 | 1,383 | 1,303 | | |
| Consumption | 12,606 | 12,210 | 12,577 | 13,068 | 12,569 | 12,676 | -3.8 | 0.9 |

Source: FAO 2018 and EOS re-elaboration, 2018 data are estimates

European production of sawn hardwood has been quite flat over the last few years, at levels below the peak achieved in 2006-2007 before the global economic crisis. In the EU it did grow by 0.9% in 2018. An interesting dynamic is taking place in Croatia. Production in the Balkan country has increased by 42% in the five years to 2017 to 1.3 million m³. Turkey remains the largest producer of the area with an increasing production in 2017 of 2.5 million m³. Romania is the second largest European producer, with production set to remain stable around 1.6 million m³ in 2018 and 2019. Romania has been confronted with limited availability of beech, its most important hardwood sector. France and Germany remain important producers with around 1.5 and 1.1 million in 2018 though production is being held back by a shortage of raw materials (particularly in France in the oak sector and in Germany in the beech sector).

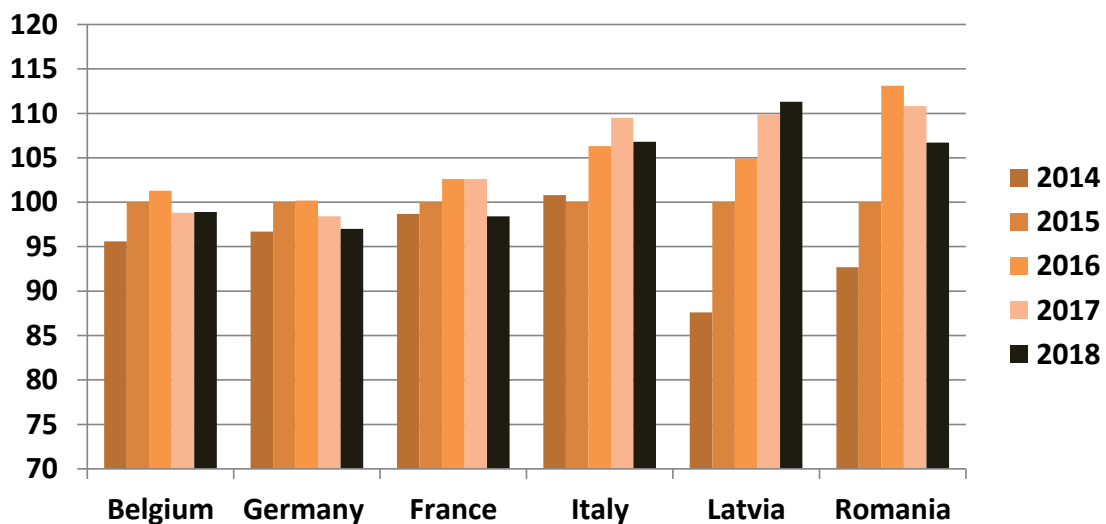
A continuing shortage of hardwood supply caused by logs export outside the EU is exacerbated by heavy dependence on European oak. Belgium is another country which has suffered from raw material exports. Thirty percent of hardwood sawmills in Belgium, France and Germany have shut down over the last ten years (Indufor, 2017).

Consumption of sawn hardwood is slowly growing. Turkey is by far the largest national market of the area, and it is fed almost entirely by internal production. In the EU28 consumption has been growing at an unremarkable pace, though markets are definitely livelier than a few years back. Overall in 2018 the spirit improved when compared to a few years ago: demand dynamics are more positive and France reports investments in the modernization of sawmills.

Country by country reports also dealing with hardwood production are available in chapter 4.

The sawn hardwood markets are connected to the level of furniture manufacturing and wood-joinery activity. Below a brief analysis of those is provided.

Figure 3.1: Index of Furniture Manufacturing activity, selected European countries (Index 2015=100)

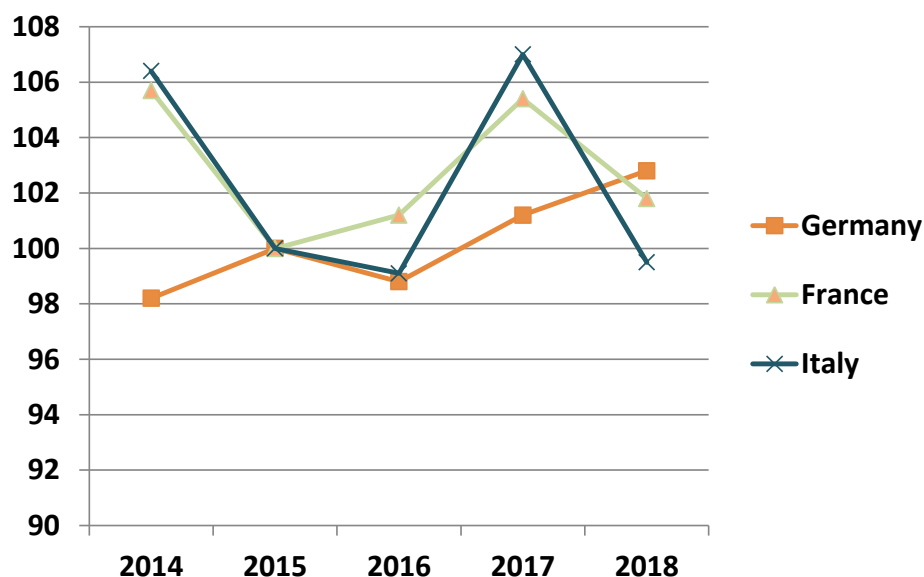


Source: Eurostat 2019 and EOS re-elaboration

The figure above shows the Eurostat calendar adjusted index of furniture manufacturing (index 2015=100). Overall, at EU level, the intensity of activity kept slowly getting higher until 2017 with 2018 showing a relative stagnation, albeit with significant local differences. In Central-Eastern European countries the sector is growing, while in the core EU countries

Belgium, Germany and France are relatively stagnating, with a slight drop in 2018. Italy seems an exception, but it is mostly recovering ground from many years of decline after the global economic crisis. The UK is doing relatively well. Scandinavian markets such as Sweden and Denmark are recovering, though they remain below the 2010 level.

Figure 3.2: Index of Wood-Joinery Activity, selected European countries (Index 2015=100)



Source: Eurostat 2019 and EOS re-elaboration

The figure above, which is regrettably available only for a few countries, represents the wood-joinery activity over the last few years. Germany is showing a steadier growth pattern over the years, whereas both France and Italy are spikier. In 2018 the wood-joinery activity grew in Germany but declined in 2018. Moreover, Germany suffered a much less significant decline in the aftermath of the global economic crisis.

Another important market for the sawn hardwood sector is the flooring market. After four years of growth, preliminary figures point to a 2% decline of European parquet production in 2018 compared to 2017. More information is available in the special focus on the European Parquet Market.

As far as trade is concerned, the net trade surplus has been expanding over the last couple of years. Exports by Croatia, the leading exporter among the EU countries, have grown in 2017 to 1 million m³. Regarding EOS countries, difficulties in exports markets were observed in 2018, particularly in the Asian markets (mainly China).

Some recent data regarding sawn tropical hardwood are available: according to the International Tropical Timber Organization, latest available statistics (to September 2018) show that tropical sawn hardwood imports rose this year on the back of some years of significant decline. Despite a slow start to the year, EU imports of tropical sawnwood were 539,000 metric tonnes in the first nine months of 2018, 9% more than the same period in 2017. Import value also

increased, by 10% to €545 million. A significant amount of tropical sawnwood arrived into the EU from Cameroon in the third quarter of 2018, taking the total import from that country in the first nine months to 186,500 metric tonnes, almost exactly equivalent to the same period in 2017. Meanwhile tropical sawnwood imports from nearly all other leading suppliers were stronger in the first 9 months of 2018 compared to the same period last year, including from Malaysia (+14% to 81,600 metric tonnes), Brazil (+20% to 73,700 metric tonnes), Gabon (+19% to 70,800 metric tonnes), Congo (+6% to 34,800 metric tonnes), Indonesia (+82% to 12,700 metric tonnes), Ghana (+8% to 11,000 metric tonnes), Democratic Republic of Congo (+7% to 9,700 metric tonnes) and Myanmar (+64% to 6,900 metric tonnes). These gains offset declining imports from Côte d'Ivoire (-9% to 21,000 metric tonnes) and Suriname (-20% to 4,100 metric tonnes).

In the first nine months of 2018, tropical sawn hardwood imports increased 8% to 185,000 metric tonnes in Belgium, bolstered by strong growth in the third quarter of the year, and also increased in the Netherlands (+14% to 81,600 metric tonnes), France (+20% to 73,700 metric tonnes), Italy (+19% to 70,800 metric tonnes), and Germany (+6% to 22,100 metric tonnes). These gains offset a 20% decline to 38,300 metric tonnes in the UK, a 15% fall to 25,800 metric tonnes in Spain and a 9% decline to 16,300 metric tonnes in Portugal. Export to Belgium are mainly redirected to other bigger consuming countries. (Itto Market Report, December 2018).



3.3.2 CIS region – Sawn Hardwood

Table 3.15: Sawn hardwood main indicators, CIS region, 2013-2018 (1,000 m³)

| CIS | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 17/16 | 18/17 |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Production | 3,099 | 3,301 | 3,233 | 3,381 | 3,668 | 3,772 | 8.5 | 2.8 |
| Imports | 101 | 103 | 84 | 111 | 109 | 109 | -2.2 | 0.0 |
| Exports | 1,080 | 1,413 | 1,988 | 2,176 | 2,314 | 2,314 | 6.4 | 0.0 |
| Net trade | 979 | 1,310 | 1,905 | 2,064 | 2,205 | 2,205 | | |
| Consumption | 2,120 | 1,991 | 1,328 | 1,317 | 1,463 | 1,567 | 11.1 | 7.1 |

Source: FAO 2018 and EOS re-elaboration, 2018 data are estimates

CIS sawn hardwood production has been trending upward over the last few years. It reached a figure just short of 3.7 million m³ in 2017 and a further increase was on the cards for 2018. Of this almost 2.8 million m³ was produced in Russia (+10% vs 2016). The UNECE/FAO reports that “the Russian Federation exported 1.7 million m³ of sawn hardwood in 2017, up by 11.7% over 2016. Exports to China were 1.27 million m³, an increase of 10.2% over 2016 and the largest quantity of Russian sawn hardwood ever shipped to China”. Birch is the dominant species, accounting for almost half of Russian sawn hardwood exports. As per current projections and forecasts, production and consumption of sawn hardwood were set to grow in 2018, with the expansion set to continue even in 2019. In 2019 production is expected to

reach almost 3 million m³ while consumption should hover around 1.1 million m³.

The Ukrainian sawn hardwood sector and the general economy have been hampered by the ongoing conflict in the east of the country. Local consumption of sawn hardwood remains very low, thus Ukraine exports abroad most of its production, its main markets being Eastern Member States of the EU, such as Romania, Poland and Lithuania.

In Belarus both production and exports of sawn hardwood are declining. In 2017 production was around 210,000 m³ down from 275,000 m³ in 2015. Exports stayed below 100,000 m³, down from 150,000 m³ in 2015.

3.3.3 North America – Sawn Hardwood

Table 3.16: Sawn hardwood main indicators, North America, 2013-2018 (1,000 m³)

| North America | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 17/16 | 18/17 |
|---------------|--------|--------|--------|--------|--------|--------|-------|-------|
| Production | 21,453 | 23,490 | 24,323 | 24,101 | 24,110 | 24,179 | 0.0 | 0.3 |
| Imports | 1,488 | 1,741 | 1,718 | 1,557 | 1,369 | 1,399 | -12.1 | 2.2 |
| Exports | 3,933 | 4,463 | 4,086 | 4,493 | 5,086 | 5,204 | 13.2 | 2.3 |
| Net trade | 2,445 | 2,722 | 2,368 | 2,936 | 3,717 | 3,805 | | |
| Consumption | 19,008 | 20,768 | 21,955 | 21,165 | 20,393 | 20,374 | -3.6 | -0.1 |

Source: FAO 2018 and EOS re-elaboration, 2018 data are estimates

In North America both production and consumption of sawn hardwood have been trending upwards in the period 2013-2018. Over the 5 years to 2017, US Production went up by 13% to 22.8 million m³, while production in Canada declined 4% to 1.3 million m³. After plummeting as a result of the global economic crisis of one decade ago, North American production has gone up steadily since 2009 but was still 3.6 million m³ less in 2017 than in 2006, the peak for home construction in the US. The decline in sawn hardwood

production in North America has caused a large reduction in the number of sawmills and in production capacity. Most of the mills built since the global financial crisis are for the manufacture of staves and industrial products. Indeed, with stronger competition from China and Viet Nam, the North American furniture industry declined, and this took a heavy toll on hardwood production. The UNECE/FAO reports that “historically, North American sawn hardwood consumption in appearance applications exceeded consumption in

industrial uses by a wide margin. Since 2007, however, sawn hardwood consumption has been higher for industrial uses than for appearance applications [...] North American consumption of sawn hardwood in appearance applications will be influenced in the next decade by factors such as growth in home construction and remodelling, substitute products, and disposable income. Home construction and remodelling is important, but a wide range of materials can be used in the production of flooring, millwork and cabinets, with sawn hardwood generally the most expensive". Income growth and consumer preferences will influence the consumption of sawn hardwood in the future. In 2017 Canadian sawn hardwood consumption declined by 230,000 m³ (-14.1%) and in the US by 542,000 m³ (-2.8%).

Regarding trade, exports are the only component of the North American sawn hardwood market that has exceeded levels achieved before the global financial crisis. In a similar fashion to imports, most Canadian and US exports before the global financial crisis were bilateral. Growth in exports since 2009, however, has been mainly in markets outside North America. Both Canadian and US exports have increased 29% in the five years to 2017, respectively to almost 600,000 m³ and 4.5 million m³. While the US remains the largest market for Canada, China is consistently gaining market share accounting for around 20% of Canadian exports in 2017. US exports to China and Viet Nam in 2017 accounted for 64% of total exports, in value terms. The only relevant trade flow of sawn hardwood from Europe to the US is German exports to the US, which in 2017 was around 70,000 and in 2018 looked set to slightly increase.

3.3.4 Global Focus and Extra Unece region – Sawn Hardwood

Table 3.17: World largest producers, exporters and importers of sawn hardwood, 2017, m³

| Production | | Exports | | Imports | |
|--------------------------|------------|--------------------------|-----------|--------------------------|------------|
| China | 47,696,000 | United States of America | 4,504,674 | China | 12,346,712 |
| United States of America | 22,774,000 | Thailand | 4,380,987 | Viet Nam | 1,618,099 |
| Viet Nam | 6,000,000 | Malaysia | 2,162,635 | Thailand | 914,039 |
| Brazil | 5,997,000 | Russian Federation | 1,678,327 | United States of America | 723,436 |
| India | 4,889,000 | Croatia | 1,022,079 | Italy | 712,912 |
| Indonesia | 4,169,000 | Germany | 795,405 | Canada | 645,353 |
| Thailand | 3,700,000 | Ukraine | 754,000 | Egypt | 562,553 |
| Malaysia | 3,228,000 | Cameroon | 670,000 | United Kingdom | 501,065 |
| Russian Federation | 2,764,421 | Romania | 645,211 | India | 459,907 |
| Turkey | 2,511,200 | France | 596,403 | Belgium | 430,374 |
| Nigeria | 2,000,000 | Canada | 581,234 | Mexico | 413,289 |
| Romania | 1,600,000 | Gabon | 549,169 | Germany | 406,172 |
| Myanmar | 1,530,400 | Indonesia | 523,000 | Netherlands | 345,600 |
| France | 1,503,000 | Latvia | 417,989 | Poland | 336,386 |
| Argentina | 1,502,000 | Viet Nam | 370,583 | France | 276,903 |
| Croatia | 1,390,566 | Brazil | 352,940 | Philippines | 271,672 |
| Canada | 1,336,000 | Belgium | 343,000 | Taiwan | 248,534 |
| Germany | 1,117,425 | Philippines | 330,133 | Japan | 208,272 |
| Cameroon | 1,000,000 | Bosnia and Herzegovina | 324,360 | South Africa | 185,940 |
| Pakistan | 919,000 | Ghana | 297,380 | Spain | 185,119 |

Source: FAO 2018 and EOS re-elaboration, data are estimates

China is by far the world's largest hardwood producer. The combined production of the second, third, fourth, and fifth largest producers is smaller than China's production. China added in 2017 more than 4 million m³ and at almost 47.7 million m³ its production was more than one third of the total global output. Chinese production mainly services an internal market hungry for sawn hardwood. With the exception of the United States, the most important hardwood producers are all mainly tropical hardwood producers, notably Vietnam, Brazil, India, Indonesia, Thailand, and Malaysia.

China is also – and by far – the world's largest importer, accounting for a whopping 48% of the total hardwood imports at global level. China's sawn hardwood imports rose by 15% in volume terms in the first quarter of 2018, year-on-year, with tropical sawn hardwood imports up

by 25% in volume and by 32% in value. The UNECE/FAO reports that: "Viet Nam is an important emerging market for sawn hardwood, although imports declined in 2015 and 2016, with tropical sawnwood accounting for most of the decline (data on Viet Nam's sawn hardwood imports for 2017 were unavailable at the time of publication). The Lao People's Democratic Republic supplied 63% of Viet Nam's tropical sawn hardwood imports in 2015, but that country's supply was affected by an export ban in May 2016. In contrast to China, Viet Nam's sawnwood imports are used predominantly in products destined for export. Thailand is the third-largest importer of sawn hardwood outside the UNECE region, importing mainly structural-grade material from Malaysia."

Data taken from the FAO Database and the UNECE/FAO Forest Products Annual Market Review, unless otherwise stated.

3.4 Overview of the wood energy markets

In many EU Member States, wood was the most important single source of energy from renewables. Wood and wood products accounted for 6.0 % of the total energy consumed within the EU-28 in 2016 (source: Eurostat, Wood as a Source of Energy). The share of wood and wood products in gross inland energy consumption ranged from over 20 % in Latvia and Finland down to less than 1 % in Cyprus and Malta. Wood was the source for more than three quarters of the renewable energy consumed in Estonia, Lithuania, Hungary, Latvia, Finland, and Poland. By contrast, the share of wood in the mix of renewables was relatively low in Cyprus and Malta (where the lowest share was reported, 4.5 %); this was also the case in Norway (6.4 %). Wood as a source of energy in France, Italy and Germany stands around 2-3% in all sources and over 30% in Germany and Italy in renewable sources (France almost 50%).

The role of wood pellets in generating energy from wood is important. According to the official UNECE/FAO data released in January 2019, in 2017 global production of pellets grew by 14% compared with 2016 to 33.3 million tonnes. Wood pellets have become an important energy carrier traded on a large scale and over long distances, due to their high energy density and stable characteristics. Global production reached 29 million tonnes in 2016, of which more than 50% was produced in the EU. The EU is also the main consumer globally

(23 million tonnes, of which 32.6% is consumed in the UK, 9.1% in Italy, 8.7% in Germany, 8.7% in Denmark and 7.4% in Sweden). In some Member States, the consumption of wood pellets relies mostly on imports, e.g. the UK (94.7%) and Italy (81%). Wood pellets are mostly used in the residential sector for heating (in Italy, Austria, etc.) or for electricity production (in the UK, Austria, etc.)." (Source: JRC, Brief on biomass for energy in the European Union). For more information please see below.

The table on the next page shows the 20 largest world producers, importers and exporters of pellets.



Table 3.18: World largest producers, exporters and importers of pellets, 2017, tonnes

| Production | | Exports | | Imports | |
|--------------------------|-----------|--------------------------|-----------|--------------------------|-----------|
| United States of America | 6,900,000 | United States of America | 5,203,981 | United Kingdom | 6,885,523 |
| Canada | 2,700,000 | Canada | 2,171,504 | Denmark | 3,089,123 |
| Germany | 2,250,000 | Latvia | 1,620,734 | Republic of Korea | 2,431,165 |
| Sweden | 1,741,000 | Viet Nam | 1,579,471 | Italy | 1,792,547 |
| Viet Nam | 1,600,000 | Russian Federation | 1,438,541 | Belgium | 1,090,921 |
| Latvia | 1,517,000 | Estonia | 1,250,596 | Japan | 442,517 |
| Russian Federation | 1,400,000 | Austria | 675,367 | Austria | 403,117 |
| France | 1,350,000 | Malaysia | 526,992 | Germany | 391,244 |
| Estonia | 1,250,000 | Portugal | 487,779 | Sweden | 268,948 |
| Austria | 1,225,000 | Germany | 450,741 | France | 263,863 |
| Republic of Korea | 980,000 | Lithuania | 403,230 | Netherlands | 244,700 |
| Poland | 900,000 | Denmark | 332,588 | United States of America | 211,617 |
| China | 873,000 | Czechia | 315,509 | Latvia | 195,802 |
| Portugal | 689,218 | Poland | 286,980 | Slovenia | 181,100 |
| Belgium | 550,000 | Croatia | 259,104 | Lithuania | 117,990 |
| Malaysia | 530,000 | Ukraine | 247,156 | Switzerland | 91,010 |
| Romania | 500,000 | Belgium | 218,762 | Finland | 86,787 |
| Brazil | 470,900 | Belarus | 204,700 | Serbia | 68,000 |
| Brazil | 460,875 | Sweden | 199,650 | North Macedonia | 66,635 |
| Czechia | 450,000 | France | 190,678 | Poland | 66,103 |

Source: UNECE/FAO 2018 and EOS re-elaboration

The US accounts for 21% of global production (6.9 million tonnes, +0.5 million tonnes vs 2016). Canada is the second largest producer (-100,000 tonnes vs 2016). Germany was the third largest producer with 2.25 million tonnes (+300,000 tonnes vs 2016). Europe and North America remain the two most important regions in terms of production; however, production in Vietnam grew again by 20% in 2017 to 1.6 million tonnes (on the back of a 30% rise both in 2016 and 2015). Production in the Baltic States of Latvia and Estonia remained high, somewhat rising in 2017 compared with 2016.

The US remained the largest exporter in 2017, accounting for 26% of global exports (5.2 million tonnes, +10% vs 2016); US south-eastern states are the main export area and they send most of their shipments to large European importers, particularly the UK. The second largest exporter remains Canada, which, with 2.2 million tonnes exported, has seen its exports shrink by over 0.2 million tonnes compared with 2016. Latvia remains the third largest exporter, followed by Vietnam (which has seen a sharp rise of exports), Russia and Estonia. As far as imports are concerned, the UK retains the lion share of pellets imports in 2017 as it accounts for 36%

of global imports with 6.9 million metric tonnes. However, in 2016 the UK accounted for 43% of global imports. Other very relevant importers remain Denmark, Italy, and the Republic of Korea. South Korean and Danish imports remarkably increased (by a third in both countries) whereas deliveries to Italy rose by almost 200,000 tonnes.

Preliminary data for 2018 are available. According to the Canadian Biomass Magazine, wood pellet trade in 2018 is estimated at 23.8 million tonnes, a whopping 26 per cent increase from 2017's 18.9 million tonnes.

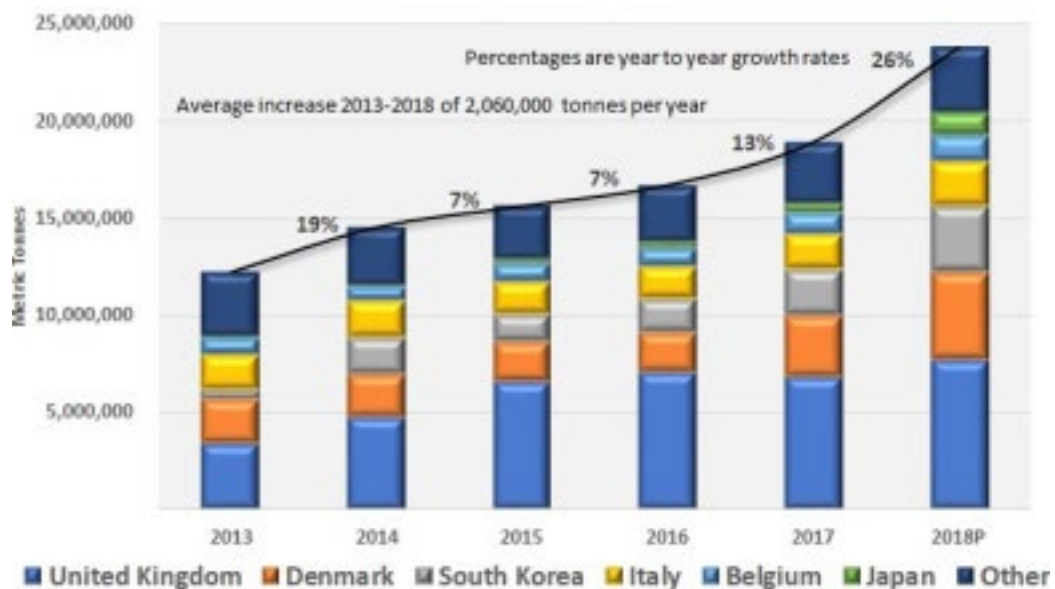
Industrial pellet demand is estimated at 17.5 million tonnes in 2018. FutureMetrics projects that industrial demand will climb to 29 million tonnes in 2023. Nearly 60 per cent of this new demand growth is projected to come from Asia, with most of the remainder from increased demand in the UK and the re-emergence of a significant industrial pellet market in the Netherlands.

While industrial pellet markets get the bulk of market analysts' attention, heating markets make up a significant amount of total global demand and FutureMetrics forecasts

continued strong growth over the next five years. Warm winters and low competing fuel prices, particularly for heating oil, slowed pellet heating demand growth in North America and Europe over the last few years. While a recent fall in oil prices raises some concern, for the most part pellets still enjoy a significant cost savings over fossil-based heating fuels in Europe and, with the notable exception of natural gas in the U.S., North America as well (<https://www.canadianbiomassmagazine.ca/pellets/2019-wood-pellet-markets-outlook-7190>)

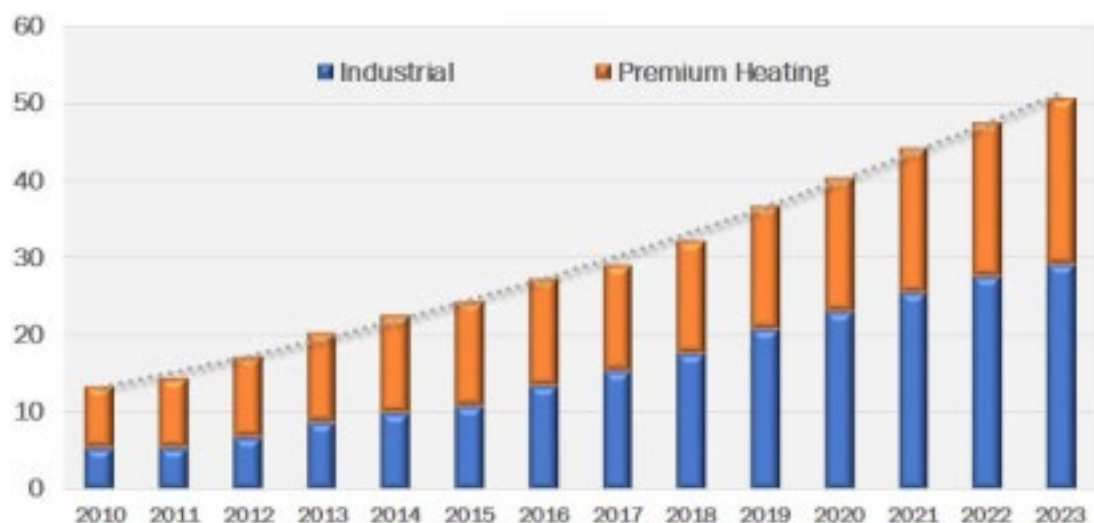
The two figures below, taken from the above-mentioned article, analyse, respectively, the global demand pellets imports from 2013-2018 and the global pellet demand since 2010 with projections up until 2023. Growth is impressive: analysts expect the global pellet demand to be more than three times as high as demand in 2010.

Figure 3.3: Global Pellet Imports, 2013-2018



Source: Historical, Argus; Forecast, Future Metrics

Figure 3.4: Global Pellet Demand, 2010-2023



Source: Historical, Argus, and European Pellet Council; Forecast by Future Metrics

Special Focus: Woodstat

China's import of softwood lumber at a high level



China - Softwood lumber

Once again, we can note that China as a softwood lumber importer ensured a balance in the market. In several countries the import of softwood lumber is still significantly below the pre-financial crisis level. The index of completed housing construction (residential, schools, shops, etc.) in the EU increased by only 1% during 2018 compared to 2017 and as a result we noticed only a minor increase in softwood lumber imports. In the U.S. the import entered a slower phase as a consequence of lower housing starts and in the Middle East low prices for crude oil lowered import of softwood lumber to the lowest level since 2006.

Softwood lumber import in China during 2018 amounted to 24.4 million m³ which means a decrease by just 2% (compared to 2017). It is worth mentioning that import during 2007 amounted to only 2.8 million m³. During January-February 2019, import increased by 16% compared to 2018 and the seasonally adjusted trend line is running at a record high level (figure 1).

The trend line for import from Russia has stabilized at a new top level, when we include the figures for February. The import from Canada during January-February 2019 increased by an impressive 65%, but the volume is still

Figure 1:

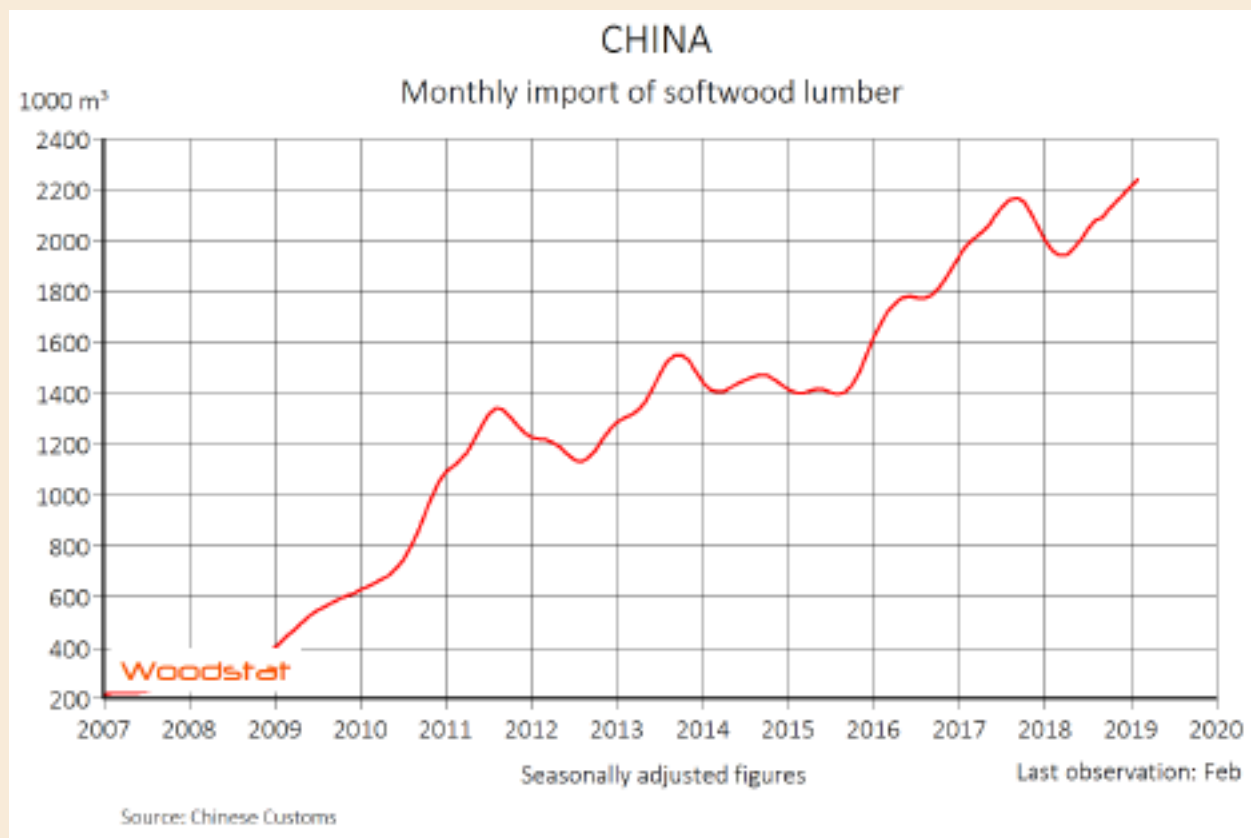
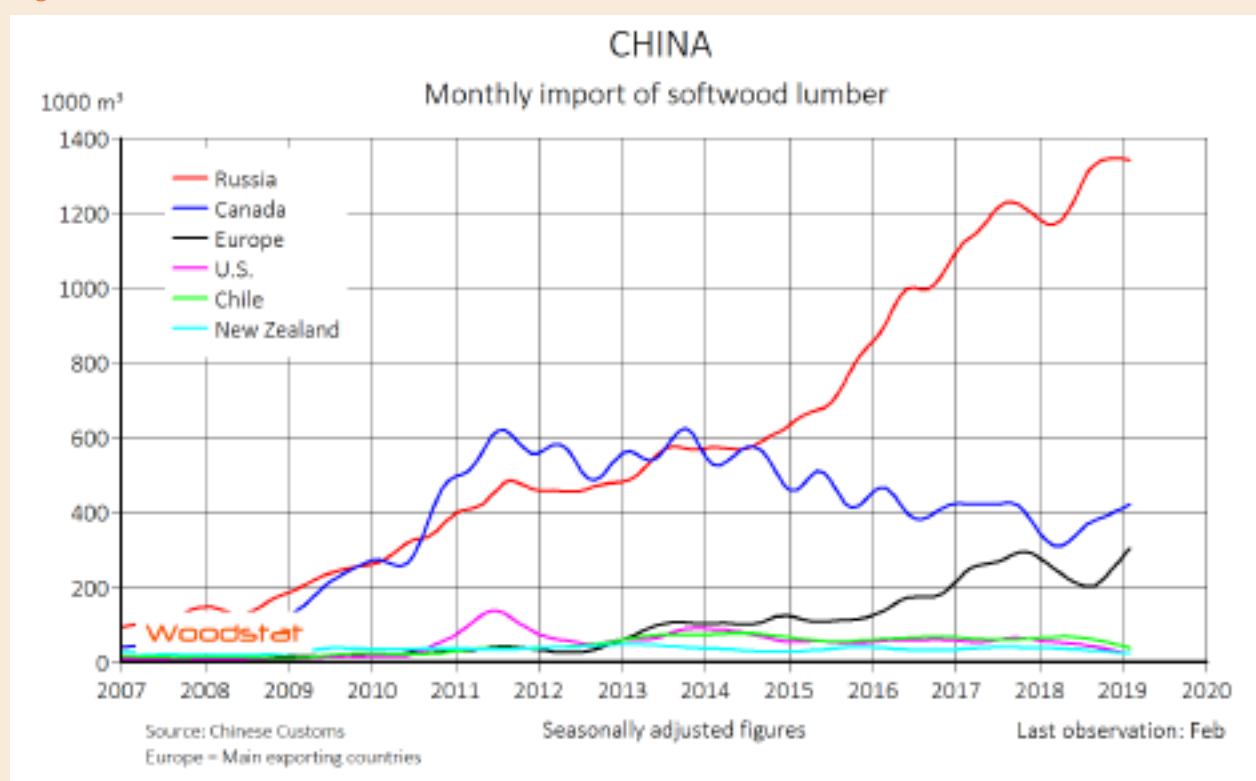


Figure 2:



limited compared to previous years. Import from Europe increased by 4% during January-February 2019 and the seasonally adjusted trend has entered a clearly positive trend (figure 2).

As can be seen in figure 2 Russia totally dominates as a supplier with a monthly export of about 1.3 million m³. Eight years ago, Canada was the main supplier. In April 2017 a countervailing duty for Canadian sawmills was imposed by the U.S. Department of Commerce. Leading Canadian producers have announced they will increase export to China, and we can already see it in the trend line.

A growing population and massive migration are still the main factors for softwood lumber consumption and will support a high demand for lumber. The furniture industry is also an important consumer of softwood lumber with a positive forecast. We can also add a growing interest in using lumber as a nature friendly material.

Russia was the main supplier and delivered 15.1 million m³ during 2018 (+7% compared to 2017). This means a market share of 62%. Second largest supplier was Canada with a total export of 4.2 million m³ (-17%) and a market share of 17%. The import from Europe (excl. Russia) decreased by 13% (table 1).

Table 1: China's import of softwood lumber (1 000 m³)

| | 2018 | 2017 | 2018/2017 |
|-----------------------|---------------|---------------|------------|
| Russia | 15 067 | 14 124 | +7% |
| Canada | 4 150 | 4 972 | -17% |
| Europe (excl. Russia) | 2 792 | 3 214 | -13% |
| Chile | 741 | 715 | +4% |
| U.S. | 531 | 697 | -24% |
| New Zealand | 367 | 441 | -17% |
| Other | 794 | 833 | -5% |
| Total | 24 442 | 24 996 | -2% |

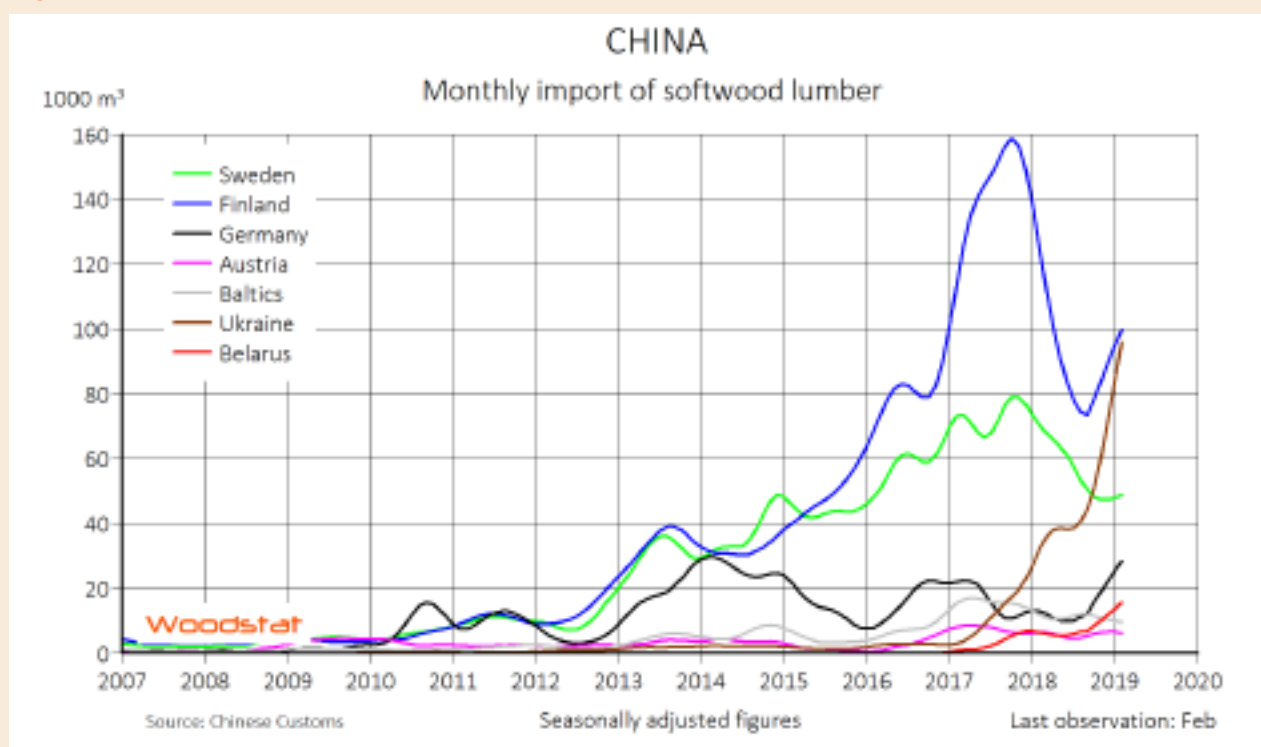
Source: Chinese Customs

Table 2: China's import of softwood lumber from main European exporters (1 000 m³)

| | 2018 | 2017 | 2018/2017 |
|--------------|--------------|--------------|-------------|
| Finland | 1 142 | 1 683 | -32% |
| Sweden | 708 | 896 | -21% |
| Ukraine | 506 | 123 | +311% |
| Germany | 153 | 205 | -25% |
| Baltics | 133 | 187 | -29% |
| Belarus | 80 | 33 | +142% |
| Austria | 70 | 87 | -20% |
| Total | 2 792 | 3 214 | -13% |

Source: Chinese Customs

Figure 3:



Finnish export to China decreased by 32% to 1.1 million m³ during 2018 (compared to 2017). Shipments from Sweden and Germany decreased by 21% and 25% respectively. However, other European exporters – Ukraine and Belarus increased the export at a very high rate. Ukraine was the top performer with an increase of 311% to 506,000 m³ during 2018. Just five years ago the figure was approximately 20,000 m³. Import from Belarus increased by 142% to 80,000 m³ (table 2). The lowered import from Finland and Sweden during 2018 are clearly shown in figure 3.

The very strong increase of shipments from Ukraine and Belarus have of course changed market shares for

European exporters (Russia excluded) dramatically (smoothed time series) (figure 4).

The rapidly increasing import in China is of course closely linked to the construction sector where residential building is the main sector, but there is also a strong demand for furniture and other further processed goods. In 2018, the amount of started housing surpassed the amount of sold housing slightly (figure 5). Compared to the situation a few years ago the floorspace for sale is much lower (figure 6). This stabilizes the building industry long term and the ongoing urbanization is an important factor. Credit is tighter and the government will certainly closely monitor the housing market.

Figure 4:

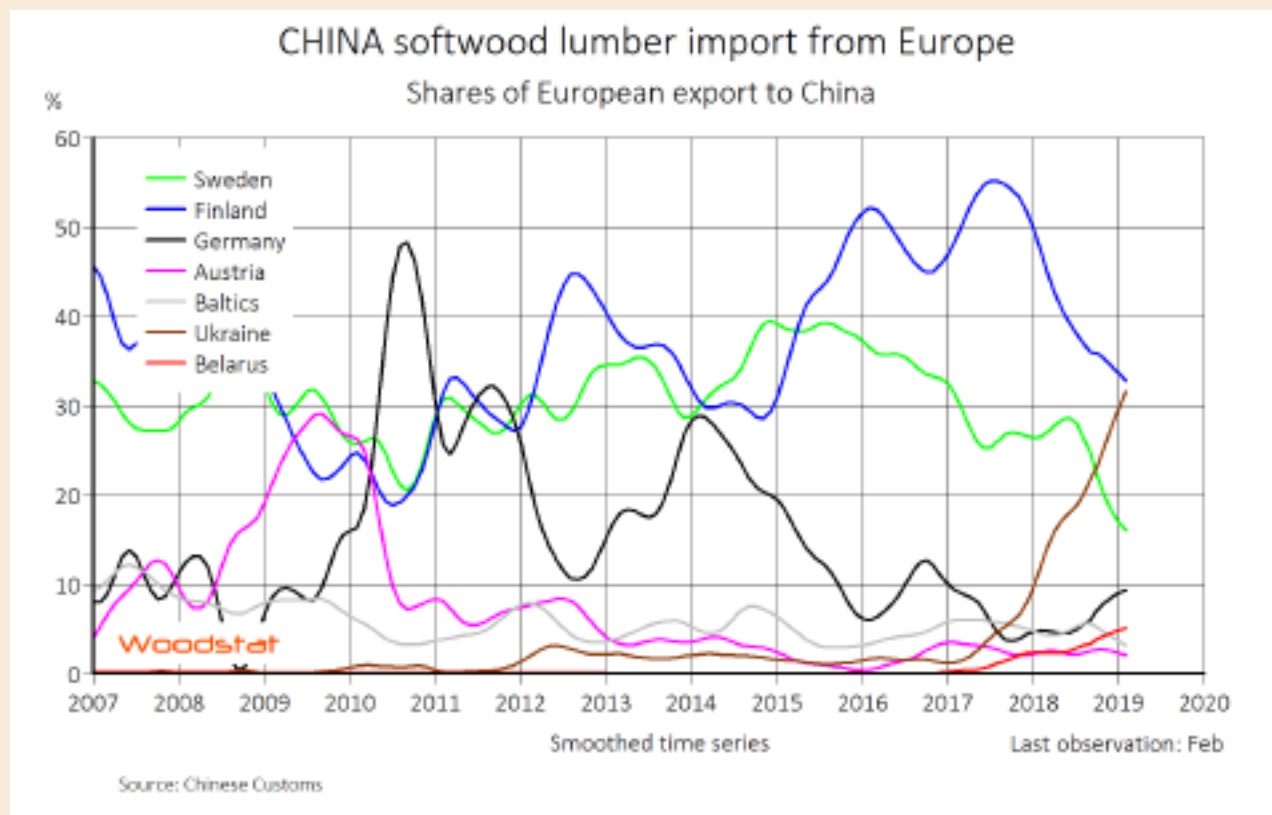


Figure 5:

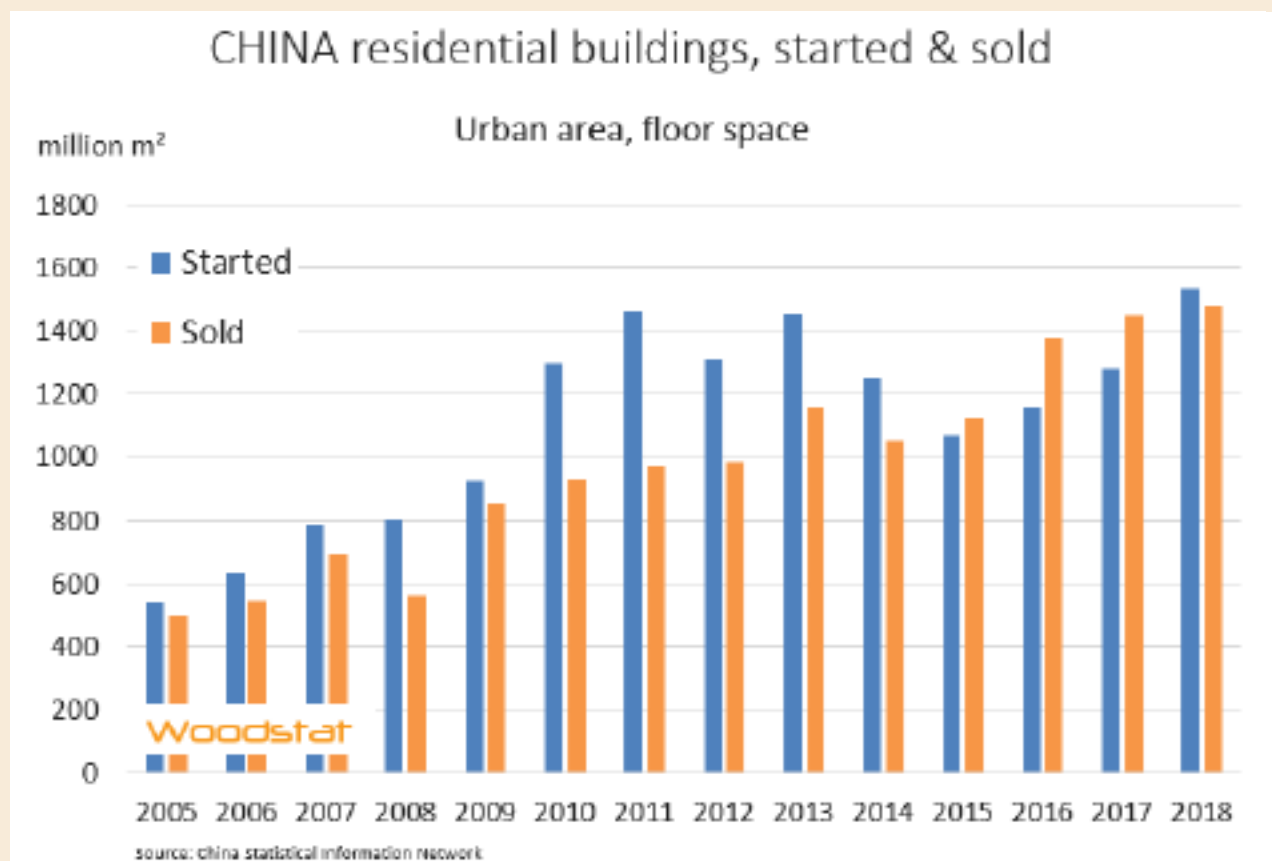
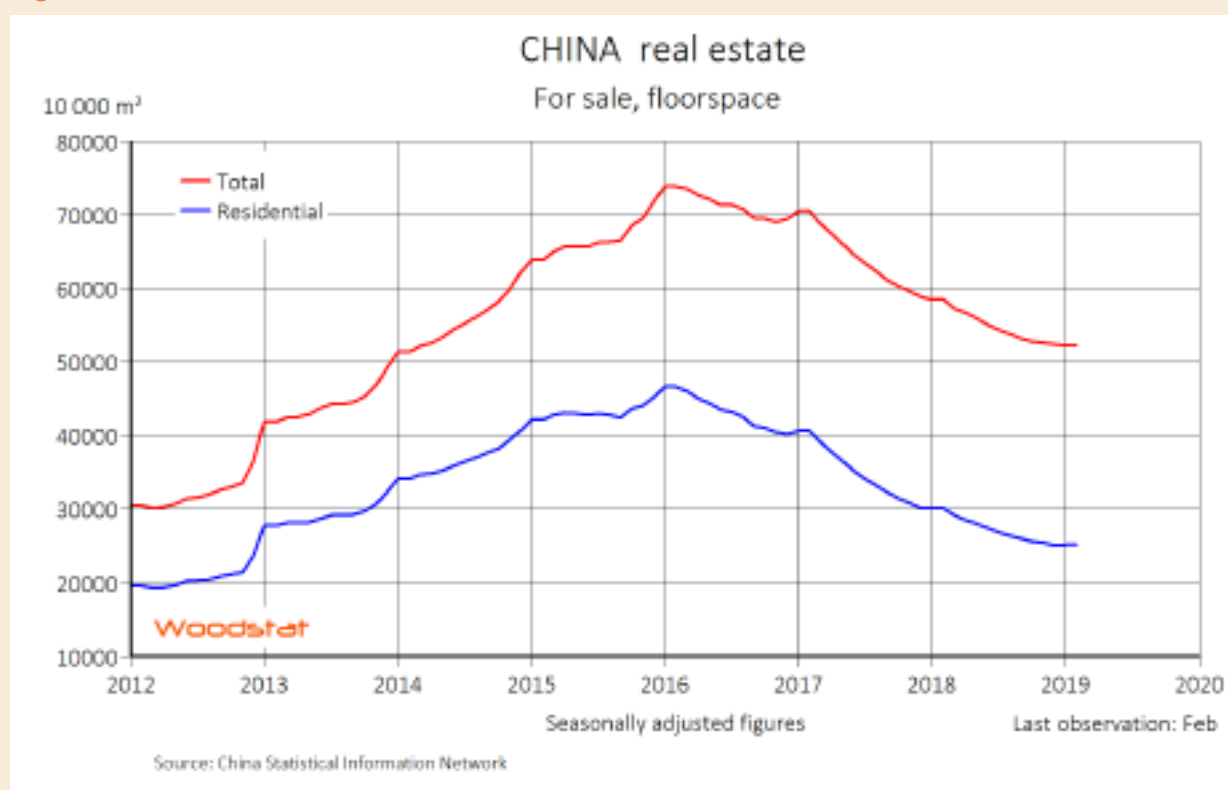


Figure 6:



China – Softwood logs

Figure 7:

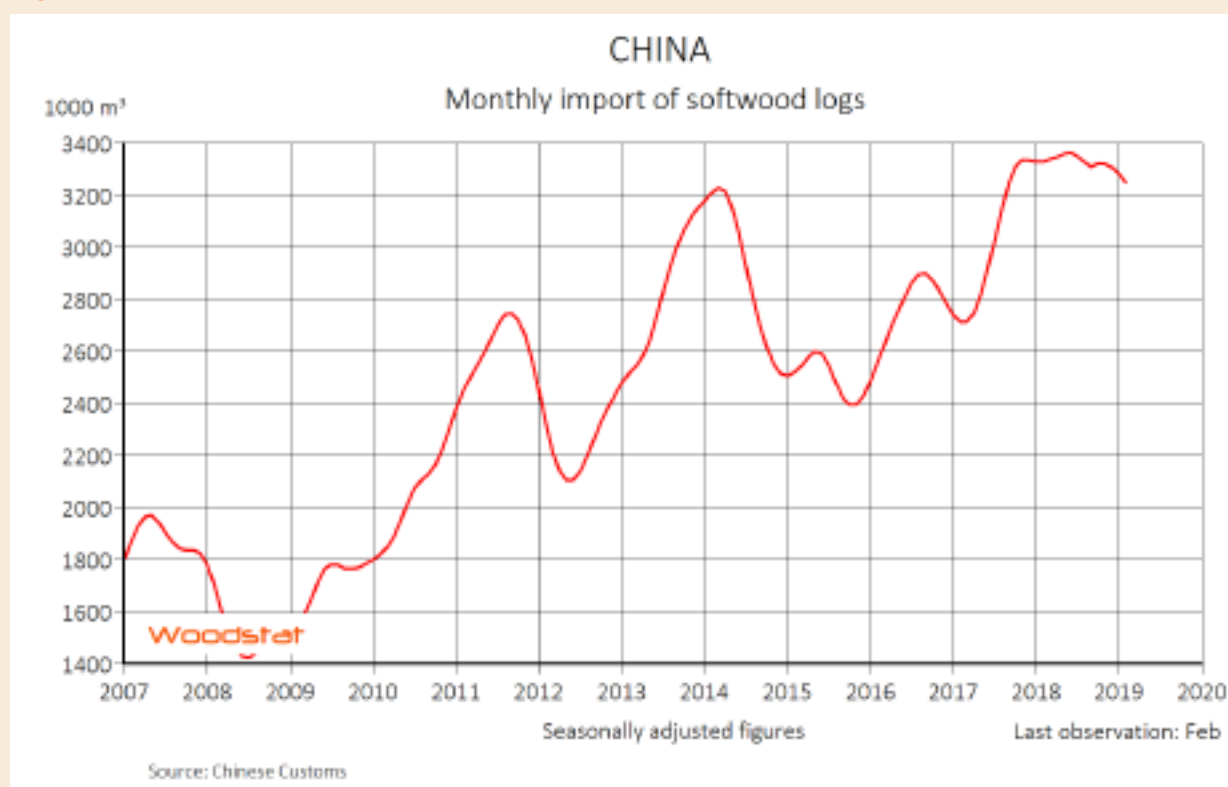


Figure 8:

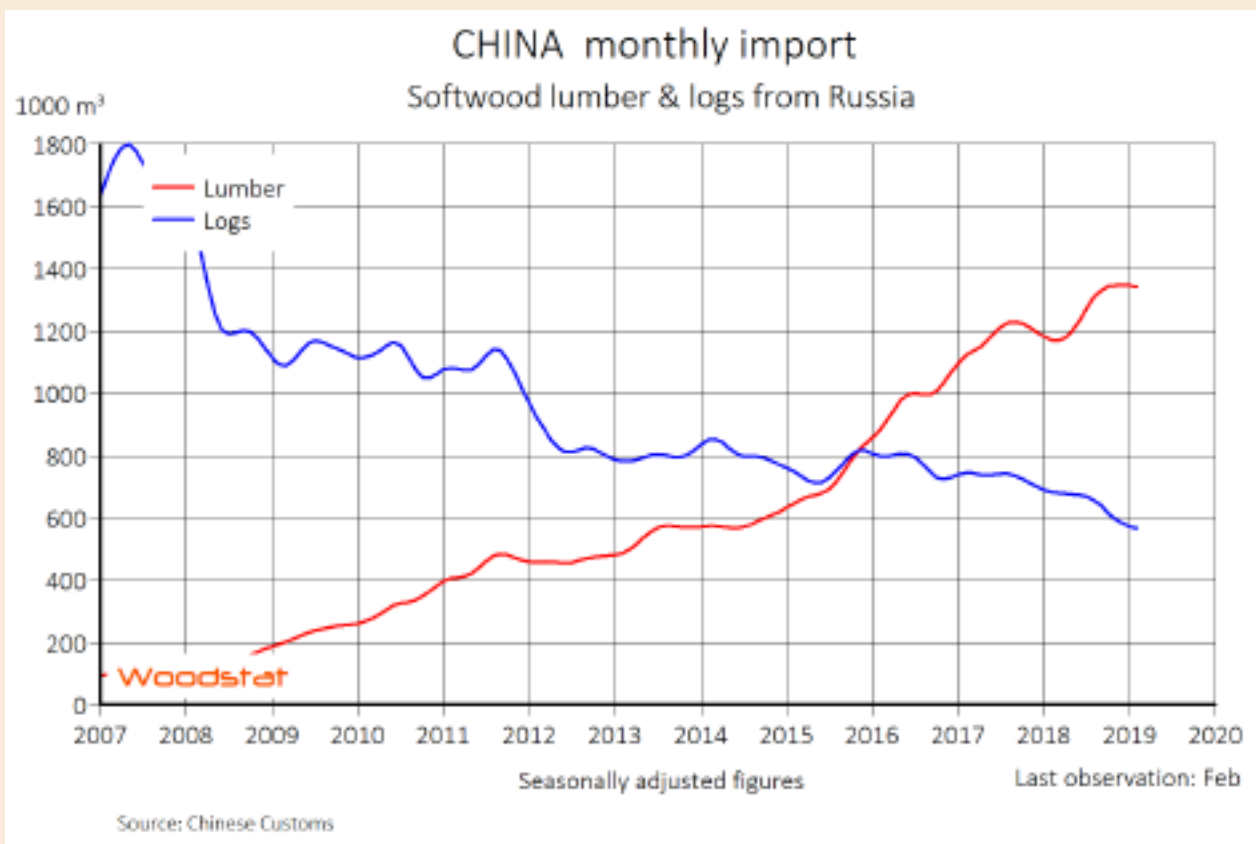
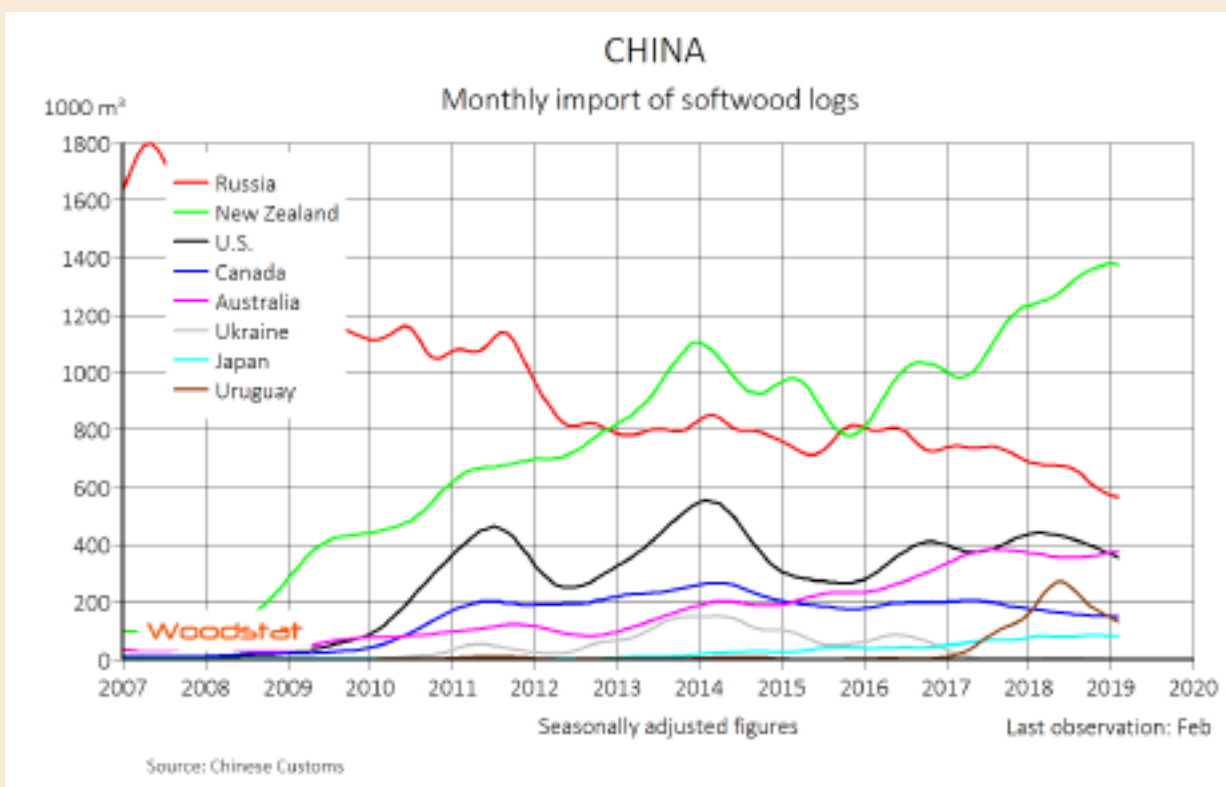


Figure 9:



Total import of softwood logs in China has increased since 2009 and was during 2018 and the beginning of 2019 running at just over 3 million m³ on a monthly basis (figure 7). The import during 2018 was 39.7 million m³ (+9% compared to 2017).

Softwood log import from Russia has changed dramatically during the last few years with a complete switch from logs to lumber which is produced at several newly built sawmills in Asia (figure 8).

As can be seen in figure 9 import of logs from Russia has a rapid falling trend but import from New Zealand is running at a record high level. Over 50% of sawlog harvest in New Zealand is exported and that is a serious problem for local sawmills. Log prices in New Zealand are at a high level, but some reductions are reported in the first quarter 2019. The trendlines for import from Canada and the U.S. are falling, but Australia has a quite stable trend line.

Southeast Asia (excl. China and Japan) – Softwood lumber

In Southeast Asia; China and Japan are the main importers, but many other countries in the region are increasing their import of softwood lumber rapidly. Import from main exporters were in the beginning of 2019 running at a monthly average level of over 400,000 m³, compared to 140,000 m³ during 2007. The trend line for import in the region is increasing at a record high level (figure 10).

As can be seen in figure 11, European exporters also gain market shares in this region. The market share for Europe has increased from just over 20% to close to 60% and at the same time the trend has been falling for Canada and New Zealand. The market share for U.S. is quite stable.

A growing economy and high construction activity in several countries support a steady increase in import. Like in many other countries there is also a growing interest in lumber as an eco-friendly material.

Figure 10:

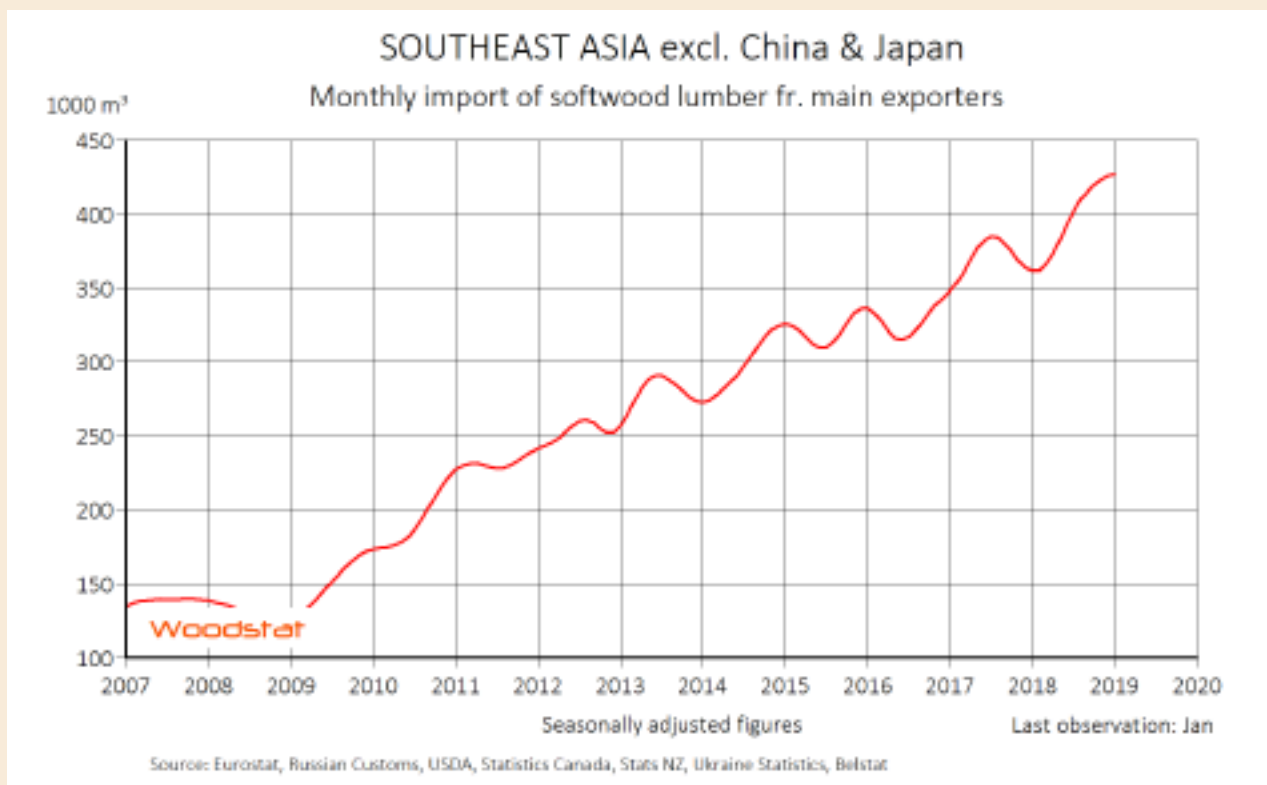


Figure 11:

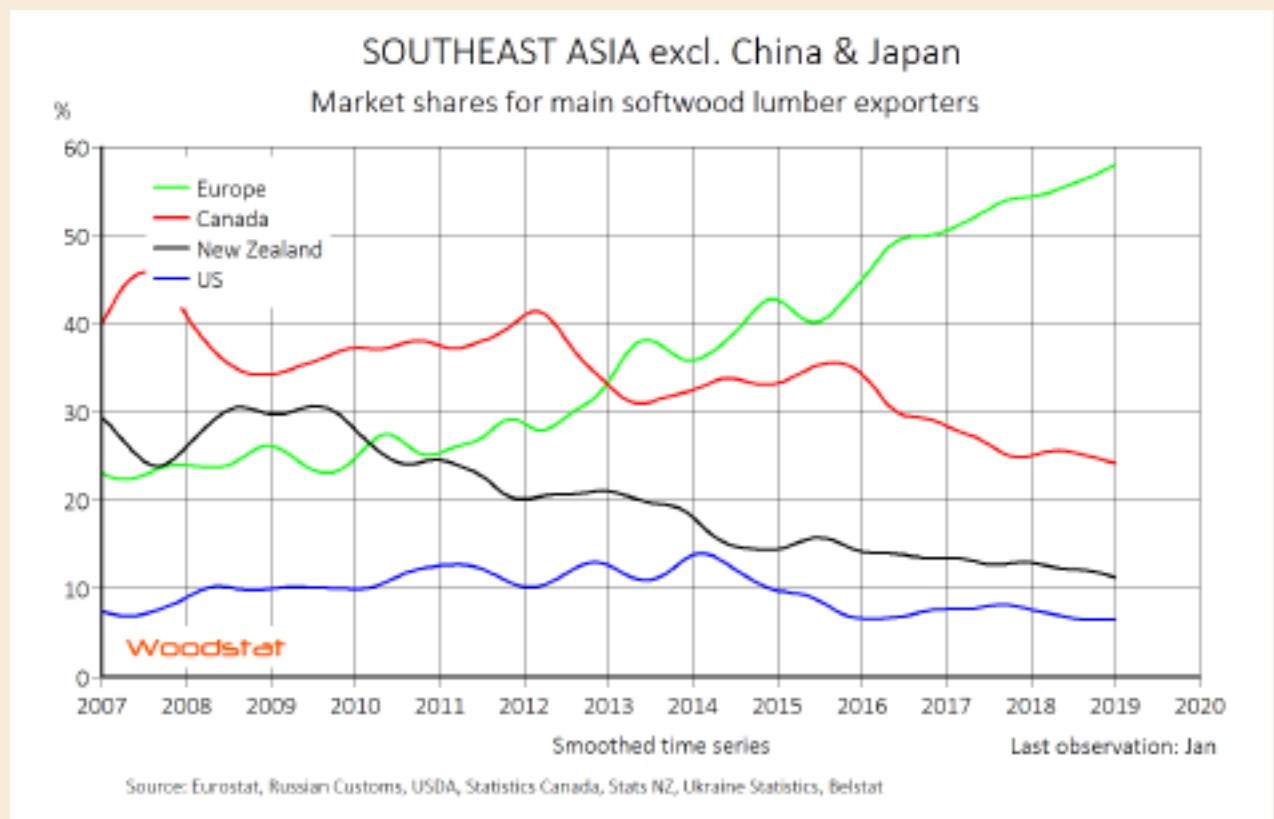


Figure 12:

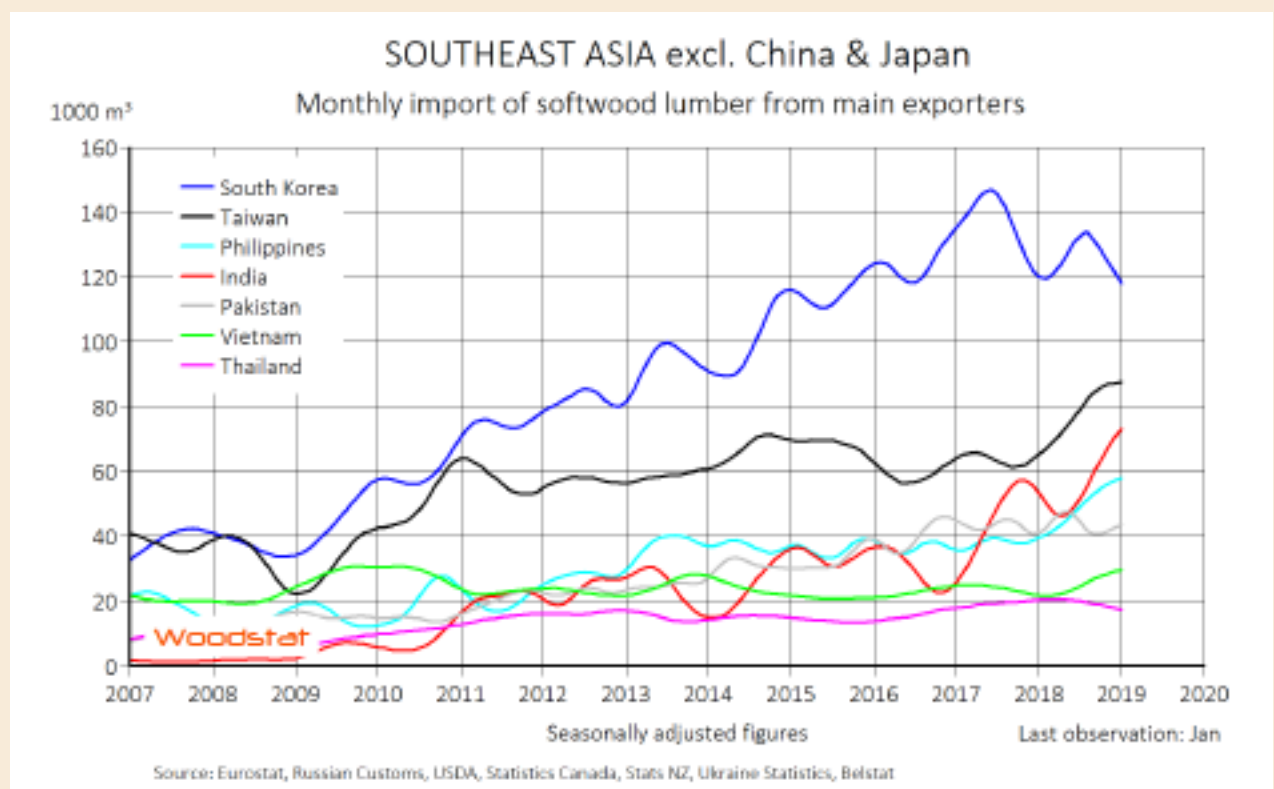


Table 3: The Southeast Asian (China and Japan excluded) import of softwood lumber (1 000 m³) from main exporters

| Importer | 2018 | 2017 | 2018/2017 |
|--------------|--------------|--------------|------------|
| South Korea | 1 520 | 1 657 | -8% |
| Taiwan | 943 | 787 | +20% |
| India | 653 | 540 | +21% |
| Philippines | 574 | 455 | +26% |
| Pakistan | 521 | 526 | -1% |
| Vietnam | 287 | 296 | -3% |
| Thailand | 234 | 230 | +2% |
| Total | 4 732 | 4 491 | +5% |

Sources: Eurostat, Russian Customs, USDA, Statistics Canada, Stats NZ, Ukraine Statistics, Beltstat

In South Korea industrial investment is falling and many economists predict a continued falling trend. Regarding housing tougher regulations were imposed in 2018, which have lowered the activity.

In January 2019 the Minister of housing in India published a report "The global Housing Technology Challenge" which include environmentally friendly and cost-effective construction. Regarding construction technologies the report said "Typically, conventional construction systems, such as the use of brick and mortar, are slow-paced, energy intensive, dependent on natural resources, and have a large carbon footprint". According to a new study by McKenzie, 700 million Indians are getting in to process of urbanization by 2050. As in China demand for housing is also supported by a rapid urbanization.

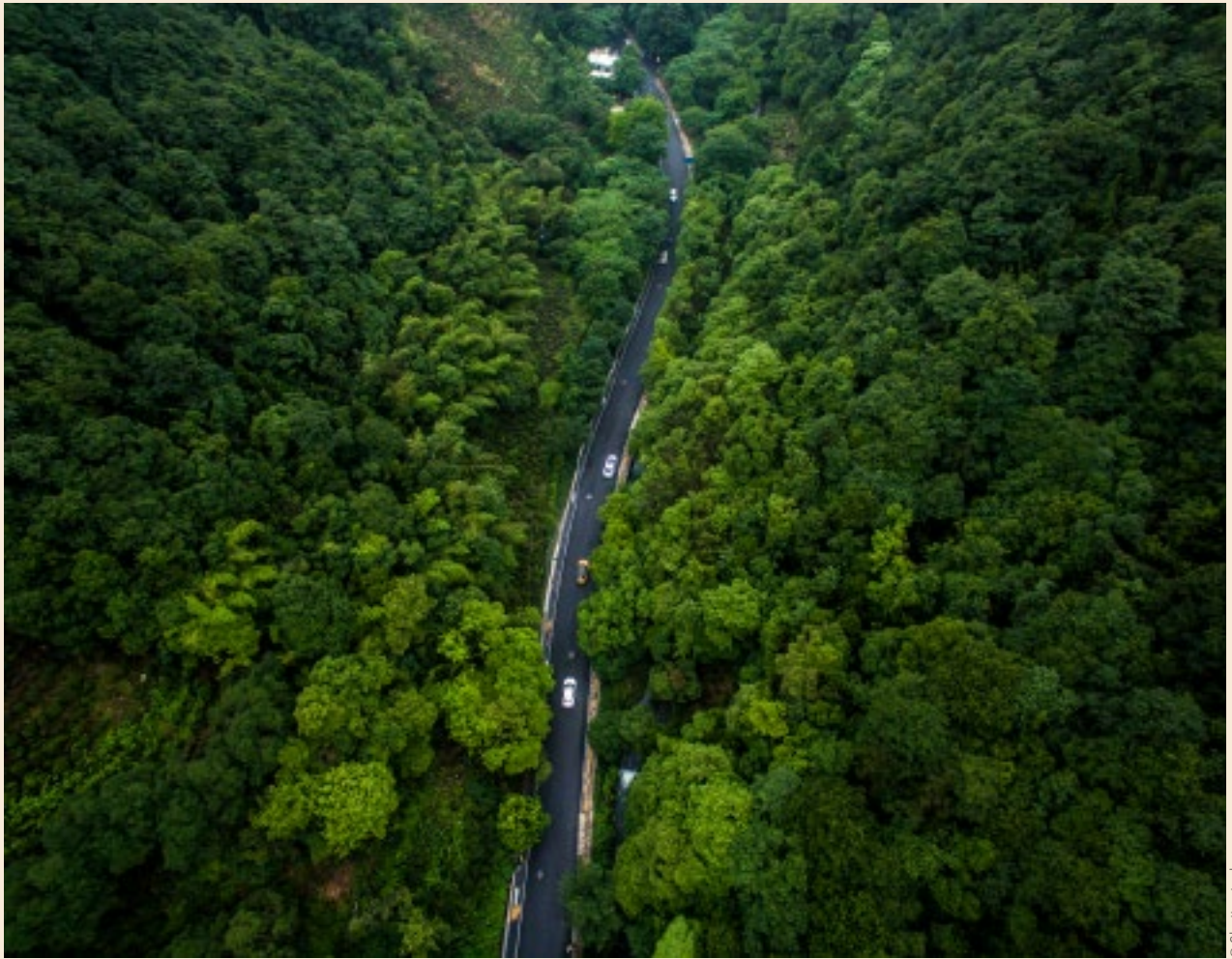
South Korea is the main importer when we analyze the softwood lumber import from main exporters, but the trend entered a falling phase during the second half of 2018. Import in Taiwan, India and the Philippines are reaching new top levels (figure 12).

Total import in the region increased by 5% during 2018 to 4,7 million m³ (compared to 2017). Increased import was seen in Taiwan, India, the Philippines and Thailand. Decreased import was noted in South Korea, Pakistan and Vietnam (table 3). If we analyze the figures for import in the region during January 2019 (compared to January 2018) imports are increasing in all countries except for Thailand. The largest increase is noted for India (+60%). The import in the region in total during January 2019 increased by 19%.

Table 4: The Southeast Asian (China and Japan excluded) import of softwood lumber (1 000 m³) from main exporters

| Exporter | 2018 | 2017 | 2018/2017 |
|------------------|--------------|--------------|------------|
| Canada | 1 212 | 1 203 | +1% |
| Germany | 654 | 556 | +18% |
| New Zealand | 573 | 579 | -1% |
| Russia | 478 | 479 | - |
| Ukraine | 372 | 211 | +76% |
| U.S. | 319 | 358 | -11% |
| Baltics | 302 | 316 | -4% |
| Austria-Slovenia | 264 | 237 | +11% |
| Sweden | 260 | 262 | -1% |
| Finland | 203 | 213 | -5% |
| Romania | 92 | 76 | +21% |
| Belarus | 3 | 1 | +200% |
| Total | 4 732 | 4 491 | +5% |

Sources: Eurostat, Russian Customs, USDA, Statistics Canada, Stats NZ, Ukraine Statistics, Beltstat



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Canada is the main supplier to the region and the import increased by 1% during 2018 (compared to 2017) while the import from Europe (incl. Russia) increased by 5%. Germany is the second largest exporter and increased the volume by 18% during 2018. New Zealand is 3rd as exporter and their volume decreased by 1% during 2018. Russia is 4th as exporter and the volume was about the same in 2018. Ukraine increased the export by 76% during 2018. The import from U.S. decreased by 11% (table 4).

With a rapidly growing economy and heavy investments in the construction sector, softwood lumber consumption in Asia will continue in a positive trend, even if duties and politics can have an influence for short period.

The United Nations Secretary-General will convene a climate Action Summit in 2019 to bring climate action to the top of the international agenda. To that we can add that in some countries, decisions have been taken to increase the height limit for wood buildings. Softwood

lumber is an environmentally friendly material that will help solve the problem with carbon dioxide affecting countries worldwide. It is created by the nature for the nature.

Jenny Wessung, CEO
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EOS expresses gratitude to Mrs Wessung for her precious contribution to the EOS Annual Report 2018/2019

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A world map is centered in the background, rendered in a light blue color against a dark blue background. The map is surrounded by a pattern of binary code (0s and 1s) in a lighter blue shade, creating a digital or data-driven aesthetic.

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4. Main results from the EOS market survey – April 2019

4.1 General information about the timber markets

The table below provides a summary overview of the sawnwood markets over the last few years in the EOS countries (big consumer countries such as Italy and the United Kingdom, which are not EOS members, are also included). For a more detailed country-by-country analysis, see section 4.5.

| Country | Year | Production (1.000 m ³) | | Imports (1.000 m ³) | | Exports (1.000 m ³) | | Consumption (1.000 m ³) | |
|---------|------|---------------------------------------|----------|------------------------------------|----------|------------------------------------|----------|--|----------|
| | | softwood | hardwood | softwood | hardwood | softwood | hardwood | softwood | hardwood |
| Austria | 2013 | 8,385 | 149 | 1,736 | 166 | 4,932 | 113 | 5,189 | 202 |
| | 2014 | 8,326 | 134 | 1,614 | 145 | 4,884 | 127 | 5,056 | 152 |
| | 2015 | 8,605 | 126 | 1,641 | 155 | 5,059 | 124 | 5,268 | 158 |
| | 2016 | 9,250 | 153 | 1,807 | 181 | 5,301 | 133 | 5,756 | 201 |
| | 2017 | 9,650 | 172 | 1,750 | 174 | 5,450 | 157 | 5,780 | 190 |
| | 2018 | 10,200 | 175 | 1,900 | 151 | 5,900 | 139 | 6,200 | 187 |
| | 2019 | 10,200 | 180 | 1,800 | 160 | 5,800 | 150 | 6,200 | 190 |
| Belgium | 2013 | 1,460 | 285 | 1,300 | 400 | 880 | 240 | 1,880 | 445 |
| | 2014 | 1,520 | 285 | 1,330 | 380 | 920 | 230 | 1,930 | 435 |
| | 2015 | 1,500 | 170 | 1,300 | 356 | 900 | 315 | 1,900 | 211 |
| | 2016 | 1,400 | 150 | 2,100 | 420 | 950 | 360 | 2,550 | 210 |
| | 2017 | 1,350 | 150 | 2,400 | 420 | 1,200 | 360 | 2,550 | 210 |
| | 2018 | 1,450 | 150 | 2,500 | 420 | 1,200 | 360 | 2,750 | 210 |
| | 2019 | 1,450 | 150 | 2,500 | 420 | 1,200 | 360 | 2,750 | 210 |
| Denmark | 2013 | 295 | 69 | 1,034 | 200 | 89 | 100 | 1,240 | 225 |
| | 2014 | 290 | 73 | 1,285 | 200 | 105 | 100 | 1,470 | 225 |
| | 2015 | 352 | 76 | 1,400 | 210 | 111 | 100 | 1,641 | 186 |
| | 2016 | 310 | 84 | 1,500 | 210 | 120 | 100 | 1,690 | 194 |
| | 2017 | 304 | 78 | 1,400 | 200 | 120 | 100 | 1,600 | 185 |
| | 2018 | 300 | 80 | 1,274 | 235 | 120 | 100 | 1,454 | 215 |
| | 2019 | 310 | 80 | 1,300 | 230 | 120 | 100 | 1,490 | 210 |
| Germany | 2013 | 20,428 | 1,031 | 4,243 | 401 | 6,512 | 639 | 18,159 | 793 |
| | 2014 | 20,757 | 1,015 | 4,348 | 418 | 6,935 | 692 | 18,170 | 741 |
| | 2015 | 20,433 | 1,032 | 4,579 | 411 | 6,529 | 697 | 18,483 | 746 |
| | 2016 | 21,109 | 1,064 | 4,915 | 396 | 7,295 | 685 | 18,729 | 755 |
| | 2017 | 22,056 | 1,082 | 5,083 | 379 | 7,848 | 781 | 19,291 | 680 |
| | 2018 | 23,000 | 1,100 | 5,340 | 350 | 8,523 | 745 | 19,817 | 705 |
| | 2019 | 23,000 | 1,100 | 5,400 | 350 | 8,800 | 770 | 19,600 | 680 |
| Finland | 2013 | 10,400 | 50 | 300 | 27 | 6,700 | 13 | 3,700 | 63 |
| | 2014 | 10,800 | 40 | 360 | 27 | 7,500 | 13 | 3,400 | 63 |
| | 2015 | 10,500 | 40 | 440 | 27 | 7,900 | 13 | 3,300 | 54 |
| | 2016 | 11,400 | 50 | 494 | 28 | 8,900 | 19 | 3,200 | 59 |
| | 2017 | 11,700 | 45 | 537 | 23 | 9,700 | 19 | 2,900 | 49 |
| | 2018 | 11,800 | 45 | 550 | 25 | 9,000 | 18 | 3,000 | 52 |
| | 2019 | 11,900 | 45 | 560 | 25 | 9,200 | 18 | 3,000 | 52 |

| Country | Year | Production (1.000 m³) | | Imports (1.000 m³) | | Exports (1.000 m³) | | Consumption (1.000 m³) | |
|---------|------|--------------------------|----------|-----------------------|----------|-----------------------|----------|---------------------------|----------|
| | | softwood | hardwood | softwood | hardwood | softwood | hardwood | softwood | hardwood |
| France | 2013 | 6,800 | 1,380 | 2,200 | 243 | 600 | 380 | 8,400 | 1,243 |
| | 2014 | 6,360 | 1,542 | 2,200 | 220 | 600 | 400 | 7,960 | 1,362 |
| | 2015 | 6,230 | 1,479 | 2,100 | 200 | 760 | 430 | 7,570 | 1,249 |
| | 2016 | 6,400 | 1,500 | 2,100 | 200 | 770 | 450 | 7,730 | 1,250 |
| | 2017 | 6,596 | 1,578 | 2,100 | 200 | 743 | 480 | 7,917 | 1,270 |
| | 2018 | 6,795 | 1,578 | 2,150 | 200 | 720 | 480 | 8,225 | 1,298 |
| | 2019 | 6,900 | 1,578 | 2,200 | 200 | 720 | 480 | 8,380 | 1,298 |
| Italy * | 2013 | 860 | 500 | 3,936 | 717 | 120 | 141 | 4,676 | 1,076 |
| | 2014 | 910 | 520 | 3,904 | 754 | 140 | 185 | 4,674 | 1,089 |
| | 2015 | 920 | 550 | 3,873 | 770 | 150 | 173 | 4,643 | 1,147 |
| | 2016 | 950 | 550 | 3,981 | 757 | 153 | 175 | 4,778 | 1,132 |
| | 2017 | 970 | 550 | 4,203 | 713 | 201 | 215 | 4,972 | 1,048 |
| | 2018 | 950 | 550 | 4,009 | 713 | 240 | 215 | 4,719 | 1,048 |
| | 2019 | 950 | 550 | 4,009 | 713 | 240 | 215 | 4,719 | 1,048 |
| Latvia | 2013 | 2,600 | 659 | 252 | 9 | 2,069 | 428 | 783 | 240 |
| | 2014 | 2,620 | 717 | 439 | 21 | 2,258 | 498 | 801 | 240 |
| | 2015 | 2,690 | 810 | 570 | 30 | 2,440 | 590 | 820 | 250 |
| | 2016 | 2,792 | 690 | 779 | 29 | 2,739 | 472 | 832 | 253 |
| | 2017 | 2,662 | 596 | 934 | 28 | 2,746 | 417 | 850 | 250 |
| | 2018 | 2,730 | 650 | 1,056 | 41 | 2,850 | 448 | 936 | 243 |
| | 2019 | 2,660 | 600 | 1,000 | 20 | 2,720 | 395 | 940 | 225 |
| Norway | 2013 | 2,200 | 0 | 960 | 35 | 515 | 1 | 2,645 | 34 |
| | 2014 | 2,400 | 0 | 970 | 23 | 512 | 0 | 2,858 | 23 |
| | 2015 | 2,444 | 0 | 979 | 24 | 560 | 0 | 2,863 | 24 |
| | 2016 | 2,533 | 0 | 991 | 28 | 600 | 0 | 2,924 | 28 |
| | 2017 | 2,655 | 0 | 996 | 31 | 666 | 0 | 2,985 | 31 |
| | 2018 | 2,675 | 0 | 924 | 31 | 667 | 0 | 2,932 | 31 |
| | 2019 | 2,675 | 0 | 925 | 31 | 650 | 0 | 2,950 | 31 |
| Romania | 2013 | 3,762 | 1,756 | 16 | 68 | 2,607 | 968 | 1,171 | 856 |
| | 2014 | 3,500 | 1,700 | 16 | 29 | 2,296 | 712 | 1,188 | 918 |
| | 2015 | 4,317 | 1,795 | 29 | 29 | 1,759 | 726 | 2,529 | 1,179 |
| | 2016 | 3,900 | 1,700 | 283 | 125 | 1,800 | 800 | 2,383 | 1,025 |
| | 2017 | 3,600 | 1,600 | 450 | 25 | 1,600 | 800 | 2,450 | 825 |
| | 2018 | 3,550 | 1,600 | 350 | 110 | 1,100 | 600 | 2,800 | 1,110 |
| | 2019 | 3,500 | 1,600 | 360 | 130 | 1,150 | 650 | 2,800 | 1,080 |
| Sweden | 2013 | 16,100 | 90 | 120 | 40 | 11,700 | 10 | 4,600 | 120 |
| | 2014 | 17,660 | 100 | 150 | 28 | 12,300 | 9 | 4,800 | 120 |
| | 2015 | 18,132 | 100 | 170 | 28 | 12,820 | 4 | 5,253 | 124 |
| | 2016 | 18,011 | 100 | 160 | 43 | 13,000 | 19 | 5,550 | 123 |
| | 2017 | 18,309 | 97 | 180 | 47 | 13,110 | 43 | 5,780 | 101 |
| | 2018 | 18,300 | 95 | 180 | 45 | 12,440 | 20 | 5,705 | 120 |
| | 2019 | 18,600 | 95 | 180 | 45 | 13,000 | 20 | 5,600 | 120 |

| Country | Year | Production (1.000 m³) | | Imports (1.000 m³) | | Exports (1.000 m³) | | Consumption (1.000 m³) | |
|-----------------|------|--------------------------|----------|-----------------------|----------|-----------------------|----------|---------------------------|----------|
| | | softwood | hardwood | softwood | hardwood | softwood | hardwood | softwood | hardwood |
| Switzerland | 2013 | 986 | 58 | 320 | 35 | 175 | 15 | 1,131 | 78 |
| | 2014 | 1,080 | 65 | 330 | 35 | 180 | 15 | 1,230 | 85 |
| | 2015 | 1,089 | 76 | 345 | 50 | 176 | 15 | 1,258 | 111 |
| | 2016 | 1,074 | 48 | 348 | 46 | 190 | 17 | 1,232 | 77 |
| | 2017 | 1,037 | 48 | 342 | 37 | 198 | 25 | 1,181 | 60 |
| | 2018 | 1,075 | 45 | 333 | 35 | 198 | 20 | 1,210 | 60 |
| | 2019 | 1,065 | 47 | 340 | 35 | 196 | 21 | 1,209 | 61 |
| United Kingdom* | 2013 | 3,536 | 46 | 5,101 | 380 | 130 | 20 | 8,491 | 410 |
| | 2014 | 3,716 | 47 | 5,352 | 400 | 140 | 20 | 8,870 | 430 |
| | 2015 | 3,449 | 44 | 5,888 | 435 | 167 | 17 | 9,170 | 462 |
| | 2016 | 3,624 | 47 | 6,219 | 427 | 167 | 21 | 9,676 | 453 |
| | 2017 | 3,728 | 42 | 7,079 | 501 | 166 | 25 | 10,641 | 518 |
| | 2018 | 3,650 | 50 | 6,564 | 501 | 194 | 23 | 10,020 | 528 |
| | 2019 | 3,800 | 50 | 6,675 | 501 | 203 | 23 | 10,272 | 528 |
| EOS TOTAL | 2013 | 77,812 | 6,073 | 21,518 | 2,721 | 37,029 | 3,068 | 62,065 | 5,785 |
| | 2014 | 79,939 | 6,238 | 22,298 | 2,680 | 38,770 | 3,001 | 62,407 | 5,883 |
| | 2015 | 80,661 | 6,298 | 23,314 | 2,725 | 39,331 | 3,204 | 64,698 | 5,901 |
| | 2016 | 82,753 | 6,136 | 25,677 | 2,890 | 41,985 | 3,251 | 67,030 | 5,760 |
| | 2017 | 84,617 | 6,038 | 27,454 | 2,778 | 43,748 | 3,422 | 68,897 | 5,417 |
| | 2018 | 86,475 | 6,118 | 27,130 | 2,856 | 43,152 | 3,168 | 69,768 | 5,806 |
| | 2019 | 87,010 | 6,075 | 27,249 | 2,860 | 43,999 | 3,202 | 69,910 | 5,733 |

*Italy and the UK are not EOS Countries, but will be analysed in this chapter

4.2 Sawn softwood

4.2.1 Overview of EOS Sawn Softwood Production

Table 4.1: Overview of the EOS sawn softwood production 2014-2019 in 1,000 m³

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 * | 18/17 % var. | 19/18 % var. * | Share % 2018 |
|------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|-------------------|-----------------|
| AT | 8,326 | 8,605 | 9,250 | 9,650 | 10,200 | 10,200 | 5.7% | 0.0% | 11.8% |
| BE | 1,520 | 1,500 | 1,400 | 1,350 | 1,450 | 1,450 | 7.4% | 0.0% | 1.7% |
| CH | 1,080 | 1,089 | 1,074 | 1,037 | 1,075 | 1,065 | 3.7% | -0.9% | 1.2% |
| DE | 20,757 | 20,433 | 21,109 | 22,056 | 23,000 | 23,000 | 4.3% | 0.0% | 26.6% |
| DK | 290 | 352 | 310 | 304 | 300 | 310 | -1.3% | 3.3% | 0.3% |
| FI | 10,800 | 10,500 | 11,400 | 11,700 | 11,800 | 11,900 | 0.9% | 0.8% | 13.6% |
| FR | 6,360 | 6,230 | 6,400 | 6,596 | 6,795 | 6,900 | 3.0% | 1.5% | 7.9% |
| IT | 910 | 920 | 950 | 970 | 950 | 950 | -2.1% | 0.0% | 1.1% |
| LV | 2,620 | 2,690 | 2,792 | 2,662 | 2,730 | 2,660 | 2.6% | -2.6% | 3.2% |
| NO | 2,400 | 2,444 | 2,533 | 2,655 | 2,675 | 2,675 | 0.8% | 0.0% | 3.1% |
| RO | 3,500 | 4,317 | 3,900 | 3,600 | 3,550 | 3,500 | -1.4% | -1.4% | 4.1% |
| SE | 17,660 | 18,132 | 18,011 | 18,309 | 18,300 | 18,600 | 0.0% | 1.6% | 21.2% |
| UK | 3,716 | 3,449 | 3,624 | 3,728 | 3,650 | 3,800 | -2.1% | 4.1% | 4.2% |
| EOS | 79,939 | 80,661 | 82,753 | 84,617 | 86,475 | 87,010 | 2.2% | 0.6% | 100% |

*Estimates



Following some challenging years in the aftermath of the global economic crisis, the recovery of sawn softwood production continues at a pleasing pace, on the back of lively demand in Europe and a satisfactory price level. Delivered volumes to East Asia (China and Japan) overall went down but sales in values were up. The United States market was very receptive in the first part of the year, less so in the second half. Overall, there were different trends across Europe when it comes to exported volumes: Sweden and Finland have seen their shipments shrink in volume (but not in value, with Swedish exports doing particularly well), whereas central European countries such as Germany and Austria have seen their exports increase.

The year was characterized by high availability of raw materials due to the widespread weather-related calamities across Europe, particularly in Central Europe. Production has increased partly because of this. It seems that as a result of climate change beetle-damaged logs will be increasing in the next few years. How the industry will adjust is a major challenge for sawmills across Europe.

In this group of countries (EOS, plus Italy and the UK) total production of sawn softwood increased by more than 2% in 2018 reaching a volume of almost 86.5 million m³.

With a production of 23 million m³ in 2018 (+4.3% vs 2017) Germany remains the largest sawn softwood producer within the EOS community. Sweden ranks second with 18.3 million m³ in 2018, with flat production. Finland remains the third largest producer with 11.8 million m³ (+1% vs 2017) ahead of Austria with 10.2 million m³ (+5.7% vs 2017). France remains the fifth largest producer with 6.8 million m³ (+3% vs 2017).

2019 is set to be a more challenging year: production is expected to remain overall flat, with the exception of Sweden and France (where production might increase) among the largest producers. On a brighter note, many countries have emphasized that numerous investments are taking place, especially in facilities which will produce value-added products such as (but not only) CLT.

Figure 4.1: Sawn softwood production volumes in the EOS member countries 2009-2019 (000 m³) - TOTAL

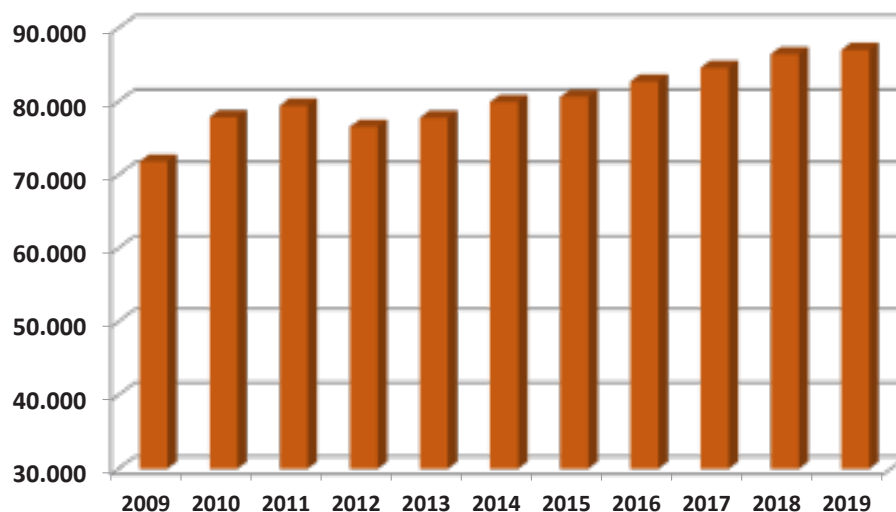
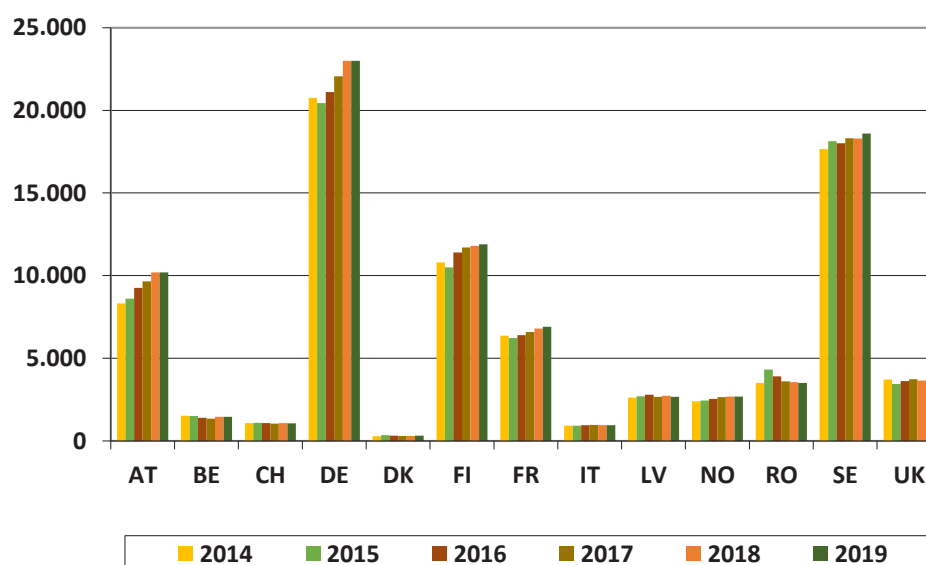


Figure: 4.2 Sawn softwood production volumes in the EOS member countries 2014-2019 (000 m³) – COUNTRY BY COUNTRY



4.2.2. Overview of the EOS Sawn Softwood Consumption

Table 4.2: Overview of the EOS sawn softwood consumption 2014-2019 in 1,000 m³

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 * | 18/17 % var. | 19/18 % var. * | Share % 2018 |
|------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|----------------|--------------|
| AT | 5,056 | 5,268 | 5,756 | 5,780 | 6,200 | 6,200 | 7.3% | 0.0% | 8.9% |
| BE | 1,930 | 1,900 | 2,550 | 2,550 | 2,750 | 2,750 | 7.8% | 0.0% | 3.9% |
| CH | 1,230 | 1,258 | 1,232 | 1,181 | 1,210 | 1,209 | 2.5% | -0.1% | 1.7% |
| DE | 18,170 | 18,483 | 18,729 | 19,291 | 19,817 | 19,600 | 2.7% | -1.1% | 28.4% |
| DK | 1,470 | 1,641 | 1,690 | 1,600 | 1,454 | 1,490 | -9.1% | 2.5% | 2.1% |
| FI | 3,400 | 3,300 | 3,200 | 2,900 | 3,000 | 3,000 | 3.4% | 0.0% | 4.3% |
| FR | 7,960 | 7,570 | 7,730 | 7,917 | 8,225 | 8,380 | 3.9% | 1.9% | 11.8% |
| IT | 4,674 | 4,643 | 4,778 | 4,972 | 4,719 | 4,719 | -5.1% | 0.0% | 6.8% |
| LV | 801 | 820 | 832 | 850 | 936 | 940 | 10.1% | 0.5% | 1.3% |
| NO | 2,858 | 2,863 | 2,924 | 2,985 | 2,932 | 2,950 | -1.8% | 0.6% | 4.2% |
| RO | 1,188 | 2,529 | 2,383 | 2,450 | 2,800 | 2,800 | 14.3% | 0.0% | 4.0% |
| SE | 4,800 | 5,253 | 5,550 | 5,780 | 5,705 | 5,600 | -1.3% | -1.8% | 8.2% |
| UK | 8,870 | 9,170 | 9,676 | 10,641 | 10,020 | 10,272 | -5.8% | 2.5% | 14.4% |
| EOS | 62,407 | 64,698 | 67,030 | 68,897 | 69,768 | 69,910 | 1.3% | 0.2% | 100% |

*Estimates

In 2018, demand was lively across Europe with the largest Central European producers all signaling satisfactory levels. Wood as a construction material is gaining ground, especially across Nordic countries. Sweden, Norway, Germany, and Austria emphasized an increase of the utilization of wood as a building material. Engineered wood

seems to be gaining momentum. The packaging sector also positively contributed to brisk consumption of sawn softwood as underlined by France and Germany. For more information on single countries, see country-by-country section below.

In 2018, total demand for sawn softwood grew in this group of countries (EOS, Italy, UK) by 1.3% to 69.8 million m³, growing for the sixth year in a row. As anticipated in the production section, 2019 looks set to be a more difficult year. Finland in its market statement stressed that 2018

could have been a cyclical peak, whereas Germany and Latvia emphasized that there is high uncertainty. There are many downside risks including the outcome of Brexit, trade tensions between the United States and China, geopolitical risks. As a result, consumption is expected to be flat.

Figure 4.3: Sawn softwood consumption volumes in the EOS member countries 2009-2019 (000 m³) – TOTAL

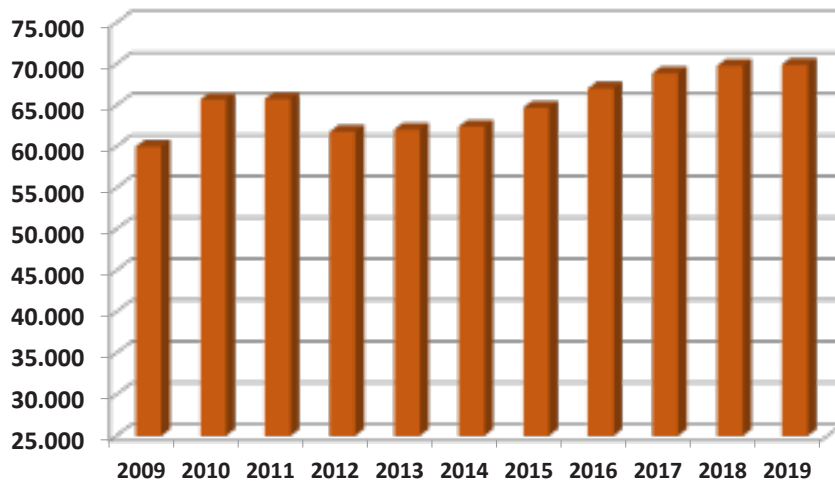
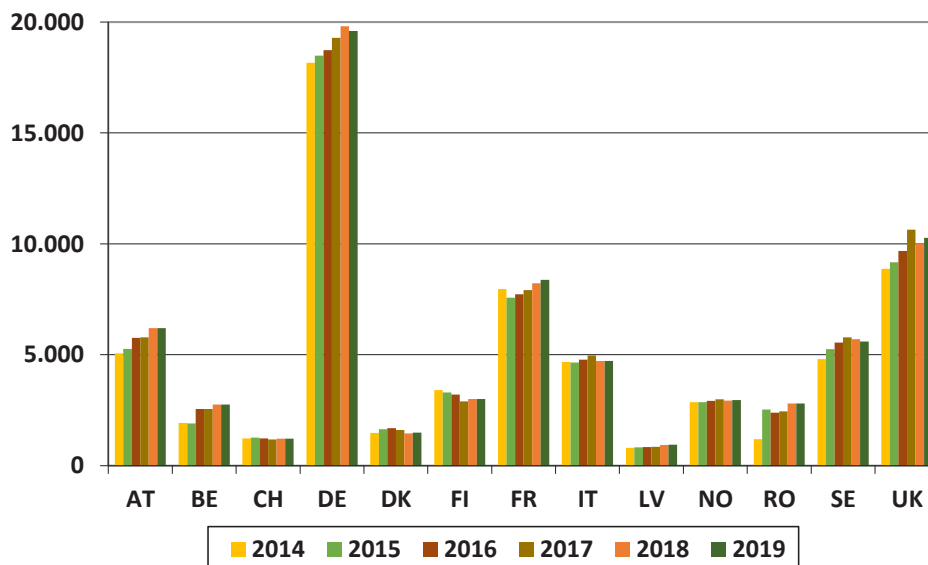


Figure 4.4 Sawn softwood consumption volumes in the EOS member countries 2014-2019 (000 m³) – COUNTRY BY COUNTRY



4.3 Sawn hardwood

4.3.1 Overview of EOS Sawn Hardwood Production

Table 4.3: Overview of the EOS sawn hardwood production 2014-2019 in 1,000 m³

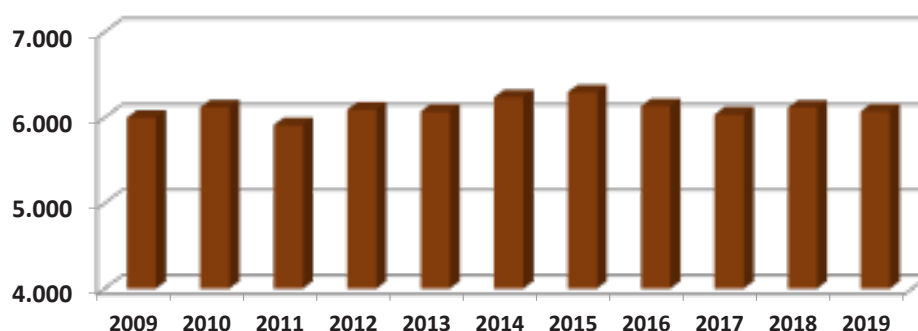
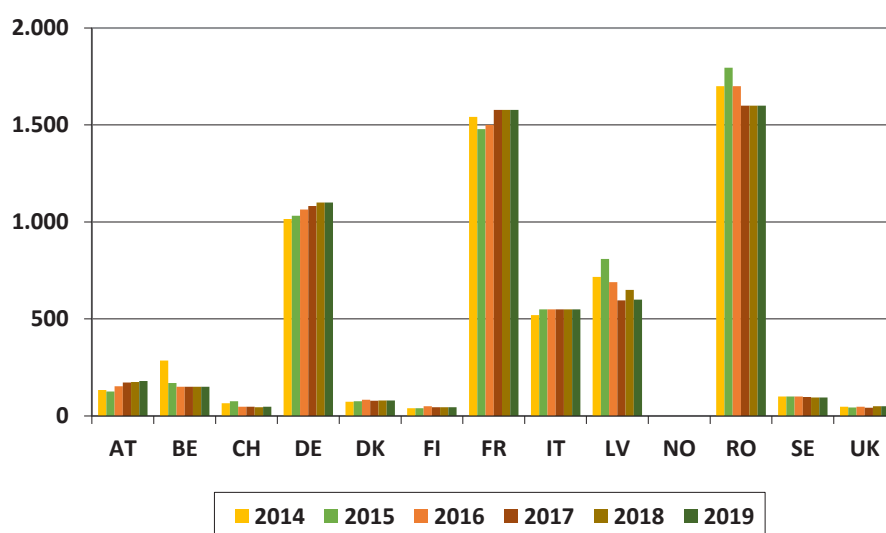
| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 * | 18/17 % var. | 19/18 % var. * |
|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| AT | 134 | 126 | 153 | 172 | 175 | 180 | 1.7% | 2.9% |
| BE | 285 | 170 | 150 | 150 | 150 | 150 | 0.0% | 0.0% |
| CH | 65 | 76 | 48 | 48 | 45 | 47 | -6.3% | 4.4% |
| DE | 1,015 | 1,032 | 1,064 | 1,082 | 1,100 | 1,100 | 1.7% | 0.0% |
| DK | 73 | 76 | 84 | 78 | 80 | 80 | 2.6% | 0.0% |
| FI | 40 | 40 | 50 | 45 | 45 | 45 | 0.0% | 0.0% |
| FR | 1,542 | 1,479 | 1,500 | 1,578 | 1,578 | 1,578 | 0.0% | 0.0% |
| IT | 520 | 550 | 550 | 550 | 550 | 550 | 0.0% | 0.0% |
| LV | 717 | 810 | 690 | 596 | 650 | 600 | 9.1% | -7.7% |
| NO | 0 | 0 | 0 | 0 | 0 | 0 | - | - |
| RO | 1,700 | 1,795 | 1,700 | 1,600 | 1,600 | 1,600 | 0.0% | 0.0% |
| SE | 100 | 100 | 100 | 97 | 95 | 95 | -2.1% | 0.0% |
| UK | 47 | 44 | 47 | 42 | 50 | 50 | 19.0% | 0.0% |
| EOS | 6,238 | 6,298 | 6,136 | 6,038 | 6,118 | 6,075 | 1.3% | -0.7% |

*Estimates



Production in the sawn hardwood sector has not been showing any significant trends over the last few years. Demand is on the way up in Europe and the mood was upbeat in 2018 but both France and Germany signaled a difficulty in export to Asian markets. However, some countries are experiencing problems in raw materials' supply for some years, which is keeping production below potential. Countries such as France, Belgium (mainly oak) and Germany (mainly beech) are experiencing significant exports of raw materials to countries like China. Romania signalled unsatisfactory availability of beech logs. On the brighter side, limitations on the exports of oak from Croatia have been lifted, which were one of the reasons why the Austrian hardwood sector had a good year.

Overall production in this group of countries exceeded 6.1 million m³ in 2018, 1.3% higher than in 2017. Production in 2019 is expected to be flat. In 2018, Romania and France remain the biggest sawn hardwood producers within the EOS community, with a production of 1.6 and 1.58 million m³ respectively. The third largest producer remains Germany, with 1.1 million m³, a small increase compared to 2017.

Figure 4.5: Sawn hardwood production volumes in the EOS member countries 2009-2019 (000 m³) - TOTALFigure 4.6 Sawn hardwood production volumes in the EOS member countries 2014-2019 (000 m³) – COUNTRY BY COUNTRY

4.3.2 Overview of EOS Sawn Hardwood consumption

Table 4.4: Overview of the EOS sawn hardwood consumption 2014-2019 in 1,000 m³

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 * | 18/17 % var. | 19/18 % var. * |
|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| AT | 152 | 158 | 201 | 190 | 187 | 190 | -1.6% | 1.6% |
| BE | 435 | 211 | 210 | 210 | 210 | 210 | 0.0% | 0.0% |
| CH | 85 | 111 | 77 | 60 | 60 | 61 | 0.0% | 1.7% |
| DE | 741 | 746 | 755 | 680 | 705 | 680 | 3.7% | -3.5% |
| DK | 225 | 186 | 194 | 185 | 215 | 210 | 16.2% | -2.3% |
| FI | 63 | 54 | 59 | 49 | 52 | 52 | 6.1% | 0.0% |
| FR | 1,362 | 1,249 | 1,250 | 1,270 | 1,298 | 1,298 | 2.2% | 0.0% |
| IT | 1,089 | 1,147 | 1,132 | 1,048 | 1,048 | 1,048 | 0.0% | 0.0% |
| LV | 240 | 250 | 253 | 250 | 243 | 225 | -3.0% | -7.2% |
| NO | 23 | 24 | 28 | 31 | 31 | 31 | 0.0% | 0.0% |
| RO | 918 | 1,179 | 1,025 | 825 | 1,110 | 1,080 | 34.5% | -2.7% |
| SE | 120 | 124 | 123 | 101 | 120 | 120 | 18.8% | 0.0% |
| UK | 430 | 462 | 453 | 518 | 528 | 528 | 1.9% | 0.0% |
| EOS | 5,883 | 5,901 | 5,760 | 5,417 | 5,806 | 5,733 | 7.2% | -1.3% |

*Estimates

Demand in the sawn hardwood sector was deemed satisfactory in France and Austria, livelier than in recent year, particularly thanks to internal markets. Even Germany stressed lively demand, particularly in the oak sector, which in Germany is however limited in terms of volume.

In 2018, sawn hardwood consumption in this group of countries increased to 5.8 million m³ (2017: 5.4 million m³).

A noticeable increase can thus be observed comparing with 2017. For 2019 a slight decline seems to be on the cards.

France remains the largest consumer within the EOS community with almost 1.3 million m³, followed by Romania with 1.1 million m³ and Germany with slightly more than 700,000 m³.

Figure 4.7: Sawn hardwood consumption volumes in the EOS member countries 2009-2019 (000 m³) - TOTAL

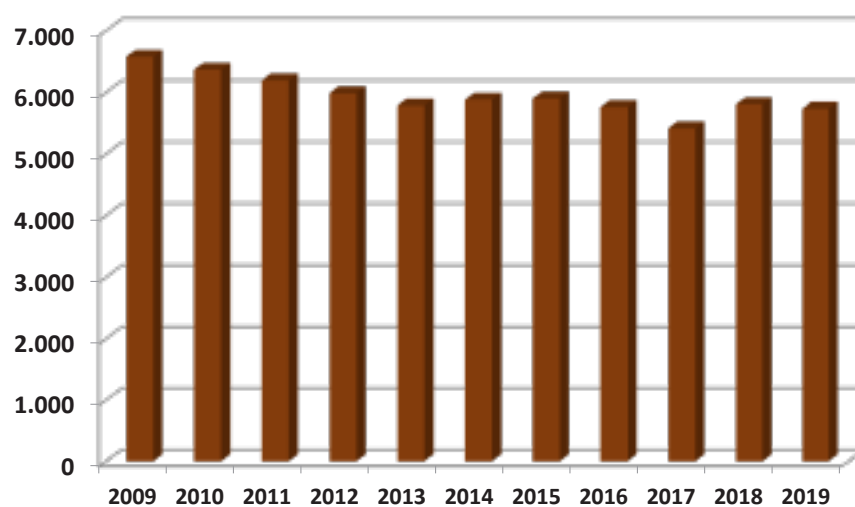
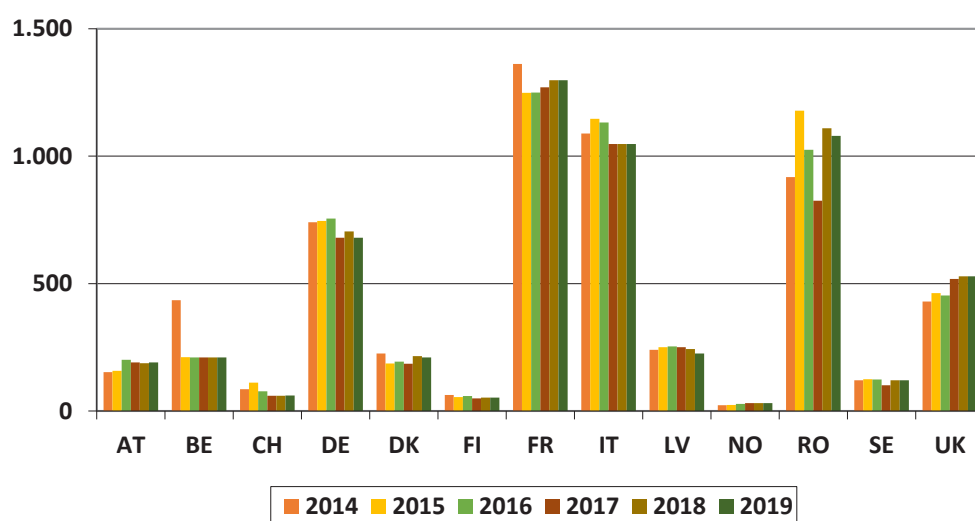


Figure: 4.8 Sawn hardwood consumption volumes in the EOS member countries 2014-2019 (000 m³) – COUNTRY BY COUNTRY



4.4 Focus on by-products

Most EOS countries have shared data on sawmill by-products, which are reported below.

Figure: 4.9 Sawdust production volumes in the EOS member countries 2016-2019 (000 m³)

| | 2016 | 2017 | 2018 | 2019* | 18/17 % var. | 19/18 % var.* |
|--------------|---------------|---------------|---------------|----------------------------|--------------|---------------|
| AT | 2,724 | 3,000 | 3,100 | 3,100 | 3.3 | 0.0 |
| BE | 207 | 191 | 221 | 221 | 15.7 | 0.0 |
| CH | 207 | 196 | 211 | 204 | 7.7 | -3.3 |
| DE | 4,697 | 4,901 | 5,106 | 5,106 | 4.2 | 0.0 |
| FI | 3,420 | 3,510 | 3,540 | 3,570 | 0.9 | 0.8 |
| LV | 558 | 521 | 534 | 521 | 2.6 | -2.6 |
| NO | 250 | 260 | 265 | 265 | 1.9 | 0.0 |
| RO | 195 | 200 | 200 | 200 | 0.0 | 0.0 |
| SE | 5,300 | 5,300 | 5,300 | UP | 0.0 | 0.0 |
| TOTAL | 17,558 | 18,079 | 18,477 | 18,487^{oo} | 2.2 | 0.1 |

*Estimates ^{oo} Sweden has estimated the 2019 value to go up but did not specify by how much. So, the total has been calculated by assuming the Swedish figure remains constant, but this is an underestimation

Figure: 4.10 Chips production volumes in the EOS member countries 2016-2019 (000 m³)

| | 2016 | 2017 | 2018 | 2019* | 18/17 % var. | 19/18 % var.* |
|--------------|---------------|---------------|---------------|----------------------------|--------------|---------------|
| AT | 3,500 | 3,550 | 3,600 | 3,600 | 1.4 | 0.0 |
| BE | 809 | 778 | 839 | 839 | 7.8 | 0.0 |
| CH | 518 | 490 | 513 | 510 | 4.7 | -0.6 |
| DE | 9,799 | 10,232 | 10,663 | 10,663 | 4.2 | 0.0 |
| FI | 7,600 | 7,800 | 7,900 | 7,900 | 1.3 | 0.0 |
| LV | 3,145 | 2,997 | 3,085 | 3,006 | 2.9 | -2.6 |
| NO | 1,500 | 1,500 | 1,250 | 1,250 | -16.7 | 0.0 |
| RO | 350 | 350 | 350 | 350 | 0.0 | 0.0 |
| SE | 11,300 | 11,400 | 11,400 | UP | 0.0 | 0.0 |
| TOTAL | 38,521 | 39,097 | 39,599 | 39,517^{oo} | 1.3 | -0.2 |

*Estimates ^{oo} Sweden has estimated the 2019 value to go up but did not specify by how much. So, the total has been calculated by assuming the Swedish figure remains constant, but this is an underestimation

Figure: 4.11 Bark production volumes in the EOS member countries 2016-2019 (000 m³)

| | 2016 | 2017 | 2018 | 2019* | 18/17 % var. | 19/18 % var.* |
|--------------|---------------|---------------|---------------|----------------------------|--------------|---------------|
| AT | 1,100 | 1,000 | 1,100 | 1,100 | 10.0 | 0.0 |
| BE | 276 | 267 | 285 | 285 | 6.7 | 0.0 |
| CH | 226 | 214 | 223 | 222 | 4.2 | -0.4 |
| DE | unav. | unav. | unav. | unav. | | |
| FI | 2,300 | 2,400 | 2,400 | 2,400 | 0.0 | 0.0 |
| LV | 429 | 400 | 400 | 395 | 0.0 | -1.3 |
| NO | 500 | 500 | 500 | 500 | 0.0 | 0.0 |
| RO | 1,992 | 1,700 | 1,650 | 1,650 | -2.9 | 0.0 |
| SE | 3,600 | 3,600 | 3,600 | UP | 0.0 | 0.0 |
| TOTAL | 10,423 | 10,081 | 10,158 | 10,152^{oo} | 0.8 | -0.1 |

*Estimates ^{oo} Sweden has estimated the 2019 value to go up but did not specify by how much. So, the total has been calculated by assuming the Swedish figure remains constant, but this is an underestimation



4.5 Country Reports

AUSTRIA

Source: Fachverband der Holzindustrie Österreichs

General economic information

| | 2016 | 2017 | 2018 | 2019 |
|---|--------|--------|--------|--------|
| Population (million) | 8.7 | 8.7 | 8.8 | 8.8 |
| GDP (%) | 1.5 | 2.9 | 2.7 | 1.7 |
| Inflation rate (%) | 1.0 | 2.1 | 2.0 | 1.7 |
| Unemployment rate (%) | 6.0 | 5.5 | 4.9 | 4.6 |
| Construction industry | | | | |
| Buildings permits (units) | 58 000 | 62 600 | 61 500 | 61 700 |
| Housing starts (units) | 51 700 | 57 300 | 59 000 | 58 500 |
| Housing completions (units) | 48 200 | 52 000 | 56 500 | 58 800 |
| Wage Development (%) | 0.3 | 0.3 | 0.6 | 0.6 |
| Average working time in sawmilling (h/week) | 38.5 | 38.5 | 38.5 | 38.5 |

2019 data are estimates

Sawn Softwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|-------|-------|--------|---------|
| Production | 9 250 | 9 650 | 10 200 | 10 200* |
| Imports | 1 807 | 1 750 | 1 900 | 1 800 |
| Exports | 5 301 | 5 450 | 5 900 | 5 800 |
| Consumption | 5 756 | 5 780 | 6 200 | 6 200 |

2019 data are estimates. *Figure is underestimated

Sawn Hardwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|------|------|------|------|
| Production | 153 | 172 | 175 | 180 |
| Imports | 181 | 174 | 151 | 160 |
| Exports | 133 | 157 | 139 | 150 |
| Consumption | 201 | 190 | 187 | 190 |

2019 data are estimates

Availability of logs

| | 2016 | 2017 | 2018 | 2019 |
|----------|------|------|------|------|
| Softwood | 2 | 4 | 4 | 4 |
| Hardwood | 3 | 2 | 3 | 3 |

(1 = low; 2 = medium low; 3 = normal; 4 = medium high; 5 = high)

Market statement

2018 was again a record-breaking year for the Austrian sawmilling industry. Production increased for the fourth year in a row and for the first time since 2008, more than 10 million m³ of sawnwood were produced. The Austrian sawmills benefited from the good economic situation and further improvements across almost all sales markets. The sawmills were able to expand their international market share. Compared to 2017, there was another increase in exports of around 8.6% in 2018.

The summer of 2018 was marked by extensive forest damage in Central Europe. Big forest areas in northern areas of Austria are under threat from a beetle plague and the increased frequency of extreme events such as storms and heavy winter snow. The biggest challenge is to select the infected trees and save them as part of special forest stocks as soon as possible. The large quantities of damaged wood led to high supply pressures on the local sawmills at a regional level. The big Austrian sawmills were able to handle these substantial amounts of logs thanks to their extensive production capabilities and also to the good sales situation particularly in the well-developed timber industries (GLT, CLT,...) Germany was the most important 'driving force' for the European market in 2018. Italy remains the largest export destination, even though the export figures stagnated, while almost all other major markets increased. Glued and prefabricated timber (GLT and CLT) recorded significant growth rates. The domestic market revealed a positive development for almost all products.

The positive trend of recent years continued in 2018. A total of 17.5 million m³ of sawlogs were processed. The sawnwood production (softwood and hardwood) reached 10.4 million m³ and thus returned to the level of before the global economic crisis of 2008. The first month of 2019 reveals a slight positive development in production, so we calculate a flat production figure for 2019. However, according to the latest projections, production in 2019 in Austria will most probably turn out to be higher than initially foreseen.

The Austrian sawmilling industry is a large and very successful sector, with approximately 1,000 companies and close to 8,400 employees. The sawmilling industry is the biggest processor of wood in the entire wood industry, handling 70% of all processed solid biomass. The industry contributes substantially to Austria's foreign trade balance and consists almost exclusively of small and medium-sized enterprises. The 40 biggest sawmills generate approximately 90% of the total production volume; the remaining 10% of production is carried out by 960 small and medium-sized enterprises which are important for the regional value creation and play a major role in rural regions.

Softwood

In 2018, 7.2 million m³ of softwood sawlogs were imported from our neighbouring EU countries (2017: 6.1 million m³).

Fig. 1: Production of sawnwood in Austria

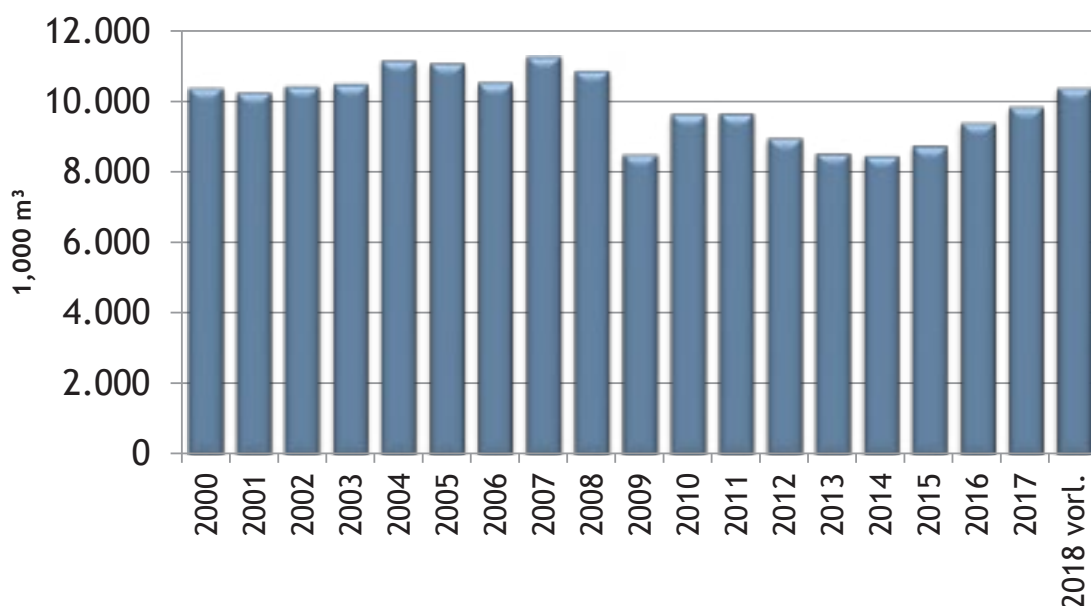
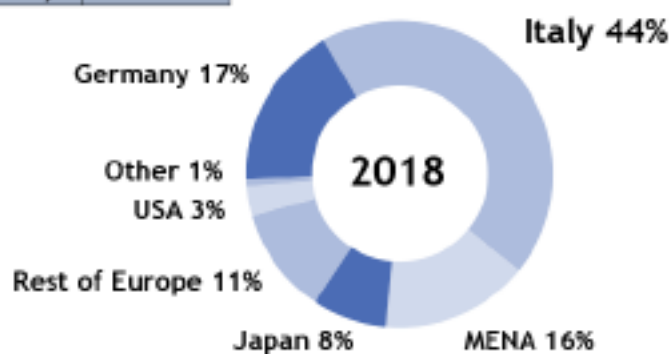


Fig. 2: Austrian sawn softwood exports 2017/2018

| Figures in m³ | 01-12 2018 | Diff. in % | 01-12 2017 |
|----------------------------|------------------|------------|------------------|
| Italy | 2 607 883 | 0,2 | 2 603 920 |
| Germany | 1 026 487 | 7,4 | 955 401 |
| Rest of Europe | 666 076 | 10,9 | 600 713 |
| MENA | 924 745 | 16,1 | 796 513 |
| Japan (incl. rest of Asia) | 463 052 | 8,4 | 427 302 |
| USA (incl. Canada) | 187 429 | 324,9 | 44 114 |
| Other | 43 197 | 109,5 | 20 618 |
| Total | 5 918 869 | 8,6 | 5 448 581 |

Source: Statistik Austria, Fachverband der Holzindustrie

Figures:
2017: final
2018: preliminary

The roundwood flow from the Czech Republic, the largest importing country, increased by 24% (3.8 million m³). The other two significant import countries are Germany +19.5% (2.0 million m³) and Slovenia +15.7% (1.1 million m³). Lower grades are mainly affected by the forest damage in these countries.

The Austrian sawmill industry was sufficiently supplied with sawlogs but there are always some regional differences and bottlenecks. In some parts of Austria, there was a tendency towards an undersupply of fresh sawlogs on the market special during the 1st quarter of 2018. Domestic wood always has the highest priority. It is important to have a continuous and predictable supply of all assortments throughout the year.

Together with by-products and further processed timber, the sawmilling industry was able to turn over almost EUR 2.4 billion, i.e. +7.6% compared with the previous year. About 60% of the whole production in Austria is exported. In 2018, the total export of sawnwood was approximately 5.9 million m³. That means an increase of about 2.4% (2017: 5.5 million m³).

Unfortunately, the main market of Italy has not developed as well as expected. About 45% of sawn softwood exports go to Italy, our long-standing key export market. With an overall sawn softwood export of 2.6 million m³, the Italian market was up by only +0.2%. All other main markets showed high growth rates. Exports to Germany increased by 7.4% to 1.0 million m³ and to all other European countries by 10.9% (2018: 0.7 million m³). The USA had the largest growth in exports with +330% and a total increase of 142,934 m³. After a difficult year in 2017, exports to the MENA significantly increased by 16% in 2018. Thus, the level of 2016 could be reached.

Hardwood

Once again, the hardwood industry in Austria developed very satisfactorily. Production increased to a total of 176,000 m³. The supply of oak logs is currently good. The temporary export ban from the Croatian government on transporting oak logs and sawnwood was lifted at a European level. In addition, the demand for oak sawnwood has continued to rise. The Austrian hardwood sawmills are satisfied with the rising demand in 2018. Joint research and development projects should help to focus on the area of 'living with wood' and the interior use of wood.

BELGIUM



Source: Fédération Nationale des Scieries

General economic information

| | 2016 | 2017 | 2018 | 2019 |
|---|--------|--------|--------|--------|
| Population (million) | 11.3 | 11.4 | 11.4 | 11.5 |
| GDP (%) | 1.4 | 1.7 | 1.5 | 1.4 |
| Inflation rate (%) | 1.8 | 2.2 | 2.4 | 2.0 |
| Unemployment rate (%) | 7.8 | 7.1 | 6.3 | 6.3 |
| Construction industry | | | | |
| Buildings permits (units) | 50 163 | 50 000 | 66 000 | 60 000 |
| Housing starts (units) | 47 000 | 47 000 | n.a. | n.a. |
| Housing completions (units) | 46 000 | 46 000 | n.a. | n.a. |
| Wage development (%) | 1.1 | 2.7 | 1.6 | 1.7 |
| Average working time in sawmilling (h/week) | 38 | 38 | 38 | 38 |

2019 data are estimates

Sawn Softwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|-------|-------|-------|-------|
| Production | 1 400 | 1 350 | 1 450 | 1 450 |
| Imports | 2 100 | 2 400 | 2 500 | 2 500 |
| Exports | 950 | 1 200 | 1 200 | 1 200 |
| Consumption | 2 550 | 2 550 | 2 750 | 2 750 |

2019 data are estimates

Sawn Hardwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|------|------|------|------|
| Production | 150 | 150 | 150 | 150 |
| Imports | 420 | 420 | 420 | 420 |
| Exports | 360 | 360 | 360 | 360 |
| Consumption | 210 | 210 | 210 | 210 |

2019 data are estimates

Availability of logs

| | 2016 | 2017 | 2018 | 2019 |
|----------|------|------|------|------|
| Softwood | 1 | 1 | 5 | 5 |
| Hardwood | 1 | 1 | 1 | 1 |
| Oak | 1 | 1 | 1 | 1 |
| Beech | 3 | 3 | 3 | 3 |

(1 = low; 2 = medium low; 3 = normal; 4 = medium high; 5 = high)

Market statement

Hardwood: supply difficulties due to significant competition with the export of logs to Asia.

Softwood: significant impact of bark beetle attacks on spruce on the timber market. The availability of spruce logs is important. This situation will have a negative impact on future log availability.



DENMARK



Source: Dansk Traeindustrier

General economic information

| | 2016 | 2017 | 2018 | 2019 |
|---|--------|--------|--------|--------|
| Population (million) | 5.71 | 5.74 | 5.78 | 5.8 |
| GDP (%) | 1.7 | 2.3 | 1.1 | 1.6 |
| Inflation rate (%) | 0.3 | 1.1 | 0.7 | 0.7 |
| Unemployment rate (%) | 4.5 | 4.1 | 3.9 | 3.7 |
| Construction industry | | | | |
| Buildings permits (units) | 31 419 | 26 593 | 26 322 | 25 000 |
| Housing starts (units) | 28 170 | 22 905 | 20 179 | 21 000 |
| Housing completions (units) | 20 821 | 24 646 | 28 389 | 29 000 |
| Wage Development (%) | 2.0 | 2.2 | 2.2 | 2.2 |
| Average working time in sawmilling (h/week) | 37 | 37 | 37 | 37 |

2018 and 2019 data are estimates

Sawn Softwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|-------|-------|-------|-------|
| Production | 310 | 304 | 300 | 310 |
| Imports | 1 500 | 1 400 | 1 274 | 1 300 |
| Exports | 120 | 120 | 120 | 120 |
| Consumption | 1 690 | 1 600 | 1 454 | 1 490 |

2018 and 2019 data are estimates

Sawn Hardwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|------|------|------|------|
| Production | 84 | 78 | 80 | 80 |
| Imports | 210 | 200 | 235 | 230 |
| Exports | 100 | 100 | 100 | 100 |
| Consumption | 194 | 185 | 215 | 210 |

2017 and 2018 data are estimates

Availability of logs

| | 2016 | 2017 | 2018 | 2019 |
|----------|------|------|------|------|
| Softwood | 3 | 2 | 3 | 3 |
| Hardwood | 3 | 3 | 3 | 3 |

(1 = low; 2 = medium low; 3 = normal; 4 = medium high; 5 = high)



FINLAND

Source: *Sahateollisuus ry* and *UNECE/FAO*

General economic information

| | 2016 | 2017 | 2018 | 2019 |
|---|--------|--------|--------|--------|
| Population (million) | 5.5 | 5.5 | 5.5 | 5.6 |
| GDP (%) | 1.9 | 2.8 | 2.4 | 1.9 |
| Inflation rate (%) | 0.4 | 0.8 | 1.1 | 1.1 |
| Unemployment rate (%) | 8.8 | 8.7 | 7.4 | 7.0 |
| Construction industry | | | | |
| Buildings permits (units) | 40 522 | 47 858 | 40 839 | 39 000 |
| Housing starts (units) | 37 567 | 45 259 | 45 676 | 40 000 |
| Housing completions (units) | 30 266 | 35 640 | 42 010 | 40 000 |
| Wage Development (%) | 1.2 | 0.0 | 1.8 | 2.0 |
| Average working time in sawmilling (h/week) | 40 | 40 | 40 | 40 |

2019 data are estimates

Sawn Softwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|--------|--------|--------|--------|
| Production | 11 400 | 11 700 | 11 800 | 11 900 |
| Imports | 494 | 537 | 550 | 560 |
| Exports | 8 900 | 9 700 | 9 000 | 9 200 |
| Consumption | 3 200 | 2 900 | 3 000 | 3 000 |

2019 data are estimates

Sawn Hardwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|------|------|------|------|
| Production | 50 | 45 | 45 | 45 |
| Imports | 28 | 23 | 25 | 25 |
| Exports | 19 | 19 | 18 | 18 |
| Consumption | 59 | 49 | 52 | 52 |

2019 data are estimates

Availability of logs

| | 2016 | 2017 | 2018 | 2019 |
|----------|------|------|------|------|
| Softwood | 3 | 3 | 4 | 4 |
| Hardwood | - | - | - | - |

(1 = low; 2 = medium low; 3 = normal; 4 = medium high; 5 = high)

Market statement

Finland

Finland is enjoying its third consecutive year of economic recovery, and the unemployment rate declined to its lowest level since 2011. Growth in 2018 reached 2.4%, clearly below earlier estimates of 2.8%. However, the volume of GDP exceeded, for the first time, the 2008 pre-financial crisis level. The growth is likely to slow further in 2019 as global demand slows and financial conditions tighten. There are downside risks to this outlook, such as an increase in trade protectionism and, over the long term, growth is likely to be lower than what has been recently, unless productivity growth permanently increases. The growth fundamentals changed in 2018 towards a less favorable direction while exports decline, and growth leaned more and more on domestic consumption. This direction is expected to continue in 2019, too.

Hence, the challenge is to make the economy more dynamic. Recent reforms have made Finnish exports more cost competitive and helped to boost employment. But the job is not yet done: unemployment rates remain persistently high in some regions despite ample vacancies in others, and productivity growth is still below what was seen before the crisis, despite the strength of the recovery. The focus of reforms should be on increasing labor market dynamism while maintaining a strong safety net. This means more flexibility about setting wages at the firm level and changing unemployment benefits to increase job search soon after losing employment. Other policies may be needed to aid regional labor mobility. Because growth is likely to slow, there is a need to continue to rebuild fiscal buffers. The 2019 budget implies a moderate tightening; going forward, fiscal policy should concentrate on raising the effectiveness of public spending, alongside policies to boost potential growth.

The financial system is sound. The authorities should continue to keep a close eye on banks' exposures to real estate. The size of the banking sector has increased substantially with the recent redomicile of Nordea to Finland, which increases demands on supervision and heightens the importance of continued close regional cooperation and preparedness for crises. Households' exposures are also important. To protect borrowers, it would be good for the authorities to have more so-called "macroprudential" tools and access to better data, such as

from a comprehensive positive credit registry. The growth in consumer credit raises the question of whether some borrowers are sufficiently informed about the conditions of their loans—extra consumer protection measures should be considered. (Source: IMF/Bank of Finland)

Forest industry

Year 2018 was a major economic peak in the Finnish forest sector. Forest industries' production and export volumes were growing, industrial roundwood fellings were increasing, stumpage prices were rising and, operating profit in non-industrial private forestry was improving. The cyclical peak was driven by the growing world economy, which increased the demand for forest products. Brisk demand from China contributed to the development of Finnish forest exports. The current uncertainty in exports is related to e.g. the Brexit, looming trade war, geopolitics and the sustainability of the financing sector in selected countries. In 2019, the growth in production and export volumes will slow down for most products and the upward trend in export prices will level off. With regard to market pulp, the export price will decrease from the record high level of 2018. The pulp and paper industries scored excellent results, while the sawmills reached only satisfactory level.

Sawmills

During the 1st half, the Finnish mills enjoyed increasing export demand and prices. Also, the domestic market picked up somewhat. The mills produced 11.8 million m³ of sawn timber (11.7 million m³ 2017) and exported about 9 million m³ (9.7 million m³ 2017). The export prices increased by 9%. The mills suffered from the rapid collapse of exports to China, increasing raw material costs. The revenues from by-products started to increase and, finally the market for dust and bark eased. The financial results were mostly satisfactory, but far away from competitors.

The outlook for the pulp- and paper industries is still positive. The export prices are expected to soften somewhat. The outlook for sawn softwood is more pessimistic. The Finnish mills are expected to suffer from high input costs and poor international competitiveness under the tightening market conditions.

The expansion of the Finnish forest cluster seems to continue its growth. Metsagroup published its commencing of a pre-

engineering projects related to building a new bioproduct mill in Kemi (Output 1.5 million tonnes of pulp) and a new sawmill in Rauma (output 750 000 m³ of sawn softwood).

Below some relevant data about the Finnish sawn softwood market are available.

Fig. 1: Export of Sawn Softwood from Finland

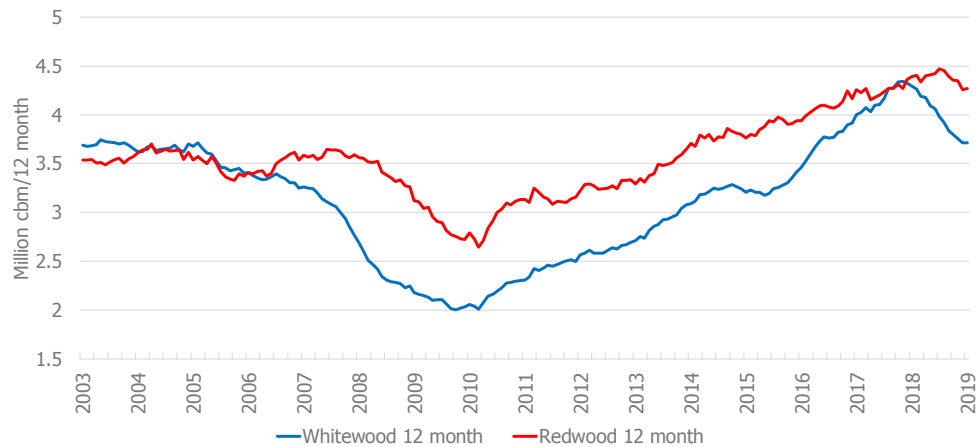


Fig. 2: Production of Sawn Softwood in Finland

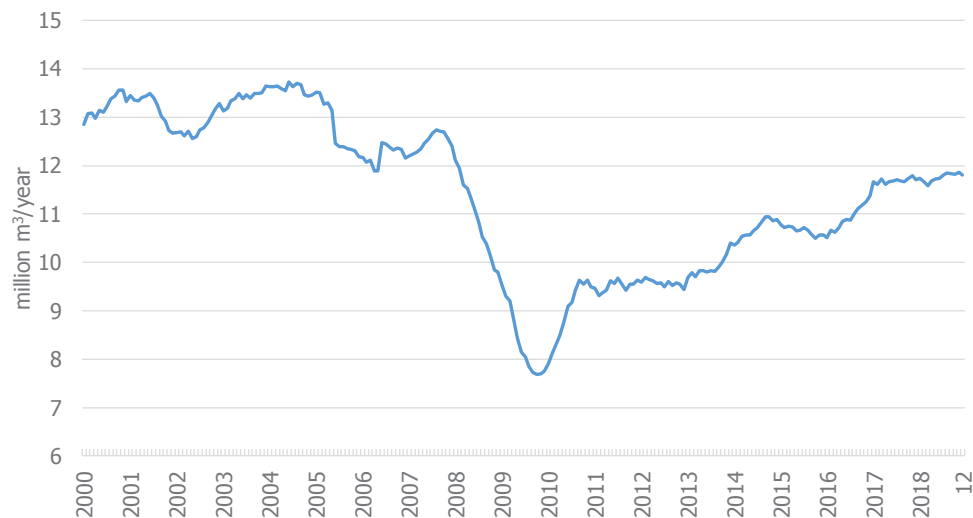
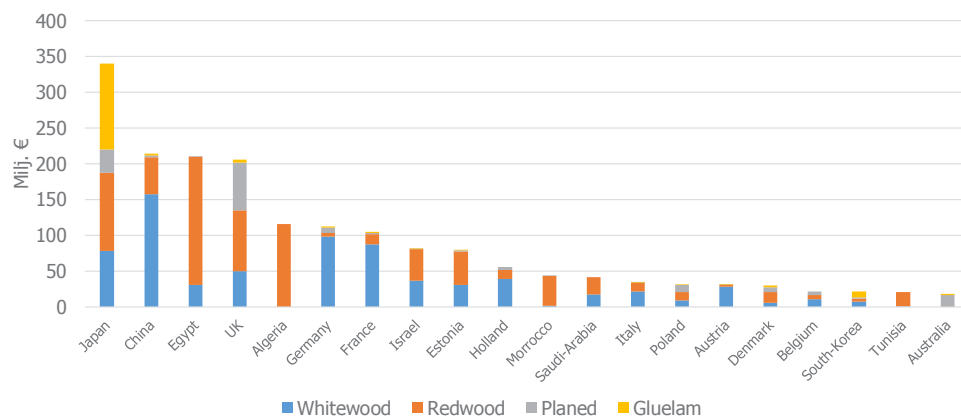


Fig. 3: Top 20 Exporting countries for sawn timber in 2018



FRANCE

Source: Fédération Nationale du Bois



General economic information

| | 2016 | 2017 | 2018 | 2019 |
|---|---------|---------|---------|---------|
| Population (million) | 66.7 | 66.95 | 66.95 | 67.15 |
| GDP (%) | 1.3 | 2.3 | 1.5 | 1.3 |
| Inflation rate (%) | 0.2 | 1.0 | 1.8 | 1.4 |
| Unemployment rate (%) | 10.0 | 8.9 | 8.8 | 8.6 |
| Construction industry | | | | |
| Buildings permits (units) | 453 700 | 497 000 | 460 000 | 440 000 |
| Housing starts (units) | 378 900 | 437 000 | 420 000 | 410 000 |
| Housing completions (units) | 350 000 | 370 000 | 370 000 | 360 000 |
| Wage Development (%) | 1.0 | 1.5 | 1.5 | 1.3 |
| Average working time in sawmilling (h/week) | 39 | 39 | 39 | 39 |

2019 data are estimates

Sawn Softwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|-------|-------|-------|-------|
| Production | 6 400 | 6 596 | 6 795 | 6 900 |
| Imports | 2 100 | 2 100 | 2 150 | 2 200 |
| Exports | 770 | 743 | 720 | 720 |
| Consumption | 7 730 | 7 917 | 8 225 | 8 380 |

2019 data are estimates

Sawn Hardwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|-------|-------|-------|-------|
| Production | 1 500 | 1 578 | 1 578 | 1 578 |
| Imports | 200 | 200 | 200 | 200 |
| Exports | 450 | 480 | 480 | 480 |
| Consumption | 1 250 | 1 270 | 1 298 | 1 298 |

2019 data are estimates

Availability of logs

| | 2016 | 2017 | 2018 | 2019 |
|----------|------|------|------|------|
| Softwood | 3 | 4 | 4 | 5 |
| Hardwood | 1 | 1 | 1 | 2 |

(1 = low; 2 = medium low; 3 = normal; 4 = medium high; 5 = high)

Market statement

For softwood sawmills the year 2018 was positive with good demand from the construction, packaging, and export sectors.

The housing in France has recovered to a level quite satisfactory even if it strongly fluctuates, which is a source of concern in the medium term.

The pulp and energy sectors also did well in 2018.

Overall, the wood sector has therefore benefited from the recovery in demand. This turnaround was expected after a long period of difficulties in the construction sector.

In terms of forest harvesting, very contrasting situations are observed according to the regions and species.

The South-West (Aquitaine) is experiencing a very difficult situation with a doubling of the price of logs over 2 years. This area has suffered from storms and bark beetles and has to deal with a production hole while the new plantations are growing.

Spruce trees are undergoing an important attack of beetles and the winter weather announces a strong upsurge in the spring.

On a social level companies have had to raise wages to cope with the return of inflation following the rise in energy prices. For hardwood sawmills, demand was generally positive, with nevertheless considerable uncertainties in export markets, particularly in Asia. The Asian market shows signs of distress.

Since autumn 2018, the oak sector has been affected by a slowdown in the price increases of logs following a limit imposed on log exports.

Regarding beech, sawmills suffer from very tight export prices in a context of rising costs for the raw material due to limited availability especially for the good qualities.

For the latter two species sawmills have made heavy modernization investments. Investment in hardwood sawmills was higher in 2018 than sawmills, which had not happened for many, many years.

Original Text

Pour les scieries résineuses l'année 2018 a été positive avec une bonne demande du secteur de la construction, de l'emballage et de l'export.

Le nombre de logements en France s'est redressé à un niveau tout à fait correct même si celui-ci fluctue fortement et fait l'objet d'inquiétudes dans la durée.

Les secteurs de la pâte à papier et de l'énergie ont aussi bien fonctionné sur l'année 2018.

Globalement le bois a donc bien profité du redressement de la demande. Ce redressement était attendu après une longue période de difficultés dans le secteur de la construction.

Sur le plan de la récolte forestière, des situations très contrastées sont observées selon les régions et essences.

Le Sud-Ouest (Aquitaine) vit une conjoncture très difficile avec un doublement du prix des grumes sur 2 ans. Cette région a subi tempêtes et scolytes et doit faire face à un trou de production le temps que les nouvelles plantations produisent.

Le douglas fait l'objet d'une forte demande sur un plan général avec un beau potentiel de développement.

L'épicéa fait quant à lui l'objet d'une attaque de scolytes importante et la météo de l'hiver annonce une forte recrudescence au printemps.

Sur un plan social les entreprises ont dû augmenter les salaires pour faire face au retour de l'inflation suite à la hausse des prix de l'énergie.

Pour les scieries feuillus, la demande a été globalement positive avec néanmoins de fortes incertitudes sur les marchés exports, en particulier en Asie. Ce débouché montre des signes de fébrilité.

En chêne on observe depuis l'automne 2018 un tassement de la hausse du prix des grumes consécutif à un plafonnement des exportations de grumes.

En hêtre, les entreprises souffrent de prix export très tendus dans un contexte de hausse de la matière première en particulier pour les belles qualités.

Pour les 2 essences les scieries ont procédé à de lourds investissements de modernisation. L'investissement des scieries feuillus a été supérieur en 2018 à celui des scieries résineuses, ce qui n'était pas arrivé depuis de très nombreuses années.

GERMANY



Source: Deutsche Säge-und Holzindustrie (DeSH)

General economic information

| | 2016 | 2017 | 2018 | 2019 |
|---|---------|---------|---------|---------|
| Population (million) | 82.5 | 82.8 | 83.0 | 83.0 |
| GDP (%) | 2.2 | 2.5 | 1.5 | 0.8-1.0 |
| Inflation rate (%) | 0.4 | 1.7 | 1.9 | 1.4 |
| Unemployment rate (%) | 4.6 | 3.8 | 3.4 | 3.2 |
| Construction industry | | | | |
| Buildings permits (units) | 316 550 | 300 695 | 302 753 | n.a. |
| Housing starts (units) | n.a. | n.a. | n.a. | n.a. |
| Housing completions (units) | 235 658 | 245 300 | n.a. | n.a. |
| Wage Development (%) | 2.3 | 2.5 | 3.0 | Stable |
| Average working time in sawmilling (h/week) | 40 | 40 | 40 | 40 |

2019 data are estimates

Sawn Softwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|--------|--------|--------|--------|
| Production | 21 109 | 22 056 | 23 000 | 23 000 |
| Imports | 4 915 | 5 083 | 5 340 | 5 400 |
| Exports | 7 295 | 7 848 | 8 523 | 8 800 |
| Consumption | 18 729 | 19 291 | 19 817 | 19 600 |

2019 data are estimates

Sawn Hardwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|-------|-------|-------|-------|
| Production | 1 064 | 1 082 | 1 100 | 1 100 |
| Imports | 396 | 379 | 350 | 350 |
| Exports | 685 | 781 | 745 | 770 |
| Consumption | 755 | 680 | 705 | 680 |

2019 data are estimates

Availability of logs

| | 2016 | 2017 | 2018 | 2019 |
|----------|------|------|------|------|
| Softwood | 2 | 2 | 4 | 4 |
| Hardwood | 3 | 3 | 3 | 3 |

(1 = low; 2 = medium low; 3 = normal; 4 = medium high; 5 = high)

Market statement

Big challenges for 2019

The expectations of the German sawmill industry for 2019 are subdued compared to 2018 due to a difficult environment. On the one hand, the industry expects that the high level of sales and thus production achieved in the previous year can be reached again. On the other hand, the weakening overall economic development in Germany and the uncertainty in foreign sales are weighing on prices, and the further effects on the sawnwood market can hardly be quantified at present.

Macroeconomic environment clouded over

The macroeconomic environment has clouded over considerably. Both the economic research institutes and the German government have significantly lowered their forecasts for overall economic development in 2019. Gross domestic product GDP is expected to grow by only 1 to 0.8 % in 2019, after 1.5 % in 2018 and 2.5 % in 2017. The long-term upswing has come to an end, according to the Spring Report. However, growth of 1.8 % is already expected for 2020.

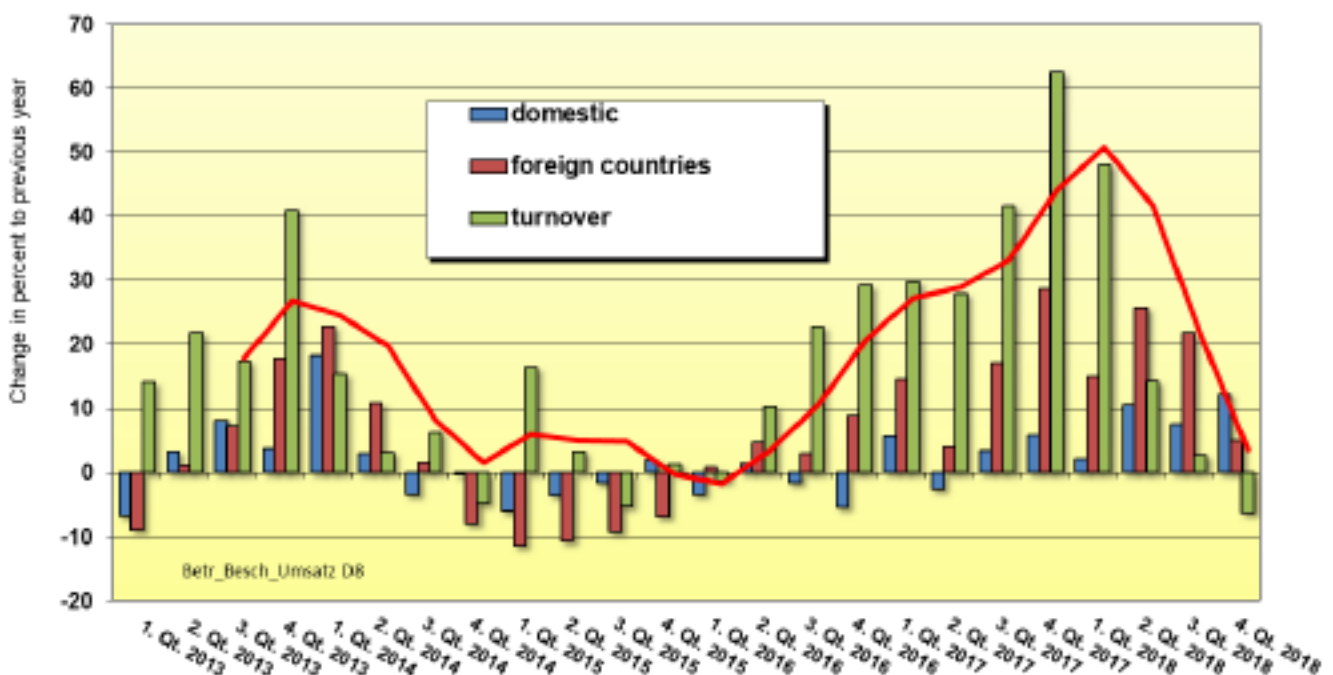
Development of the sawmill industry in 2018

The past year 2018 was a very positive year for the German sawmill industry as a whole. And this despite a very difficult commodity market, which was characterised by a large number of regional wind storms and, as a result, extensive production of wood damaged by beetles.

The rapid removal of the wood produced and its utilization was the challenge for the companies in the past year. Above all, it was possible to successfully sell the timber via existing sales channels and open up new sales markets.

The good sales situation for sawn timber led to a significant increase in sales in the German sawmill industry in 2018. While domestic sales only showed a slight increase, foreign sales, in particular distance sales, were strongly expanded in some countries outside Europe.

Sawing industry, planing and impregnation plants
Turnover quarterly, Change in percent to previous year



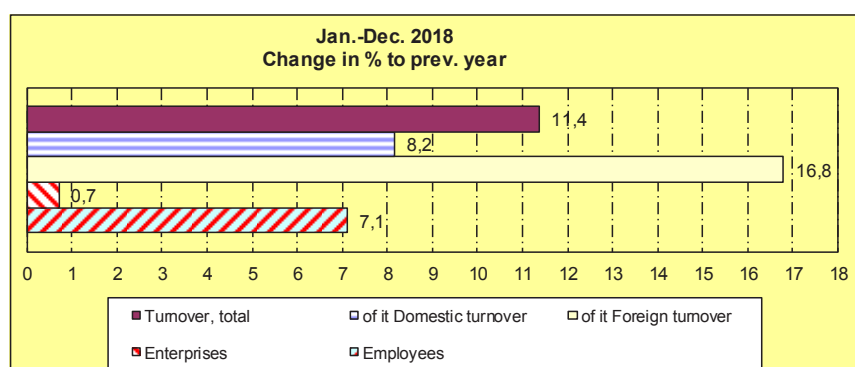
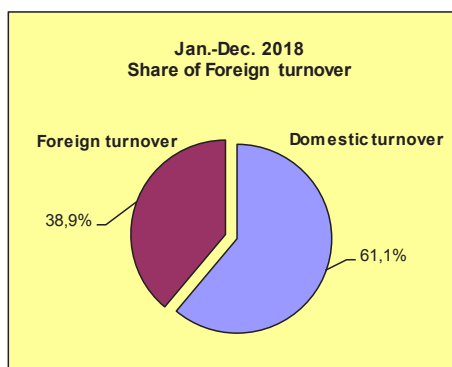
Sawing and planing mills with 50 or more employees, Source: Destatis Monthly Report

Sawing industry, planing and impregnation plants

Turnover, Enterprises, Employees

| in Mio. EURO | Jan.-Dec. 2017 | Jan.-Dec. 2018 | Change in % | Dec. 2018 | Change in % vs. prev. Year | Change in % vs. prev. Month |
|------------------------------------|----------------|----------------|-------------|-----------|-------------------------------|--------------------------------|
| Turnover, total | 4.025,1 | 4.482,2 | 11,4 | 253,5 | 1,2 | -37,0 |
| of it Domestic turnover | 2.531,9 | 2.738,6 | 8,2 | 151,8 | 6,9 | -39,3 |
| of it Foreign turnover | 1.493,2 | 1.743,6 | 16,8 | 101,8 | -6,3 | -33,2 |
| Foreign turnover Euro zone | 851,8 | 936,4 | 9,9 | 253,5 | 1,2 | -37,0 |
| Foreign turnover outside Euro zone | 641,4 | 807,2 | 25,9 | 55,4 | -4,1 | -15,6 |
| Share of foreign turnover in % | 37,1 | 38,9 | | 40,1 | | |
| Enterprises | 94 | 94 | 0,7 | 94 | 1,1 | 0,0 |
| Employees | 10.704 | 11.465 | 7,1 | 11.729 | 7,1 | 0,1 |

Enterprises with 50 and more employed



Enterprises with 50 and more employed
Source: DeStatis, statistic of enterprises

Softwood

In 2018, the demand for sawn timber from all important demand sectors remained largely constant, not least due to the stable economy of the German economy. In particular, the construction sector was again able to assert itself as the most important customer for domestic softwood sawn timber. In addition to high demand for strength-graded sawnwood, the increased demands of modern timber construction are increasingly leading to demand for processed construction pre-products, which are produced in a broad range of solid structural timber, laminated beam timber and cross laminated timber.

In addition to demand from the construction sector, the packaging sector also remained an important and constant customer for domestic softwood sawnwood. Recently, however, the Packaging Division tended to be slightly weaker.

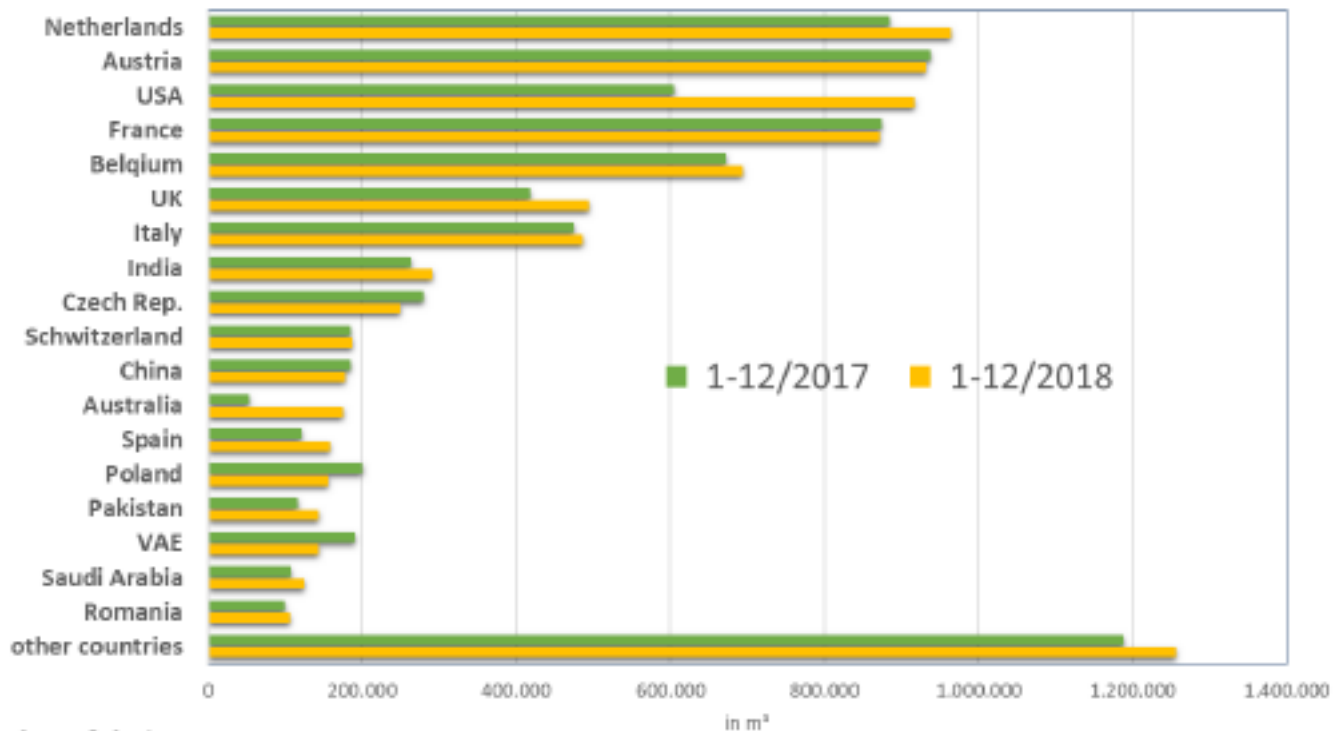
In both areas, the high supply in the 4th quarter led to considerable price pressure.

The high volume of calamity wood that had to be produced also had to be sold on foreign markets in addition to the domestic market. Among the customer countries, the United Kingdom and countries in remote exports proved to be particularly receptive. There was a significant increase in exports to the USA, which absorbed a third more softwood sawn timber in 2018 at 978.4 thousand m³. The course was very dynamic, with a peak in Q2 and Q3 and a drastic reduction in Q4.

Among the customer countries, the Netherlands has risen to the top of the list of customer countries due to the significantly higher purchase volume of 964 thousand m³, ahead of Austria. Last year, the USA increased its purchase by half and, with 917 thousand m³, now ranks third among the customer countries. Exports to Great Britain and Spain also increased, while the other customer countries in Europe showed a constant or even slightly declining trend.

In addition to the USA, India, Australia, Pakistan and Saudi Arabia are also to be mentioned with rising export figures in distance selling. On the other hand, China and especially the UAE saw some significant declines.

Export of sawn softwood planed and unplaned timber



Source: DeStatis

Export of sawn softwood planed and unplaned timber

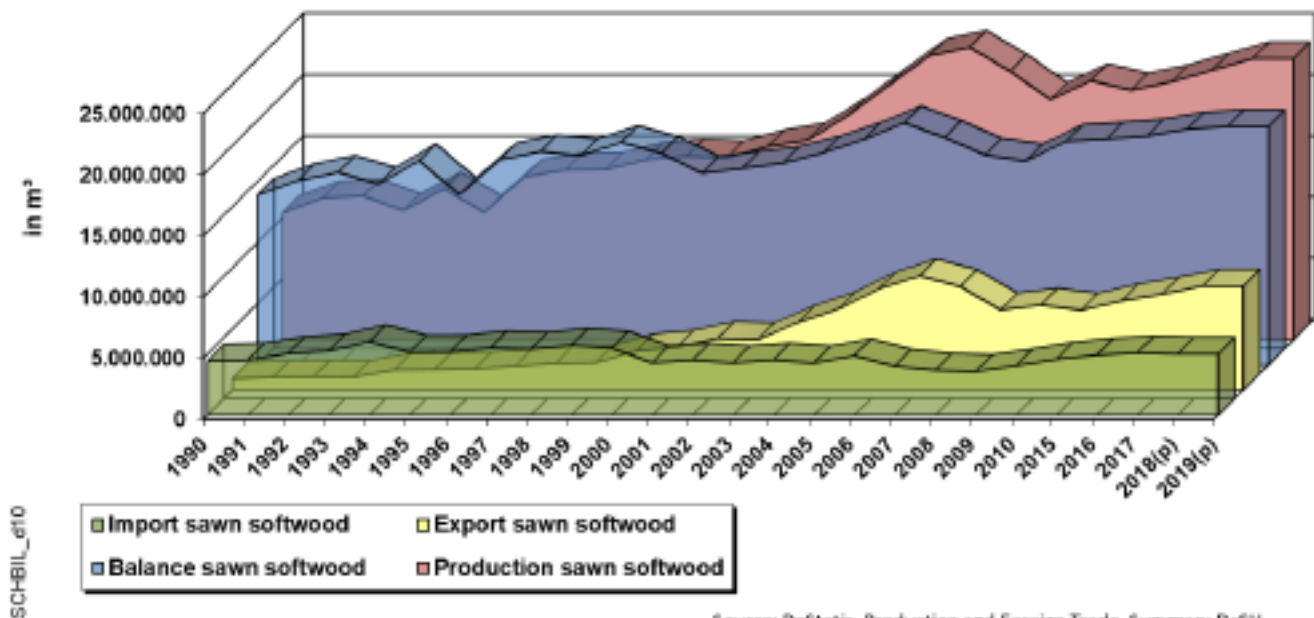
in m³

| Country | 1-12/2017 | 1-12/2018 | Change |
|-----------------|------------------|------------------|------------|
| Netherlands | 883.929 | 963.630 | 9,0 |
| Austria | 936.893 | 931.812 | -0,5 |
| USA | 603.803 | 916.614 | 51,8 |
| France | 873.084 | 871.004 | -0,2 |
| Belgium | 671.431 | 693.208 | 3,2 |
| UK | 418.018 | 493.439 | 18,0 |
| Italy | 474.953 | 486.213 | 2,4 |
| India | 262.148 | 289.986 | 10,6 |
| Czech Rep. | 279.465 | 249.367 | -10,8 |
| Schweiz | 184.906 | 186.679 | 1,0 |
| China | 184.368 | 177.433 | -3,8 |
| Australia | 53.941 | 174.440 | 223,4 |
| Spain | 121.223 | 158.077 | 30,4 |
| Poland | 200.693 | 156.157 | -22,2 |
| Pakistan | 115.930 | 143.757 | 24,0 |
| VAE | 190.470 | 143.395 | -24,7 |
| Saudi Arabia | 107.184 | 124.598 | 16,2 |
| Romania | 99.051 | 106.986 | 8,0 |
| other countries | 1.186.930 | 1.256.064 | 5,8 |
| total | 7.848.420 | 8.522.859 | 8,6 |

*VAE: United Arab Emirates

Source: DeStatis

Balance of sawn softwood



Source: DeStatis, Production and Foreign Trade, Summary DeSH

The high level of exports achieved by German sawmills as a result of their export efforts made it possible to cut calamity wood quickly in Germany.

The 3.9 % rise in the production index in 2018 indicates a significant increase in domestic production in 2018.

According to the quarterly production statistics available up to the third quarter of 2018, domestic production of sawn softwood rose by 3.3 % to 17.3 million m³ in the first three quarters of 2018. The production of planed timber increased particularly strongly, by 11.4 % to 3.3 m³.

The production of unplanned timber increased by 1.6 % to 13.9 million m³. With the domestic market largely constant and exports rising sharply, the export ratio continued to rise in 2018.

The 2018 balance for softwood timber shows a further increase in softwood timber production to just under 23 million m³, with another above-average increase in planed timber production.

With slightly higher imports at 5.3 million m³, exports at 8.5 million m³ enabled a significant increase in domestic production. Domestic consumption will only increase by about 3 % to just under 20 million m³ in 2018.

The raw timber market was already marked by a series of storms in 2017, but also in 2018, with a relatively high number of wind storms and in particular the subsequent accumulation of wood damaged by beetle infestation. The calamity wood is taken up by the sawmill industry according to its possibilities, but requires high efforts by the domestic sawmills to market this wood in terms of quantity and quality at home, but above all on the foreign markets.

Regionally, the price development for the various softwood species and crude wood assortments was very differentiated, also depending on the regional occurrence of calamity wood and the marketing possibilities. On the other hand, there is an increase in additional expenditure for the disposition and cutting of crude wood.

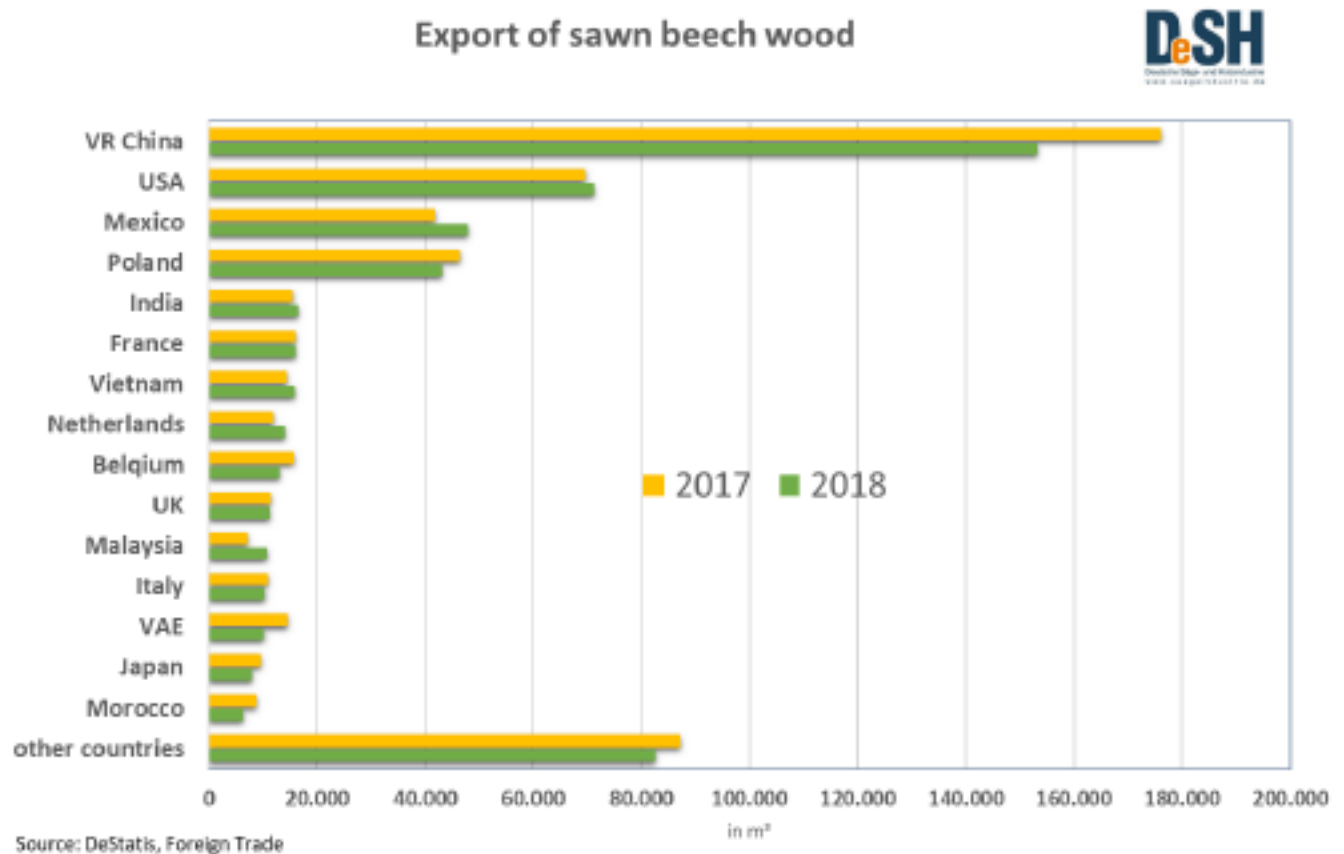
Despite the high challenges in 2018, the earnings situation of the softwood sawmills should have improved again slightly, not least as a result of increased production and thus improved capacity utilization and the good export situation. At the turn of the year dark clouds gathered over the horizon.

The industry is increasingly focusing on the diversification of its softwood product range. The companies are increasingly going into further processing and higher

product refinement. Further developed construction pre-products such as solid structural timber, laminated beam timber and cross laminated timber. Increasing demands are also coming from the packaging sector.

Hardwood

The hardwood market continues to remain at a fixed level. Beech continues to record a stable domestic market. Exports, which are decisive for hardwood companies,



Export of sawn beech wood

| in m³ | 2010 | 2015 | 2016 | 2017 | 2018 | Change 2018/2017 in % |
|-----------------|----------------|----------------|----------------|----------------|----------------|-----------------------|
| VR China | 97.414 | 138.112 | 129.117 | 176.059 | 153.330 | -12,9 |
| USA | 37.282 | 63.058 | 65.875 | 69.575 | 71.251 | 2,4 |
| Mexico | 3.335 | 35.293 | 36.674 | 41.717 | 47.865 | 14,7 |
| Poland | 40.990 | 45.155 | 40.110 | 46.422 | 43.139 | -7,1 |
| India | 16.831 | 14.303 | 16.034 | 15.356 | 16.473 | 7,3 |
| France | 11.173 | 13.149 | 13.532 | 15.907 | 16.009 | 0,6 |
| Vietnam | 4.173 | 8.245 | 10.037 | 14.470 | 15.771 | 9,0 |
| Netherlands | 20.554 | 11.792 | 11.652 | 11.931 | 14.150 | 18,6 |
| Belgium | 11.614 | 16.504 | 12.600 | 15.550 | 12.969 | -16,6 |
| UK | 15.666 | 14.952 | 12.912 | 11.355 | 11.182 | -1,5 |
| Malaysia | 6.940 | 9.968 | 7.777 | 7.146 | 10.751 | 50,4 |
| Italy | 16.718 | 11.550 | 9.852 | 10.777 | 10.297 | -4,5 |
| VAE | 8.611 | 10.596 | 14.437 | 14.608 | 10.101 | -30,9 |
| Japan | 4.252 | 8.041 | 9.287 | 9.664 | 7.876 | -18,5 |
| Morocco | 2.657 | 5.860 | 6.490 | 8.806 | 6.268 | -28,8 |
| other countries | 79.651 | 77.628 | 81.797 | 87.234 | 82.505 | -5,4 |
| total | 377.861 | 484.206 | 478.183 | 556.577 | 529.937 | -4,8 |

Source: Destatis, Foreign Trade



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became much more difficult last year, also due to the uncertainties arising from the US customs measures against China. Distance sales, especially to China as by far the most important customer, fell by more than 20 thousand m³ or - 12.9 % to 153 thousand m³ in 2018. The decline in exports to China and some other customer countries led to a decline in total beechwood exports of 27 thousand m³ or - 4.8 % to 529.9 thousand m³.

The market for sawn oak timber, which is however limited in terms of volume, is once again characterised by lively demand.

Thanks to the solid market trend and exports, which are still at a high level, it was possible to slightly expand production of hardwood sawn timber in the first three quarters of 2018.

The production of hardwood sawn timber rose by 4.0 % to just under 890 thousand m³ with a strong increase in planed timber production of 10.3 % and at the same time a slight decline in the production of unplanned timber (- 2.1 %). The concerns of the hardwood sawmills about some negative market developments remained unchanged. For example, there was a tendency for oak to increasingly offer logs through tenders. This deprives traditional regional sawmills with knowledge of regional qualities and growth characteristics of their raw materials. In the case of beech, it is the export of raw beech wood that removes a large part

of the beech harvest. This resource is no longer available to the domestic sawmill industry.

2019 with high uncertainty

2019 will be a difficult year for the German sawmill industry. The commodity material market continues to be burdened by a large amount of damaged wood from wind storms. It is expected that the bark beetle will produce a large amount of damaged wood, which must be harvested and processed quickly in order to maintain its value. The management of damaged wood is clearly at the centre of the sawmill industry's efforts to limit damage.

Price pressure on sawn timber and residual timber prices accelerated in Q1; the sales potential in Germany and other European countries is low. The sawmill industry is dependent on functioning sales markets for sales. The still unclear development of Brexit and the customs and foreign trade measures between the USA and China are placing a heavy burden on exports, especially the important long-distance exports to the USA and the Far East. These uncertainties make it particularly difficult to assess the course of 2019 for both softwood and hardwood. In softwood, the good foreign sales of 2018 will probably not be achieved.

In hardwood, a slight increase in exports is expected in 2019. On the other hand, a slight weakening of sales of sawn hardwoods is expected in Germany.

ITALY



Source: Federlegno, UNECE/FAO, European Commission and EUROCONSTRUCT

General economic information

| | 2016 | 2017 | 2018 | 2019 |
|---|--------|--------|--------|--------|
| Population (million) | 60.7 | 60.6 | 60.5 | 60.4 |
| GDP (%) | 1.1 | 1.6 | 1.0 | 0.2 |
| Inflation rate (%) | -0.1 | 1.3 | 1.0 | 1.2 |
| Unemployment rate (%) | 11.7 | 11.3 | 10.9 | 10.5 |
| Construction industry | | | | |
| Buildings permits (units) | 83 300 | 86 600 | 89 600 | 91 700 |
| Housing starts (units) | 83 500 | 86 900 | 89 400 | 91 600 |
| Housing completions (units) | 81 600 | 80 600 | 83 500 | 86 900 |
| Wage Development (%) | 0.5 | 0.5 | 1.5 | n.a. |
| Average working time in sawmilling (h/week) | 40 | 40 | 40 | 40 |

2019 data are estimates

Sawn Softwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|-------|-------|-------|-------|
| Production | 950 | 970 | 950 | 950 |
| Imports* | 3 981 | 4 203 | 4 009 | 4 009 |
| Exports | 153 | 201 | 240 | 240 |
| Consumption | 4 778 | 4 972 | 4 719 | 4 719 |

2019 data are estimates

Sawn Hardwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|-------|-------|-------|-------|
| Production | 550 | 550 | 550 | 550 |
| Imports | 757 | 713 | 713 | 713 |
| Exports | 175 | 215 | 215 | 215 |
| Consumption | 1 132 | 1 048 | 1 048 | 1 048 |

2019 data are estimates

Availability of logs

| | 2016 | 2017 | 2018 | 2019 |
|----------|------|------|------|------|
| Softwood | 3 | 3 | - | - |
| Hardwood | 2 | 3 | - | - |

(1 = low; 2 = medium low; 3 = normal; 4 = medium high; 5 = high)

LATVIA



Source: Association of Latvian Timber Producers and Traders

General economic information

| | 2016 | 2017 | 2018 | 2019 |
|---|------|------|------|------|
| Population (million) | 2.0 | 2.0 | 2.0 | 2.0 |
| GDP (%) | 2.1 | 4.6 | 4.8 | 3.5 |
| Inflation rate (%) | 0.1 | 2.9 | 2.5 | 2.9 |
| Unemployment rate (%) (15-64) | 8.4 | 6.8 | 6.4 | 5.6 |
| Construction industry | | | | |
| Buildings permits (units) | 2376 | 3145 | 3338 | 3200 |
| Housing starts (units) | n.a. | n.a. | n.a. | n.a. |
| Housing completions (units) | n.a. | n.a. | n.a. | n.a. |
| Wage Development (%) | 5.0 | 7.9 | 8.4 | 7.0 |
| Average working time in sawmilling (h/week) | n.a. | n.a. | n.a. | n.a. |

2019 data are estimates

Sawn Softwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|-------|-------|-------|-------|
| Production | 2 792 | 2 662 | 2 730 | 2 660 |
| Imports | 779 | 934 | 1 056 | 1 000 |
| Exports | 2 739 | 2 746 | 2 850 | 2 720 |
| Consumption | 832 | 850 | 936 | 940 |

2019 data are estimates

Sawn Hardwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|------|------|------|------|
| Production | 690 | 596 | 650 | 600 |
| Imports | 29 | 28 | 41 | 20 |
| Exports | 472 | 417 | 448 | 395 |
| Consumption | 253 | 250 | 243 | 225 |

2019 data are estimates

Availability of logs

| | 2016 | 2017 | 2018 | 2019 |
|----------|------|------|------|------|
| Softwood | 4 | 2 | 4 | 2 |
| Hardwood | 3 | 2 | 3 | 2 |

(1 = low; 2 = medium low; 3 = normal; 4 = medium high; 5 = high)

Market statement

Roundwood market in 2018 was highly influenced by pulpwood price rally due to strong demand from Swedish/Finnish forest industry companies. Up to twice higher prices levels (compared with domestic market) for exported pulpwood destroyed normal roundwood market conditions, leading to some shortages for mills which process smaller logs. Overall, all types of small and average diameter logs recorded an economically unreasonable price increase.

In 2019 log availability will be lower comparing to last year. During last year weather conditions with dry summer were well above average for forestry works. Also, roundwood high prices stimulated private forest owners' higher activity. According to latest statistics issued by State Forest Service

(VMD), in 2018 those factors have brought additional 1 million m³ logs on the market. Sawnwood global market conditions have never been so unpredictable as today.

Higher productivity in the hardwood sector was driven mainly by higher availability of low quality hardwood sawlogs for packaging. 2018 was also characterized by strong export markets, but it looks like 2019 could be a weaker year for exports.

In the middle term period forest land availability for forest industry in Latvia and Lithuania could be strongly affected by biotope inventory. This process could reduce forest areas available for harvesting, especially in Lithuania.



NORWAY



Source: Treindustrien, UNECE/FAO

General economic information

| | 2016 | 2017 | 2018 | 2019 |
|---|--------|--------|--------|------|
| Population (million) | 5.2 | 5.3 | 5.3 | 5.4 |
| GDP (%) | 1.2 | 2.0 | 1.4 | 2.0 |
| Inflation rate (%) | 3.6 | 1.8 | 2.7 | 2.3 |
| Unemployment rate (%) | 3.6 | 4.2 | 3.8 | 3.7 |
| Construction industry | | | | |
| Buildings permits (units) | 36 203 | 35 273 | 31 527 | n.a. |
| Housing starts (units) | 36 203 | 35 273 | 31 647 | n.a. |
| Housing completions (units) | 29 394 | 31 557 | 32 884 | n.a. |
| Wage Development (%) | 1.8 | 2.3 | 2.9 | 3.3 |
| Average working time in sawmilling (h/week) | 37.5 | 37.5 | 37.5 | 37.5 |

2019 data are estimates

Sawn Softwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|-------|-------|-------|-------|
| Production | 2 533 | 2 655 | 2 675 | 2 675 |
| Imports | 991 | 996 | 924 | 925 |
| Exports | 600 | 666 | 667 | 650 |
| Consumption | 2 924 | 2 985 | 2 932 | 2 950 |

2019 data are estimates

Sawn Hardwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|------|------|------|------|
| Production | - | - | - | - |
| Imports | 28 | 31 | 31 | 31 |
| Exports | - | - | - | - |
| Consumption | 28 | 31 | 31 | 31 |

2019 data are estimates

Availability of logs

| | 2016 | 2017 | 2018 | 2019 |
|----------|------|------|------|------|
| Softwood | 2 | 2 | 2 | 2 |
| Hardwood | - | - | - | - |

(1 = low; 2 = medium low; 3 = normal; 4 = medium high; 5 = high)

Market statement

The upturn in Norwegian economy continues. Higher oil prices and low interest rates have contributed to this. Increased oil investments, digitization and high public investment also contribute to lifting growth. The unemployment rate in Norway is still generally low compared to other European countries. Capacity utilisation is slightly above normal level. Consumer price inflation is just above the 2% target. The key policy rate has been raised from 0.75 % to 1.0 %, and the forecast from Norway's central bank is a slow increase, reaching 1.75 % by the end of 2022. Annual wage growth in 2018 was 2.8 %, in line with the wage settlement norm.

The housing market

After years of house price growth, especially in Oslo, the price growth stabilized last year. House prices have risen slightly more than expected at the start of 2019. There has been some concern that household debt growth in recent years could affect the market, however household debt growth has slowed through 2018. The development relative to housing starts is slowing down slightly, but is still at a high level compared to the level from 2009 – 2015. The market for new commercial buildings is still good, and so is the demand

for upgrade and rehab of existing buildings. Changing requirements for standards in office and public buildings, demand for energy efficiency and public procurement contribute to this. The demand for building with wood is increasing in all markets, and wood is a preferred material by many actors in the building sector. Through regulations and public procurement authorities have pulled the market in the direction of using more wood. The government has also made increased use of wood in buildings a part of the new political platform.

Specific market information

There has been record high production of sawn wood in 2018. The timber price is at a record high, and export is increasing. This makes availability of sawlogs somewhat unstable. There is still some domestic pulpwood consumption, but export levels are high. Norwegian wood industry continue to perform well. We see investments being made both in sawmills and other parts of the wood industry such as prefabrication, elements, CLT etc. The level of industrialisation and automation is highly increasing, and digitalization is high on the agenda.



ROMANIA



Source: Asociatia Forestierilor Din Romania (ASFOR)

General economic information

| | 2016 | 2017 | 2018 | 2019 |
|---|------|--------|--------|--------|
| Population (million) | 19.9 | 19.6 | 19.6 | 19.5 |
| GDP (%) | 4.9 | 6.7 | 4.1 | 3.8 |
| Inflation rate (%) | -1.1 | 3.2 | 3.5 | 3.6 |
| Unemployment rate (%) | 6.0 | 4.6 | 4.6 | 4.6 |
| Construction industry | | | | |
| Buildings permits (units) | n.a. | 17 500 | 17 100 | 16 000 |
| Housing starts (units) | n.a. | 12 500 | 12 500 | 12 000 |
| Housing completions (units) | n.a. | n.a. | n.a. | n.a. |
| Wage development (%) | 0.7 | 1.25 | 2.0 | 3.0 |
| Average working time in sawmilling (h/week) | 40 | 40 | 40 | 40 |

2019 data are estimates

Sawn Softwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|-------|-------|-------|-------|
| Production | 3 900 | 3 600 | 3 550 | 3 500 |
| Imports | 283 | 450 | 350 | 360 |
| Exports | 1 800 | 1 600 | 1 100 | 1 150 |
| Consumption | 2 383 | 2 450 | 2 800 | 2 800 |

2019 data are estimates

Sawn Hardwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|-------|-------|-------|-------|
| Production | 1 700 | 1 600 | 1 600 | 1 600 |
| Imports | 125 | 25 | 110 | 130 |
| Exports | 800 | 800 | 600 | 650 |
| Consumption | 1 025 | 825 | 1 110 | 1 080 |

2019 data are estimates

Availability of logs

| | 2016 | 2017 | 2018 | 2019 |
|----------|------|------|------|------|
| Softwood | 3 | 3 | 3 | 3 |
| Hardwood | 3 | 3 | 3 | 3 |

(1 = low; 2 = medium low; 3 = normal; 4 = medium high; 5 = high)

Market statement

- In 2018 beech lumber exports were lower than in 2017, registering two different extremes: maximum prices in the first half of the year and minimal prices in the second half;
- During the previous year sawlogs imports reached 1.5 million m³ (wood in the rough stripped of its bark, shaped or carved) which modified the standard commercial assessment;
- The economical agents from the wood-processing industry were taken by surprise in 2018, as they were either keeping wood stocks at high prices from spring, suffering overall losses, or they confirmed decreased wood stocks, registering smaller losses and therefore they could reinitiate the production cycle in autumn;
- Exchange rates variations had major impacts on exports. Romanian Leu was -5% lower against Euro and Dollar in 2019 and this depreciation has been felt by the entire forest industry;
- The beechwood market has been dominated by exporters originating from China, Egypt and EU axis;
- Difficulties during the process of firewood exploitation / the low demand from the industry have led to a decrease of the exploited wood volume and a limited availability of the beech logs resource.



SWEDEN



Source: Swedish Forest Industries Federation, UNECE/FAO

General economic information

| | 2016 | 2017 | 2018 | 2019 |
|---|--------|--------|--------|--------|
| Population (million) | 10.0 | 10.1 | 10.1 | 10.1 |
| GDP (%) | 3.0 | 2.4 | 2.4 | 1.5 |
| Inflation rate (%) | 1.9 | 1.8 | 2.0 | 2.0 |
| Unemployment rate (%) | 6.9 | 6.7 | 6.3 | 6.1 |
| Construction industry | | | | |
| Buildings permits (units) | 68 800 | 76 900 | 67 300 | 63 300 |
| Housing starts (units) | 63 300 | 68 300 | 57 800 | 52 300 |
| Housing completions (units) | 53 600 | 63 800 | 70 500 | 63 400 |
| Wage Development (%) | 2.5 | 2.2 | 2.5 | n.a. |
| Average working time in sawmilling (h/week) | n.a. | n.a. | n.a. | n.a. |

2019 data are estimates

Sawn Softwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|--------|--------|--------|--------|
| Production | 18 011 | 18 309 | 18 300 | 18 600 |
| Imports | 160 | 180 | 180 | 180 |
| Exports | 13 000 | 13 110 | 12 440 | 13 000 |
| Consumption | 5 550 | 5 780 | 5 705 | 5 600 |

2019 data are estimates

Sawn Hardwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|------|------|------|------|
| Production | 100 | 97 | 95 | 95 |
| Imports | 43 | 47 | 45 | 45 |
| Exports | 19 | 43 | 20 | 20 |
| Consumption | 123 | 101 | 120 | 120 |

2019 data are estimates

Availability of logs

| | 2016 | 2017 | 2018 | 2019 |
|----------|------|------|------|------|
| Softwood | 3 | 3 | 3 | 4 |
| Hardwood | - | - | - | - |

(1 = low; 2 = medium low; 3 = normal; 4 = medium high; 5 = high)

MARKET STATEMENT

2018 was a good year for Swedish sawmills, with improved profitability for most of the sawmills.

The European export markets, which stands for roughly 60 per cent of the exported volume, were driven by high activities in construction. The demand was stable, and prices improved. The exchange rate of the Swedish krona has been favourable during the year.

The increasingly important non-European markets were very active during the first half of the year. However, during the second half of the year, the softwood price on the US-market deteriorated from a record high level. The Chinese market, as well as the North African and the Middle East markets also worsened during the fall.

In this year 2019, the market balance for softwood has, in general, changed in favour of buyers and prices have decreased from a relatively high level.

| Swedish Sawn Softwood | | | | | | | |
|-----------------------|----------------------|--------|--------|--------|--------|--------|--------|
| 2019 are estimates | | | | | | | |
| | Unit | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| Production | 1.000 m ³ | 17 660 | 18 132 | 18 011 | 18 309 | 18 300 | 18 600 |
| Imports | 1.000 m ³ | 150 | 170 | 160 | 180 | 180 | 180 |
| Exports | 1.000 m ³ | 12 300 | 12 820 | 13 000 | 13 110 | 12 440 | 13 000 |
| Consumption | 1.000 m ³ | 4800 | 5253 | 5550 | 5780 | 5705 | 5600 |

Swedish softwood production 2018

Despite the improving market conditions during 2018, Swedish softwood production remained unchanged at 18.3 million m³. Since 2015, the Swedish production has, in fact, remained more or less unchanged, in contrast to the relatively fast-growing global production and consumption.

However, during the first quarter of this year, the production increased by seven per cent compared with the same period last year. This year, the raw material supply and sawmill operations have been favoured by better weather conditions than last year.

Ongoing bark beetles' infestations in southern Sweden is forecasted to kill 2-12 million m³ of spruce trees this year. However, the impact on raw material supply is supposed to be relatively marginal.

Our preliminary forecast is that the production will increase only slightly or 2 per cent to 18.6 million m³ this year.

Exports 2018: Decreasing volumes

The table below shows the shipments from Swedish sawmills to different markets last year. The total export volume was 12,4 million m³, which was five per cent less than in 2017.

| Swedish softwood shipments 2018 | | |
|---------------------------------|---------------------------------|--------------------------------|
| | Softwood (1000 m ³) | Change compared with last year |
| Sweden | 5 705 | -1% |
| United Kingdom | 2 587 | 0% |
| Germany | 814 | -8% |
| The Netherlands | 955 | 0% |
| Denmark | 850 | -1% |
| Norway | 942 | -6% |
| Other Europe | 1 615 | |
| Exports Europe | 7 763 | -2% |
| Egypt | 917 | -29% |
| Algeria | 533 | 71% |
| Other Africa | 608 | |
| Middle East | 468 | -2% |
| Japan | 724 | -14% |
| China | 661 | -28% |
| Other Asia | 291 | |
| USA | 372 | -8% |
| Other | 100 | |
| Total exports | 12 437 | -5% |
| Total shipments | 18 300 | 0% |

The export to **United Kingdom**, the largest export market, remained unchanged during 2018.

The European "quartet" **Germany, Denmark, Norway and the Netherlands** are all important markets for Swedish sawmills. All of them import each year 800.000 to one million m³ of Swedish wood. In general, the European market has been characterized by stable but moderate growth during last years. From now, the growth of softwood consumption is forecasted to slow down somewhat.

Exports to the **North African and Middle East region** (mainly redwood markets for the Swedish sawmills) continued to decrease during last year. Exported volumes to **Egypt** decreased by no less than 29 per cent to 916.000 m³, the lowest volume since 2008. On the other hand, exports to the **Algeria** jumped back to 533.000 m³, an increase by 71 per cent.

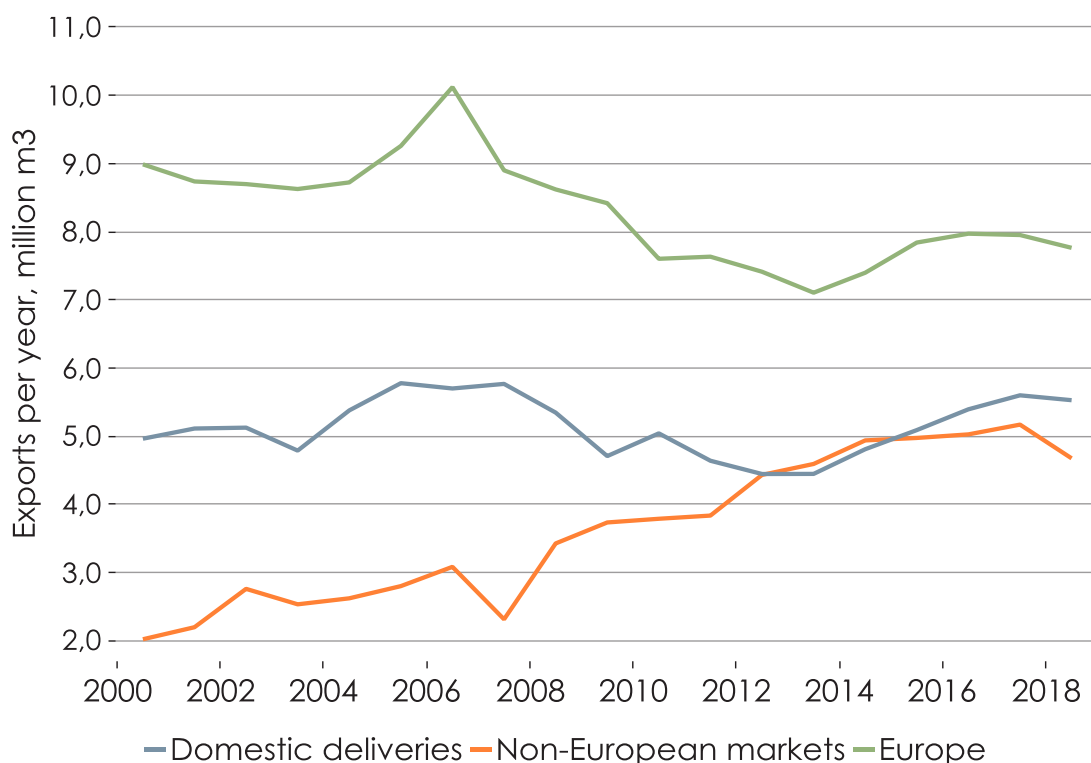


Last year the volumes to the East Asian markets decreased for the first time since 2014. Especially the volumes to **China** decreased (-28%), after a fantastic development during the previous six-year period.

Despite very good prices on the North American market during the first half year, exports to the **USA** decreased marginally to 372.000 m³.

With a softwood consumption of 5.7 million m³, **Sweden** is the single largest market for the Swedish sawmills. Up to last year, demand has been driven by strong housing activity. However, the construction activity is now decreasing from a high level. On the other hand, the share of multi storey houses build with wood is now increasing. For example, several investments in CLT-production is now under way in Sweden. The repair and maintenance activity, which consumes large volumes of wood, remains on a stable level.

Swedish softwood exports and domestic deliveries





SWITZERLAND

Source: Holzindustrie Schweiz

General economic information

| | 2016 | 2017 | 2018 | 2019 |
|---|--------|--------|--------|--------|
| Population (million) | 8.4 | 8.5 | 8.5 | 8.6 |
| GDP (%) | 1.3 | 1.0 | 2.5 | 1.1 |
| Inflation rate (%) | -0.4 | 0.5 | 0.9 | 0.5 |
| Unemployment rate (%) | 3.3 | 3.2 | 2.4 | 2.4 |
| Construction industry | | | | |
| Buildings permits (units) | 57 700 | 57 500 | 56 800 | n.a. |
| Housing starts (units) | n.a. | n.a. | n.a. | n.a. |
| Housing completions (units) | 53 400 | 55 800 | 56 900 | 55 300 |
| Wage Development (%) | 0.6 | 0.3 | 0.4 | 0.8 |
| Average working time in sawmilling (h/week) | 42.5 | 42.5 | 42.5 | 42.5 |

2019 data are estimates

Sawn Softwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|-------|-------|-------|-------|
| Production | 1 074 | 1 037 | 1 075 | 1 065 |
| Imports | 348 | 342 | 333 | 340 |
| Exports | 190 | 198 | 198 | 196 |
| Consumption | 1 232 | 1 181 | 1 210 | 1 209 |

2019 data are estimates

Sawn Hardwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|------|------|------|------|
| Production | 48 | 48 | 45 | 47 |
| Imports | 46 | 37 | 35 | 35 |
| Exports | 17 | 25 | 20 | 21 |
| Consumption | 77 | 60 | 60 | 61 |

2019 data are estimates

Availability of logs

| | 2016 | 2017 | 2018 | 2019 |
|----------|------|------|------|------|
| Softwood | 4 | 4 | 5 | 3 |
| Hardwood | 3 | 3 | 3 | 3 |

(1 = low; 2 = medium low; 3 = normal; 4 = medium high; 5 = high)

Market statement

The Swiss economy benefited from an economically strong year in Europe and achieved GDP growth of 2.5% in 2018.

The construction industry and its supplier industries benefited greatly from this, as the high number of buildings constructed shows. Sawn timber production in sawmills increased by 3.5% in 2018 compared with the previous year, following a steady decline in the years before. The positive sales trend was favoured by the exceptionally high supply of raw materials following several windstorm events in 2018.

Demand for residual wood remains probably high in 2019. The situation on the Swiss residual wood market is dampened by the closure of PAVATEX, a market leader in

wood-based insulation boards. As a result, Switzerland is losing an important client for residual wood. A stable volume development is expected for the current year 2019, albeit at falling prices. The timber industry will continue to be well supplied with a high proportion of beetle-infested wood.

The Swiss timber industry is still struggling with the strong Swiss franc. Fortunately, however, efforts to position the Swiss timber origin mark “Herkunftszeichen Schweizer Holz” on the market are increasingly noticeable. Swiss customers are increasingly demanding Swiss timber. These efforts will be continued. Various sawmills are currently investing in processing technology (glulam, CLT), which points to a positive market estimate for the coming years.





UNITED KINGDOM

Source: UNECE/FAO, European Commission and EUROCONSTRUCT

General economic information

| | 2016 | 2017 | 2018 | 2019 |
|---|---------|---------|---------|---------|
| Population (million) | 65.7 | 66.1 | 66.5 | 66.8 |
| GDP (%) | 1.8 | 1.8 | 1.4 | 1.3 |
| Inflation rate (%) | 0.7 | 2.7 | 2.5 | 1.8 |
| Unemployment rate (%) | 4.8 | 4.4 | 4.3 | 4.5 |
| Construction industry | | | | |
| Buildings permits (units) | n.a. | n.a. | n.a. | n.a. |
| Housing starts (units) | 178 600 | 188 000 | 193 000 | 193 000 |
| Housing completions (units) | 164 600 | 175 000 | 177 000 | 177 000 |
| Wage Development (%) | 2.9 | 3.1 | 3.0 | 3.1 |
| Average working time in sawmilling (h/week) | n.a. | n.a. | n.a. | n.a. |

2019 data are estimates

Sawn Softwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|-------|--------|--------|--------|
| Production | 3 624 | 3 728 | 3 650 | 3 800 |
| Imports | 6 219 | 7 079 | 6 564 | 6 675 |
| Exports | 167 | 166 | 194 | 203 |
| Consumption | 9 676 | 10 641 | 10 020 | 10 272 |

2019 data are estimates

Sawn Hardwood (in 1,000 m³)

| | 2016 | 2017 | 2018 | 2019 |
|-------------|------|------|------|------|
| Production | 47 | 42 | 50 | 50 |
| Imports | 427 | 501 | 501 | 501 |
| Exports | 21 | 25 | 23 | 23 |
| Consumption | 453 | 518 | 528 | 528 |

2019 data are estimates

Holzindustrie Schweighofer

Perfection in Timber

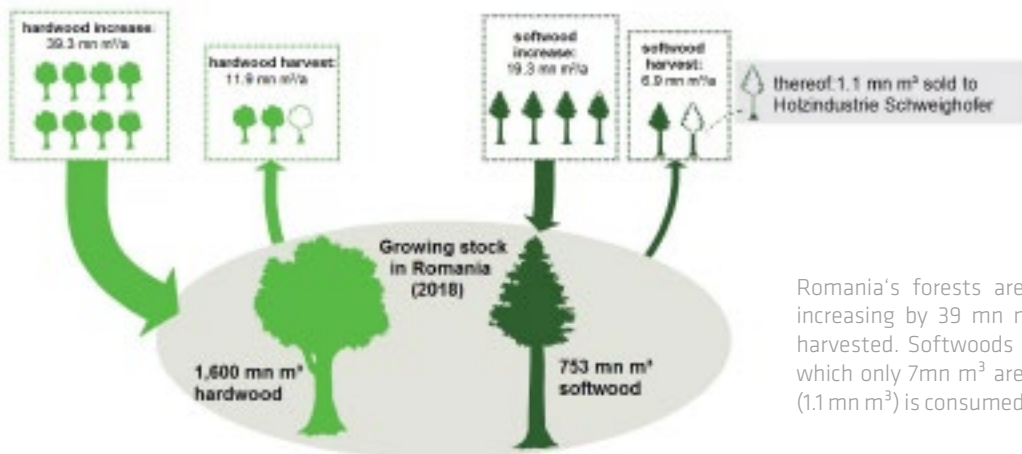


Holzindustrie Schweighofer is one of Europe's leading wood processing companies, operating three modern sawmills and two panel factories in Romania as well as a sawmill in Germany. The company produces high-quality timber products for industrial customers in more than 70 countries worldwide. Currently, Holzindustrie Schweighofer employs around 3,100 people.

Did you know that...

... Holzindustrie Schweighofer processes *only 6.5%* of the entire wood harvested in Romania?
... *around 50%* of the wood Holzindustrie Schweighofer processes in Romania is *imported*?
... Holzindustrie Schweighofer *does not have any harvesting operations*, but focusses on processing?
... the company *passed 12 EUTR* (EU Timber Regulation) *controls* without complaints since 2015?

Romania's forest is growing



Romania's forests are growing each year. Hardwoods are increasing by 39 mn m³/year, of which only 12 mn m³ are harvested. Softwoods are growing by 19 mn m³ per year, of which only 7mn m³ are harvested. And only a minor fraction (1.1 mn m³) is consumed by Holzindustrie Schweighofer's mills.

Source: Romanian National Forest Inventory 2018; all volumes are indicated according to the Romanian roundwood measurement standards

Unique security architecture: GPS tracking system *Timflow*

In Romania, Holzindustrie Schweighofer uses the GPS tracking system *Timflow* which monitors each saw log truck's exact transport route, from the loading point to the mill gate. This is a voluntary system, surpassing all legal requirements by far. All collected data, including the GPS data of the transport routes and photos of the loaded trucks, is public on www.timflow.com.

CSR at a glance: Planting *Tomorrow's Forest* in Romania

Holzindustrie Schweighofer has launched the afforestation project *Tomorrow's Forest* in cooperation with the Association of Forest Administrators (AAP) and the Stefan cel Mare University of Suceava. With a budget of 1 million Euros, the project aims at planting one million trees on degraded forest land in Romania. For further information please visit: <https://padureademaine.ro/en/>



www.schweighofer.at

Special Focus: The European Parquet Market - Challenges & Opportunities

by Mrs Isabelle Brose, FEP Managing Director



FEP is the European Federation of the Parquet industry based in Brussels. It reunites 52 European Parquet Producers, 17 major Suppliers to the industry and 8 National associations and represents their interests at all relevant levels.

The European Parquet Market in 2017

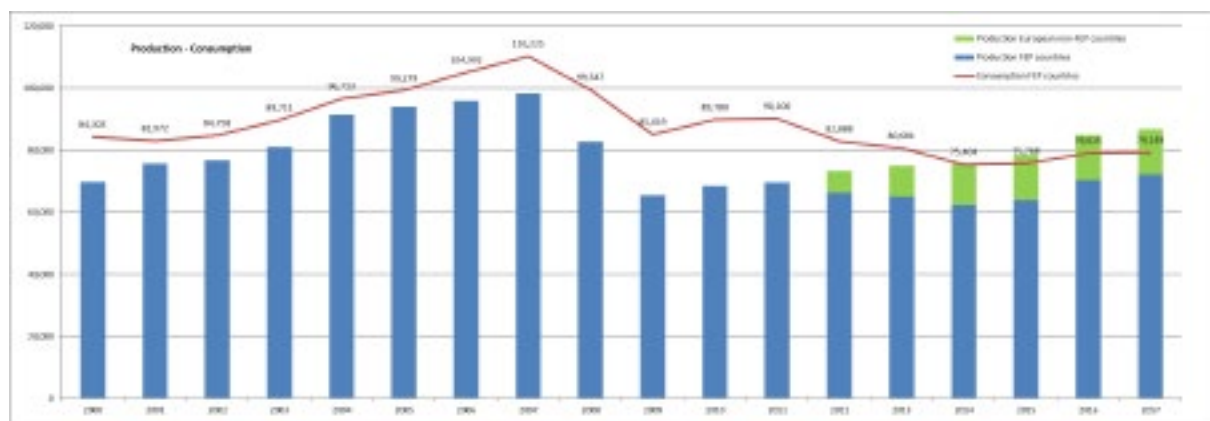
After several years of a challenging situation, the general trends on the parquet market eventually turned positive in 2016 and progressed further in 2017. Projects were the main driver of the market although renovation should create additional activity.

In 2017, parquet **consumption** continued to increase in the EU benefiting from the encouraging economic context, especially from the growth of the European consumption, and the positive trends shown by the construction sector. Regretfully, Germany, the biggest European market for parquet, reported a significant decline in parquet consumption. The consolidated data provided by FEP member companies and affiliated

national associations thus point to a slight growth of the global European market of 0,3% in 2017 compared to 2016, and a consumption which exceeds 79 million m³.

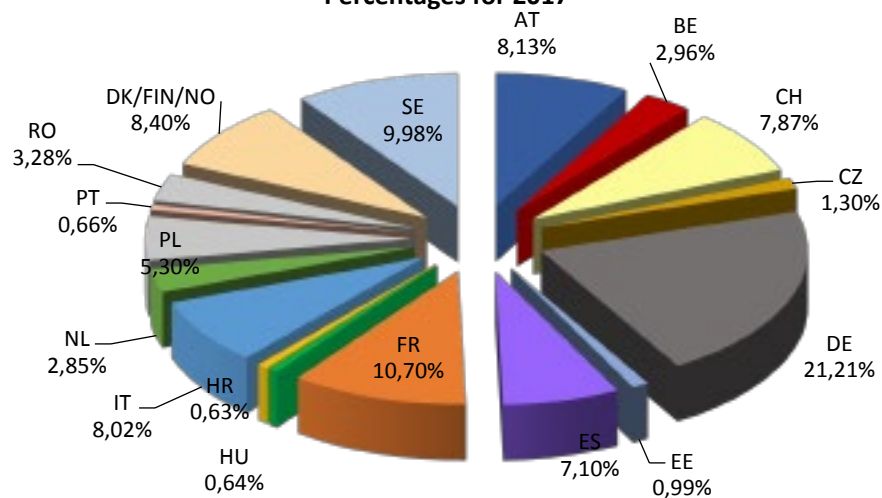
In terms of consumption per country, Germany remains in first position, despite its declining market, with 21,2% and is followed by France at 10,7%. Sweden completes the podium with 10%. The Nordic Cluster (Denmark, Finland, Norway) at 8,4% keeps the fourth seat. Austria with 8,1% takes back its fifth position from Italy (8%) while Switzerland (7,9%) comes in seventh position only.

As regards the per capita parquet consumption, Sweden keeps the first seat (0,78 m²) before Austria (0,74 m²)



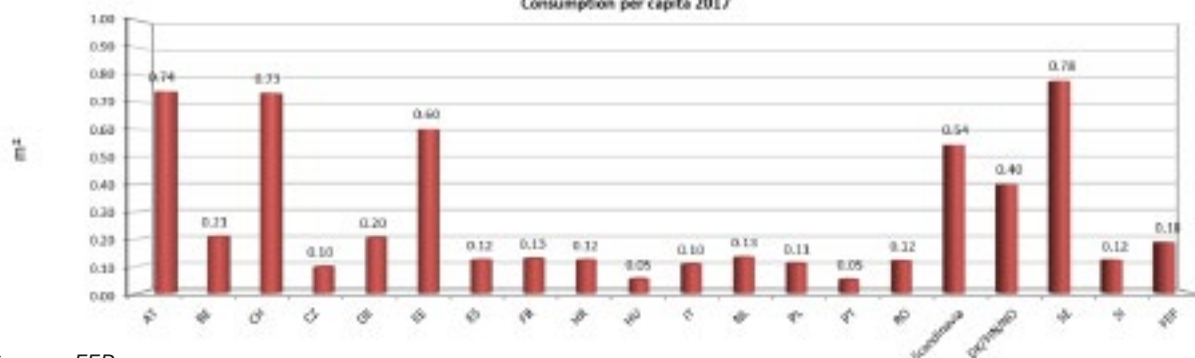
Source: FEP

**Total FEP Consumption
Percentages for 2017**



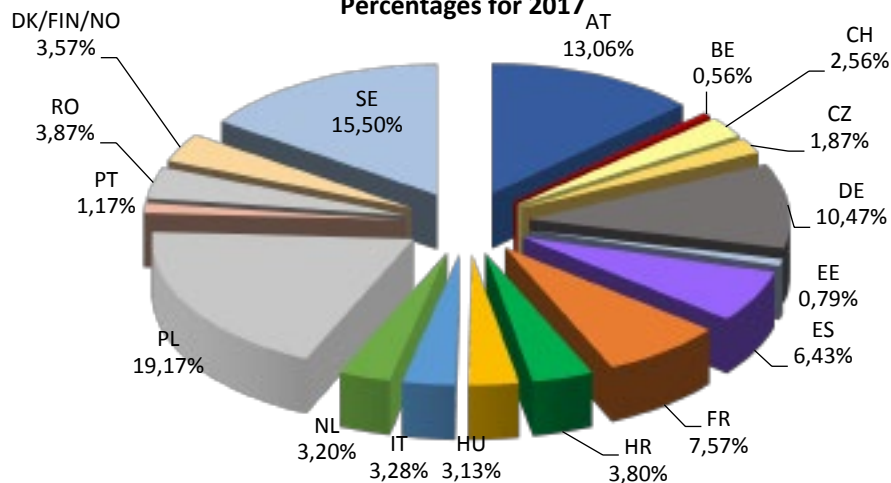
Source: FEP

Consumption per capita 2017

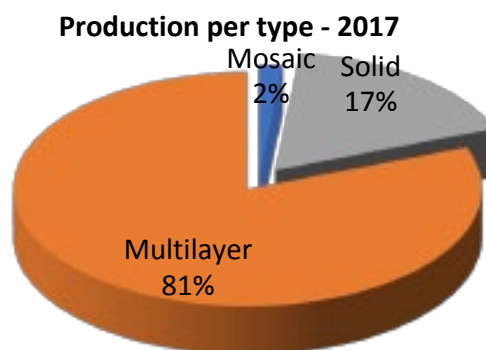


Source: FEP

**Total FEP Production
Percentages for 2017**



Source: FEP



Source: FEP

and Switzerland (0.73 m²). In the total FEP area, the consumption per inhabitant remains stable at 0,18 m³ in 2017.

The **production** in FEP territory confirmed its growth by 2,6% and exceeded significantly the 72 million m² threshold in 2017. In absolute production figures by country, Poland maintains its top position at 19,2%. Sweden consolidates its second place on the podium with 15,5%. It is followed by Austria at 13%, while Germany comes in as fourth (10,5%).

First results for 2018

After three years of moderate growth or stabilisation, and despite a generally good start of the year, the consumption figures of parquet in Europe downturned for 2018. A drop close to 2% is forecasted for the whole year. FEP wishes to stress that this is a first prognosis

The European production outside FEP countries is at an estimated 14,5 million m² – 9 million m² produced in EU countries and 5,5 million m² in European non-EU countries.

The 2017 total parquet production per type remains similar to the picture already presented from 2010 onwards, whereby multilayer comes in first with 81% (compared to 80% in 2016), being followed by solid (including lamparquet) with 17% (compared to 18%) and mosaic at 2% of the total cake.

subject to variations, in anticipation of the complete data to be communicated at FEP's annual General Assembly mid-June in Lisbon, Portugal.

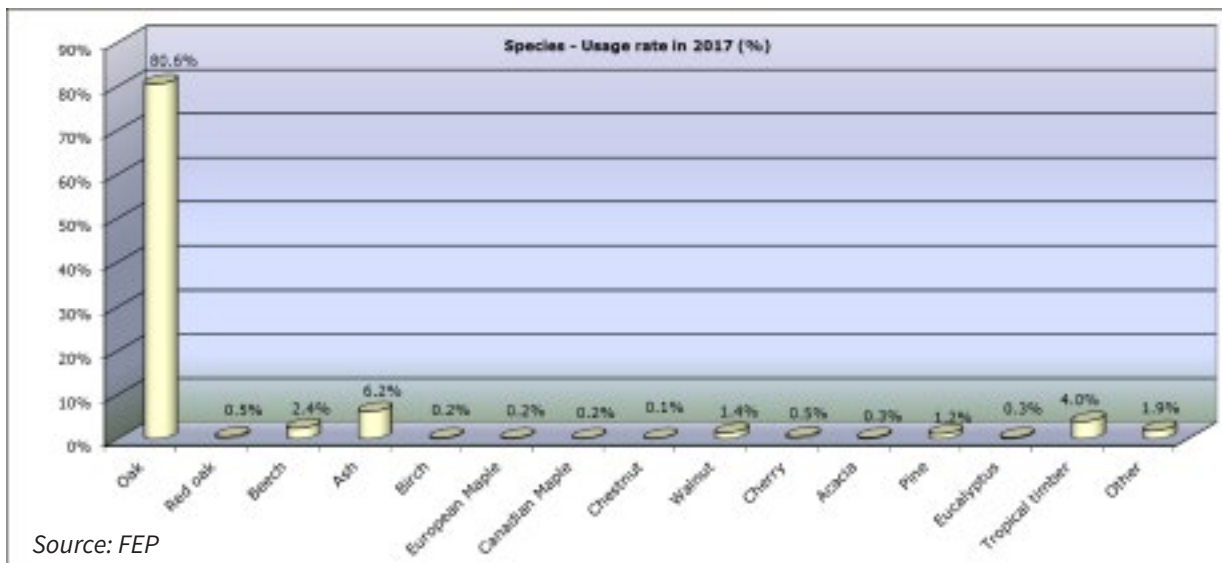
Use of wood species

The usage of wood species in 2017 as shown on the above graph indicates that the share of oak remains stable and reaches 80,6%, compared to 80,8% in 2016. Tropical wood species use continues to represent 4,0% of used wood. Ash and beech remain the two other most common chosen species with 6,2% and 2,4% (compared to 5,7% and 2,5% in 2016) respectively.

As long as oak represents more than 80% of the wood used to produce parquet top-layer, any variation in its availability can be problematic for the industry.

The export bans in place in Belarus, Russia or Ukraine have impacts on the oak procurement as had the phytosanitary measures unilaterally taken by Croatia within the EU Internal Market. Furthermore, as efficient harvesting has been demanded from forest-owners and sawmillers, small formats are now unfortunately lacking.

Obviously, softwood and wood-based panels are also used to produce other than the top-layer of engineered flooring.



Challenges & Opportunities

Besides the problem of oak availability, the parquet industry is confronted with the harsh competition from **“wood look flooring substitutes”** - laminate but also and increasingly LVT (Luxury Vinyl Tiles).

The widespread **misuse of the “PARQUET” denomination**, which causes a growing and unjust confusion at consumer level, is also gaining in importance. According to the norm EN 13756, *“parquet is a wood flooring system consisting of a face of solid wood of minimum 2,5 mm and with or without additional layer(s)”*.

Parquet remains at a 5% market share among all flooring solutions despite the fact that *everybody wants parquet* as stressed by the three studies FEP has conducted on the “European Consumers Perceptions & Expectations towards Parquet”. In order to sensitize the European consumer to opt for parquet as “THE” flooring solution, FEP is working on the **5-2-7 Project**, aiming at increasing the parquet market share from 5 to 7%. The objective of the project is to communicate more efficiently the messages already developed for the **Real Wood** initiative to the end-consumers, taking into account the importance of Social Media. The project tries to focus dedicated efforts on the right communication stages, channels and contents to help driving the decision on parquet vs. other flooring solutions.



The principle is to convince the end-consumer that parquet remains the genuine original, the only flooring solution made of sustainable and renewable raw material Real Wood, coming from sustainably managed and expanding forests!

While the parquet sector is facing numerous challenges, FEP welcomes the increasing recognition by the EU authorities of the **positive contribution of wood products**, including parquet, to fight Climate Change and to support Circular Economy, Circular Bioeconomy & sustainability.

Parquet is and remains the only Real Wood flooring which allows bringing nature in home and building a better future!

More information is available on:
www.realwoodqualityfloors.com
www.realwood.eu
www.parquet.net

EOS expresses gratitude to Ms Isabelle Brose for her precious contribution to the EOS Annual Report 2018/2019

5. The Construction Industry in Europe

EOS expresses gratitude to Mr Orifjon Abidov, Economic Adviser of EPF (European Panel Federation) for his kind contribution to this EOS Annual Report Chapter.

5.1 The Construction Industry in Europe

In 2018, the European construction activity measured by the construction output according to Euroconstruct registered an increase for the fifth year in a row of 2.8% in comparison with 2017. The construction market was characterised by two major developments in 2018. Firstly, the growth in construction activity slowed down substantially last year from a growth peak of 4.5% (volume) registered in 2017. Secondly, except in the UK the construction output increased in all countries (members of Euroconstruct) in 2018.

The growth in Eastern Europe reached 13.4% partly thanks to the continued availability of EU funds in the majority of countries which pulled up the non-residential and civil engineering construction activities. In Western Europe, the construction output moved up by 2.2% in 2018. The favourable construction output was driven by economic growth, which had positive implications for household income, corporate profits and the state of public finances.

After increasing by a total of 11.8% between 2015 and 2018, the construction output is expected to grow further by 4.9% by 2021. However, there is still a lot to recover from the pre-crisis level with the construction output in 2021 still forecast to be 15% below the 2007 peak. However, when eliminating the extreme situations in Ireland, Spain and Portugal, the level of output would be recovered for the sum of the other countries.

In Eastern Europe, all four countries, members of Euroconstruct, registered an increase with Hungary registering the largest growth (+24.7%) followed by Poland (+12.9%). In Western Europe, construction activity increased significantly in Portugal (+7.6%, though coming from a very low level), Netherlands (+6.3%), Ireland (+6.1%) and Spain (5.7%), the latter two also from a very low level. On the other hand, the construction activity contracted in the UK (-0.8%) probably caused by uncertainty from the Brexit process. The other countries of the region registered a more stable situation with a moderate growth of their construction output between 1% and 3.2%.

Figure 5.1: Growth rates of the different segments of the European construction market, 2018

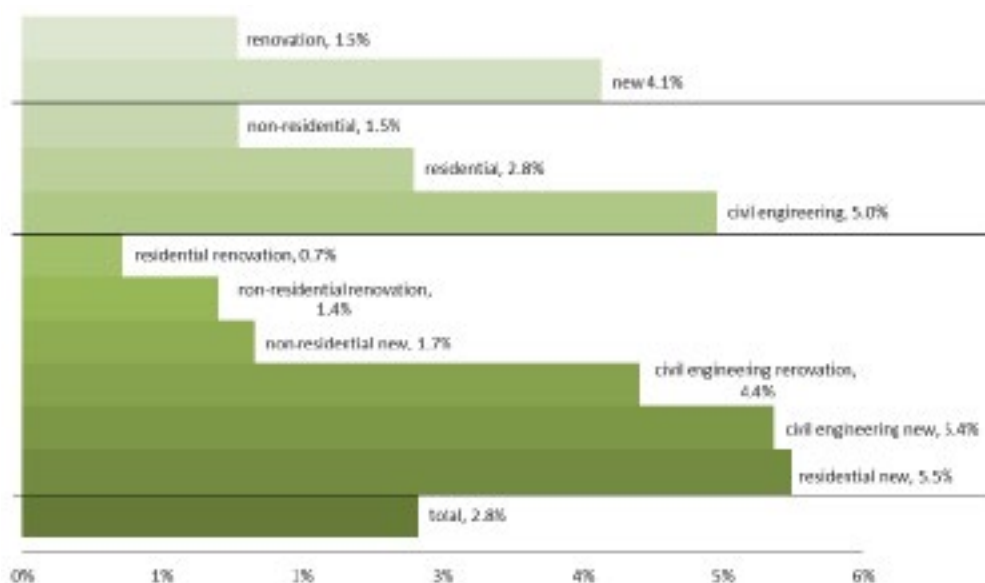


Table 5.1: Overview of the construction industry in Western and Eastern Europe in million EUR in 2017 and 2018

| | total construction* | | | new residential | | | residential renovation | | | new non-residential | | | non-residential renovation | | | new civil engineering | | | civil renovation | | |
|-----------------------------|---------------------|------------------|--------------|-----------------|----------------|--------------|------------------------|----------------|-------------|---------------------|----------------|--------------|----------------------------|----------------|-------------|-----------------------|----------------|--------------|------------------|----------------|-------------|
| | 2017 | 2018 | % | 2017 | 2018 | % | 2017 | 2018 | % | 2017 | 2018 | % | 2017 | 2018 | % | 2017 | 2018 | % | 2017 | 2018 | % |
| Austria | 40,068 | 40,991 | 2.3% | 12,009 | 12,333 | 2.7% | 5,336 | 5,443 | 2.0% | 11,102 | 11,368 | 2.4% | 3,606 | 3,671 | 1.8% | 6,412 | 6,553 | 2.2% | 1,603 | 1,622 | 1.2% |
| Belgium | 44,689 | 45,717 | 2.3% | 8,956 | 9,529 | 6.4% | 12,228 | 12,350 | 1.0% | 9,618 | 9,099 | -5.4% | 6,744 | 6,652 | 1.6% | 5,325 | 6,049 | 13.6% | 1,818 | 1,838 | 1.1% |
| Denmark | 31,191 | 32,018 | 2.7% | 3,840 | 4,109 | 7.0% | 11,366 | 11,593 | 2.0% | 4,604 | 4,774 | 3.7% | 3,654 | 3,631 | 2.0% | 4,923 | 4,957 | 0.7% | 2,604 | 2,653 | 1.9% |
| Finland | 33,161 | 34,096 | 2.8% | 6,719 | 7,371 | 9.7% | 7,460 | 7,535 | 1.0% | 7,195 | 7,389 | 2.7% | 5,138 | 5,164 | 0.5% | 4,865 | 4,850 | -0.3% | 1,784 | 1,788 | 0.2% |
| France | 216,054 | 223,018 | 3.2% | 46,558 | 47,132 | 3.5% | 61,994 | 62,428 | 0.7% | 29,401 | 32,076 | 9.1% | 35,568 | 35,390 | -0.5% | 25,348 | 26,767 | 5.6% | 18,205 | 19,224 | 5.6% |
| Germany | 327,816 | 331,987 | 1.3% | 60,901 | 64,555 | 6.0% | 124,773 | 124,149 | -0.5% | 33,820 | 34,327 | 1.5% | 51,154 | 51,410 | 0.5% | 30,642 | 30,489 | -0.5% | 26,526 | 27,057 | 2.0% |
| Ireland | 20,379 | 21,622 | 6.1% | 4,116 | 5,561 | 35.1% | 3,994 | 4,114 | 3.0% | 7,679 | 7,226 | -5.9% | 1,310 | 1,275 | -2.7% | 2,530 | 2,662 | 5.2% | 750 | 785 | 4.7% |
| Italy | 165,587 | 168,382 | 1.7% | 14,415 | 14,905 | 3.4% | 67,685 | 68,226 | 0.8% | 15,697 | 16,262 | 3.6% | 33,569 | 34,106 | 1.6% | 11,551 | 11,759 | 1.8% | 22,670 | 23,123 | 2.0% |
| Netherlands | 75,151 | 79,897 | 6.3% | 12,965 | 14,132 | 9.0% | 18,623 | 19,331 | 3.8% | 10,979 | 11,956 | 8.9% | 11,055 | 11,486 | 3.9% | 14,164 | 15,325 | 8.2% | 7,365 | 7,667 | 4.1% |
| Norway | 46,286 | 46,731 | 1.0% | 11,128 | 10,037 | -9.8% | 8,073 | 8,218 | 1.8% | 7,334 | 7,121 | -2.9% | 8,769 | 8,901 | 1.5% | 7,900 | 9,267 | 17.3% | 3,682 | 3,187 | -3.4% |
| Portugal | 17,019 | 18,319 | 7.6% | 2,626 | 2,757 | 5.0% | 5,489 | 6,312 | 15.0% | 2,775 | 2,925 | 5.4% | 1,176 | 1,247 | 6.0% | 3,904 | 4,006 | 2.6% | 1,049 | 1,072 | 2.2% |
| Spain | 101,480 | 107,302 | 5.7% | 31,230 | 34,665 | 11.0% | 17,870 | 18,317 | 2.5% | 18,940 | 19,698 | 4.0% | 13,740 | 14,015 | 2.0% | 12,780 | 13,100 | 2.5% | 6,920 | 7,508 | 8.5% |
| Sweden | 43,539 | 44,394 | 2.0% | 11,685 | 12,036 | 3.0% | 7,719 | 7,742 | 0.3% | 6,611 | 6,234 | -5.7% | 6,875 | 7,068 | 2.8% | 6,891 | 7,387 | 7.2% | 3,735 | 3,927 | 4.5% |
| Switzerland | 62,278 | 63,846 | 2.5% | 21,752 | 21,839 | 0.4% | 8,371 | 8,379 | 0.1% | 8,858 | 9,004 | 2.1% | 10,220 | 10,445 | 2.2% | 4,639 | 4,908 | 5.8% | 8,438 | 9,231 | 9.4% |
| UK | 212,746 | 210,994 | -0.8% | 52,384 | 53,746 | 2.6% | 39,991 | 39,351 | -1.6% | 63,111 | 59,829 | -5.2% | 24,144 | 24,192 | 0.2% | 22,409 | 22,633 | 1.0% | 10,707 | 11,242 | 5.0% |
| Total Western Europe | 1,437,444 | 1,469,315 | 2.2% | 300,264 | 314,707 | 4.8% | 400,972 | 403,489 | 0.6% | 237,724 | 239,330 | 0.7% | 216,922 | 219,151 | 1.0% | 164,283 | 170,712 | 3.9% | 117,279 | 121,926 | 4.0% |
| Czech Republic | 17,684 | 19,456 | 10.0% | 3,330 | 3,670 | 10.2% | 999 | 1,096 | 16.7% | 5,040 | 5,504 | 9.2% | 3,802 | 4,323 | 13.7% | 1,463 | 1,483 | 1.4% | 3,110 | 3,381 | 8.7% |
| Hungary | 10,828 | 13,502 | 24.7% | 1,551 | 2,714 | 75.0% | 1,179 | 1,448 | 5.0% | 2,342 | 2,738 | 16.9% | 2,129 | 2,342 | 10.0% | 1,828 | 2,248 | 23.0% | 1,599 | 2,012 | 25.8% |
| Poland | 49,185 | 55,513 | 12.9% | 10,081 | 11,342 | 12.4% | 3,337 | 3,554 | 3.5% | 13,070 | 14,965 | 14.5% | 8,202 | 8,338 | 4.1% | 9,205 | 11,680 | 27.0% | 5,280 | 5,523 | 4.6% |
| Slovak Republic | 4,948 | 5,239 | 5.9% | 760 | 879 | 15.7% | 466 | 500 | 7.3% | 1,405 | 1,370 | -2.5% | 666 | 640 | -4.0% | 1,393 | 1,589 | 14.1% | 228 | 260 | 14.0% |
| Total Eastern Europe | 82,645 | 93,710 | 13.4% | 15,722 | 18,606 | 18.3% | 6,121 | 6,498 | 6.2% | 21,857 | 24,577 | 12.4% | 14,829 | 15,843 | 6.8% | 13,889 | 17,012 | 22.5% | 10,217 | 11,175 | 9.4% |
| Total Europe | 1,520,089 | 1,563,024 | 2.8% | 315,986 | 333,313 | 5.5% | 407,093 | 409,987 | 0.7% | 259,581 | 263,906 | 1.7% | 231,751 | 234,994 | 1.4% | 178,172 | 187,724 | 5.4% | 127,496 | 133,101 | 4.4% |

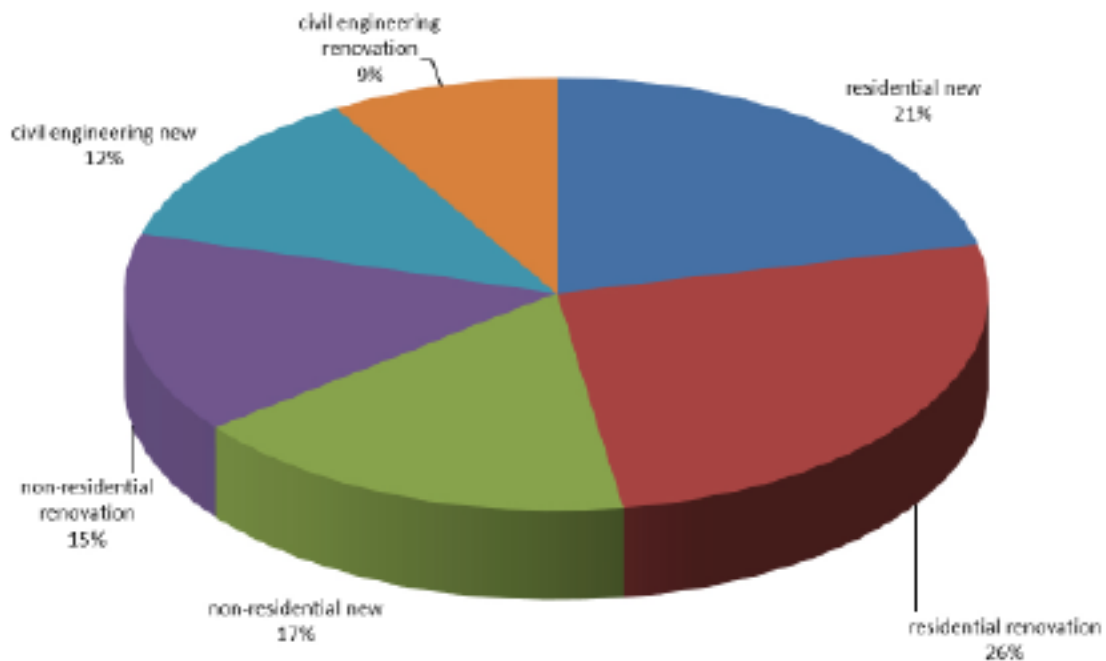
Source: Euroconstruct

* total construction also includes services/construction by other sectors, DIY, black economy

The “new construction” sub-segments registered the largest increase of 4.1% when compared with “renovation” (+1.5%). The “new residential” segment showed the largest

progression with +5.5% followed by “civil engineering new” at +5.4%.

Figure 5.2: Relative share of the different segments in the overall construction market in Europe, 2018



With a stable share of 47%, residential construction remains the building sector’s main branch. Non-residential buildings

rank second, accounting for 32%, while civil engineering projects account for the remaining 21%.



5.1.1 Residential Construction

Table 5.2: Total residential construction volume in Europe in million EUR and annual increases, 2017-2021

| Total volume x million EUR | | % change | | | |
|-----------------------------|----------------|-------------|------------|------------|------------|
| (current prices) | 2017 | 2018* | 2019** | 2020** | 2021** |
| Austria | 17,345 | 2.5 | 1.5 | 1.3 | 0.6 |
| Belgium | 21,184 | 3.3 | 1.7 | 2.8 | 2.6 |
| Denmark | 15,206 | 3.3 | 3.5 | 2.9 | 2.5 |
| Finland | 14,179 | 5.1 | -1.8 | -2.4 | -2.7 |
| France | 107,532 | 1.9 | -2.1 | -2.0 | 1.6 |
| Germany | 185,674 | 1.6 | 0.5 | -0.3 | -1.0 |
| Ireland | 8,110 | 19.3 | 15.7 | 9.9 | 9.5 |
| Italy | 82,100 | 1.3 | 1.5 | 1.4 | 1.4 |
| Netherlands | 31,588 | 6.0 | 3.4 | 3.6 | 2.9 |
| Norway | 19,201 | -5.0 | -4.0 | 1.3 | 2.5 |
| Portugal | 8,115 | 11.8 | 11.1 | 9.7 | 8.4 |
| Spain | 49,100 | 7.9 | 6.4 | 3.2 | -1.2 |
| Sweden | 19,404 | 2.0 | -12.3 | -3.5 | -6.1 |
| Switzerland | 30,123 | 0.3 | -2.7 | -2.4 | -0.9 |
| UK | 92,375 | 0.8 | 2.7 | 3.9 | 0.7 |
| Total Western Europe | 701,236 | 2.4 | 0.9 | 1.0 | 0.6 |
| Czech Republic | 4,269 | 11.6 | 9.1 | 6.9 | 11.6 |
| Hungary | 2,930 | 42.1 | 9.3 | -9.7 | -2.1 |
| Poland | 13,428 | 10.2 | 6.8 | 4.5 | 5.2 |
| Slovak Republic | 1,226 | 12.5 | 5.1 | -2.8 | -2.5 |
| Total Eastern Europe | 21,853 | 14.9 | 7.6 | 2.2 | 5.0 |
| Total Europe | 723,089 | 2.8 | 1.1 | 1.0 | 0.7 |

* estimate

** forecast

Source: Euroconstruct

Following the significant growth of 6.1% in 2017, the total residential construction is estimated to have grown by a further of 2.8% in 2018. Growth is considerably higher in Eastern Europe (+14.9%) than in Western Europe (+2.4%), but since the volume of construction in euro terms is much smaller in Eastern Europe, 93% of the total European growth

in residential construction came from the Western area. Although at a decelerating pace, the outlook is quite positive with residential building activity projected to continue to increase by +1.1% in 2019, +1% in 2020 and +0.7% in 2021, again with Eastern Europe registering the highest increases.

At a national level, in 2018, residential construction contracted only in Norway (-5%), while except in Finland (where it accelerated from 3.2% in 2017 to 5.1% in 2018) the growth slowed down in all countries. In 2019, housing construction is forecast to contract again in Norway, while the positive growth in Finland, France, Sweden and Switzerland in 2018 will likely turn into a contraction ranging

from 1.8% to 12.3% this year. In 2020, a similar trend is forecast for Hungary and Slovak Republic where respectively 9.3% and 5.1% growth in 2019 is forecast to turn into a contraction in 2020 (-9.7% for Hungary and -2.8% for Slovak Republic). Another significant change is a trend reversal in Spain, where 3.2% growth of total residential construction in 2020 is predicted to turn into contraction in 2021 (-1.2%).

Table 5.3: Finished single and two-family dwellings forecasts for the Western and Eastern European countries x 1,000 dwellings, 2017-2021

| | 2017 | 2018* | 2019** | 2020** | 2021** |
|-----------------------|--------------|--------------|--------------|--------------|--------------|
| Austria | 17.1 | 17.2 | 17.2 | 17.2 | 17.4 |
| Belgium | 18.9 | 18.1 | 19.1 | 18.2 | 19.3 |
| Denmark | 6.5 | 7.0 | 8.0 | 8.0 | 8.5 |
| Finland | 7.4 | 7.3 | 7.4 | 7.6 | 7.8 |
| France | 162.7 | 164.0 | 172.0 | 159.0 | 145.0 |
| Germany | 178.9 | 195.0 | 205.0 | 215.0 | 220.0 |
| Ireland | 12.2 | 16.3 | 20.6 | 24.1 | 27.5 |
| Italy | 29.6 | 30.6 | 31.7 | 32.7 | 33.4 |
| Netherlands | 38.1 | 33.0 | 36.0 | 41.0 | 45.0 |
| Norway | 10.4 | 10.8 | 10.2 | 10.4 | 11.1 |
| Portugal | 5.0 | 6.3 | 7.2 | 8.3 | 8.7 |
| Spain | 13.5 | 17.0 | 20.0 | 23.0 | 25.0 |
| Sweden | 17.9 | 17.6 | 14.7 | 12.8 | 11.0 |
| Switzerland | 6.5 | 7.0 | 7.1 | 7.1 | 7.0 |
| UK | 144.5 | 152.3 | 154.5 | 156.9 | 155.6 |
| Western Europe | 669.2 | 699.5 | 730.7 | 741.3 | 742.3 |
| Czech Republic | 15.9 | 18.6 | 21.3 | 24.8 | 27.8 |
| Hungary | 7.0 | 12.0 | 13.0 | 10.0 | 10.0 |
| Poland | 82.4 | 85.0 | 90.0 | 95.0 | 95.0 |
| Slovak Republic | 11.5 | 12.7 | 13.5 | 13.0 | 13.0 |
| Eastern Europe | 116.8 | 128.3 | 137.8 | 142.8 | 145.8 |
| Total Europe | 786.0 | 827.8 | 868.5 | 884.1 | 888.1 |

* estimate

** forecast

Source: Euroconstruct

The number of completions of new single and two-family dwellings upturned strongly in 2018 with 5.3% growth. In the following years, the upturn is expected to slow down significantly from 4.9% in 2019 to 0.5% in 2021. The largest market for finished one and two-family dwellings in Europe is Germany with 24% of market share in 2018 or 195,000 units (see Table 5.4). The completion of one and two-family dwellings is expected to increase to peak at 220,000 units in

2021 in Germany. France is the second largest market in this segment with 20% of market share in 2018 or 164,000 units. In 2019, the completion of single and two-family dwellings in France is likely to increase before contracting in 2019 and in 2020. Nonetheless, finished single and two-family homes are expected to be substantial drivers for growth in wood-based panel consumption in the next years.

Table 5.4: Finished flats forecast for the Western and Eastern European countries x 1,000 dwellings, 2017-2021

| | 2017 | 2018** | 2019** | 2020** | 2021** |
|-----------------------|--------------|----------------|----------------|----------------|----------------|
| Austria | 34.9 | 39.3 | 41.6 | 42.5 | 42.8 |
| Belgium | 29.2 | 29.6 | 31.9 | 30.4 | 32.2 |
| Denmark | 19.0 | 20.5 | 21.0 | 22.0 | 23.0 |
| Finland | 28.3 | 34.7 | 35.1 | 30.4 | 25.2 |
| France | 204.7 | 244.0 | 263.0 | 247.0 | 238.0 |
| Germany | 178.9 | 195.0 | 205.0 | 215.0 | 220.0 |
| Ireland | 2.2 | 2.7 | 3.4 | 3.9 | 4.5 |
| Italy | 51.0 | 52.9 | 55.2 | 56.8 | 58.1 |
| Netherlands | 24.9 | 34.0 | 32.0 | 31.0 | 31.0 |
| Norway | 21.1 | 24.6 | 24.0 | 19.6 | 18.4 |
| Portugal | 3.6 | 4.4 | 5.1 | 5.9 | 6.1 |
| Spain | 41.1 | 53.0 | 65.0 | 77.0 | 85.0 |
| Sweden | 46.0 | 52.9 | 48.7 | 41.8 | 40.5 |
| Switzerland | 49.3 | 49.8 | 48.2 | 46.8 | 46.6 |
| UK | 43.2 | 37.7 | 40.4 | 41.9 | 44.4 |
| Western Europe | 777.4 | 875.1 | 919.6 | 912.0 | 915.8 |
| Czech Republic | 12.7 | 12.5 | 14.1 | 15.8 | 17.0 |
| Hungary | 7.4 | 18.0 | 22.0 | 15.0 | 15.0 |
| Poland | 95.9 | 103.0 | 110.0 | 115.0 | 127.0 |
| Slovak Republic | 5.4 | 7.1 | 5.7 | 5.3 | 5.0 |
| Eastern Europe | 121.4 | 140.6 | 151.8 | 151.1 | 164.0 |
| Total Europe | 898.8 | 1,015.7 | 1,071.4 | 1,063.1 | 1,079.8 |

* estimate

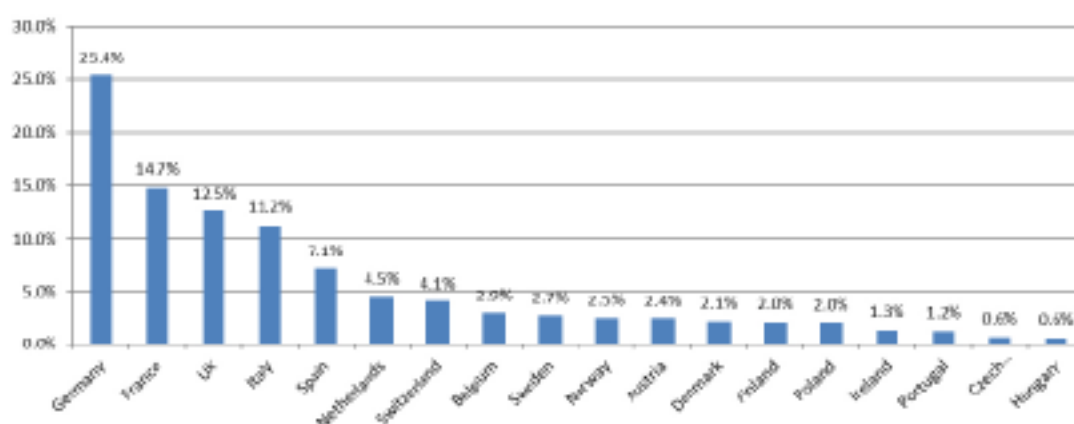
** forecast

Source: Euroconstruct

The turnaround for completions of flats came already in 2014 after the very poor showing in the previous years. The number of finished flats continued to post a double-digit growth in 2018 in both Eastern (+16%) and Western (+13%) Europe. Despite declining growth rates in 2019, the total number of finished flats in Europe is projected to register an increase from nearly 900,000 units in 2017 up to over one

million dwellings (+19%) in 2019 (see Table 5.5). However, the growth in 2020 is forecast to halt with both Western and Eastern Europe registering a mild contraction. In 2021, completions of flats will likely increase in Eastern Europe (+8.5%) with flat development in Western Europe, which means that at the European level the number of finished flats is forecast to increase by 1.6%.

Figure 5.3: Relative share of the Western and Eastern European countries in the overall residential construction market, 2018



Germany represents about 25.4% of the overall residential construction market in Europe in 2018 according to Euroconstruct (see Figure 5.3), followed by France (14.7%), the United Kingdom (12.5%), Italy (11.2%) and Spain (7.1%). Together those five countries represent 71% of the overall residential construction market in Europe in 2018. The other European countries hold a share of maximum 4.5%.

New residential construction has the strongest growth rate in 2018 with 5.5% (see Figure 5.1) but it is recovering from a deep recession. In Western Europe, except in Norway (-9.8%) the new residential construction increased in all the countries with Ireland posting a significant double-digit growth (+35%, though recovering from a deep recession). In Eastern Europe, all countries continued to register the strongest growth in 2018 with Hungary showing an impressive 75% growth.

5.1.2. Non-Residential Construction

After posting the highest growth of 3.7% in 2017 since 2013, the non-residential construction segment increased mildly in 2018 registering an estimated growth of 1.5%. Western Europe posted a lower growth (+0.9%) compared to Eastern Europe (+10.2%), although 83% of European

Housing renovation is not expected to grow as fast, but records healthy production levels currently. An improvement of 0.7% for Europe is driven essentially by a positive trend in Western Europe (+0.6%) in 2018 and a quite noticeable growth in Eastern Europe (+6.2%).

So far European households are enjoying better access to credit and in some countries, they benefit from state support in the form of various programmes to encourage access to housing. The recovery in house prices gives positive signals to investments, but it also tends to overheat the market. Investors are becoming more active in new building developments.

growth in euro term came from Western Europe. The new sub-segment of the non-residential sector grew by 1.7%, while renovation posted just 1.4% growth in 2018. The new segment is in the very early stages of recovery and benefitted from improved economic conditions in Europe

and the continued availability of EU funds in Eastern Europe.

At a national level, except Belgium (-5.4%), Ireland (-5.9%), Norway (-2.9%), Sweden (-5.7%), the UK (-5.2%) and Slovakia (-2.5%) all the countries posted a growth in new non-residential construction in 2018, with a double-digit growth observed for Hungary (+17%) and Poland (+14.5%).

The non-residential renovation sector already rebounded in 2014, two years before new non-residential, and is estimated to have grown by 1.4% in 2018. Again, for this sub-segment, Eastern Europe posted a higher growth (+6.8%) versus its Western counterpart (+1%). At national level, except France (-0.5%), Ireland (-2.7%) and Slovakia (-8%), all the other

countries registered a growth in non-residential renovation construction.

In a context where there is still plenty of concern about the economy, and companies are not significantly expanding their staff and/or equipment, renovating their existing facilities remains a reasonable option. And from the point of view of property investors, the same atmosphere of caution also hints at the idea that buying assets in newly developed areas involves more risks than in consolidated areas, even if the latter are likely candidates to be renovated in order to make them competitive. This explains largely a higher growth rate registered in the renovation sub-segment over the new one in the non-residential construction in 2018.

5.1.3. Civil Engineering Construction

After a contraction of 1% experienced in 2016, civil engineering posted a growth of 2.2% in 2017, which accelerated to 5% in 2018. Like in 2017, the growth was again higher in Eastern Europe (+16.9%) over Western Europe (3.9%). The new segment posted a higher growth of 5.4% compared to the 4.4% growth in the renovation segment thanks to the increased investments in the private sector and the availability of public funds.

Thanks to the resilient nature of civil engineering renovation segment, the activity increased in all the countries in 2018.

In Western Europe, the highest growth rate was registered in Switzerland (+9.4%) Spain (+8.5%), the UK (+5%), France (+5.6%), Ireland (+4.7%), Sweden (+4.5%) and Netherlands (+4.1%) with the rest of the countries posting a growth between 0.2% and 3.4%. In Eastern Europe, Hungary (+26%) and Slovakia (+14%) performed particularly well in 2018.

In the new sub-segment, except a minor drop in Finland (-0.3%) and Germany (-0.5%), all the countries in Western Europe posted a growth in activity with Belgium (13.6%) and Norway (17.3%) registering a double-digit growth.

5.1.4. Country Analysis of the Construction Market in Europe

Austria

The construction activity in Austria slowed down from 3.5% growth in 2017 to 2.3% in 2018 due to lower economic growth and higher construction prices. All segments and sub-segments developed positively but the main drivers of growth were housing and non-residential construction, driven by the vivid economic performance of Austria. Total **residential** construction is estimated to have grown by 2.5% in 2018 with the new sub-segment increasing by 2.7% and renovation by 2%. For subsequent years, growth is expected to continue, however, at lower rates than before (+1.1% per annum during 2019-2021) due to the risk of an overheating market (due to increasing house prices). The **non-residential** construction sector increased by 2.2% in 2018 in association with sustained economic activity in Austria. New non-residential construction showed a higher

growth (+2.4%) compared to the renovation (+1.8%) sub-segment. From 2019 onwards, growth in non-residential construction will likely slow down due to several factors. In addition to lower economic growth, the phasing out major city development projects in the capital Vienna by the end of 2018 and early 2019 (especially in office construction) and market saturation in some areas (such as in commercial construction where the competition has already reached a very high level) would be the main factors behind a lower growth in non-residential construction (1.4% annually during 2019-2021). As for **civil engineering**, it is estimated to have expanded by 2.3% in 2018, with new civil engineering growing by 2.2% and civil renovation by 1.2%, on the back of stronger investments in rail construction works (+4.3%). Total construction in Austria is expected to develop rather stable in the

upcoming years from 2019 to 2021 at an average real growth rate of about 1.4% per annum.

Belgium

In Belgium, the total construction output increased by 2.3% in 2018, with the major source of growth being residential and civil engineering. The **residential** construction sector is estimated to have registered a 3.3% increase with new residential increasing by 6.4% and renovation by 1%. The further tightening of Belgian energy performance requirements in Flanders at the end of 2017 and the improved economic conditions (falling unemployment and rising disposable incomes in a context of very low mortgage rates) were the primary factors explaining a solid performance of new housing construction in 2018. Although less strongly, these factors are expected to continue supporting demand in the period 2019-2021. After a strong recovery in 2016 and a moderate growth in 2017, the **non-residential** construction declined in 2018 (-2.6%) driven by the contraction in new non-residential construction (-5.4%) and despite the growth in the renovation segment (+1.6%). The contraction in new non-residential construction in 2018 is largely explained by the low volume of building permits issued in 2017 for certain types of building (offices and industrial buildings). However, from 2019 onwards the situation should start improving, which in combination with a steady growth in the renovation segment, will likely help non-residential construction to renew with the growth (2.9% annually during 2019-2021).

Civil engineering construction experienced a significant growth of 10.4% in 2018, with new civil engineering surging by 13.6%, whereas renovation increased by just 1.1%. The four flagship projects (Oosterweel Link road, the extension of the Brussels metro, expansion of the Liège tram network and to a lesser extent the RER regional express rail network) should maintain the growth in civil engineering construction over the 2019-2021 period (+4.7% per annum). Even though the total construction output in Belgium is expected to grow by an average of 2.9% per annum over 2019-2021, the construction market in Belgium can be identified as a mature market.

Czech Republic

In 2018, the Czech construction sector posted an impressive growth of 10% driven by a continued growth in all segments (housing, non-residential and civil engineering construction). After a mild growth in 2017, the **residential** construction sector renewed with a double-digit growth of 11.6% in 2018. The new residential sub-segment increased

by 10.2% thanks to high demand for new dwellings, while the renovation segment surged by 16.7%. Strong public investments and sustained economic activity led the **non-residential** construction sector to post a second consecutive year of double-digit growth in 2018 (+11.1%). The positive development is expected to continue in 2019-2021 thanks to strong public spending, especially from EU funds and continued growth in private investments. After huge negative developments in 2016-2017, **civil engineering** is estimated to have rebounded (+6.3%) in 2018 with the new sub-segment posting a mild growth of 1.4% and renovation growing by 8.7% reflecting the start of the EU funds programme. The Czech construction sector is expected to register a positive outlook from 2019 onwards with all sectors contributing to the growth (+7% per annum during 2019-2021). The renewal of financing from EU funds will likely support a sustained growth in non-residential and civil engineering construction over the forecast period. The main downside risk to this outlook is the ability of Czech authorities to push enough shovel-ready projects to capitalise the total of EU funds approved in Brussels.

Denmark

Total Danish construction is estimated to have grown by 2.7% in 2018. The **residential** construction sector increased by 3.3% thanks to a solid growth in new residential construction (+7%) and a relatively mild growth in the renovation segment (+2%). Rising real estate prices in association with increasing housing needs will likely lead to a lower growth in new residential construction from 2019 onwards. Renovation in residential construction will likely be promoted by a government scheme supporting energy conservation, climate-related projects and broadband internet installation. Total housing construction is forecast to increase by 3% annually during 2019-2021. The **non-residential** construction sector is estimated to have increased by 2.9% in 2018. New non-residential construction grew by 3.7% driven mainly by a large governmental programme of new hospitals and a renewed growth of private sector construction. Renovation in non-residential construction is estimated to have grown by 2% driven by incentives in energy savings linked to high energy costs. In 2019-2021, non-residential construction is predicted to maintain a stable growth thanks to continued economic growth and healthy public finance. **Civil engineering** is estimated to have increased mildly by 1.1% in 2018 driven mainly both by new (+0.7%) and renovation (+1.9%) sub-

segments. Going forward, civil engineering construction is forecast to post a moderate growth of just 1% annually from 2019 to 2021. Total construction activity in Denmark is predicted to post a stable growth of 2.3% annually thanks to the building sector.

Finland

In Finland, construction output is estimated to have increased by 2.8% in 2018, thanks to growing building activity. The **residential** construction sector is estimated to have continued a strong growth path in 2018 (+5.1%) driven by the solid demand for new flats. The growth in new housing construction was particularly significant (+9.7%) thanks to housing investors investing in new non-subsidised rental dwellings and increased urbanisation. For the next few years, however, the volumes of housing starts are expected to decline sharply (-6.8% per year in 2019-2021) driven by oversupply of flats in many urban areas and declining rent prices (especially in 2020-2021). The residential renovation sub-segment, the largest of the Finnish construction sector, increased at a moderate rate of 1% in 2018 mainly driven by a professional renovation segment, but to a lesser extent by consumer-driven DIY renovation. The outlook for renovation (+1.7% per annum in 2019-2021) is better than that for new residential starts since a considerable number of flats and attached houses are reaching the age when renovation will be required. The **non-residential** construction sector increased mildly by 1.8% in 2018 after a strong growth in the previous year thanks to the general economic revival. New non-residential construction increased by 2.7% in 2018 driven by construction of buildings for education, industry, commerce and health-care. However, from 2019 onwards new non-residential construction is forecast to contract due to the declining office constructions. Renovation in non-residential continued its stable growth of 0.5% in 2018. The need to renovate non-residential buildings increases more steadily, especially in the public sector and is likely to grow even until 2030. After contracting in 2017, **civil engineering** construction remained stable in 2018. This could be explained by the strong growth in 2016 (+6.5%) thanks to the delays in the first phase of the metro project, which increased investments in 2016 considerably. At the same time, much of the funding for reducing the repair backlog was also spent that year. Going forward, the civil engineering construction volumes are likely to drop due to increasing development and input costs as well as the decrease in state funding resulting from the growing government debt. In the light of the sluggish economy and a saturated real

estate market, the Finnish construction market is expected to post a mild growth in 2019 (+1.4%) before progressively contracting during 2020-2021 by 1.8% annually.

France

The French total construction output is estimated to have grown by 3.2% in 2018. A strong upward trend from 2016-2017 in **residential** construction weakened with an increase of just 1.9%. The new and renovation sub-segments increased by 3.5% and 0.7% respectively, still highly supported by political measures for access to ownership along with attractive housing loans. Despite the extension of supportive fiscal measures (the "Pinel" and PTZ loan ("Prêt à taux zéro" – zero loan rate) for another four years and the dedication of these measures to tense areas (where home prices are already high), the new housing starts are forecast to decrease from 2019 to 2020 before going up in 2021. The expected mild growth in more resilient renovation segment will unlikely offset the future contraction in new housing construction, which would result in residential construction going down by 0.8% annually during 2019-2021. The year 2016 witnessed the end of a 7-year long downward trend in **non-residential** construction buildings which continued to increase by another 3.9% in 2018 thanks to a solid performance of the new (+9.1%) sub-segment. New non-residential segment growth can be attributed to the improved economic visibility and steady economic growth. At the same time, output of buildings for education and healthcare improved significantly over the course of 2018. The situation is expected to continue improving through 2021, thanks to positive macro-economic indicators in the private sector and the ambitious public investment plan proposed by the French President. The overall activity in non-residential construction is forecast to continue its upward trend from 2019 onwards with annual growth of 3.1%. Although from a very low level, growth in **civil engineering** construction accelerated from 0.6% in 2017 to 5.6% in 2018. Both the new and renovation sub-segments contributed equally to this performance mainly thanks to a further growth in public spending over the course of 2018. Civil engineering is expected to accelerate, since private investment (telecom, energy, water) will keep pushing, and public investment will continue to recover (roads, high speed train) hopefully with some support from EC initiatives. Total construction output in France is forecast to increase mildly by 1.3% annually during 2019-2021 thanks to civil engineering and non-residential constructions offsetting the lower output in the residential segment.

Germany

The German construction output is estimated to have grown mildly by 1.3% in 2018 boosted mainly by new housing. The **residential** construction sector increased by 1.6% with all of the impetus coming from the new construction segment (+6%), while renovation registered a mild contraction (-0.5%). Higher refugee immigration, as well as pull-forward effects in single and two-family house construction due to tougher energy regulations as of the beginning of 2016, are giving a temporary boost to residential construction. Main constraining factors include the limited supply of construction areas and the sharp increase in construction and development costs exacerbated by tougher energy regulations. Concerning renovation construction in residential, renovation measures have been at an exorbitantly high level for a decade, significantly reducing the need for refurbishment in the years ahead. Also, a number of constraints (such as often little additional potential for energy savings, unclear usage horizons, buildings with complex ownership structures, complex state funding combined with ambitious target) point to a cool-down in the renovation market. Still, renovation in residential housing is predicted to remain by far the largest sub-segment by volume in the German construction industry. Although the **non-residential** construction sector increased by 0.9% with new increasing by 1.5% and renovation by 0.5%, the segment is suffering from companies' cautious approach to investment. There are nevertheless currently several indicators that companies will start reducing their funding on maintaining their buildings and/or on new construction in 2019-2021. At the same time, the lack of building lands will dampen any hopes for renewed growth in non-residential construction in Germany over the forecast period. In the renovation segment, given the size it has already achieved, it appears that little further expansion can be foreseen in near future. **Civil engineering** increased mildly by 0.7% in 2018 mainly driven by the renovation segment (+2%), which offset a minor contraction in new civil engineering construction (-0.5%). Civil engineering is mainly benefiting from far higher federal government funding for roads and railways and increased contribution to the expenditure on refugees realised by "Länder" and municipalities. For instance in the transport sector, the federal government launched an investment offensive in 2015-2016 and the level of funding reached in 2018-2019 will then be kept at the same level going forward. This will likely affect the output in civil engineering construction in 2019-2021, which will likely drop by 0.6% per year. The German construction output is

forecast to remain stable in 2019 (+0.1%) mostly because of a continued demand in the new housing segment. However, as soon as the first symptoms of fatigue appear in 2020-2021, the whole German construction sector is forecast to contract slightly (-0.7%) with not a single segment expected to grow during this period. The stagnation in the building renovation segment, representing about 55% of the German construction market, can pose a problem in the future.

Hungary

After a disastrous 2016 due to the slump in non-residential construction and civil engineering sectors, the construction output in Hungary continued its double-digit growth in 2018 (+24.7%). All sectors of the construction industry equally contributed to last year's performance. Thanks to state support (tax relief, easier grants for young families) to turn the negative demographic trends, the **residential** construction sector saw an impressive growth (+48%) in 2018. The lion share of this growth came from the new residential sub-sector, which increased by 75%. Renovation in residential construction grew more moderately by 5% as the government's housing policy prioritises young couples' home purchase. Additional growth in the 2019 period should be the result of the current permit numbers and the number of announcements of intention to build a home within the simplified permit procedure. However, uncertainty surrounding the extension of the favourable VAT scheme will likely reduce the housing starts (-20%) in 2020 with an expected stabilisation in 2021. In the renovation sub-segment, the acceleration of growth is likely to be driven by a booming real estate market in 2019-2020 where the growth will average 9% per annum before the market is expected to contract by 5% in 2021. The **non-residential** construction sector increased by 13.6% in 2018 thanks to various factors (solid economic fundamentals, on-going absorption of EU funds, low interest rate and Hungary's upgrade by international rating credit agencies). Both new and renovation segments performed particularly well where the output increased by respectively 16.9% and 10%. The combination of state support with EU transfers to support SME's investment, the increased state expenditure for public projects in culture, entertainment and sports, the non-residential construction (both new and renovation) output is likely to post a steady growth of around 7.4% annually between 2019 and 2021. Following a huge drop in 2016, the **civil engineering** sector continued with a strong growth (+24.3%) in 2018 both in the new and renovation sub-segments thanks to the continued availability of

EU funds. Four mega infrastructure projects called Paks II dominate the period between 2018-2022, which will provide a steady growth in both new and renovation civil engineering construction. The output growth in this sector is expected to average 10% per year. Due to bottlenecks (higher development costs, labour shortages, emigration of expertise) created in association with the quick rebound in construction demand, it will probably be challenging for Hungary to meet the abrupt growth in current construction demand. This means that the growth in construction output will likely decrease significantly from 10.2% in 2019 to just 1.7% in 2020 before it accelerates to 5.6% in 2021. Despite an expected growth in other sub-segments, a sharp drop in housing starts will particularly affect the whole construction industry in 2020.

Ireland

The Irish construction sector commenced a strong recovery in 2013, albeit from an exceptionally low base, and is estimated to have registered a further growth of 6.1% in 2018. The **residential** construction sector increased by 19.3% with new being the most expanding segment with 35.1% growth while renovation increased by just 3%. The level of housing supply in Ireland is substantially below where it needs to be. Thanks to continued state support for the housing market, Irish residential construction is forecast to grow at double-digit rates in 2019-2021, albeit at a slower pace compared to performance in 2018 (+11.7%). After a strong performance of 15.6% in 2017, the **non-residential** construction sector declined by 5.5% in 2018 driven by the oversupply in the commercial (office), industrial and agricultural building construction. It is very likely that it will take many years for the demand side of the non-residential sector to absorb the high level of construction in 2015-2017. Therefore, non-residential construction is expected to contract further in 2019-2021 by 11.6% annually. The **civil engineering** sector is estimated to have rebounded in 2018 on the back of growth in the new (+5.2%) and renovation (+4.7%) sub-segments. There is a commitment in the "Programme for Government" to leverage additional private investment in sectors struggling with large infrastructure deficits, including residential care, housing, regional transport and third level education. The overall volume of construction output is forecast to grow at a declining rate from 2019 onwards. The Irish construction industry is in a recovery phase and is on course to experience a positive outlook, provided Brexit does not adversely impact this encouraging trajectory.

Italy

Following an upturn in 2015, the Italian construction sector experienced a continued growth in 2018 (+1.7%) thanks to the performance of all sub-segments. The **residential** construction sector increased by 1.3% with the new sub-segment moving up by 3.4% while renovation increased by just 0.8%. New housing market is characterised by a poor demographic evolution, high real estate prices and a relatively high level of unsold stock of houses. In the years to come, a moderate growth is forecast to be the main characteristic of the market. With cumulative growth of 4.3% during 2019-2021 period, the residential construction output will still be 25% below the peak reached in 2006 by the end of 2021. The **non-residential** sector increased by 2.3% with new increasing by 3.6% and renovation by 1.6% in 2018. The recovery in non-residential construction started in 2015 and is driven by the industrial, office and agricultural segments as well as the public sub-segments. The demand for construction in these economic sectors will likely register a stable growth of 2.2% per year in the 2019-2021 period backed up by the continued economic growth and elevated business confidence indicators. After two consecutive years of decline (-2.7% annually during 2016-2017), **civil engineering** construction resumed its growth in 2018 (+2%) thanks to the recovery of investment by Central Government and by some of the biggest national and local companies. From 2019 investment by Local Bodies is also expected to recover thanks to the availability of public funds allocated to the sector in the three-year period as well as that from road managing companies. These investments will likely help civil engineering construction to increase by 3% annually during 2019-2021. The Italian market is still wrapped up by the stabilising effects of a prominent renovation market, representing a share of 60% of the total construction market. Although the fiscal incentives for different renovation and energy saving projects are expected to slow down in the building sector, the stable growth rate of renovation output in both residential and non-residential constructions should support a sustained growth rate of the Italian construction industry in 2019-2021 period. This, in combination with continued expansion in new civil engineering construction, is expected to lead to an annual average growth of 2% per year over the same period.

Netherlands

Following an upturn in 2014 and strong growth in 2015-2017, the construction sector in the Netherlands continued its growth path in 2018 with an estimated rate of 6.3%. The

residential construction sector growth slowed in 2018 but remained vigorous (+6%) with new increasing by 9% and renovation by 3.8%. The development of residential construction is boosted by high consumer confidence, low interest rates and the increasing need for housing in light of a demographic growth. A steady increase in output is expected in the years further ahead (3.3% per year during 2019-2021). The **non-residential** construction sector increased by 6.4% in 2018 thanks to continued economic growth. New construction in 2018 expanded by 8.9% boosted by the improvement of the economic situation and favourable export opportunities ensuring a steady demand for industrial, and storage buildings. This is accompanied also by a significant recovery of sectors relying on public infrastructure (like for education and hospitals). The Renovation & Maintenance segment is estimated to have grown by 3.9% in 2018 thanks to the catching up on postponed maintenance work and focused efforts to make existing buildings more efficient. Favourable economic conditions should boost the non-residential construction output in 2019-2021, which is forecast to grow by 4% annually. **Civil engineering** is gradually recovering from the economic crisis and austerity measures in the past and registered a solid growth of 6.8% in 2018 with contribution of both new (+8.2%) and renovation (+4.1%) sub-segments. Main drivers are economic growth, some large projects and the increasing need for work to accompany new residential construction. The devoted public budget by the Dutch government to beat the mobility problem should accelerate growth in civil engineering, mainly in new construction and renovation of roads and railways. The forecast reveals robust expectations of around 3.2% growth per annum for 2019-2021, which will also be driven by the continued investment by local government after several years of budget constraint. The balanced growth in the building area and the extra budget impetus from the Dutch government supporting higher growth in civil engineering will help the construction industry to grow by 3.5% between 2019 and 2021.

Norway

The Norwegian construction sector has barely experienced any significant recession, and yet still has some more room for growth. After a robust increase of 6.6% in 2017, the construction sector in Norway is estimated to have grown by just 1% in 2018 due to the contraction of output in new buildings. The **residential** construction sector contracted by 5% with the new sub-segment plunging by 9.8% while renovation increased by just 1.8%. Decreasing

housing prices since May 2017, a lack of production capacity (meaning that developers will find it difficult to attract construction firms to their projects), as well as a lower population growth were the main factors explaining lower output in new housing in 2018. The negative effects of these factors will likely continue in 2019, which means that new housing construction is forecast to increase mildly again from 2020. The anticipated real wage growth along with a high level of housing stocks are forecast to provide a steady growth (+1.8% per year) to the renovation and maintenance activities in the future. After growing by 3.7% in 2017, the **non-residential** construction sector posted a mild drop in 2018 (-0.5%) due to the situation in new sub-segment, which contracted by 2.9% offsetting growth (+1.5%) in the renovation area. Higher demolishing rates for existing offices and commercial buildings, transformation of existing non-residential buildings to dwellings led to lower output in new non-residential construction. Regarding the renovation sub-segment, lower employment growth, in combination with companies being more cautious with non-essential expenditures lead to a modest growth. Going forward, most of the growth in the non-residential construction market (2.2% per annum during 2019-2021) is expected to come from increased public sector spending on health and education. **Civil engineering** output surged by 13.4% with the new sub-segment expanding the most by 17.3% and renovation by 3.4%. This market has experienced strong growth since 2010 and there are no signs of weaker growth. In general, new investments are growing faster than maintenance. The Norwegian construction output is expected to continue growing by 3.9% per annum for 2019-2021. With new residential construction declining from high levels, growth comes from civil engineering (roads and energy) and building renovation segments. Opposite to most European countries, in Norway public demand for construction is stronger than private demand.

Poland

Following a slump in 2016, the rebound in the construction output in Poland continued in 2018 (12.9%) on the back of a recovery of investments co-financed with EU funds. The **residential** construction sector increased by 10.2% with the new sub-segment increasing by 12.4% and renovation by 3.5%. Like in previous years, the main driver of growth in housing which are the investments in the construction of flats carried out mainly by developers remained in 2018. A simultaneous increase was observed in both dwellings completed and number of permits issued. In a context

of stabilisation of flats prices, housing demand has been fuelled by the growing affordability of mortgages and lower interest rates, supported by improving labour market conditions and the extended government-subsidised housing programme “Flat for the Young”. Some slow-down is expected from 2019 onwards in connection with the fading out of “Flat for the Young” and the implementation of the “Flat Plus” programme easing access to ownership and rental to medium and low incomes. The **non-residential** construction sector accelerated its growth from 6.2% in 2017 to 10.5% in 2018 with a positive contribution of both new (14.5%) and renovation (4.1%) subsegments. Continued availability of EU funds and increased investment expenditure by local governments were the main factors explaining the strong growth in non-residential construction. At the same time, continued improvement in the economy helped the private sector to increase their investments. From 2019 onwards, an increasing absorption of EU funds under the financial framework for 2014-2020 is expected to provide impetus to the sector both for public and private constructions going forward. **Civil engineering** increased by 19% with new surging (+27%) and renovation continuing a stable growth of 4.6%. In 2019, many delayed construction investments, related to the use of funds from the EU financial framework 2014-2020, are expected to start. This will likely support the growth in civil engineering construction at a double-digit rate. Total construction output is expected to rise again by another 10.1% in 2019 and slow down in 2020 (+4.7%) and 2021 (+5.4%). The biggest threat in the Polish construction sector may be the further increase in labour costs and prices of building materials, which reduce the growth in construction output.

Portugal

In 2018, the construction sector in Portugal is estimated to have continued to grow by a solid rate (+7.6%) thanks to the availability of public investment. The **residential** construction sector is estimated to increase again at a double-digit rate in 2018 (11.8%) after healthy growth in 2017 (+15.2%), with the renovation sub-segment being the most dynamic segment of the construction sector registering an increase of 15%. Still, the new construction segment also progressed well with a 5.4% increase. For the near future, forecasts for the evolution of the housing market are positive, in a framework of economic recovery. New housing construction is expected to perform positively until 2021, but the renovation and maintenance works segment is still expected to register a higher dynamism. The

non-residential construction sector increased by 5.6% in 2018 in line with the recovery of the Portuguese economic situation and the increase observed in the economic agent's confidence level. Both new non-residential building construction and renovation contributed to this upturn with a growth of 5.4% and 6% respectively. In the renovation and maintenance works segment the continued several years of growth is driven by the private investment, largely of foreign origin, attracted to Portugal by the availability of liquidity in financial markets and low interest rates combined with an undervaluation of real estate assets. From 2019 to 2021, the non-residential building segment is expected to register positive but declining growth rates from 4.3% in 2019 to 2.8% in 2021. After contracting sharply in 2016 (-12.6%), **civil engineering** construction continued its growth in 2018 (+2.5%) driven by a stable recovery in public investment. As by far the largest the sub-segment, new civil engineering construction contributed the most to this performance thanks to 2.6% growth, which compares to 2.2% growth in the renovation sub-segment. Civil engineering is expected to continue a growth path thanks to the Structural Funds Programme “Portugal 2020” as well as healthy economic prospects. Nevertheless, the case of Portugal has some similarities with Spain. It is also a market that has suffered from a long and deep recession that the high forecast figures (6.4% per annum for 2019-2021) are giving a false perception of recovery since it starts from very low levels. Like in Spain, there are plenty of uncertainties in the non-residential segment, but some hope in new housing remains stirred by property investors.

Slovakia

After a sharp recession in 2016 the Slovakia construction sector renewed with growth in 2017, which continued at an estimated rate of 5.9% in 2018. The main factors that led to the 2016 recession were removed in 2017 such as the disruption in the EU funds causing a huge drop in civil engineering and new non-residential construction projects. The increasing demand for housing and building permits helped the **residential** construction sector grow by 12.5% in 2018. The new residential sub-segment accelerated its growth from 8.3% in 2017 to 15.7% in 2018 thanks to the demand for housing, affordable mortgage lending and the purchase of apartments as investment. However, this growth is unlikely to sustain due to the negative demographic evolution, limited land availability and tighter credit regulations. After contracting by 3.4% in 2017, the renovation segment rebounded with a growth of 7.3% in 2018 thanks to the

Slovak State support for thermal insulation of houses and apartment buildings as well as construction of municipal housing. This programme, which is replaced by a tax bonus in 2019 will still maintain a stable output in renovation and maintenance construction before it starts contracting again through 2021 (-1%). The **non-residential** construction sector, being the largest segment of the Slovak construction market, contracted in 2018 (-4.3%) after growing mildly the previous year (+0.9%) due to the decrease in the use of non-residential buildings under construction permits. In 2019, the non-residential construction is expected to increase by 1.2% thanks to the public investment. However, this growth will likely fade away by the end of 2021 due to a declining investment from the private sector. While **civil engineering** was the driving force of the construction sector in 2015, the sector is estimated to have registered a drop of 25% in 2016. 2017 was characterised by the return of public investment and EU funds, which led to the growth of 8%, which accelerated to 14% in 2018. The new sub-segment posted a growth of 14.1% in 2018 though with a declining growth outlook in 2019-2021 (+2.1% per year). All of the growth in the civil engineering construction is likely to come from the new sub-segment going forward mainly thanks to the infrastructure projects backed up by both the Slovakian government and EU funds. A continued recovery is expected in 2019, with 3.7% growth in the total construction industry in Slovakia thanks to the continued availability of funds for civil engineering and still growing housing market. However, uncertainty lies for the year 2020-2021 for which a stable construction output is expected.

Spain

In 2018 the construction sector in Spain is estimated to have increased further by 5.7%, with segments moving at very different speeds illustrating a gap between public and private development. The recovery in residential construction has remained steady, while civil engineering began to benefit from the increased availability of both public and private funds. Non-residential construction lies somewhere in between, improving moderately. The **residential** construction sector is estimated to have increased by 7.9% in 2018 but to be still far from its comfort zone. Construction of new buildings increased by 11% thanks to the effects of the reappearance of owner occupant buyers following a fall in housing prices and more mortgages being granted. This is the third consecutive year after the crisis that there have been more housing starts than completions. The renovation sub-segment has registered a

steady growth of 2.5% in 2018 as a result of both large and small-scale renovations. The **non-residential** construction sector encounters more difficulties recovering than housing and is estimated to have increased by 3.2% in 2018 and both new and renovation sub-segments registered a positive development during three consecutive years with new increasing by 4% and renovation by 2%. Non-residential real estate activity continues to be intense, and there are few signs of fatigue so far. But as demand was boosted by speculating investment funds it cannot be interpreted as a clear upturn in the development of new construction. After two consecutive years of drop, the **civil engineering** construction finally rebounded by 4.6% in 2018 thanks to growth in both the new (+2.5%) and renovation (+8.5%) sub-segments. The local works that are making an appearance in the run up to 2019 municipal elections favoured mostly the renovation segment, while some cost curbing measures have reduced the number of new projects and slowed progress on works already underway. With no contribution from infrastructure construction, renovation production is expected to contract by 2% in 2019, but then grow again in 2020-2021 (+4% per year) essentially driven by local works from municipalities. For 2020-2021, Euroconstruct expects a steady growth in new civil engineering (after the elections), while the strength in the development of stated developed projects, especially railways manifest themselves once again. Total construction growth is forecast to average 2.8% per annum during 2019-2021 thanks to steady growth in the building sectors and civil engineering. However, this will still generate very modest output compared to pre-crisis levels.

Sweden

Since 2014, Sweden has been experiencing substantial growth thanks to the good performance of new building, and particularly new housing. After a robust growth of 6.6% in 2017, the Swedish construction sector is estimated to have increased by just 2% in 2018 due to the contraction in the new non-residential sector. The **residential** construction sector increased by 2% driven essentially by activity in the new sub-segment (+3%). The increase in housing starts, reaching levels not seen since the early 90-ties, can be explained by fundamentals like low interest rates, a huge demand, rising house prices, employment and income growth. However, this growth comes from very low levels, although the output level was above the government's goal of 70,000 new dwellings annually to 2025. New residential buildings are expected to flatten out and drop from 2019 as a result of lower employment growth, uncertain house prices,

rising taxes, shortages of labour and higher interest rates. The renovation sub-segment is expected to post a steady growth of just under 1% per year from 2019 onwards. The **non-residential** construction sector contracted by 1.4% in 2018. The new non-residential building activity dropped by 5.7% due to the office and educational buildings segments. The renovation sub-segment did much better with a growth of 2.8%. Based on building permits, project lists and the expected slow-down in economic growth in general, the activity in new non-residential construction is forecast to decline further from 2019 onwards. Non-residential renovation will likely remain the most stable sector of the Swedish construction industry with a growth projected at 1.2% per annum in 2019-2021. Historically low interest rates, decreased vacancies and rising rents have made it a good opportunity to initiate renovation projects. The property market is expected to cool down in the coming years making investors increasingly selective. **Civil engineering** increased by 6.2% in 2018 with new and renovation increasing by 7.2% and 4.5% respectively. Transport infrastructure is taking a leap upwards as a consequence of the transport infrastructure plan from 2014. Many new and large projects are reaching a more intensive phase. However, the extensive need for renovation and maintenance will continue to enforce priorities. The Swedish construction industry will likely be featured by contrasting trends in its sub-segments in 2019-2021. With the residential market expected to contract from 2019, civil engineering keeping growing at moderate speeds, and a declining output in the building sector driven by new sub-segment will lead the construction sector contracting in 2019 (-3.8%), stabilising in 2020 and contracting again in 2021 (-2.4%).

Switzerland

In 2018 the Swiss construction output is estimated to have increased by 2.5%. The **residential** construction sector revived in 2017 registering growth of 3.6%, but slowed down significantly to 0.3% in 2018 due to rising interest rates, sluggish demand for housing and an increasing number of vacant flats. These factors are forecast to have a further negative effect on the housing market, which means that it will likely contract by 2.4% per year during 2019-2021. The **non-residential** construction sector increased by 2.2% with new increasing by 2.1% and renovation by 2.2%. Big projects such as the "Circle" at the airport in Zurich or investments of biotechnology and pharmaceutical companies support the non-residential construction sector. At the same time, the better economic situation for manufacturing firms leaves

room for investments into production facilities and new offices. Also, the health and educational sector will likely support the non-residential construction on the back of aging population and outdated infrastructure. Therefore, the non-residential construction in Switzerland is predicted to post a stable output growth in 2019-2021, which will average 2.7% per year. After two consecutive years of contraction, **civil engineering** construction rebounded in 2018 (+8.1%) with both new and renovation sub-segments contributing to this growth. The civil engineering segment is expected to continue benefitting from two new infrastructure funds in the next few years: the railway infrastructure fund implemented on 1st January 2016 and the national road and agglomeration transport fund from 2018 onwards. The renovation segment will particularly benefit from higher a share of investments over the next three years. Despite positive fundamentals and high investments into hospitals and infrastructure projects, the construction sector growth should decelerate from 2019 onwards (0.7% annually during 2019-2021) due to contracting residential construction. This more sedate growth rate and high production levels in the Swiss construction market indicate a situation of saturation.

United Kingdom

After a healthy growth in 2017 (+7%), the British construction sector is estimated to have contracted by 0.8% in 2018 driven by performance of residential renovation and new non-residential sub segments. The **residential** construction sector increased by just 0.8% thanks to the new residential sub-segment increasing by 2.6% as a result of positive developments of both private and public housing construction. The forecast for private housing has remained relatively buoyant as the underlying market dynamics of high latent demand and lack of supply have not changed. The prospects of the public house building market have also improved with a goal of the UK government to build 250,000-270,000 new homes a year. With a drop of 1.6% in 2018, the renovation activity was impacted negatively by pressures on disposable incomes and a modest pick-up in unemployment. On the other hand, on the public side there can be an increase in activity going forward linked to the remedial work on high-rise apartment blocks. Despite the UK referendum vote to leave the EU, the **non-residential** construction sector experienced a growth of 4.9% annually during 2016-2017. However, the uncertainty about the Brexit process led to a contraction in non-residential construction in 2018 (-3.7%) with the new sub-segment declining by 5.2% and renovation output remaining stable (+0.2%). The



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outlook becomes uncertain due to developments on the economic front and post Brexit effects. The most vulnerable sectors are the industrial, offices and commercial ones, with their heavy reliance on business investment. The outlook for construction in education is rather dull and depends heavily on subsidies despite a number of projects in the pipeline. Office construction is especially vulnerable to post Brexit uncertainties thus some decline is forecast in 2019-2020. The only sector to show a positive outlook over the forecast period is the commercial one (retail, leisure), especially in 2020 and 2021. The capital's office development cycle had probably already peaked; thus the referendum result is likely to sharpen the downturn. The expected contraction in new non-residential construction will likely be in contrast with a good performance of the renovation market (+1.4%) over the period of 2019-2021. Indeed, a substantial number of buildings stocks of more than 40 years old in the education sector will require renovation and maintenance, which explains the outlook for the R&M segment. After contracting

by 4.2% in 2016, **civil engineering** continued to recover with a 2.3% growth in 2018 driven more by renovation works (+5%) rather than the new sub-segment (+1%). While no change is expected in projects launched, in the future, the government may even boost capital spending to mitigate the impact of the referendum vote. Going forward, the road, rail and energy sectors will likely create new works, which will ensure a growth of 4.1% per year in civil engineering construction during 2019 and 2021. There is little doubt that the vote in favour of leaving the European Union will have a significant impact on the UK's economic and political landscape in the ensuing years.

The resilience of the housing market and the state support for large infrastructure projects will likely compensate for an expected contraction in the hesitant non-residential segment, which will allow the UK construction industry to register growth rates of 1.3% in 2019 and 2.7% in 2020 and 1.1% in 2021.

Special Focus: Erasmus + Sector Skills Alliances



“Skills for Baltic Wood industry - European Quality in Vocational Education and Training” / Skilled-Up

The further advancing technical, digital and productivity developments in the wood sector have made an impact on the Baltic States, Latvia, Estonia and Lithuania as well. There is urgent need to stimulate cooperation between employers and educational institutions providing first level higher professional education (EQF Level 5) – in order to prepare skilled work force (that companies already have stated as lacking) in the short and mid-term perspective. Hence, the German-Baltic Chamber of Commerce in Estonia, Latvia, Lithuania (AHK) as the project leader, together with 8 partners – namely the

Latvian Association of Wood Processing Entrepreneurs and Export (LKUEA), the Association of Wood Producers and Exporters of West Lithuania (AWPEWL), Furniture Cluster of South-East Estonia, Institute Rosenheim eV (LHK), Latvia University of Life Sciences and Technologies (LLU), the Kauno Kolegija (KK), Center of Competence for Wood Processing and Furniture Manufacturing (unit of Voru County Vocational Training Center) and AS “Latvijas Finieris” - has initiated the project “Skills for Baltic Wood industry - European Quality in Vocational Education and Training” within the Erasmus+ Sector Skills Alliances. To



maximize possible positive impact of the project, project partners have decided to focus on wood processing sector as it is one of the highly important sectors in national economies for all three Baltic states. Project partners have identified that one of the most experienced countries in developing and organizing a dual education system is Germany, therefore it was decided to form partnership from institutions and stakeholders in Baltic states and Germany.

The project aims at the following goals:

- To strengthen cooperation between VET institutions and industry;
- To improve the quality of VET providers through the development and implementation of a Work-Based Learning (WBL) program with an internationally recognized qualification at EQF level 5, in line with EU quality tools (EQF, ECVET, EQAVET);
- To promote economic development and innovation in the wood sector by training and upskilling specialists to meet the needs of the labor market;
- To promote the understanding that digital technologies, mobility and sustainable production are the drivers of change.

The project “Skilled-Up” should bring about long-term changes and have positive effects on education systems in the Baltic States. The transferability of the implemented approaches will provide tools for adopting results in other countries and sectors.

The project partners have already held two meetings so far: from 15 to 16 January 2019 to the kick-off meeting in the German city of Rosenheim, as well as a follow-up meeting on 22 February in Riga, Latvia.

During the meetings, representatives of all 9 partners got to know each other and discussed first steps, administrative topics, concrete content and structure for the development of the training program. Over the next few months, local expert groups from the respective project partner countries will meet to develop the module



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descriptions and contents for the curriculum. The three main fields that the curriculum will cover are Technology, Organization Processes and HR/Leadership. Within these three fields, the following main modules (tentative) will be developed: Industrial Technology and Industrial Design, Planning, control & communication systems, Operational Costs, Business Management, Workplace, Environment & Health Protection, People Management, Communication Methods & Channels and Leadership & (Personal) Development. During the process of the development, the project partners will also ask for feedback by international sector experts, apart from the ones from the Baltic states. The modular curriculum will be published on the website www.skilled-up.eu once developed and openly accessible to be adapted by other countries.

If you have questions about the project or would like to get involved as a reviewing external expert, feel free to contact us under: josef.tschoep@ahk-balt.org.

EOS expresses gratitude to Mr Tschoep for his precious contribution to this Annual Report.



Co-funded by the
Erasmus+ Programme
of the European Union



6. EOS Advocacy Actions


As per tradition, last December 2018 the EOS Secretariat prepared a season's greetings letter to be sent to the European Commission, the Members of the Parliament and Member States emphasising the role of wood products in tackling climate change.

The key messages of the letter are here summarised:

- Need to engage in an environmentally friendly European economic growth.
- Products entering in the European market should comply with the high environmental and social standards which characterize the European Union.
- Wood products, legally sourced from sustainable managed

forests, can play a key role in decarbonising the economy - due to the low carbon footprint compared to other materials and the CO₂ stored in it - while enhancing a circular bio-economy.

- Creating markets - within and outside Europe - for traditional and innovative new wood products supports sustainable forestry, helps to counteract green house gas emissions, and puts the timber industry in the forefront of carbon free Europe.
- Enhancing the competitiveness of the European sawmill Industry and using more sustainable wood products contributes to a sustainable growth.



Bruxelles, 19 December 2018

2019: TIME TO ACT

Christmas is a time for celebration and commitments, but also to look forward to the New Year with new ambitions and expectations.

On this occasion the European Organisation of the Sawmill Industry invites the European Commission, the Members of the Parliament and Member States to engage in an environmentally friendly European economic growth.

To achieve this, it is important that European policies balance environmental, social and economic aspects.

At the same time, it is imperative that products entering in the European market comply with the high environmental and social standards which characterize the European Union.

Wood products, legally sourced from sustainable managed forests, can play a key role in decarbonising the economy - due to their lower carbon footprint compared to other materials and the CO₂ stored in them - while boosting the circular bio-economy. Forests are a major store of carbon and, when properly managed, significantly contribute to reducing carbon dioxide in the atmosphere.

Wood naturally stores and locks away carbon. Recycling is an important way to prolong the life of wood products and to keep the carbon stored in wood for longer. The longer a wood product is used, the longer the carbon remains in the product.

Emerging engineered wood technologies, and other wood products, can be used in industrial and residential building projects such as high-rise construction. A 3-5 story building, made from wood, has the same emission reduction as taking up to 550 cars off the road for one year!


Wood-based solutions in buildings have also been demonstrated to improve energy efficiency, thereby reducing energy consumption for heating and cooling.

Creating markets - within and outside Europe - for traditional and innovative new wood products supports sustainable forestry, helps to counteract greenhouse gas emissions, and puts the timber industry at the forefront of carbon free Europe.

Transitioning to a low-carbon economy presents both significant opportunities and challenges. The European sawmill Industry has the potential to strengthen economic growth while - through the use of wood products - tackling climate change. Enhancing the competitiveness of the European sawmill Industry and using more sustainable wood products contributes to a sustainable growth.

ACT NOW, CHOOSE WOOD!

Season's Greetings



6.1 The Club du Bois meeting on 17th October 2018

The European Panel Federation (EPF), the European Organisation of the Sawmill Industry (EOS) and the European Confederation of Woodworking Industries (CEI-Bois), organised the 7th Club du Bois meeting under the chairmanship of Mrs Maria Noichl, MEP, on 17th October at the European Parliament in Brussels.



This edition focussed on **“The European woodworking industry and its threats & opportunities”**.



Opening by Mr Paul Brannen, MEP

Paul Brannen MEP opened the event highlighting that the focus of the Bioeconomy Strategy from 2012 seemed to be novel uses of biomaterials, in particular further down the value chain. The updated EU Bioeconomy Strategy from earlier this month recognises the role biomaterials, namely wood used in construction, play in the EU priorities, one of them being building a carbon neutral future in line with the climate objectives of the Paris Agreement. He also underlined that this recognition is likely a result of the successful lobbying and liaising with the Commission and he thanked the Commission. While we always used to build in wood, engineered timber now allows us to build at height and at scale, some of the best examples of which we have in Europe, including the largest structure built in wood, in Hackney in London.



Driving the global bio-economy: market trends and perspectives of the European wood construction sector – Mrs Margherita Miceli, Policy Advisor, CEI-Bois

The presentation of Mrs Miceli (CEI-Bois) offered some insights on the statistics of the woodworking sector as an important contributor to the European Bioeconomy.

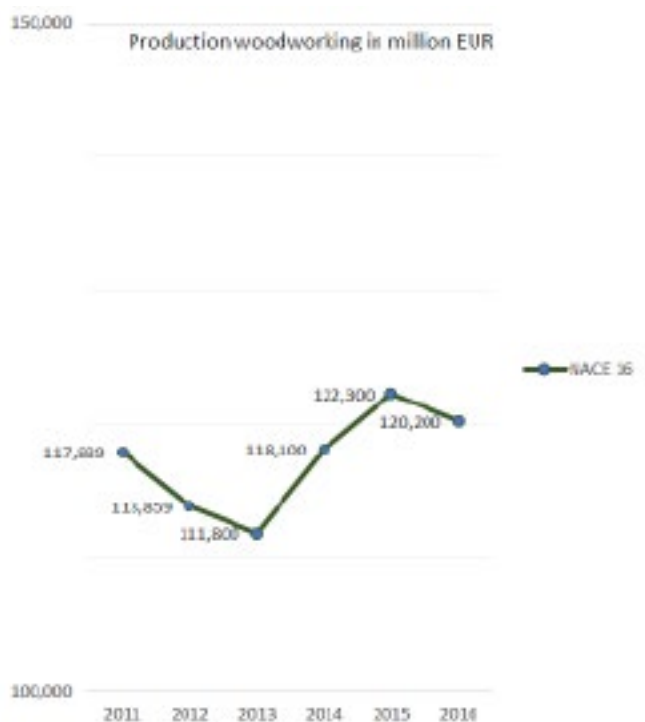
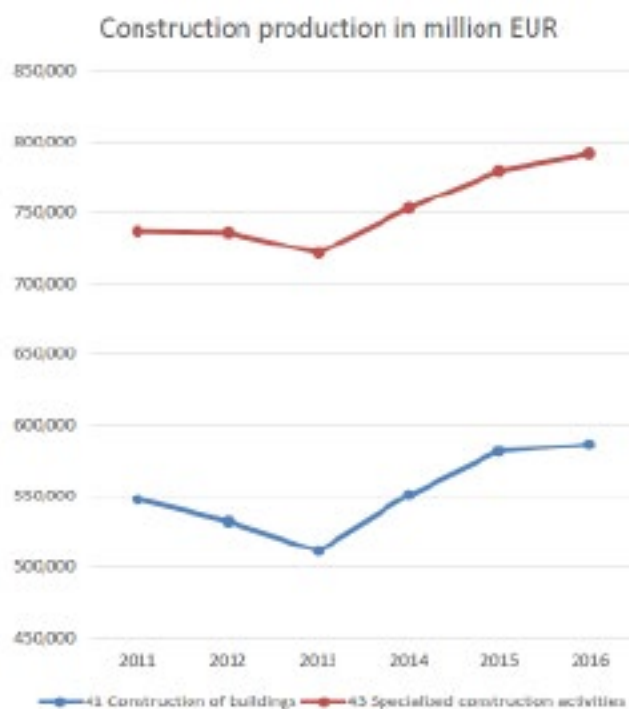
She started the presentation quoting the newly released EU Bioeconomy Strategy (11.11.2018), which stresses the importance of sustainability and circularity – two core features of the woodworking industries – as key drivers for EU economic development.

Mrs Miceli also highlighted how the Strategy recognises the contribution of the woodworking industry to the fight against global climate change thanks to its greenhouse gas (GHG) emissions saving potential, with an average of 2.1 tons of CO₂ saved per ton of wood used in construction as a replacement for concrete.

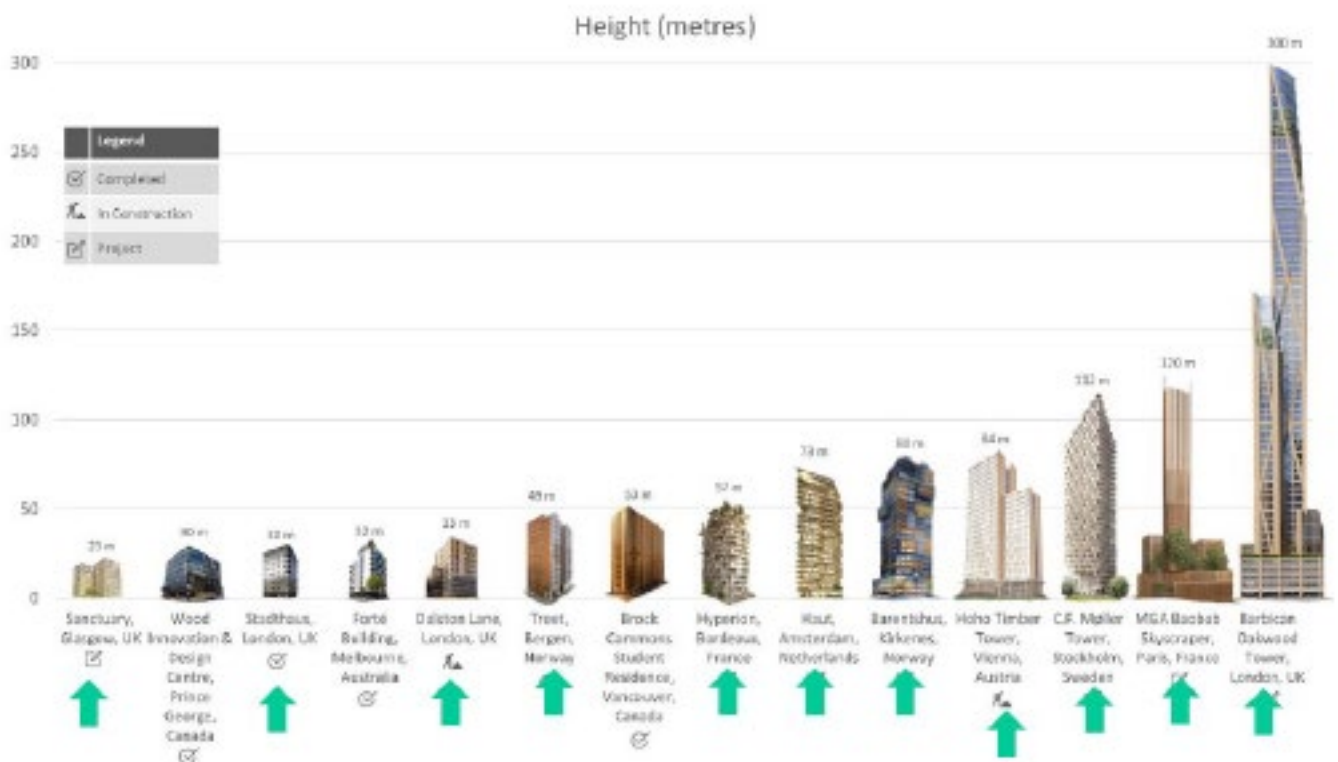


Looking at the economic contribution, the woodworking and furniture sector are together the third largest sector of the Bioeconomy in terms of employment and the fifth for turnover.

Construction market EU28



After presenting some statistics, including the positive outlook of the European construction sector, Mrs Miceli concluded her presentation showing how Europe is already leading the way of sustainable construction with examples of existing and planned high-rise timber building projects and expressing the wish that the Bioeconomy Strategy will further accelerate this transition.



Source: Confederation of Timber Industries, UK

The European Sawmill Industry: global market developments and trends – Mr Diego Benedetti, Economic and Policy Advisor, EOS

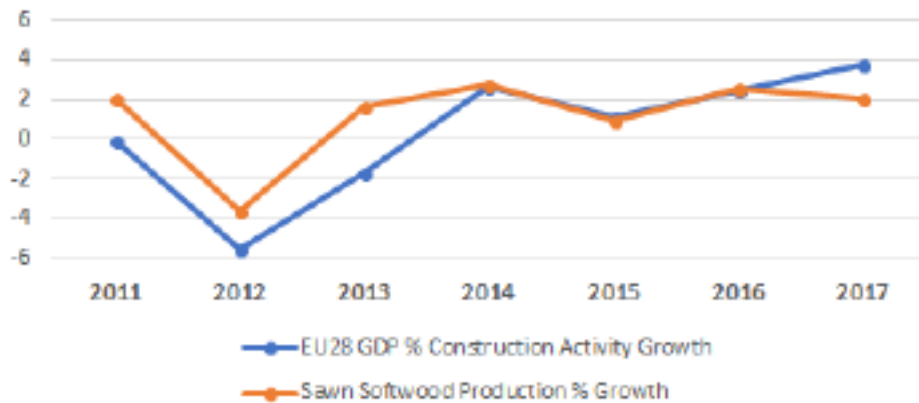
Diego Benedetti, Economic and Policy Advisor of the European Organization of the Sawmill Industry (EOS), gave a presentation on the sawnwood's market outlook titled: *The European Sawmill Industry: global market developments and trends*. A short macroeconomic overview set the scene: Mr Benedetti explained that GDP in the EU is set to grow by 2% both this year and probably in 2019, too. However, many potential downside risks are accumulating, including – but not limited to – a fully-fledged trade war between the US and China, a hard Brexit, a steep rise in oil prices, and last but not least, a hard landing of the Chinese economy – however, over the last few years many observers predicted a crisis in China. While this never materialised, there are presently many imbalances in the Chinese economy.

Mr Benedetti then proceeded to analyse the sawnwood markets. EOS represents both softwood and hardwood producers, but he emphasised that the two sectors have different dynamics. Overall the sector's production and exports rose by 2% in 2017 and even this year are expected to grow. The softwood sector is doing well thanks to active construction markets in Europe (Mr Benedetti showed that



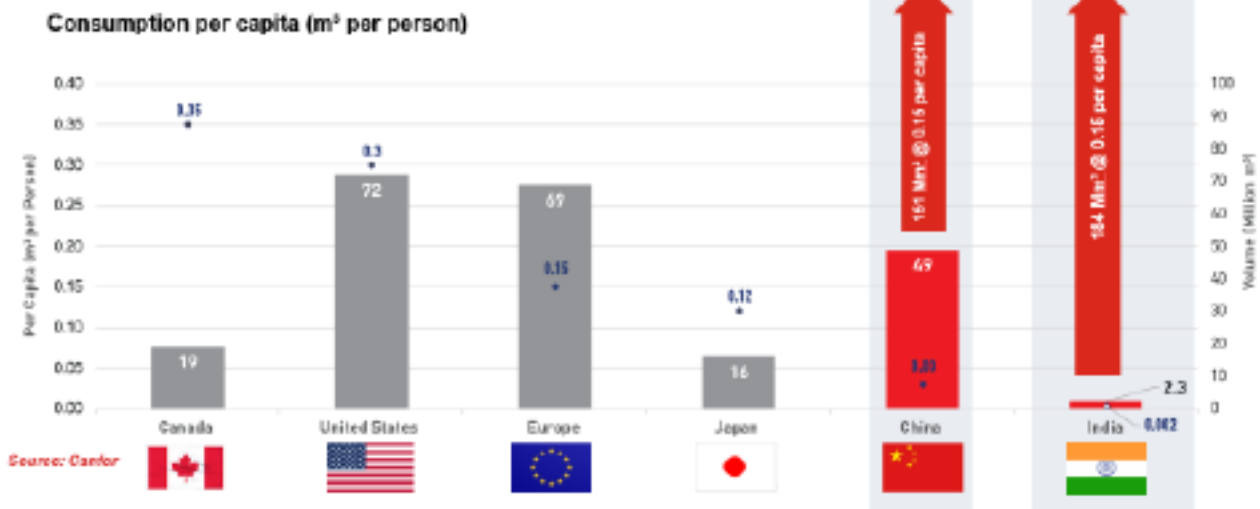
there is a strong correlation between construction activity growth and sawn softwood production growth) and lively overseas exports. Deliveries to overseas countries have been growing over the last few years: the largest markets for European producers are Egypt, China, Japan, and the United States. Mr Benedetti opined that in the medium- and long-term overseas markets will be playing a more and more important role for many European mills. Also, he argued that the UK is a very large importer of sawnwood so he called for a Brexit outcome that keeps trade unhindered.

Even Stronger Correlation between EU Construction Activity % Growth and Sawn Softwood Production % Growth



In the medium-long term Mr Benedetti argued that the market has a huge untapped potential: per capita sawn softwood consumption in Europe is five times as high as in China and immensely higher than in India.

Opportunities - Softwood Lumber Consumption Per Capita



The sawn hardwood sector (despite a relatively strong demand) is stagnating due mainly to ongoing raw material leakage to Asia, in particular to China. Mr Benedetti showed the steep increase of oak roundwood exports to China over the last few years (+240% in the period 2010-2017), which affects mainly France and Belgium. Mr Benedetti urged all stakeholders to consider that it is important for the European economy to add value in Europe to its raw materials. Mr Benedetti also invited stakeholders to reflect on the effects of climate change on the European forests: there is evidence that softwood species will shrink, and hardwood species will increase, particularly in Central Europe; this could play an important role in the future availability of raw materials.

Mr Benedetti wrapped up by summarising the main messages in his presentation and by urging stakeholders to focus on raw material availability: to secure the long-term vitality of the sawmill industry (and of the whole woodworking industry) a stable and secure supply of raw materials is fundamental. This summer was characterised by widespread heat across Europe, which, combined with a stormy early Autumn, damaged the quality of many logs, particularly, but not only, in Central Europe. Overall, the sector is doing well, and there is huge potential in many areas, but in some instances, production cannot meet a relatively strong demand because it is difficult to source raw materials. Thus, actions aiming to improve the mobilisation of sustainably sourced logs should be prioritised.

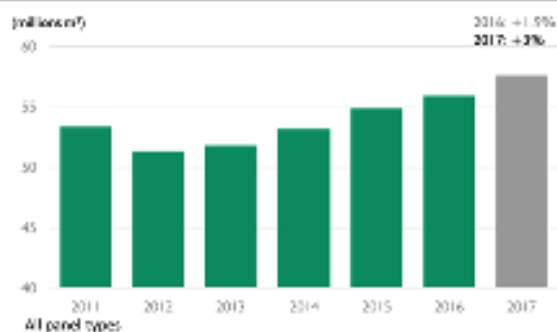
Wood-based panels – clear progress in 2017; regulatory and market opportunities in 2018 and beyond

– Mr Clive Pinnington, Managing Director, EPF

Mr Pinnington began his presentation with the good news that wood-based panels production has grown by an average of 2.3% over the last 5 years (compared to 1.8% GDP over the same period). This faster progress than GDP shows rising demand for these ubiquitous products, increasingly seen in furniture, construction and other applications.

Results 2017

3% industry growth (in production)



Successful advocacy was commended by Mr Pinnington in winning increased prominence for Harvested Wood Products (HWPs) in the new Bioeconomy Strategy, as well as the recent LULUCF Regulation. Putting HWPs and wood-based panels at the heart of these, together with the Circular Economy, have been clear recent accomplishments. So too was the final text of the Renewable Energy Directive Recast that should secure respect for the Waste Hierarchy as well as a level playing field for raw materials, free from undue market distortions. MEPs were thanked for their great support in helping to secure these advances.

Looking ahead, Mr Pinnington highlighted three developments to MEPs.



Firstly, the threat to a level playing field that comes from the desire of Member States to pass their own laws, surpassing European regulation. VOCs are a good example of this. EPF supports a harmonised European single market and opposes national developments that jeopardise it. Secondly, Mr Pinnington recalled that in Europe's drive towards renewable energy, existing businesses must not be neglected. The European Environment Agency (EEA) has stated that 72% of Europe's Net Annual Increment (NAI) in



Photo courtesy of Egger/Christian Verhofer



Photo courtesy of Gernica

forests is currently harvested, meaning that there is limited supply. It is essential that parliamentarians and regulators recall this when considering future bioenergy use. Lastly, EPF applauded the recent IPCC report on climate change that highlights the need to plant more trees. Accepting a floor recommendation to call also for timely sustainable forest management, Mr Pinnington closed by urging for greater

use of HWPs, such as wood-based panels that can extend the carbon cycle. This will continue to bring technically advanced products into our daily lives, improving them whilst benefiting our planet at the same time.

Mr Brannen closed the session with thanks to all involved and looked forward to the next meeting.



MEP Paul Brannen, MEP Maria Noichl, Mrs Margherita Micelli, Mr Diego Benedetti, Mr Clive Pinnington

6.2 Wood Dust: Revision of the Carcinogens and Mutagens Directive (2004/37/EC)

On 13 May 2016, the European Commission proposed to amend Directive 2004/37/EC by expanding its scope and by including and/or revising occupational exposure limit values for a number of cancer-causing chemical agents. According to the Commission, this would improve workers' health protection, increase the effectiveness of the EU framework and promote clarity for economic operators.

Overall, the proposal received a broad welcome from stakeholders. After completion of the legislative procedure at first reading in the European Parliament and the Council, the presidents of the co-legislators signed the final act on 12 December 2017. **This was published in the Official**

Journal as Directive (EU) 2017/2398 and applies from 16 January 2018.

➔ **Hardwood dust: a limit is set at 3 mg/m³ for five years after the entry into force of the directive and is lowered to 2 mg/m³ thereafter.**

On 16 May 2019, the European Commission scheduled a "European Wood Dust Conference" in collaboration with the EU social partners of the "Woodworking" and "Furniture" sectors (EFBWW, EFIC, UEA and CEI-Bois). The conference is intended to serve as a platform for exchange of information and good practice on the implementation of the new limit

value for hard wood dust, established by European Directive 2017/2398.

The conference was held in Brussels in the Steigenberger Hotel (avenue Louise 71 - 1050 Brussels). The participants had the possibility to engage in discussions on subjects such as measurement methodology, good prevention practices, and innovation in wood dust prevention.

On behalf of the European Hardwood sawmill, Mr Michel Astier, responsible for the Social Affairs of the EOS French Member FNB, gave an overview of the European hardwood sawmill sector. The EOS Hardwood Member, Mr Michael Nied, General Manager of the hardwood sawmill plant "Karl Nied GmbH", gave a technical presentation about the sawn machineries and the correlated hardwood wood dust implications.

6.3 Climate and Energy policies

The EU's policies on climate and energy are based on Articles 191-194 of the Treaty on the Functioning of the European Union. Under Article 191, combating climate change is one of the objectives of the EU's environment policy, while under Article 194 the EU promotes energy efficiency and energy saving and the development of new and renewable forms of energy.

The EU remains on the right path to achieve the target of reducing GHG emissions by 20% below 1990 levels by 2020.

In 2017, GHG emissions in the EU had decreased by 22% according to preliminary data, which also covered emissions from international air transport, but not emissions or removals resulting from land use, land use change or forestry activities. (Source: *Report from the Commission to the European Parliament and the Council, EU and the Paris Climate Agreement: Taking stock of progress at Katowice COP24, COM(2018)716, 26 October 2018.*)

6.3.1 A "Strategic long-term vision for a prosperous, modern, competitive and climate neutral economy by 2050 – A Clean Planet for all."

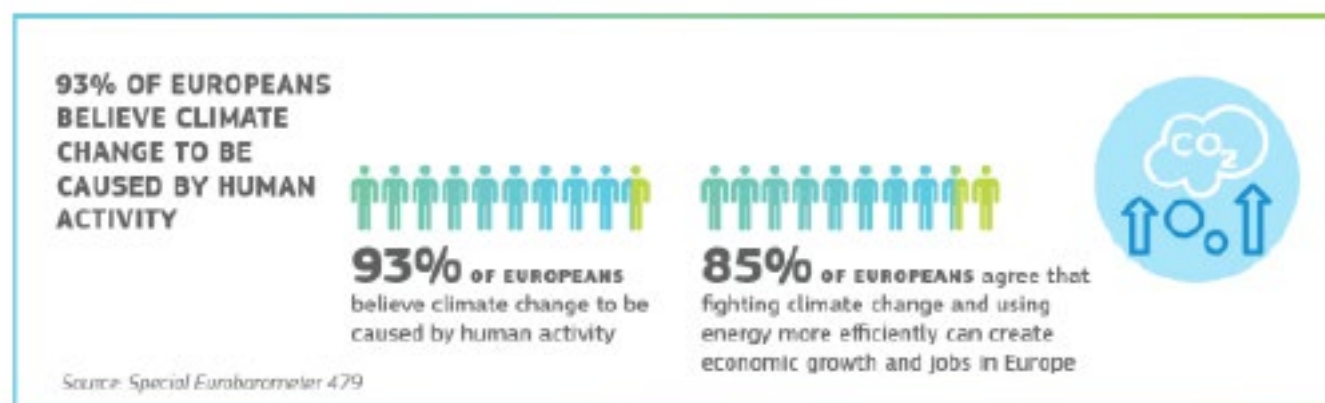
On 28 November, the EU Commission published a "*Strategic long-term vision for a prosperous, modern, competitive and climate neutral economy by 2050 – A Clean Planet for all.*" This new EU document was officially presented to stakeholders - including EOS - on occasion of the meeting "Forestry and Cork" organised on the same day by the EU Commission Directorate-general for agriculture and rural development. The strategy presented ahead of the UN climate summit (COP24) from 2 to 14 December in Katowice (Poland) outlines the EU vision for a deep economic and societal transformations, engaging all sectors of the economy and society, in order to achieve the transition to a climate-neutral economy. **The new document does not set targets or propose new initiatives to be taken.** Instead it seeks to ensure that this transition is socially fair and enhances the competitiveness of EU economy and industry on global markets, securing high quality jobs and sustainable growth in Europe.

According to the Commission, in order to achieve a carbon neutral economy actions in seven strategic areas should be envisaged. The concerned sectors are: energy efficiency;

deployment of renewables; clean, safe and connected mobility; competitive industry and circular economy; infrastructure and interconnections; bio-economy and natural carbon sinks; carbon capture and storage to address remaining emissions.

The most important statements of the Strategy in a sawmill prospective:

- New materials will play an important role as well, whether rediscovering traditional uses such as wood in construction, or new composites replacing energy intensive materials. Consumer choices will also matter for product demand";
- Sustainable biomass has an important role to play in a net-zero greenhouse gas emissions economy. Biomass can directly supply heat. When used in power generation, CO2 emitted can be captured creating negative emissions when stored. And it can substitute for carbon intensive materials, particularly in the building sector but also through new and sustainable bio-based products such as biochemicals (e.g. textiles, bioplastic and composites);
- A net-zero emissions economy will require increasing



amounts of biomass compared to today's consumption. Depending on technologies and actions chosen, significant differences exist, with highest projections seeing an increase in bio-energy consumption by around 80% by 2050 compared to today.

- A biomass-based transition is limited by the availability of land. Depending on the biogenic material from which the biomass is produced, the impacts on land use, the EU natural sink, biodiversity and water resources can differ substantially. The transition of our economy will always have to be careful how to make best use of scarce land and other natural resources and ensure that biomass is only used in the most efficient and sustainable way.

Comprehensive information on the Strategy

The European Commission's plan to slash greenhouse gas output by mid-century sets out eight scenarios, ranging from an 80% cut, as agreed by EU leaders even before the Paris Agreement, to a goal of net-zero emissions by 2050.

Five of the eight pathways outline different strategies to cut emissions by 80% compared to 1990 levels, which the EU executive assumes would equate to an 85% net reduction when the potential for land use and forestry as a carbon sink is factored in.

All require large increases in the consumption of renewable electricity – an approach enthusiastically championed by utilities and generators – with differences such as a six-fold increase in storage capacity, or conversion to hydrogen or synthetic liquid fuels. A sixth approach outlined by the Commission would combine all of the above at lower levels, which the executive estimates could lead to an emissions cut of 90%, when carbon sinks are included.

Only the last two mooted pathways envisage achieving 'carbon neutrality' by 2050. "The seventh scenario pushes all zero-carbon energy carriers as well as efficiency, and relies

on a negative emissions technology in the form of bioenergy combined with carbon capture and storage to balance remaining emissions," the Commission's communication states.

The eighth "assesses the impact of a highly circular economy and the potential beneficial role of a change in consumer choices that are less carbon intensive" and looks at the potential to "strengthen the land use sink, to see by how much this reduces the need for negative emissions technologies".

Biodiversity and ecosystem services for climate mitigation and adaptation

Terrestrial and marine ecosystems are an essential asset for mitigating climate change. At global level, these natural "carbon sinks" absorb 50% of anthropogenic greenhouse gas emissions, including in particular through the oceans.

Maintaining and further increasing the natural sink of forests, agricultural lands and wetlands in the EU is important. It also helps to compensate any remaining greenhouse gas emissions that cannot be avoided. In this context, preserving and restoring ecosystems and nature-based solutions have a key role to play and provide multiple benefits for mitigating climate change and adapting to its consequences. They provide a set of services that protect us from the effects of climate change, such as water retention, flood control, air quality improvements and protection against desertification and combat the heat island effect in cities while contributing to climate change mitigation.

At the global level, land-based mitigation options, including afforestation and land restoration, represent a potentially large share of the total cumulative abatement potential, and are therefore important elements in climate stabilisation. Mitigations in the land sector must keep pace with emission reductions in the fossil-fuel sector, not offset one against the other.

Therefore, it is of a paramount importance to change production processes, patterns of consumption, recycling and disposal of biological resources drastically. Integrating the bioeconomy into the (semi)circular economy model is the key element for the development of a sustainable society, since the circular bioeconomy is a cornerstone linking forestry, agriculture and fisheries to the industrial production of bio-based products that are functional for both sustainable land use and societal services.

In a circular bioeconomy perspective, it is of paramount importance that products originate from the development of new local agroindustrial supply chains, creating new case studies and new regional standards and projects. The value chain coming from the regenerative management of forest products is another area of opportunity.

The promotion of bioenergy production in Europe may imply the conversion of natural ecosystems outside the EU boundaries through international trade. This so-called indirect effect has to be carefully accounted for in the environmental assessment of bioenergy production. Mitigation options may also imply trade-offs between local and global pollution (e.g. a bioenergy plant using local wood resources or large livestock facilities) and between mitigation and adaptation.

Partnerships with industries

Partnerships with industries will be required to boost carbon-neutral innovation at all stages, in particular for those industries with process-based emissions. This will lead to changes in feedstock (e.g. bio-refineries and green chemistry) and alternative materials (e.g. using engineered wood instead of cement and steel in construction). Partnerships with industries are also needed to develop the radical breakthroughs needed to fully decarbonise some 'difficult' transport means, such as aviation, shipping and heavy-duty road transport.

Buildings

Buildings, combining the residential and services sectors, currently represent the largest share of final energy consumption in the EU – about 40% of the total in 2015. Better building insulation and other measures to improve the housing stock on a much higher scale than today will help reduce energy use for heating. This will play a key role in decarbonisation. More efficient products and appliances, deployment of "smart" buildings/appliances management

systems and consumer behaviour will help to further moderate energy demand. As to the remaining energy needs, fuel switching will need to happen with almost all homes using renewable heating (electricity, district heating (produced from renewable sources), renewable gas and solar thermal). Importantly, biogas, hydrogen (up to some proportion) or e-methane produced from renewable electricity are renewable gaseous fuels that could all play a role in existing buildings without changing the current transmission/distribution grid and type of appliances.

80% of the 2050 buildings' stock exists today. An integrated approach and consistency across all relevant policies will be necessary for the modernisation of the built environment and mobilisation of all actors. This is a condition sine qua non to engage citizens and businesses in the necessary renovation activities.

Focus on the wood products competitors

The production of many industrial goods like glass, steel and plastics will see further significant reductions in energy needs and process emissions, particularly with increasing recycling rates.

Many industrial process-related emissions will be very difficult to eliminate. Some options to mitigate them nonetheless exist. CO₂ can be captured and stored and used. Instead of fossil fuels, both renewable hydrogen and sustainable biomass can be a feedstock for a number of industrial processes, such as steel production and certain chemicals

Steel, cement and chemicals dominate industrial emissions. In the next 10 to 15 years, technologies that are already known will need to demonstrate that they can work at scale, and some of them are indeed already being tested at small scale, e.g. hydrogen-based primary steel production.

First Reactions to the Strategy

The Greens/EFA group in the European Parliament already yesterday reacted to the European Commission's Climate Strategy 2050 stating that the new Strategy "*misses the opportunity to set clear targets for EU governments to significantly reduce their greenhouse gas emissions and keep global temperature rises under 1.5c. While, it is welcome that the European Commission is matching its obligation as part of the Paris Agreement to come out with a long-term strategy before 2020, none of the eight scenarios documented reflect*

any sense of urgency. The Strategy shows all the benefits more ambitious climate policy will bring to our society, but at the same time proposes business-as-usual for the next decade”.

Lobby groups in Brussels and across Europe have been reacting to the European Commission’s long term strategy for slashing the EU’s greenhouse gas emissions.

The International Association of Oil and Gas Producers’ director of EU affairs, François-Régis Mouton, said the industry looked forward to giving carbon capture and storage and hydrogen the “place they need to support reaching the EU’s objective under the Paris Agreement”.

Electricity sector represented by Eurelectric said the electrification required for decarbonisation would need increased investment. “Clear long-term signals will therefore be required to ensure investor confidence,” said secretary general Kristian Ruby.

The wind power sector could help increase the share of electricity in energy to cut energy-related emissions by 90% by 2050, said WindEurope CEO Giles Dickson.

But lobbying campaigners Corporate Europe Observatory (CEO) said the strategy relied on gas and “unproven” carbon capture technologies as a result of “heavy gas industry lobbying”, instead of leading the EU away from fossil fuels.

Brussels-based green umbrella group, the European Environmental Bureau, “cautiously” welcomed the strategy but warned the bloc must reach net-zero emissions by 2040, a decade earlier than envisioned by the Commission’s most ambitious scenario. “It’s now up to governments, industry and people everywhere to accelerate the speed at which we’re moving,” said EEB climate and energy policy officer Roland Joebstl.

➡ The reliance of the strategy on “unsustainable” quantities of imported biomass, concerned campaigners Transport and Environment. “Shipping and aviation can’t continue to freeride on other sectors’ efforts,” said executive director William Todts. Forest campaign group Fern’s Kelsey Perlman said that most of the strategy’s scenarios envision a doubling of bioenergy consumption that would “leave the EU dangerously reliant on burning trees that we need to suck more CO₂ out of the atmosphere”.

Next steps:

The European Commission invited the European Council, the European Parliament, the Committee of the Regions and the Economic and Social Committee to consider the EU vision for a climate neutral Europe by 2050. In order to prepare EU Heads of State and Government for shaping the Future of Europe at the European Council on 9 May 2019 in Sibiu, ministers in all relevant Council formations should hold extensive policy debates on the contribution of their respective policy areas to the overall vision.

Member States were expected to submit to the European Commission, by the end of 2018, their draft National Climate and Energy Plans, which are central for the achievement of the 2030 climate and energy targets and which should be forward-looking and take into account in the EU long term strategy. In addition, an increasing number of regions, municipalities and business associations are drawing up their own vision for 2050 which will enrich the debate and contribute to defining Europe’s answer to the global challenge of climate change.

Internationally, over the coming year the EU should expand its cooperation closely with its international partners, so that all parties to the Paris Agreement develop and submit a long-term national mid-century strategy by 2020 in the light of the recent IPCC Special report on 1.5°Celsius.

6.3.2 UN climate summits COP24

The UN climate summits, i.e. so called COP (Conference of the Parties) are global conferences, in the course of which action for climate policy is negotiated. Poland hosted them twice - in 2008, in Poznań and in 2013, in Warsaw. In December 2018, for the first time, the climate summit took place in Katowice.

The 2018 year’s summit included: the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP24), and the Meeting of the Parties

to the Kyoto Protocol (CMP 14) and the Conference of Signatories to the Paris Agreement (CMA 1).

On 12 Decmber 2018 the Polish presidency announced its next initiative - the Katowice Ministerial Declaration “Forests for Climate.” The meeting was attended by Minister of the Environment Henryk Kowalczyk and Paola Deda, OiC, Forests, Land and Housing Division, UNECE, among others.

The role of forests in the Paris Agreement

The Paris Agreement shows a general will to get involved in a global effort aimed at achieving a balance between anthropogenic emissions of greenhouse gases deriving from sources and their absorption by scrubbers and absorbing agents. Responsibility for achieving this goal lies with all governments, because it can only be achieved through a global effort. The fifth article of the Paris Agreement is one of the most important articles because it indicates the way to implement the basic premise of this document, that is, the balance between emissions and absorption in the second half of this century. The parties should take measures in order to preserve and improve the state of absorbers and greenhouse gas reservoirs, including forests. Multifunctional and sustainable forest management is fundamentally important for achieving climate neutrality.

There is no future without counteracting climate change,

and there is no future without forests. For this reason, during COP24 a special event regarding the Parties' support for the Katowice Ministerial Declaration "Forests for Climate" was held for ministers and chairmen of delegations. The document was adopted by acclamation. As emphasized by Minister of the Environment Henryk Kowalczyk, the forest cover of Poland's territory is systematically expanding. "From 1995 to 2014, the area of forests in our country increased by 504,000 hectares. This has been achieved thanks to, among others, the State Forests supervised by the Ministry of the Environment," he declared. Among the many Parties that declared their willingness to endorse the Declaration were present ministers and representatives of delegations from countries such as Indonesia represented by minister of the environment and forestry H.E. Siti Nurbaya Bakar, but also: North Korea, Tanzania, Japan, Germany, Finland, Russia, France, Italy, as well as Austria.



In the picture: Lake Carezza, Western Dolomites, Italy.



The Ministerial Katowice Declaration on Forests for the Climate

The Ministers / the Head of Delegations attending the twenty-fourth session of the Conference of the Parties (COP24) of the United Nations Framework Convention on Climate Change (UNFCCC), held in Katowice, Poland, from 2 to 14 December 2018,

Recalling that in order to achieve the long-term temperature goal, the Parties to the Paris Agreement aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty,

Further recalling that Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases, including forests and forest products as well as to strengthen cooperation in this respect,

Affirming that there is no future without addressing climate change, and forests are a key component to achieve the goals of the Paris Agreement, which will contribute to building a community with a shared future for humankind,

Welcoming the finding of the IPCC Special Report on the impacts of global warming of 1.5°C which reveals that all pathways that limit global warming to 1.5°C project the use of carbon dioxide removal (CDR) that is subject to multiple feasibility and sustainability constraints, while requiring rapid and far-reaching transitions in energy, land, urban and infrastructure and industrial systems that imply deep emissions reductions in all sectors, a wide portfolio of mitigation options and a significant upscaling of investment,

Acknowledging the important role of forests as sinks and reservoirs of greenhouse gases, in mitigating climate change, and simultaneously recognizing the need for reducing emissions from deforestation and forest degradation, and forest conservation, sustainable management of forests, enhancement of forest carbon stocks, as well as alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests, while addressing and respecting social and environmental safeguards and objectives,

Recognizing that climate change is affecting forests, under certain circumstances, as a result of natural disasters, leading to increased emissions, affecting the carbon storage capacity of forests and *underlining* the need to increase the capacity of forests to adapt to climate change,

Further recognizing that forests have a decisive role to play in the sequestration and storage of carbon in the soil, trees and other vegetation, and in providing goods, resources and materials with a smaller carbon footprint, such as harvested wood products,

Sharing the UN Strategic Plan for Forests' vision of a world in which all types of forests and trees outside forests are sustainably managed, contribute to sustainable development and provide economic, social, environmental and cultural benefits for present and future generations. Recognizing that multifunctional and sustainable forest management contributes to nature conservation, as well as constitutes a keystone in achieving a balance between anthropogenic emissions by sources and removals by sinks,

Emphasizing that healthy, biologically diverse, and resilient forests adapted to climate change have important benefits for species habitat and biodiversity, and ensure the continued provision of a wide range of ecosystem services that are essential to human health and wellbeing,

Further recognizing the role of indigenous peoples and local communities in conserving and sustainably managing forests for the benefit of present and future generations,

Building on milestone documents and processes such as the 2030 Agenda for Sustainable Development, and its SDGs, the UNFCCC and related legal instruments, the Warsaw Framework for REDD+, the CBD and the Aichi Biodiversity Targets, and the UN Strategic Plan for Forests, as well as other, global and regional initiatives regarding sustainable forest management, and stressing the importance of strengthening synergies at the national level in implementing UNFCCC, CBD, UNCCD, UNFF, where appropriate,

1. *Pledge* to accelerate our actions to ensure that the global contribution of forests and forest products is maintained and further supported and enhanced by 2050, in order to support the achievement of the long term goal of the Paris Agreement.

2. *Encourage* the scientific community to continue to explore and quantify the contribution of sinks, and reservoirs of greenhouse gases in managed lands, including forests, to achieving a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, as well as to explore ways to increase this contribution and welcome the work done up to now.

3. *Encourage* non-party stakeholders including cities, regions, businesses and investors, to continue to display their ambition and commitments in their forestry related climate actions through the Marrakech Partnership for Global Climate Action and the NAZCA Platform.

6.3.3 Inclusion of greenhouse gas emissions and removals from land use, land use change and forestry into the 2030 climate and energy framework: the new European legislative proposal

In May 2018, the Regulation on land use, land-use change and forestry (LULUCF) was adopted. It incorporates emissions and removals from land into the 2030 climate and energy framework in line with the Paris Agreement, which points to the critical role of land use in reaching long-term climate mitigation objectives. The LULUCF Regulation establishes the EU's commitment for 2021-2030 to produce net-zero emissions from the described scope of the Regulation. Its scope covers all managed land, including forest, cropland, grassland and wetland by 2026. It simplifies and upgrades the accounting methodology under the Kyoto Protocol and Decision No 529/2013/EU. It also establishes a new EU governance process for monitoring how Member States calculate emissions and removals from activity in their forests.

Following the adoption of the Regulation on the inclusion of greenhouse gas emissions and removals from land use,

land use change and forestry in the 2030 climate and energy framework, and amending Regulation (EU) No 525/2013 and Decision No 529/2013/EU, Member States had received the "Guidance on developing and reporting Forest Reference Levels in accordance with Regulation (EU) 2018/841".

Indeed, the LULUCF Regulation requires the Member States to submit their National Forestry Accounting Plans, including a proposed FRL, to the Commission by 31 December 2018 for the period from 2021 to 2025, and by 30 June 2023 for the period from 2026 to 2030. While the guidance provided in this document is not binding on the Member States, it seeks to help the Member States to interpret the LULUCF Regulation, and provides examples of possible technical approaches for preparing the Forest Reference Levels (FRLs). During the 2019, Technical assessment of the NFAPs will be carried on by the Commission and experts appointed by Member States.



On 25 September 2018, EOS, together with three organisations of the European forest-based sector, co-organised a **joint workshop on the practical consequences of the recently adopted Regulation for the inclusion of Land Use, Land Use Change and Forestry (LULUCF) within the 2030 EU Climate and Energy framework**. The main focus of the event was the analysis the impact of the new forest reference levels to be set by the Member States on the annual harvest levels in European forests and potential implications for the domestic wood supply in the EU, and specifically on the down-stream value chains.

Mr **Simon Kay** and Mr **Giacomo Grassi** from the European Commission addressed aspects linked to the Commission guidance and implementation of the LULUCF Regulation and especially the rules for setting up of new Forest Reference Levels.

The distinctiveness and specificity of the LULUCF were explained by several speakers hailing from different parts

of Europe. Forests are home to at least 80 percent of the world's remaining terrestrial biodiversity and forests and forest sector can positively contribute to the climate change mitigation and adaptation by removing CO₂ from the atmosphere. Sustainable forest management also help to maintain the fertility of the soil, protect watersheds, and reduce the risk of natural disasters. At the same time forest are an important source of economic growth and employment. Forest-based industries represent about 7% of EU manufacturing GDP. They have a combined production value of €460 billion, with a total added value of €135 billion on a turnover of €485 billion. These employed 3.3 million persons across the EU-28 in 2015 or 11 % of the manufacturing total (*source: Eurostat*). Raw material used by the forest-based industries provides income to around 16 million forest owners in the EU. In the workshop, the representatives from France, Poland, Sweden Switzerland, Romania, Finland and Spain will describe the respective national orientation for optimising the sector's contribution

to climate change mitigation, while also ensuring to enhance the competitiveness of the forest-based industries. The event was moderated by Mr **Aigar Kallas**, Managing Director and Chairman of the Management Board of the Estonian State Forest Management.

A video recording of the event is available on the EOS video gallery:

https://www.eos-oes.eu/en/press_videos.php



LULUCF: Practical consequences for the forest-based sector

*Joint CEPEF, CEPI, EOS and EUSTAfor workshop
on the practical consequences of the introduction of the Regulation for the
inclusion of Land Use, Land Use Change and Forestry (LULUCF) within the 2030 EU
Climate and Energy framework*

Tuscany Region Brussels Office
Rond-point Robert Schuman 14, Brussels, Belgium
25 September 2018

Moderator's conclusions

The workshop aimed at assessing the possible implications of the recently adopted LULUCF regulation, taking into consideration both the implementation process by Member States and the current trend of the EU forest-based sector in general.

The presentations given during the workshop were practical and full of content, providing the audience with high quality food for thought. As recalled during the discussion, the text of the adopted LULUCF Regulation is the result of a political negotiation. The audience perceived that the regulation favors the conservation value of forest carbon stock over the value of the use of wood-based materials and the related substitution effect. As the substitution effect of timber as an alternative raw material can be significant over time, a rational approach is needed.

The crucial point in the effective implementation of the LULUCF Regulation is - *without doubt* - the elaboration of national forest action plans (NFAPs), including the definition of forest reference levels (FRLs). In this respect, a [technical guidance document](#) has been prepared by the International Institute for Applied Systems Analysis (IIASA) for DG Climate Action, in order to support EU Member States in complying with the LULUCF Regulation. While the guidance is not binding for the Member States, it seeks to help them to interpret the LULUCF Regulation and provides examples of possible technical approaches for preparing the FRLs and NFAPs.

It is equally important to remember that, during the year 2019, the European Commission, assisted by experts appointed by Member States, will make a technical assessment of the NFAPs. This leaves the possibility for Member States to provide their recommendations. Stakeholders might also give their contribution and share their expertise in order to achieve the best outcome from this exercise.



The European Commission has largely acknowledged that the use and management of forest resources vary greatly across Europe. For this reason Member States can use credits flexibly within the effort-sharing sectors in the period 2020-2030. At the same time, governments are requested to provide transparent, accurate, reliable and comparable data to ensure that emissions and removals are not double-counted. The accounts include changes in carbon stocks of above-ground and below-ground biomass, litter, dead wood, soil organic carbon and harvested wood products (HWPs).

The Commission pointed out that the projected FRLs are based on the continuation of the forest management practices of 2000-2009. However, the audience expressed concerns about forest aging. Statistics prove that in almost all European countries the current decade's harvest levels are well below the expected ones. In order to continue practicing forestry in a sustainable manner, e.g. to not deviate from the optimal age class distribution, the inevitable differences in the state of forests between the past reference period (2000-2009) and the commitment period (2021-2030) must be taken into account by the Member States when setting up FRLs for LULUCF accounting periods.

The moderator, together with CEPF, CEPI, EOS and EUSTAFAFOR, would like to thank the speakers and the participants for their essential contribution to the LULUCF workshop. We are grateful for the time and effort they took to share their expertise and opinions on this topic.

A special thanks to the EU Representation of the Tuscany Region, in Brussels, who kindly hosted our event.

On 26 October, the EU Commission published the annual progress report titled "EU and the Paris climate agreement: Taking stock of progress at Katowice COP". The document shows that despite a slight growth in emissions in 2017, the EU remains firmly on track to meet its 2020 greenhouse gas emissions reduction target of a 20% reduction compared to 1990. In 2017, EU GHG emissions were down by 22%, according to preliminary data (covering emissions from international aviation, but not emissions and removals from land use, land-use change and forestry (LULUCF)). Over the past 4 years, EU emissions were reduced by 3%. Most of the reduction has taken place in the energy supply sector where emissions are down by 11%, as compared to 2013. Emissions from energy use in buildings show some year-to-year variation due to weather-related changes in heating demand. However, they were 16 % lower in 2017 than in 2005 and the downward trend is projected to continue in the period to 2030. However, the EU Commission recognises that there are still considerable challenges ahead, as emissions have decreased only slowly the past years.

LULUCF REPORTING: At present, the EU's land stores more emissions than it emits and the LULUCF Regulation focuses on creating incentives to preserve this situation. The LULUCF Regulation requires each Member State to ensure that accounted emissions from land use are entirely compensated by an equivalent removal of CO₂ from the atmosphere through action in the sector. This 'no-debit rule' means that Member States have to offset emissions from deforestation, for instance by equivalent carbon sinks from afforestation or improving the sustainable management of existing forests.

OF IMPORTANCE FOR THE SAWMILL INDUSTRY: There are noticeable patterns in GHG inventories and their accounts at Member State level, although these are preliminary and are adjusted at the end of the accounting period in 2020 under LULUCF rules. Denmark and Ireland show net reported emissions, mainly as a result of high emissions from cropland management (Denmark) and grazing land management (Ireland). Under accounting rules for the Kyoto Protocol second commitment period, Belgium, Bulgaria, Cyprus, Finland, Latvia and the Netherlands show net debits in this preliminary accounting exercise. Croatia, Estonia, Germany and Lithuania show increasing credits, while we see decreases for Greece and Portugal. Belgium, Bulgaria and Finland have decreasing debits. No particular trends emerge for Austria, the Netherlands, Romania, Slovakia and Slovenia. Trend reversals, with first increasing and then decreasing credits, are shown for Denmark, France, Hungary, Italy, Spain, Sweden and the United Kingdom. Ireland and Luxembourg show first decreasing and then increasing trends in credits. Finally, it should be noted that the EU's target reduction is 20 % from 1990 levels, Japan's is 3.8 % from 2005 levels, China's pledge involves a 40-45 % reduction in CO2 intensity by 2020 and increases in forest stock and the proportion of non-fossil sources in primary energy consumption, and India's a 20-25 % reduction in emissions intensity (excluding agriculture) compared to 2005.

The first meeting of the Commission expert group on Land Use, Land Use Change and Forestry (LULUCF) took place on 6 February.

On this occasion, representatives from Member States were informed about how the European Commission (DG CLIMA) is planning to organise the evaluation of the National Forest Accounting Plans (NFAP) including the forest reference levels (FRLs).

- During the 2019 the Commission, in consultation with experts appointed by the Member States, undertook a technical assessment of the national forestry accounting plans submitted by Member States with a view to assessing the extent to which the proposed forest reference levels have been determined in accordance with the principles and requirements set out in the LULUCF Regulation.
- By April 2019, experts from Member States were expected to have completed the first review of the NFAPs.

The review process

- National experts were divided in sub-groups in order to avoid that any Member State is responsible for the technical assessment of its own NFAP.
- A sub-group Chair may request a Member State to present an overview of its NFAP to the relevant sub-group and to provide clarifications, where appropriate.
- Each Sub-group appointed a rapporteur. Each rapporteur shall submit, in writing, a structured summary on the progress and results of the sub-group's technical assessment of an NFAP, hereafter called the "synthesis report". Rapporteurs should endeavour to ensure that the key views and opinions expressed in the sub-group are recorded in the synthesis report.
- Synthesis reports were submitted at the end of each

review day, through a specific electronic portal and made available to all experts.

On 12 April, the two working weeks related to the assessments of the National Accounting Plan (NAP) and Forest Reference levels (FRL) under the LULUCF Regulation have been concluded.

- ➔ The European Organisation of the Sawmill Industry attended these two working weeks having being appointed as observer in the LULUCF expert group.

The LULUCF Regulation required Member States to submit their NFAPs, including a proposed FRL, to the Commission by 31 December 2018 for the period from 2021 to 2025 (*and by 30 June 2023 for the period from 2026 to 2030*). Only Romania did not submit its National Accounting Plan.

The net emissions figures Member States arrive at – **subject to approval by the European Commission** – will count towards a country's overall emissions reductions, for which the EU-wide target is a 40% cut compared to 1990 levels.

The Technical assessment of the NFAPs has been carried on by the European Commission and experts appointed by Member States. Experts were called to ensure that the reporting by Members States is transparent and complete, and based on as consistent, comparable and accurate information as possible. Nevertheless, the complexity of the Regulation leaves considerable scope for interpretation.

The Expert Group considered that the following Countries, namely: Finland Sweden, Slovenia, Latvia and Poland should provide more precise information on the climate impact of increased logging presented in their NAPs.

Timeline: By June 2019 - and only if necessary - Member States will be requested by the EU Commission to provide further clarifications and/or to make technical corrections to their own National Accounting Plans. The EU Commission will prepare requests to Member States having taken into consideration the recommendations prepared by the Experts Group in the Country's Synthesis Reports. Member States shall communicate their revised proposed forest reference levels to the Commission by 31 December 2019 for the period from 2021 to 2025.

LULUCF and wood products

Key elements of a large majority of the National Accounting Plans and the role of wood (construction) products:

AUSTRIA

Both the Austrian Forest Strategy 2020+ and also the Austrian Climate and Energy Strategy, #mission 2030 (2018) emphasize the importance of a sustainable forest management strategy. The land use related policies and measures identified in the #mission 2030 should help to achieve the target for 2030 as defined in Article 4 of the LULUCF Regulation, in particular through:

- continuously increasing tree growth and timber harvesting in Austrian forests on the basis of sustainable forest management, with the aim of increasing carbon storage in forests and harvested wood products in the long term and
- increasing the use of domestic timber in construction and utilizing the manifold opportunities of the bio-economy.

BELGIUM

In Wallonia, the Forest Code (Decree of 15 July 2008) has introduced a certain number of constraints in favor of forest conservation and the maintenance of ligneous materials and carbon, including:

- incentives for production of high quality wood and therefore use of wood in long-term applications with gains in CO₂ linked to substitution by other materials.

FINLAND

According to the long- term forest strategy and the Finnish Bio-economy Strategy:

- the aim is to reduce dependence on fossil natural resources and create new economic growth and jobs in line with the principle of sustainable development;
- the role of promoting wood construction is recognised in the Strategy as long-term storage carbon.

FRANCE

The forest management envisaged in the SNBC is more dynamic than the one envisaged in France's FRL, in order, in particular, to renew forest stands by making them more resilient to climate change, by bringing more biosourced materials into the economy taking advantage of the associated effects of temporary storage and substitution with more emitting materials and fossil fuels.

The SNBC 2 seeks to improve the effectiveness of the forest-wood sector in order to achieve this target. Indeed, the latter is strategic because it meets the need to supply the economy with biosourced and renewable energy and products, and at the same time, contributes significantly to the carbon sinks of the land sector through carbon sequestration in forests and in wood products.

The forest management envisaged in the SNBC is more dynamic than the one

As regards climate policy, the draft 2nd national low carbon strategy (SNBC 2) identifies the main following levers for the forest sector:

1. Improving forest carbon sinks by better forest management practices, which both adapt forests to climate change and preserve soils carbon stocks (whose observation and statistical monitoring must be guaranteed and improved). The enhancing of carbon sinks in the forest-wood sector will also include the development of afforestation and a reduction in deforestation.
2. Maximising the substitution effects and the storage of carbon in wood products, thanks to:
 - an increased wood harvest (in particular with an increased wood marketing objective set by the National forest and wood programme for the 2016-2026 period) while ensuring that biodiversity is preserved;
 - an incentive towards long-life uses (in particular through an intensified use of wood in construction) and development of recycling and energy recovery of end-of-life products

SLOVENIA

According to the Resolution "GOZD in les – razvojna priložnost Slovenije" ('FORESTS and wood – Slovenia's development opportunity') the following actions are welcomed:

- to systematically label semi-finished products, products and services in relation to their impact on greenhouse gas emissions and on the environment throughout their entire lifecycle;

- to promote the gradual use of wood in construction, the manufacturing industry, agriculture and energy: good wood for products, poor wood for processing and cellulose, and ligneous residues for energy sources;
- to define wood as a strategic raw material and forestry and the wood processing industry as important sectors;
- to strengthen the wood and wood products market, and to integrate the manufacturing, processing and sales processes;
- to put education and training systems in place, and to organise an accelerator service to promote and guide wood production and processing.

SWEDEN

Bio based fuels and materials that substitute fossil resources are important for transition to a low carbon society. Sweden

is well suited to combine active forest management with high environmental standards whilst maintaining a substantial carbon sink. Sustainable forest management influences carbon dioxide removals and emissions in various ways, through the production of renewable raw materials that can replace fossil fuels and materials that generate emissions of greenhouse gases while maintaining or increasing carbon stocks in biomass, soils and harvested wood products.

UNITED KINGDOM

The development of a thriving forestry sector, through an industry-led action plan (Grown in Britain), is highlighted as an essential element to achieve woodland planting aspirations and deliver emissions savings in other sectors through the sustainable use of wood fuel as a source of renewable energy and harvested wood products substituting for other materials.

6.4 Sustainable finance

The European commission is currently working on a green taxonomy with the aim of facilitating the investment necessary to achieve Europe's climate targets, the transition to a low carbon economy and a sustainable development model.

However, in order to respect its energy and climate targets for 2030, the European Union will require additional annual investment of €150-177 billion until 2030.



In March 2018, the European Commission published its ACTION PLAN ON FINANCING SUSTAINABLE GROWTH, which sets out a comprehensive strategy to further connect finance with sustainability.

Copy of this document is available at the following link:

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0097&from=EN>

The action plan calls for a unified EU classification system to clarify what constitutes a sustainable investment, including a EU labels system in order to facilitate investors in identifying

‘green’ financial products. The common understanding of what constitutes environmentally sustainable investment will complement existing EU environmental policies by providing a reference point which they can use in the future so that such policies develop more consistently across the Union.

Currently, financial institutions identify sustainable economic activities and sustainable investable assets in-house and on a voluntary basis. This is time consuming and costly, and the result is that different financial institutions use different taxonomies.

- A unified EU classification system - or taxonomy - will provide clarity on which activities can be considered ‘sustainable’. It is at this stage the most important and urgent action of the Commission’s Action Plan.

In particular, the EU strategy on sustainable finance includes the following actions:

- Establishing a common language for sustainable finance, i.e. a unified EU classification system – or taxonomy – to define what is sustainable and identify areas where sustainable investment can make the biggest impact.
- Creating EU labels for green financial products on the basis of this EU classification system:
 - Clarifying the duty of asset managers and institutional investors to take sustainability into account in

the investment process and enhance disclosure requirements.

- Requiring insurance and investment firms to advise clients on the basis of their preferences on sustainability.
- Incorporating sustainability in prudential requirements: banks and insurance companies are an important source of external finance for the European economy.
- Enhancing transparency in corporate reporting. Revision of the guidelines on non-financial information to further align them with the recommendations of the Financial Stability Board’s Task Force on Climate-related Financial Disclosures (TCFD).

Additionally, the Commission established a technical expert group on sustainable finance (TEG) in July 2018. The TEG was requested to publish a report based on a broad consultation of all relevant stakeholders on selected economic activities and criteria for the first sub-set of economic activities **expected to make a substantial contribution to climate mitigation**.

Together with the “Action Plan on Financing Sustainable Growth”, the EU Commission published an EU-wide guiding principle, or ‘**TAXONOMY**’, to define sector-by-sector what constitutes green investments and, ultimately, label green assets. This new proposal was then sent now to the EU Council and the European Parliament for discussion.

The taxonomy that the European Commission is seeking to establish will have to reflect the existing technologies and policies, and will need to be updated regularly. It is not a standard, nor a mandatory list in which to invest. While the taxonomy will only include activities defined as green, this does not mean that other activities should systematically be considered brown (bad for the environment). Among these other activities, some may make a positive contribution to the environment that is very limited, while some are neutral, and others are “brown”.



KEY FEATURES:

1. A unified EU classification system (‘taxonomy’):

The proposal sets harmonised criteria for determining whether an economic activity is environmentally-sustainable. Step by step, the Commission will identify activities which qualify as ‘sustainable’, taking into account existing market practices and initiatives and drawing on the advice of a technical expert group that is currently being set up. This should provide economic actors and investors with clarity on which activities are considered sustainable.

Article 3 of the Taxonomy regulation proposal sets out the criteria for determining the environmental sustainability

of an economic activity, in line with six environmental objectives:

1. Climate Change Mitigation
2. Climate Change Adaptation
3. Sustainable use and protection of water and marine resources
4. Transition to a circular economy, waste prevention and recycling
5. Pollution prevention control, and
6. Protection of healthy ecosystems.

According to the Taxonomy regulation proposal, the Commission shall establish the technical screening criteria through a series of delegated acts, the first of

which will be on the economic activities delivering on the first two environmental objectives (climate change mitigation and climate change adaptation as per Article 6 and 7).

2. **Investors' duties and disclosures:** The proposed Regulation will introduce consistency and clarity on how institutional investors, such as asset managers, insurance companies, pension funds, or investment advisors should integrate environmental, social and governance (ESG) factors in their investment decision-making process. Exact requirements will be further specified through Delegated Acts, which will be adopted by the Commission at a later stage.
3. **Low-carbon benchmarks:** The proposed rules will create a new category of benchmarks, comprising the low-carbon benchmark or "decarbonised" version of standard indices and the positive-carbon impact benchmarks. This new market standard should reflect companies' carbon footprint and give investors greater information on an investment portfolio's carbon footprint.
4. **Better to advice to clients on sustainability:** The Commission has launched a consultation to assess how best to include ESG considerations into the advice that investment firms and insurance distributors offer to individual clients.



In the EU framework for determining environmentally sustainable financial activities by the EU Parliament, lead negotiators MEP Bas Eickhout (Greens/EFA, NL) and MEP Sirpa Pietikäinen (EPP, FI) tabled amendments to the proposal that the European Commission along with a package of measures following up its action plan on financing sustainable growth.

The report included a 'brown' taxonomy to be added over time, defined as "criteria for economic activities with a negative environmental impact". *(This contrasts with EU executive's proposal, which only aims at a positive approach, disregarding environmentally harmful activities.)*

EOS ADVOCACY ACTIONS

In the Parliament report, the Rapporteurs Mr Eickhout and Mrs Pietikäinen proposed a new definition of "sustainable forest management" including criteria on biodiversity restoration.

EOS contacted several members of the EU Parliament underlining that "it is imperative that efforts are made in order to tackle climate change and eliminate environmental degradation. For this reason, it is of utmost importance that finance responds to the objective of a sustainable development."

In this framework, **EOS stressed the following points:**

- To mitigate climate change, it is necessary to reduce greenhouse gas emissions and store more carbon. Healthy forests can do both. For this reason, governments and organizations can improve their corporate social responsibility and reduce their environmental footprint through policies and procurement processes that encourage the use of wood products coming only from sustainably managed forests.
- EOS believes in the importance of enhancing biodiversity and calls the Members of the EU Parliament to maintain in the Article 2 – paragraph 1 – the internationally agreed definition of sustainable forest management. Introducing the additional criterion such as "restoring biodiversity" (amendments n° 44) in the internationally accepted definition of sustainable forest management might be controversial.
- Forests managed for timber have an important role to play in conserving global biodiversity. Scientific studies proved unmanaged forests are often susceptible to disturbances including insect and disease outbreaks and generate a much greater carbon debt if they are combusted during a wildfire, rather than a managed forest with much less dead and dying fuel wood.
- The benefits of sustainable forests management should be emphasised recalling that the wood processed in manufacturing facilities extends the forest-carbon stores to long-lived products.

Additionally, the "cascading use" was proposed in the final compromise amendment presented by the Greens on the definition of "substantial contribution to the circular economy and waste prevention and recycling". More specifically:

- An economic activity shall be considered to contribute substantially to the transition to a circular economy, including waste prevention, re-use and recycling, covering the entire life cycle of a product or economic activity in different

stages of production, consumption and end of use, where that activity minimises the use of resources or promotes cascading use of material and the waste hierarchy...

- using natural energy resources, raw materials, water and land efficiently in accordance with the cascading use of resources;
- promote sustainable bioeconomy based on the principle of cascading and regenerative use of renewable sources.

Also in this framework, EOS informed the Member of the EU Parliament that if the GREEN compromised amendment would have been voted positively, the “cascading approach” will have legislative implication (A “regulation” is a binding legislative act. It must be applied in its entirety across the EU). The transition toward resource efficient production and consumption patterns is currently one of the main challenges in environmental science and in governmental policies. This transition has led to a proliferation of meanings related to the resource efficiency concept. **The concept of ‘cascade’ is all but univocal as it does not find an unanimous definition by the scientific community being very much subjected to interpretations. For this reason, EOS called the Members of the EU Parliament to reject** Compromise amendment I (compromise amendment replacing AMs 74-82, 454-480 -Proposal for a regulation - Article 9) and favour the original text proposed by the EU Commission.

On 28 March 2019 the Plenary Session of the EU Parliament voted the “Proposal for a regulation of the European Parliament and of the Council on the establishment of a framework to facilitate sustainable investment” (so called “Taxonomy” Regulation) on occasion of the EU Parliament plenary session in Strasbourg. The proposal was adopted by 316 votes to 93 and 192 abstentions. The vote closes the Parliament’s first reading in view of an agreement with EU ministers in the next parliamentary term. The Council is yet to adopt its position.

The amendments related to “restoring biodiversity” in the definition of Sustainable Forest Management” and the “cascading principle” have been both rejected.

Positive for the Sawmill Industry the following adopted amendments:

- Switching to or increasing the use of environmentally sustainable renewable materials based on a full life cycle assessment and substituting particularly fossil-based materials, which delivers near term greenhouse gas emissions savings is one of substantial contribution actions to climate change mitigation”;
- An economic activity shall be considered to contribute substantially to the transition to a circular economy where that activity, in line with the EU acquis, contributes substantially to that environmental objective through any of the following means “fostering bio-economy through the sustainable use of renewable sources for the production of materials and commodities”.

NEXT STEPS: The EU Council spokesperson announced that the inter-institutional negotiations are expected to start after the European elections.

On 10 January 2019, the European Commission panel of experts released its **FIRST REPORT INTO CLIMATE RISK DISCLOSURE**, while the Members of the EU Parliament voted to oblige EU financial regulators to assess environmental factors affecting the stability of financial institutions.

The Report contains recommendations that will allow the Commission to update its non-binding guidelines on non-financial reporting with specific reference to climate-related information, in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) established by the Financial Stability Board, and with the Commission proposal on a ‘taxonomy’ of sustainable economic activities. The report contains proposals for disclosing not just how climate change might influence the performance of a company, but also the impact of the company itself on climate change.

The report proposes ways for companies to disclose the impact they may have on climate change in addition to their own exposure to climate change related risks. It outlines principles for general disclosure, or information a company “should” disclose. This includes key indicators and the role of the board in overseeing climate related risks.

The report notes that companies “may consider” disclosing the ratio of green bonds, issued according to a forthcoming EU Green Bond Standard.

Technical Experts on Sustainable Finance

The taxonomy working group (TWG) has been tasked with developing these technical screening criteria for the EU taxonomy or classification system of environmentally sustainable economic activities, starting with the environmental objectives of climate change mitigation and climate change adaptation.



Between December 2018 and February 2019, the TWG held a call for feedback, seeking stakeholder input on the proposed 1st round climate mitigation activities and on the usability of the taxonomy. In addition, the Technical Expert Group on Sustainable Finance (TEG) selected experts from relevant sectors among those who expressed an interest to participate in the second round of stakeholder outreach. The Commission and the TEG aim to foster a transparent and meaningful outreach process as well as communication with experts, other relevant stakeholders, and the media. This document provides an overview of current outreach

plans. The document will be updated regularly to include additional dates and details once they are known.

In the context of the European Commission's ongoing work on developing a classification system for sustainable investments, the European Organisation of the Sawmill Industry expressed with other Organisations representing the Forestry Based Sector, its views on the topic of forest management in the proposed taxonomy regulation, notably on the first round of climate mitigation activities drawn up by the Commission's Technical Expert Group on Sustainable Finance (TEG).



Brussels, 19 February 2019

The role of forest management in the upcoming taxonomy regulation for sustainable investments

In the context of the European Commission's ongoing work on developing a classification system for sustainable investments¹, the undersigned organisations would like to express their views on the topic of forest management in the proposed taxonomy regulation, notably on the first round of climate mitigation activities drawn up by the Commission's Technical Expert Group on Sustainable Finance (TEG)².

The undersigned organisations welcome the fact that forest management activities have been included in the scope of the proposed regulation, which applies the definition of Sustainable Forest Management (SFM) that European countries and the European Commission agreed upon at the Ministerial Conference on the Protection of Forests in Europe³ and that was referred to in the 2013 EU Forest Strategy⁴. Given the fact that the proposed taxonomy regulation also aims to define a set of criteria and that SFM contributes in many ways to several UN Sustainable Development Goals as well as the Paris Agreement goals, it is crucial that a holistic approach to forest management is applied while keeping in mind that forest policy is a competence of the EU Member States.

Sustainable and active forest management plays an important role in meeting EU climate and energy policy objectives, e.g. tackling climate change, improving energy security and promoting jobs and economic growth. SFM is needed to reach these targets. It provides three main climate benefits: CO₂ sequestration in resilient, growing forests; carbon storage before and after harvesting; and a renewable and climate-friendly raw material that substitutes energy-intensive materials and fossil fuels. Unfortunately, the TEG's first set of climate mitigation activities only classifies existing forest

¹ [Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the establishment of a framework to facilitate sustainable investment](#)

² <https://ec.europa.eu/eusurvey/runner/taxonomy-feedback-first-round-climate-change-mitigation-activities>

³ https://foresteurope.org/wp-content/uploads/2016/11/Commitments_all.pdf

⁴ https://ec.europa.eu/agriculture/forest/strategy_en

management as positive if it improves carbon sinks in forests, and disregards the holistic concept of sustainable forestry and the related carbon cycle.

With regard to forestry, the first round of climate mitigation activities overlooks the fact that SFM, its principles and tools have already been defined in a comprehensive manner and that it can therefore serve as a point of reference for various sectors. EU legislation should, therefore, make full use of these instruments before yet another system addressing the same issues is developed. Given that forest policy falls within Member State competence and as addressed in the EU Forest Strategy, the Standing Forestry Committee should remain the forum for discussing all forest-related issues, ensuring coordination and coherence of forest-related policies. Consequently, this body should be involved in developing the SFM criteria and indicators to be used in the context of sustainable finance (COM(2013)659 final, page 5).

In its future work on the first round of climate mitigation activities, we would recommend that the TEG draw more on expertise from the forest sector, including from the organisations involved in forest-related policy-making in the EU. This would minimise the risk of shortcomings and misconceptions in the proposed structure of the taxonomy system related to forestry.

Subdividing forestry activities into afforestation, rehabilitation/restoration, reforestation and existing forest management points to a lack of comprehension of forestry activities. It should be noted that, afforestation is an activity that takes place on non-forest land. Given the fact that the primary focus of the entire 'sustainable finance' initiative should be climate mitigation and adaptation, the categories and definitions should also be in line with the Kyoto Protocol definitions and the LULUCF regulation⁵. In addition, the inexistent link between active forest management and increased resilience to climate change marks a missed opportunity to include adaptation aspects in the scope of existing forest management.

The undersigned organisations strongly recommend that forest management be classified as a sustainable activity if it complies with the internationally agreed definition of SFM and at least keeps the forest in its existing condition. With regard to metrics and parameters for forest management activities, it is highly advisable to ensure consistency with the risk-based approach for forest biomass of the Renewable Energy Directive (recast)⁶. This would avoid confusion, legal uncertainty and subsequent restrictions to investments in the forestry sector.

Finally, not allowing forest biomass to substitute non-renewables as a renewable and carbon-neutral fuel is neither in line with the EU 2050 Climate Strategy⁷, the 2030 climate and energy targets⁸, nor with the targets suggested in this same legislation (Article 6a and 6h, i.e. generating renewable energy and producing fuels from renewable sources).

The aforementioned recommendations will allow the European Union to send out a clear message to investors on how to promote the development and sustainable use of forest resources and the entire forest-based value chain with a view to positively contributing to achieving the Paris Agreement climate objectives.

⁵ [LULUCF Regulation](#)

⁶ [Recast of the Renewable Energy Directive](#)

⁷ https://ec.europa.eu/clima/sites/clima/files/docs/pages/com_2018_733_en.pdf

⁸ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014DC0015&from=EN>

Political agreement on transparency rules

Following a provisional agreement reached the first week of March to create a new category of low-carbon benchmarks (*preliminary agreement on a proposal creating a new category of financial benchmarks aimed at giving greater information on an investment portfolio's carbon footprint: specifically EU climate transition benchmarks, which aim to lower the carbon footprint of a standard investment portfolio. More precisely, this type of benchmarks should be determined taking into account companies that follow a measurable, science-based "decarbonisation trajectory" by end-2022, in light of the long-term global warming target of the Paris agreement. And EU Paris-aligned benchmarks, which have the more ambitious goal to select only components that contribute to attaining the 2°C reduction set out in the Paris climate agreement*), the Romanian presidency of the Council and the European Parliament reached on 6 March a preliminary agreement on a proposal introducing transparency obligations on how financial companies integrate environmental, social and governance factors in their investment decisions. The text agreed sets out a harmonised EU approach to the integration of sustainability risks and opportunities into the procedures of institutional investors. It requires them to disclose:

- the procedures they have in place to integrate environmental and social risks into their investment and advisory process;
- the extent to which those risks might have an impact on the profitability of the investment;
- where institutional investors claim to be pursuing a "green" investment strategy, information on how this strategy is implemented and the sustainability or climate impact of their products and portfolios.

The proposed regulation should in practice limit possible "greenwashing" – i.e. the risk that products and services which are marketed as sustainable or climate friendly in reality do not meet the sustainability/climate objectives claimed to be pursued.

It covers the following financial services sectors:

- investment funds;
- insurance based investment products (life insurance products with investment components available as individual retail life policies as well as group life policies);
- private and occupational pensions,
- individual portfolio management; and
- both insurance and investment advice.

Investment managers will now have to disclose their exposure to environmental and social risk, as well as the environmental and social impacts of their financial products. In addition, they will have to provide evidence that products marketed as sustainable meet clear standards. But negotiators chose to limit the scope of the regulations to investment management companies with over 500 employees.

The agreed measures are part of that package, together with the EU rules for the creation of benchmarks for low-carbon investment strategies agreed on 25 February by the European Parliament and Member States. The Commission is working with the co-legislators with the objective to reach an agreement on the remaining part of the package: the Commission proposal to establish a unified EU classification system ('taxonomy') of sustainable economic activities.

Next steps: The political agreement will now be submitted to EU ambassadors for endorsement. It will then undergo a legal linguistic revision. Parliament and Council will be called on to adopt the proposed regulation at first reading.

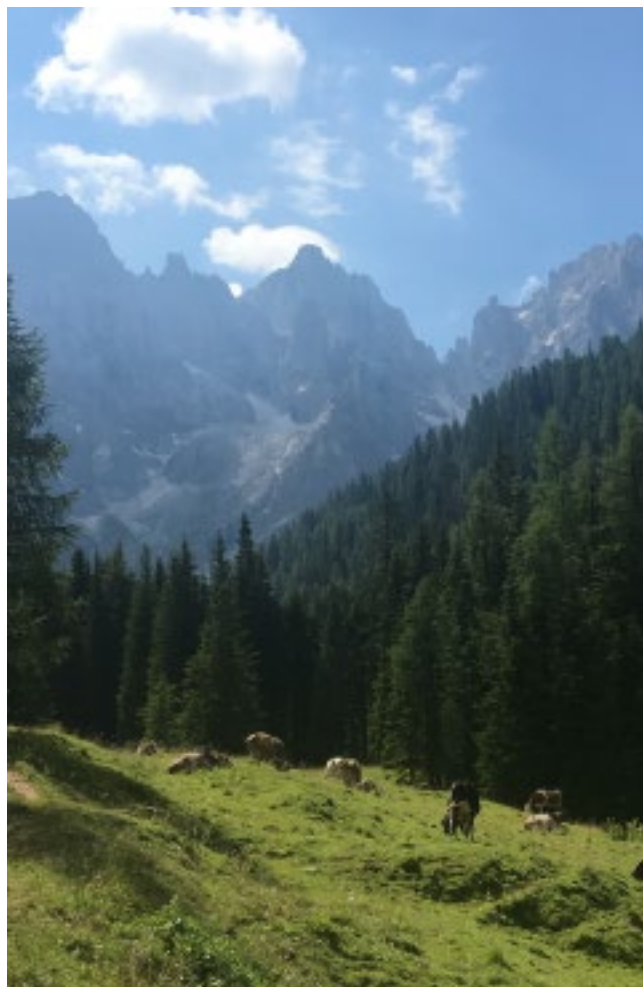


Photo: EOS

6.5 COFO24, the World Forest Week in Rome, July 2018

The European Organization of the Sawmill Industry participated in the biennial session of the Committee on Forestry (COFO) – the highest FAO Forestry statutory body – which was held in Rome on 16-20 July 2018.



Photo: EOS

The Committee brings together heads of forest services and other senior government officials to identify emerging policy and technical issues, to seek solutions and to advise FAO and others on appropriate action.

Forests and trees make crucial contributions to food security, provision of drinking water, renewable energy and rural economies. They provide around 20 percent of income for rural households in developing countries - notably more in many areas - and fuel for cooking and heating for one in every three people around the world.

During the meeting it was emphasized that Forests are essential for meeting the 2030 Agenda objectives ranging from tackling climate change to conserving biodiversity, reducing inequalities and improving urban habitats.

The FAO in the State of the World's Forests 2018 was also discussed: the report emphasizes the importance of clear legal frameworks regarding forest tenure rights, welcomes the growing trend to strengthen local governance, and calls for effective partnerships and private sector engagement to pursue sustainable goals. The State of the World's Forests 2018 focuses on the contribution of forests and trees to achieving several goals and targets of the 2030 Agenda

for Sustainable Development. In this regard, it is a useful complement to the Global Forest Resources Assessment (FRA) coordinated by the FAO and last published in 2015 (a new edition is expected in 2020). The European Member States took a strong position in favour of SOFO 2018, asking for its key messages to be disseminated widely in the appropriate fora, and for the FRA to be promoted as the main reference data source on forest resources at a global level. Additionally, Member States underlined the importance of monitoring progress and collecting reliable evidence on forests and their contributions to the 2030 Agenda, including gender-disaggregated data, and requested the FAO to provide capacity-building support in this regard.

The 24th session of COFO and the 6th World Forest Week explored the contributions that forests can make to the achievement of the Sustainable Development Goals (SDGs) and other internationally agreed goals; explored ways and means to accelerate progress, in particular, towards Goal 15 (Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss). It also discussed

actions for implementing the policy recommendations of the Committee on World Food Security regarding the contributions of forests to food security and nutrition; reviewed opportunities and challenges for urban and peri-urban forestry; considered the implementation of FAO's climate change strategy and specific tasks related to forest resilience, health and forest fires; and provided strategic direction for the future work of FAO in forestry.

An important session from EOS point of view was the one dedicated to urban and peri-urban forestry. In that session, EOS also delivered a message. The EOS Secretariat stated: "What about planting a second forest – reinforcing and promoting wood-based constructions? Storing CO₂, wood-based products play a key role in making our cities sustainable. The use of wood products should be integrated in the urban forest concept."

6.6 Initiative Report on Europe's woodworking competitiveness strategy by the European Economic and Social Committee

In December 2017, the European Economic and Social Committee (EESC), consultative body of the European Commission the European Commission decided to draw up an Initiative Report on Europe's woodworking competitiveness strategy.



The EESC contributes to strengthening the democratic legitimacy and effectiveness of the European Union by enabling civil society organisations from the Member States to express their views at European level.

In the framework of the revision of the European Forest Strategy expected for 2018 and in the light of the European Renewed Industrial Policy, this informative report aims at contributing to various aspects of these two documents and calls for appropriate policy actions in order to support the woodworking industry to succeed in the rapidly evolving global manufacturing landscape.

Although a study group made up by members of the EESC elaborated the report and the recommendations to be addressed to the EU Institutions, EOS was selected as consultative expert for the group, therefore the EOS Secretariat provided concrete advice to be included in the Report.

On occasion of the plenary session held on 12-13 December 2018, the European Economic and Social Committee (EESC) adopted the Informative Report on the Europe's woodworking competitiveness factors.

EESC's considerations and recommendations:

This information report aims to assist the EU institutions in articulating a strategy and possibly ad hoc initiatives that can optimise the economic potential of the wood industry

for job creation, trade expansion and social development. It hopes to contribute to recent EU initiatives such as the mid-term review of the EU Forest Strategy; the review of the Bioeconomy Strategy; the review of the EU Timber Regulation; and the EU Industrial Policy Strategy: Investing in a smart, innovative and sustainable industry.

In the framework of this information report, a public hearing was organised on 9 April 2018 in order to collect input directly from representatives of the sectors. Speakers described the wood industries as an important sub-sector of the overall bioeconomy. The wood-based bioeconomy is important in terms of both material and energy-related uses; moreover, it was stressed that increasing the demand for wood products can play a decisive role in the global carbon cycle and in tackling climate change. Wood materials can substitute for GHG-intensive materials. Studies of such substitution effects generally find a reduction in GHG emissions when biomass systems are compared to fossil reference systems. Member States should create a positive legislative environment to promote the use of wood products.

Forests are part of the supply chain for the wood used by the woodworking industry. Among the main construction materials, wood is a renewable resource. It is worth using silvicultural practices and regeneration and harvesting methods that support forest growth and health.

Bearing in mind the crucial role of forests for the EU's woodworking sector, the EESC calls for measures to address the lack of skilled workers in forestry. The lack of a qualified forest harvesting workforce is negatively impacting wood availability. Member States should ensure adequate education, training and skills programmes, allowing for minimum proficiency and health and safety standards related to wood mobilisation, especially with regard to

wood harvesting. An EU study on the “identification of current and forecast employment and business growth in forestry and identification of current and forecast human resources, skills development and training requirements in the woodworking industries” should be carried out by the competent DG of the European Commission.

The ongoing mid-term review of the EU Forest Strategy will put forward consistent measures to boost the competitiveness of the wood industries. Since this sector uses large quantities of wood, its availability – if possible at a competitive price, and always in accordance with sustainable forest management practices – is a determining factor for the performance of the sector.

- Monitoring international developments on raw material trade will be of crucial importance. China’s flourishing economy, coupled with policy constraints limiting domestic forest production (due to a logging ban), has resulted in skyrocketing forest product imports over the last several years. China’s log imports (H.S. code 4403) for 2017 were about 45 million tons, about five percent higher than the 43 million tons in 2016. Exports of logs from the EU to China have soared in the last 10 years: in 2007 they amounted to 700 000 tonnes, while in 2017 they surpassed 3.3 million tonnes (source: Eurostat).

Wood mobilisation will be recognised as one of the most significant challenges facing the forestry sector over the coming decade. It is a matter of realising expected increases in wood supply and meeting rising demands for wood resources from all major end users in an efficient and cost-effective manner.

Considering that, in most Member States, woodworking continues to suffer from an undeserved negative image which affects its attractiveness and which, to some extent, explains the difficulties in hiring and retaining young people as well as skilled workers, appropriate programmes at EU and national levels should be encouraged in order to improve the attractiveness of the sector to young people. The development of high quality vocational education and lifelong learning programmes should receive financial support from governments.

Member States and local communities should collaborate with the wood industries in order to communicate to society and to the young generation the importance of forests and forest-based industries while showcasing the correlated innovative and sustainable character.

Increasing forests’ capacity to supply more wood – in particular, high quality wood – is a long-term commitment and as such must be well planned and forests well managed

in order to maximise their positive contribution to society, ecology and biodiversity, and even help mitigate climate change by balancing part of the global carbon budget.

To ensure the proper industrial development of the woodworking sector and its implementation, it is important to closely monitor and encourage developments in the wood supply chain (including commercial aspects and chain of custody certification – CoC) enabling the highest value for products.

Given that the European Commission is considering amending the product scope of the EU Timber Regulation (No 995/2010), the EESC calls for the inclusion of the following product categories:

- 4402: Wood charcoal (including shell or nut charcoal), whether or not agglomerated;
- 4404: Hoopwood; split poles; piles, pickets and stakes of wood, pointed but not sawn lengthwise; wooden sticks, roughly trimmed but not turned, bent or otherwise worked, suitable for the manufacture of walking sticks, umbrellas, tool handles or the like; chipwood;
- 4419: Tableware and kitchenware, of wood.

The rationale behind this is that the EESC thinks that all wood entering Europe should be certified as a matter of principle.

European R&D funds should be harnessed to support new and innovative applications of hardwood species, with simultaneous intense activities to ensure an abundant supply of wood in Europe.

It is necessary to develop new innovations in the sourcing of wood raw materials, while at the same time increasing carbon storage and substitution in processed wood. Wood supply can to some extent be increased by afforestation, coppice plantations and plantations of fast-growing trees. Aside from the production of wood, plantations and reforested areas – e.g. in former industrial and agricultural zones – offer the opportunity for effective carbon sequestration in the soil they generate.

A clearly favourable trend in raw materials policy is CoC certification, which makes it possible to track wood from forest to final product. This makes it possible to assess the sustainability and legal origin of wood products in order to increase their uses.

The positive climate effect of using wood can be further enhanced by promoting the use of locally sourced wood. The EU Commission is invited to elaborate a study on the climate-related, economic and social benefits of using locally sourced harvested wood products. Using sustainable and legally sourced wood should provide competitive

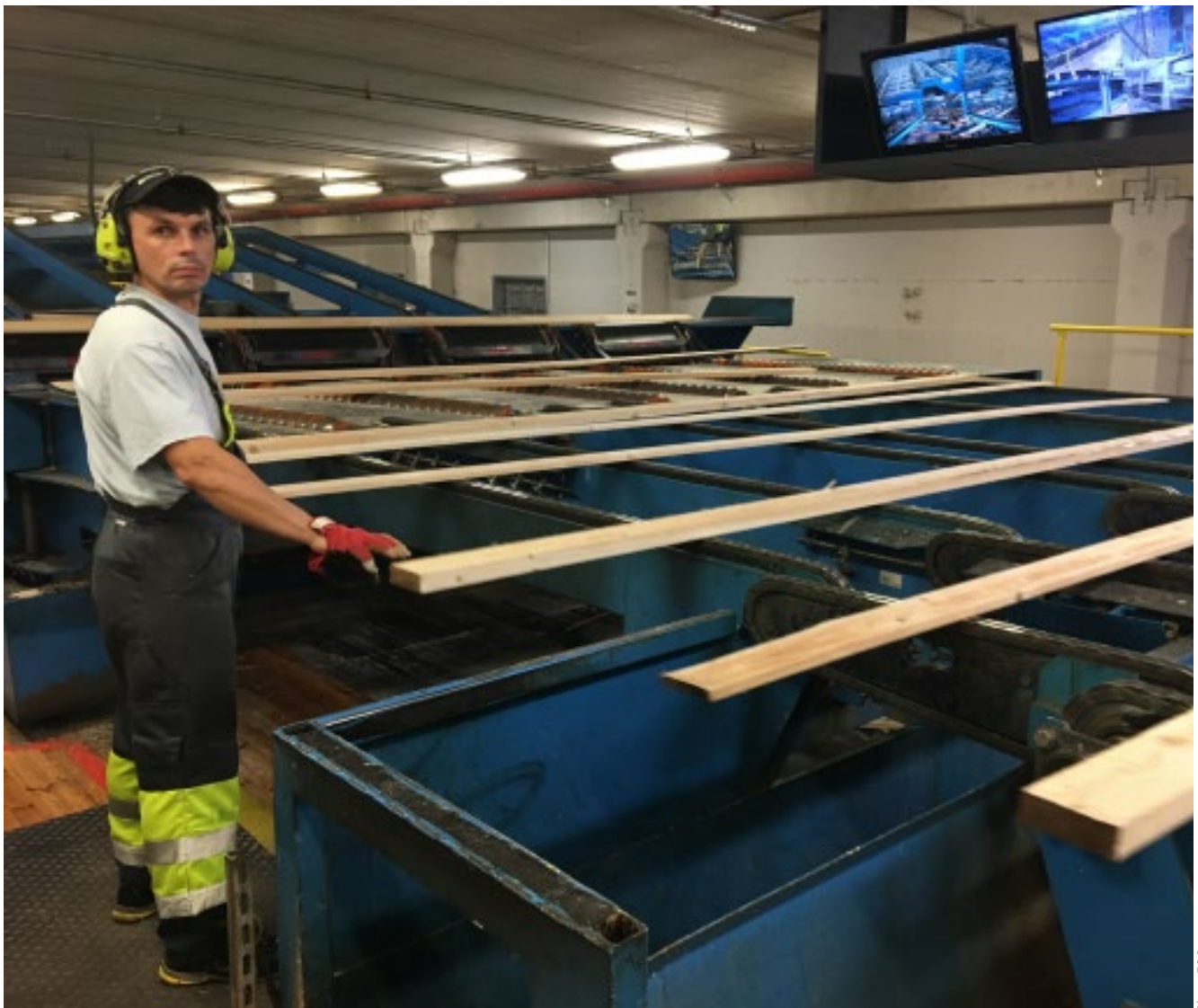


Photo EOS

advantages for woodworking industries in all public procurement processes. Wood products are considered to contribute to the mitigation of carbon dioxide emissions. Harvested wood products (HWP) have value both as a form of carbon sequestration and fossil fuel substitution. There are some ways that forest management can help to increase carbon storage in harvested wood product pools. Emphasising “durable” or “long-lived” wood products, such as lumber used for building construction, can help to increase the overall lifespan of the product in use, as well as shifting the mix of products towards those that decay less in landfills. Although forest management can influence the species and size of trees available for wood products, larger-scale policies and markets will largely drive demand for particular products.

- One goal of the European Commission is to help the construction sector become more competitive, resource-efficient and sustainable. Building with wood makes a

significant contribution to these goals. The woodworking industries can play a significant role in decarbonising the economy if governments seize the opportunity to use wood products in meeting their policy goals, such as in energy efficient construction and as everyday materials.

- Hybrid construction, where wood construction is combined with concrete and/or steel construction, is also a promising opportunity for the future of Europe. Hybrid construction is particularly common when building large or tall structures, so as to provide extra structural support. Timber engineered wood products feature heavily in hybrid structures, including cross laminated timber, glued laminated timber, laminated veneer lumber, etc

In order to facilitate the increased use of wood in residential and non-residential buildings, EU research programmes should focus on new applications of the European hardwood species that are currently underutilised.

6.7. Forestry's aspects

6.7.1 Progress in the implementation of the EU Forest Strategy – ‘A new EU Forest Strategy: for forests and the forest sector’

On 7 December 2018, the report ‘progress in the implementation of the EU forest strategy’ was published by the European Commission and it concluded that the strategy has set clear aims and has successfully coordinated efforts to achieve them.

- The EU forest strategy 2014-2020 was developed to provide a coherent framework for both EU forest-related policies and the national forestry policies of the individual EU countries. It was developed by the EU Commission in close cooperation with EU countries and stakeholders.

The Report has been prepared by DG AGRI (European Commission — Directorate-General for Agriculture and Rural Development) after an information collection made by the European Forest Institute (EFI) in collaboration with stakeholders -including EOS- and Member States.

THE REPORT IN A NUTSHELL

The midterm review highlights that the EU forest strategy is achieving its aims of encouraging sustainable forest management both in the EU and globally. Rural development funds can support the implementation of sustainable forest management by the Member States. It concludes that the strategy has set clear aims and has successfully coordinated efforts to achieve them.

- Set up in 2013 to coordinate the European Union's response to the challenges that are faced by our forests and the forest sector, the Forest Strategy sets out specific actions to achieve eight key priorities. The report shows that the majority of the actions, across all 8 priority areas, have been implemented as envisaged.
- By encouraging and promoting the sustainable management of forests and their multifunctional role, the strategy helps to fight deforestation, to reduce greenhouse gas emissions in the atmosphere by sequestering carbon, to enhance resilience of ecosystems to a fast changing climate and to protect and preserve biodiversity and other ecosystem services.
- These positive effects are felt both in the European Union and abroad. The report has shown that EU efforts to reduce illegal logging globally, under the Forest Law Enforcement, Governance and Trade Action Plan, have been substantially more effective in 2015-2017 due

partially to the increased cooperation and coordination promoted by the Forest Strategy, both within Europe and in international organisations.

- The support to the protection and the sustainable management of forests provides a valuable potential contribution to the EU's green economy. In 2015, the extended value chains of the forest-based industries supported 3.6 million jobs and produced a turnover of €640 billion with an added value of €200 billion. Innovation is fostering more and more new forest-based products and uses able to replace fossil-based materials for the benefits of climate and human health. The report shows that the strategy has supported this process through the sustainable and efficient use of forest resources and the development of the bioeconomy, including bioenergy.
- A key role has also been played by the EU rural development policy under the Common Agricultural Policy, which has provided €8.2 billion in public funds towards achieving the objectives and priorities of the strategy. Furthermore, the EU rural development funds have been coordinated with an increased spending on research and innovation. Research funding for the forest sector has also increased significantly. In 2013-2017, 249 projects received €615 million benefitting jobs and growth.

THE COUNCIL CONCLUSIONS

On 15 April, the European Council adopted a set of conclusions on the progress achieved in the implementation of the EU Forest Strategy and on a new strategic framework for forests. The conclusions follow the publication of a Commission report in December 2018, which reviewed the role played by the strategy in its first five years of life.

In its conclusions, the Council welcomes the progress made in the implementation of the EU Forest Strategy, which has contributed to the promotion of sustainable development through sustainable forest management, and improved the cooperation between member states, the Commission and other relevant stakeholders on EU forest-related policies. The Council underscores the importance of forests and the forest-based sector for meeting the Sustainable Development Goals (SDGs), for rural, peri-urban and urban livelihoods and welfare, growth and

jobs, nature and biodiversity conservation, mitigation and adaptation to climate change, to combating desertification, the provision of key ecosystem services to European society and the necessary transition to a low-carbon bioeconomy. It highlights as well the need to further promote research, innovation and the deployment of technologies in forests and the forest-based sector and to strengthen skills through academic and vocational education

The conclusions then set out the priorities to be followed in the next two years in order to achieve the objectives of the strategy, such as further improving coordination, communication and the sharing of best practices.

Finally, the Council calls on the Commission to present an ambitious communication on stepping up the EU action against deforestation and **to develop a new EU forest strategy beyond 2020.**

Council Priorities for 2019-2020

- making full use of all the financial tools, in particular the rural development forestry measures under the Common Agricultural Policy and state aid;
- contributing further to mainstreaming EU biodiversity objectives in a coherent manner;
- further integrating nature conservation into SFM;
- enhancing communication and awareness of the value and importance of forests and SFM by addressing major societal and environmental challenges as a contribution to the integrated implementation of the 2030 Agenda for Sustainable Development;
- **continuing to encourage the use of wood from sustainably managed forests, as an environmentally friendly raw material for multiple purposes;**
- promoting the key role of forests in line with the Paris Agreement.

6.7.2 Conference “Our Forest Conference, our Future”

On 25-26 April, the EOS Secretariat attended the conference titled “Our Forest Conference, our Future” organised by the European Commission in order to analyse and discuss opportunities and challenges for enhancing the contribution of the forest sector to the main EU priorities.

High-level speakers included Phil Hogan, Commissioner for agriculture and rural development, Arias Cañete,

Commissioner for climate action and energy, Ioan Deneş, Romanian Minister for water and forests, and high representatives of the private sector, academia, civil society, and non-governmental organisations. On behalf of the Council, Mr Deneş recalled that a new Forestry policy after 2020 should be undertaken by the EU Commission.



Photo: EOS

The event was ended with a “planting trees” ceremony at the “Parc du Cinquantaire”, in Brussels. This ceremony was attended as well by Felix Finkbeiner, who at the age of 9, launched the children and youth initiative “Plant-for-the-Planet” in 2007. At the second day of the European Commission’s conference ‘Our Forests, Our Future’, Commissioner Hogan announced as well, the possibility of a ‘Trees for Kids’ scheme to provide solutions to reach national and European objectives in line with our post-2020 Common Agricultural Policy proposals. The scheme would target support to planting of trees by schoolchildren.

During conference, it was recalled that the forest sector has indeed the potential to provide sustainable solutions to current and future societal challenges that concern all EU citizens, such as combating climate change, reducing the reliance on fossil fuels, promoting the circular bio-economy, protecting biodiversity, and enhancing natural resources. It was also recalled -by the moderator of the event that - **when exposed to fire, wood retains its strength longer than steel.**

Commissioner Hogan, stressed the importance and potential of forests, **wood and other materials for the bio-economy. He stated that “wood should replace fossil fuel-based products”.**

During the conference, Commissioner Hogan announced as well the proposal of a **“1 hectare initiative”**, which would be supported through the common agricultural policy

(CAP). Under their future CAP Strategic Plans, Member States will have the option to reward farmers with payments per farm for the afforestation of one hectare. This afforestation should be done in a biodiversity-friendly way, contributing to climate and environmental objectives. This initiative can be programmed through Rural Development funding and could help Member States to meet their climate and biodiversity objectives. Such an initiative could significantly contribute to the creation of valuable ecosystem services, such as water retention and flood and soil erosion control. It would also provide significant biodiversity benefits, such as shelter and connectivity.

As recalled during this event -despite the worrying global picture, forests have been expanding in the EU and currently cover 43% of the EU’s land area. Forests play an increasingly important role in multiple policy priorities:

- strong mitigation effect on climate change;
- huge potential in shaping the new bio-economy;
- protective role in our environment;
- forests are home to an unaccountable number of species and habitats;
- vital source of income for rural communities.

The review of the EU Forest Strategy identified this communication gap, showing a growing mismatch in the perception of forests by experts and by society. Commissioner Hogan stated that “there is a clear need to communicate to 21st century urban dwellers about the



Photo: EOS

role and value of forests and the importance of managing them to address many of the challenges we are facing today. Planting trees, creating and restoring forests: these things are crucial for our climate and a more sustainable management of our natural resources, but also for raising awareness”.

The EU Commission informed that the “Communication on Stepping up EU Action on Deforestation and Forest Degradation” is expected later this year. The EUTR and FLEGT are particularly relevant to broader work on other agricultural products that have effects on deforestation, as the EUTR is almost a pioneer experience in this regard. Improving forest governance has been recognised as a key tool for tackling illegal logging and deforestation. In particular, the following actions should be further enhanced:

- enhance inclusive stakeholder dialogue, and empower communities to exercise rights to resources;
- support country-level planning, including cross-sectoral land use planning, which involves forestry, agriculture, and other land uses that drive deforestation;
- strengthen the enabling environment for sustainable investment through incentives to small and medium businesses to improve market access.

Commissioner Cañete, recalled that in November 2018 the EU Commission published a Strategy “A Clean Planet for All”. The Strategy outlines a vision of the economic and societal transformations required, engaging all sectors of the economy and society, to achieve the transition to a climate neutral economy by 2050. It seeks to ensure that this transition is socially fair, securing high quality jobs and sustainable growth in Europe. The European Commissioner repeatedly stressed the importance of supporting the forest sector to effectively manage forests as a tool for ecological transition. “To achieve the transition to climate-neutrality, our forests will help us – but we will need to help our forests, and the people working with our forests, to tackle the challenges ahead. Forests hold the answers to some of today’s global challenges. They are key to fight climate change by absorbing greenhouse gas emissions. They are home to 80% of our planet’s biodiversity. They supply three quarters of our freshwater. They provide sustenance and jobs: 1.6 billion people – a quarter of the world’s population – depend directly on forests for their livelihoods. And they are an important part of our cultural, social and spiritual heritage. So when it comes to delivering on our international commitments, forests are part of the solution.

When we talk about Sustainable Development Goal 15 - Life on Earth - and our target to manage forests sustainably by 2030, we are not just talking about a stand-alone goal. We are also talking about food security, water, climate change and strengthening resilience and peace. Ultimately, we are talking about whether we can build a more sustainable and inclusive world for all by 2030. This is why forests need to be front and centre of our objectives in the 2030 Agenda, the European Consensus on Development, and the Paris Agreement on Climate. The European Union is taking forward this vision in our relationship with partner countries in different ways. Between 2014 and 2020, we committed more than 500 million to support forests in developing countries. There is no one-size-fits-all: Deforestation and sustainable forest management is a complex challenge, and solutions need to be specific to each country and region”.

One of the speaker, **Mr Peter Holmgren (Former Director-General of CIFOR (climate smart forestry: synergies between mitigation and adaptation. FutureVistas – CEO)** emphasised that locking up carbon is the only role given to forests in the Paris Agreement (as per Article 5). Previously, in the IPCC 1st Assessment Report 1990 “Primary recommendation on forests”, the role of wood products (including the substituting effect) in climate change mitigation, was positively recognised. He stressed that:

- Carbon capture of forests is SEVERAL TIMES bigger than our fossil emissions.
- Active forest management dramatically INCREASE carbon capture.
- PROVIDED it makes economic sense and is not ideologically blocked.
- IN ADDITION harvested wood gives further climate benefits.
- REPLACING fossil materials and energy.

The Paris Agreement ignores all of the above and this is a gigantic missed opportunity.

Dr. Adrian Enache explained that the EIB (European Investment Bank) activities support the full forest value chain including afforestation, reforestation, forest rehabilitation and protection, wood processing, timberland funds, and REDD+ (Reducing Emissions from Deforestation and Forest Degradation). EIB support the EU Forestry Strategy and the EU Forest Action Plan, which frame EU forestry policy, and the Timber Regulation and Forest Law Enforcement, Governance and Trade Initiative for tackling illegal logging and improving traceability.

Within the EIB Priorities, the following were mentioned:

- Climate and Environment (Climate Action: mitigation/adaptation)
 - Paris Agreement (UNFCCC), REDD+, EU FLEGT, SFM (Forest Europe process), EUTR, Forest Certification (e.g. FSC/PEFC)
- Innovation and Skills (RDI)
- SMEs

The EIB-financed forestry projects are targeting:

- Improved forest and watershed management and flood control:
 - afforestation, forest rehabilitation, erosion control, forest fire prevention/mitigation and implementation of RDPs
- Restoration after major natural hazards
 - earthquakes, flooding, sleet, forest-fires, wind-throws
- Support sustainable renewable wood-based materials production:
 - Primary and secondary processing, renewable energy and energy efficiency (upgrading industrial facilities), biomass/CHP plants.

Alistair Monument (WWF) stressed the need of protect and restore nature by 2030 for the benefit of people and the planet. In the past years WWF has contributed to achieve the following objectives:

- 50% of the world's forests are effectively protected or under improved management.
- Halting deforestation.
- Restoring 350 million hectares of forest landscapes.

Finally, WWF stressed the need for a balanced approach to management of forests that equally considers economic, social and environmental aspects. WWF called to a better coordination and cooperation between government agencies working on forestry and nature protection to integrate management planning.

All presentations given during the conference are available at the following link:

https://ec.europa.eu/info/events/forestry-conference-2019-apr-25_en

6.7.3 Sustainable Forest Products for a Better Future

The European Organisation of the Sawmill Industry attended the Committee on Forests and Forest Industry (COFFI), of the United Nations Economic Commission for Europe (UNECE) held between 5-9 November in Vancouver. On this occasion, participants - including EOS - approved a joint document so-called **Vancouver Invitation on Sustainable Forest Products for a Better Future**. This is a statement of intent to create a larger community of like-minded stakeholders in support of sustainable forest products as a key element of a green economy and to achieve relevant Sustainable Development Goals (SDGs – see below for more information on the SDGs).

The United Nation's Agenda 2030 has identified 17 Sustainable Development Goals (SDGs) to pursue over the coming decades in order to make the world a better place. As one of the largest terrestrial habitats, forests and their sustainable management can have a positive impact on most, if not all of the SDGs. Wood and wood-based products obtained from timber harvested in sustainably managed forests can also provide substantial benefits. These range from reductions in atmospheric carbon from the substitution of renewable wood for more carbon



intensive building materials (SDG 13—Climate Action), to the invigoration of rural economies and communities in forested areas (SDG 8—Decent Work and Economic Growth), to the provision of renewable energy (SDG 7—Affordable and Clean Energy) and to the overarching goal of equality (SDG 5—Gender Equality).

In a nutshell, reported the key elements of the Vancouver Invitation:

- Wood products obtained from timber harvested in sustainably managed forests can also provide substantial benefits.
- Communicate to the society at large, and younger generations in particular, the importance of the forestry and forest-based industries, while showcasing their innovative and sustainable character.
- Undertake actions to improve attractiveness of the sector to tackle widespread workforce aging and loss of skills.
- Recognize and promote the importance of construction standards that do not unduly discriminate against wood materials.

- Identify appropriate initiatives that can assist in attracting investment in forests, timber processing and manufacturing sectors
- Undertake actions to ensure a steady supply of sustainably sourced raw materials to the sector, balanced with social and environmental considerations.
- Foster the implementation of policy measures to encourage use of wood as a building material to help tackle climate change through increased carbon storage.

6.7.4 Public consultation on the EUTR Product Scope

A public consultation on the EUTR Product Scope was launched on 29 January 2018 until 24 April 2018. Any interested party, including operators (as defined under the EUTR), Traders (as defined under the EUTR), other businesses potentially concerned with a changed product scope, affected industry and/or trade associations, Member States' EUTR Competent Authorities, Monitoring Organisations under the EUTR, Civil society organisations, non-EU timber-producing countries, general public have been invited to take part in the consultation.

Objective of the consultation

Following the evaluation of the effectiveness and functioning of the EUTR during its first two years of application, it was noted that the EUTR covers a significant number of timber products, but not all are included in its scope. The evaluation concluded that the European Commission may consider amending the product scope, subject to an impact assessment of options. The European Commission had therefore undertaken an impact assessment to analyse possible changes to the EUTR product scope. As part of this impact assessment process and in line with the European Commission's Better Regulation Guidelines, an extensive consultation of stakeholders was carried out. The main aim of the public consultation is to gather views and evidence on possible changes to the EUTR product scope.

EOS Secretariat submitted its response to the consultation, asking that the following products categories are included in the EUTR.

- **4402:** Wood charcoal (including shell or nut charcoal), whether or not agglomerated;
- **4404:** Hoopwood; split poles; piles, pickets and stakes of wood, pointed but not sawn lengthwise; wooden

sticks, roughly trimmed but not turned, bent or otherwise worked, suitable for the manufacture of walking sticks, umbrellas, tool handles or the like; chipwood;

- **4419:** Tableware and kitchenware, of wood.

Results from the Public Consultation on the Product Scope of the EU Timber Regulation

221 individuals and organisations responded to the European Commission's public consultation on the product scope of the EU Timber Regulation (EUTR).

Coming from a range of public and private sectors, they identified as:

- 63 – Trade and Industry Associations
- 49 – Civil Society Organisations
- 30 – Operators
- 22 – Competent Authority or Public Authority
- 21 – Traders
- 23 – Other businesses and organisations

The survey shows those responding as broadly in favour of expanding the scope of the EUTR to products currently excluded, particularly all printed material and ending the disparity between chairs and other wooden furniture.

Overwhelmingly, responders do not think the EUTR in its current scope is adequate for meeting the aims of the EUTR – namely, fighting illegal logging and the related trade.

Asked why they believed the product scope needed to be changed comments focused on the need to end loopholes and create an even playing field. The EUTR should aim for the 'simplest and easy to understand system'. EU based printers said they were being undercut by paper produced elsewhere, they wanted a level playing field for domestic producers and companies importing from 3rd countries.



In the picture “Eye of the Dolomites”, Plose, Italy

And last but not least, the limits to the product scope is preventing the EUTR from reaching its core objective of countering illegal timber. If any timber product is reaching the EU market despite being made from illegally logged timber, due to it not being covered by the EUTR, then this clear loophole must be closed.

Others also emphasized the need to implement other reforms along with the product scope expansion. Suggestions included support for trans-border action with confiscation ability, harmonisation of enforcement procedures across member states and better education of authorities.

In the framework of the amending process of EU Timber Regulation (Regulation (EU) No 995/2010) (EUTR) initiated by the EU Commission a joint letter has been prepared by the Brussels based organisations representing the forest-based industries.

With this letter, the European forest-based industries are calling on:

- the extension of the scope of the EU Timber Regulation to ensure that wood-based products sold on the European market are safe from illegal logging regardless of their origin;
- the inclusion under the scope of the EUTR regulation tree like products, such as bamboo, whose illegal sourcing and extraction is causing deforestation and environmental degradation;
- a coordinated and more consistent enforcement of the EU Timber Regulation.

The open letter was sent on Friday and it will be addressed to Ms Elżbieta Bieńkowska, European Commissioner for Internal Market, Industry, Entrepreneurship and SMEs, Mr Karmenu Vella, European Commissioner for Environment, Maritime Affairs and Fisheries and Ms Cecilia Malmström, European Commissioner for Trade.

Ms. Elżbieta Bieńkowska

European Commissioner for Internal Market,
Industry, Entrepreneurship and SMEs

Mr. Karmenu Vella

European Commissioner for Environment, Maritime
Affairs and Fisheries

Ms. Cecilia Malmström

European Commissioner for Trade

Brussels, 20 July 2018

Open letter to the European Commission:

European forest-based industries call on the extension of the scope of the EU Timber Regulation to ensure that wood-based products sold on the European market are safe from illegal logging regardless of their origin.

Dear Commissioners,

The EU Timber Regulation (995/2010/EU) is one of the key measures of the European Union to combat illegal logging. It aims to prevent wood and wood-based products that derive from illegally logged forests to enter the European market.

Wood and a large part of wood-based products are already covered by the Regulation. The European forest-based industries, as *operators* or *traders* under the Regulation, have already put in place the required due diligence systems for the wood or wood-based products that they are placing on the European market.

Regrettably, several wood-based products are not yet in the scope of the Regulation. Millions of euros worth of wood-based products are therefore still entering the European market without any assurance on their legality.

This not only creates a significant environmental loophole in the Regulation but it also distorts competition between wood-based products produced in the European Union with compliant raw material and wood-based products produced outside the European Union which can be freely imported and placed on the European market regardless of the origin of the raw material.

The EU Timber Regulation helps to secure legal sourcing of products sold on the European market. Illegal logging blemishes the reputation of the forest-based industries and the image of wood-based products. It is not acceptable that the reputation of European companies is tarnished because of illegally sourced imported products put on the European market. Moreover, it is important that European consumers can trust that any wood-based products found on the European market have been sourced legally.


The European Union should ensure that wood-based products on the European market are safe from illegal logging regardless of their origin. We therefore call on the European Commission to revise without further delay the scope of the EU Timber Regulation and extend it to wood-based products, such as printed matter, which are so far not covered.

Additionally, we invite the European Commission to include under the scope of the EUTR regulation tree like products, such as bamboo, whose illegal sourcing and extraction is causing deforestation and environmental degradation.

Furthermore, the European Commission should coordinate more consistent enforcement of the EU Timber Regulation.

We thank you for your consideration and remain at your disposal for further discussions on this matter with you or your respective services.

Yours sincerely,

Beatrice Klose
Secretary General
INTERGRAF – European Federation for Print and Digital Communication


Silvia Melegari
Secretary General
EOS - European Organization of the Sawmill Industry



Clive Pinnington
Managing Director
EPF – European Panel Federation



Sylvain Lhôte
Director General
CEPI – Confederation of European Paper Industries



Isabelle Brose
Managing Director
FEP – European Federation of the Parquet Industry



Patrizio Antonicoli
Secretary General
CEI-Bois



Piotr Borkowski
Executive Director
Eustafor



Roberta Dessi
Secretary General
EFIC



6.7.5 Illegal Logging & Trade

The European Commission (EC) launched a **public consultation on deforestation and forest degradation** (January 2019). The consultation took place between 14 January and 25 February 2019, with individuals and organisations with an interest in deforestation and forest degradation invited to complete the online questionnaire. The consultation aims to address the link between deforestation and agricultural expansion, acknowledging that as a major importer of agricultural commodities, the EU is part of the problem but is well placed to help address the issue. The overall aim is to step-up EU action by increasing the coherence of existing EU policies and tools, taking advantage of synergies across policy areas and better mainstreaming deforestation considerations throughout relevant EU policies.

According to the FAO report “State of the World’s Forests 2016” agricultural expansion for the production of commodities (e.g. soy, beef, palm oil, coffee, cocoa) drives about 80% of all deforestation specifically in tropical countries, while mining, urbanisation and infrastructure are responsible for less than 10% each.

In order to set up effective measures, the EU Commission is evaluating the following actions:

- Build effective partnerships with producer countries in the tropical domain to support the uptake of sustainable agricultural and forestry practices, including afforestation, by both local communities and foreign investors, reduce pressure on forests, improve land governance and promote better conservation and management of tropical forests as well as alternatives livelihoods.
- Promote sustainable and transparent supply chains for sustainably produced commodities and sustainable provision of related services.
- Facilitate improved access, particularly by smallholders, to public and private investment and financial support, including through public-private partnerships, for sustainable value chains and sustainable landscapes. Achieve enhanced transparency of investment flows associated with deforestation, forest degradation, illegal logging and illegal land acquisition.
- Strengthen international cooperation with other major consumer countries to ensure responsible and sustainable supply chains at the global level and reduce the risk of ‘leakages’.
- Better mainstream considerations to prevent tropical

deforestation and forest degradation throughout relevant EU policies.

Feedback received will be taken into account for further development and fine tuning of the initiative. The Commission will summarise the input received in a synopsis report explaining how the input will be taken on board and, if applicable, why certain suggestions can’t be taken up.

New Ukrainian law to prevent illegal logging

comes into force (January 2019). The new law “on amendments to certain legislative acts of Ukraine on the preservation of Ukrainian forests and preventing the illegal export of raw timber” came into force on 1 January 2019, aimed to ensure better forest governance and minimise illegal logging. The punishment for illegally exporting restricted timber or timber products has been set at 3-5 years imprisonment, with longer sentences for repeat offenders or those committed by an organised group or on a particularly large scale. The fines and prison terms imposed for illegal felling have also increased. The law amends the Code of Ukraine on Administrative Offenses, the Criminal Code of Ukraine and the law “on the peculiarities of state regulation for activity of business entities related to the sale and export of timber”.

An article on **How Illegally Harvested Timber Is ‘Greenwashed’ in China** was published last January 2019.

The report by Sixth Tone, an online publication providing coverage on China, has expressed concern over what it terms ‘greenwashing’, whereby illegal timber is given false certification status to avoid scrutiny and enter restricted markets. In 2018, Sixth Tone conducted an investigation that identified seven Chinese companies manufacturing wood products for export to Europe with fraudulent FSC logos and certification, despite them acknowledging that their goods do not meet FSC standards. The risk of being caught was reportedly considered negligible, due to inadequate checks by buyers and regulators of the authenticity of certification. It is believed that European importers are aware of the fraudulent activity.

The article states that “As the world’s manufacturing hub, China is the biggest importer and consumer of wood products. Over 60 percent of tropical logs on the global market are imported to China. Much tropical wood comes

from species which environmentalists consider at high risk for being logged illegally: Assessments by the United Nations Environment Program and Interpol suggest that 15 to 30 percent of timber traded globally has been illegally harvested — in tropical countries, this proportion could be as high as 50 to 90 percent.”

6.7.6 Forest Europe

Since November 2017, the European Organization of the Sawmill Industry obtained the status of observer in Forest Europe. FOREST EUROPE (the brand name of the Ministerial Conference on the Protection of Forests in Europe) is the pan-European voluntary high-level political process for dialogue and cooperation on forest policies in Europe. FOREST EUROPE develops common strategies for its 47 signatories (46 European countries and the European Union) on how to protect and sustainably manage their forests. Since 1990, the collaboration of the ministers responsible for forests in Europe has had a great economic, environmental and social impact on the national and international level. FOREST EUROPE has led to achievements such as the guidelines, criteria and indicators for sustainable forest management.

6.7.4.1 Workshop on “Enhancing the Long-term Competitiveness of the Forest Sector in a Green Economy: policies for forest-based bioeconomy in Europe”

On 29 May 2018, the European Organisation of the Sawmill Industry was invited to speak at the workshop on “Enhancing the Long-term Competitiveness of the Forest Sector in a Green Economy: policies for forest-based bioeconomy in Europe”.

Objectives and the goal of the workshop.

In order to promote long-term competitiveness and viability of the whole forest sector and its contribution to the overall Green Economy, the workshop was aimed at:

1. exchanging views on future policy making and governance to support development of a forest-based bioeconomy in European sub-regions;
2. discussing drivers and barriers for long-term economic viability and competitiveness of forestry and forest-based industries, which provide a sound basis for the bioeconomy, to enable relevant and effective policy response;
3. identify possible topics for intergovernmental cooperation at pan-European level focused at maintaining and

The Report by Sixth Tone is available here: <http://www.sixthtone.com/news/1003369/how-illegally-harvested-timber-is-greenwashed-in-china?from=timeline&isappinstalled=0>



increasing economic viability and competitiveness of the forest-based sector.

The workshop discussed the long-term competitiveness of the forest sector value chains that contribute to sustainability of the overall economy, especially highlighting the role of wood and other forest-based products and materials from sustainable sources. The workshop addressed the competitiveness mainly at sectoral level as an ability of the European forest sector to compete with other sectors in Europe as well as at global market. However, as the competitiveness of firms, sectors and whole economies are closely interrelated it has not been entirely possible to draw a clear borderline between these different levels and focus solely at sectoral level. Issues of forest ecosystem services (though they are important for the competitiveness of the primary producers, whole forest sector and a coherent

part of the forest-based bioeconomy) were excluded from the overall thematic scope of the workshop as this area is tackled in its complexity under another activity of the FOREST EUROPE Work Programme.

Extract of the Workshop conclusions

- Coherent and stable policy framework as well as coordination across different levels, sectors, policies and actors is needed to facilitate the basis for developing the forest-based bioeconomy.
- Intergovernmental cooperation on the forest-based bioeconomy should be facilitated (possibly creating a kind of (pan-)European “bioeconomy hub”). Potential of the existing institutions and processes, such as Forest Europe, should be considered for this purpose to build on established cooperation, developed relationships and trust (incl. public and private forest actors) as well as to take into account the criteria and indicators for Sustainable Forest Management developed at the pan-European level.
- Participatory approach to intergovernmental cooperation should be maintained to provide a platform for sharing experiences across borders and regions.
- To eliminate distortions at the market (beyond the sector), policy making should aim at maintaining stable and predictable operational environment as well as setting equal conditions for all the sectors – e. g. set appropriate price of carbon emissions equal for all the sectors (including plastic and petrochemical sectors) and develop other standards needed to create level playing field for the bioeconomy. Creating such a level playing field should be superior to subsidies in order to encourage long-term healthy competition and innovation.
- To promote wood as building material, appropriate common European standardisation on fire protection, water protection, and sound insulation for wooden constructions should be developed. New public buildings built from wood can encourage and rise trust in wooden construction, especially in those areas without long-term tradition of building with wood.
- From the market view, the sector should look for where the consumption will be in the future (which products and which regions of global market), e.g. growing middle-class at the global level can significantly influence these developments.
- Sustainable supply of wood and the development of the bioeconomy depend on healthy, dynamic and resilient forest ecosystems. It is therefore necessary to anticipate

climate change impacts and to adapt forest structure and management as well as to adapt forest industry to changing quantity and quality of the European wood supply.

The Report is available here: https://foresteurope.org/wp-content/uploads/2017/08/Workshop-report_final-1.pdf

6.7.5.2 Roundtable Meeting on a Legally Binding Agreement (LBA) on Forests in Europe on 19-20 September 2018 in Bratislava, Slovakia.

On 19-20 September, EOS attended the Roundtable Meeting on a Legally Binding Agreement (LBA) on Forests in Europe on 19-20 September 2018 held in Bratislava. This meeting was organised in order to facilitate an exchange of views among FOREST EUROPE signatories and observers regarding the Madrid Extraordinary Ministerial Decision, the RTM meeting will serve as a platform for informal discussion on a possible LBA and procedural options to follow-up of the Madrid Extraordinary Ministerial Decision. Discussion should focus on general perceptions, benefits and impacts of LBA as well as other related general aspects to be addressed, such as barriers and preconditions to restart possible negotiations on and adoption of LBA.

EOS Message

The European Organisation of the Sawmill Industry welcomes the commitment undertaken by the FOREST EUROPE signatories to discuss about a legally binding agreement of forests.

It is well recognised that the forest sector plays an important role in the development of a green economy and in the climate change mitigation due to the carbon storage of wood products and the substitution of non-renewable materials and energy. In this respect, EOS believes that the legally binding agreement on forests should be a tool for balancing forest protection and production. Scaling up sustainable forest management and replacing energy intensive products with forest-based products, it is the most efficient way to mitigate climate change and to build a sustainable green economy.

Forests are affected by climate change and they need to adapt to it. The main challenge related to the legally binding agreement consists in balancing between the various forest functions and enabling the forest sector to make the largest possible contribution to tackle climate change, while maintaining the best possible combination of the other forest functions. However, it is imperative to avoid legally binding solutions which unduly favour one forest

function (such as carbon sequestration) over all the others. Afforestation measures should not therefore privilege some forests functions over others: tree species with a proven commercial value must not be neglected. EOS calls for reliable data gathered across the whole value chain as the basis of any decisions related to afforestation.

The legally binding agreement on forests should favour the long-term development of the forest-based industries and overall simplify the regulatory framework in order to combine solutions to mitigate the environmental impact of forests utilisation with measures to promote the development of the forestry community.

Over the last decade a range of initiatives have set up different private verification systems aiming at assuring over the quality of forest management. The share of forests certified is distributed highly unevenly. 20% of the forest area in the ECE region is certified for sustainable forest management, whereas only 3% of forests are certified outside Europe, North America and Russia. In particular, 63% of European forests are certificated, 36% of North American ones are certified, while everywhere else certified forests make up way below than 10% of total forests. In July 2017, more than 69 million hectares (or 16%) of all certified forests globally were double certified to both PEFC and FSC. Double certification exists because foresters in different

parts of the world have chosen to use both PEFC and FSC certification for their forest management units to prove their sustainable forest management practices. But the presence of two partially overlapping systems creates a cumbersome situation which significantly increases bureaucracy for all stakeholders across the value chain; the confusion created by the present system might even endanger what should be the main aim of certification, that is the wellbeing of forests. Therefore, the legally binding agreement on forests should create the basis for the unification of the certification systems in order to provide consistent and reliable information on the origin of timber and on the quality of forest management.

Establishing a single method will enable producers to manage their traceability systems in an efficient and transparent way, providing reliable and trustworthy information on the environmental and social integrity of wood products. At the same time, it will reduce costs for forest owners without lowering the quality of sustainable forest management.

The success of this process for defying a legally binding agreement on forests depends on the forest sector and Member States articulating solutions with a united voice. EOS expressed gratitude to the signatories of Forest Europe for having had the opportunities to present its view.



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6.8 The forest city project 2019

On 21 March 2019, the European Sawmill Organisation celebrated the International Forest Day by co-hosting a high level discussion where representatives of the industry and of green interests confirmed their commitment to identifying solutions for a sustainable and environmentally friendly economic growth.

With a new European Parliament and European Commission coming into office in 2019, the event aimed at ensuring that forests and sustainable wood products are valued for their role in climate change mitigation.

- ➡ The theme of 2019 “Forest City Project” is “The Role of Forests in Advancing EU Climate Action”. Participants in the 2019 edition were invited to share support to the use of wood as a climate friendly material using the shorthand reference: **#Wood4Climate**

As recognized by the Paris Agreement, sustainably managed forests play a central role in climate change mitigation and adaptation. Trees offer manifold environmental benefits: from the sequestering and storing of carbon, to stabilizing soil to prevent natural hazards and safeguarding provisions of clean water and air. As a renewable resource, forests are at the heart of a sustainable bio-based economy. Wood-based materials can act as carbon sinks and reduce carbon emissions, serving as a substitute for fossil-based materials and energy.

At this March event, Michael Proschek-Hauptmann, Head of Compliance and Sustainability, Schweighofer Group gave a presentation on the role of wood products as a climate change mitigation solution. He recalled as well that “sustainability in forests means equal emphasis on the social, environmental and economic aspects. Through Sustainable Forest Management (SFM) it is possible to maintain forest ecosystem health and vitality while preserving biodiversity”. The EOS Member, Mr Proschek-Hauptmann, was kindly requested to take part in the debate due to his knowledge about sustainability aspects in forestry related issues.

Mr Proschek-Hauptmann recalled that while you may not connect healthy forests with selling wood, they are actually intimately connected. Landowners need income to pay ongoing costs for forest management activities such as maintaining roads and clearing out invasive species, as well as to cover annual property taxes. Income from woods can help with this and encourage landowners to invest in forest sustainable forest management. Markets for wood products aren't just important for landowners, they are important for keeping employment in rural communities.

In the framework of the “Forest City Project”, an article was published in the correlated event's magazine was prepared and it is reproduced in the following pages.

The article aims at being a tool for urging that forests and sustainable wood products are valued for their role in climate change mitigation.



Panellist included: Hugo Schally, Head of Unit, Multilateral Environmental Co-operation (DG Environment), Hannah Mowat, Campaigns Coordinator, FERN, Andreas Kleinschmit von Lengefeld, Directeur Innovation Recherche et International at the “Institut Technologique” and Mr Tapio Kytola from the Finnish Permanent Representation to the EU, who concluded the debate providing a “take home message” for the next EU Presidency.



In view of this specific political momentum (the new European Parliament and European Commission will be in place by the second half of 2019), the purpose of the article is twofold:

- Summarising the role of wood in a climate change perspective;
- Presenting the Sawmill Industries Blueprint for EU Climate Action on Forests & Wood Products.



WOOD PRODUCTS

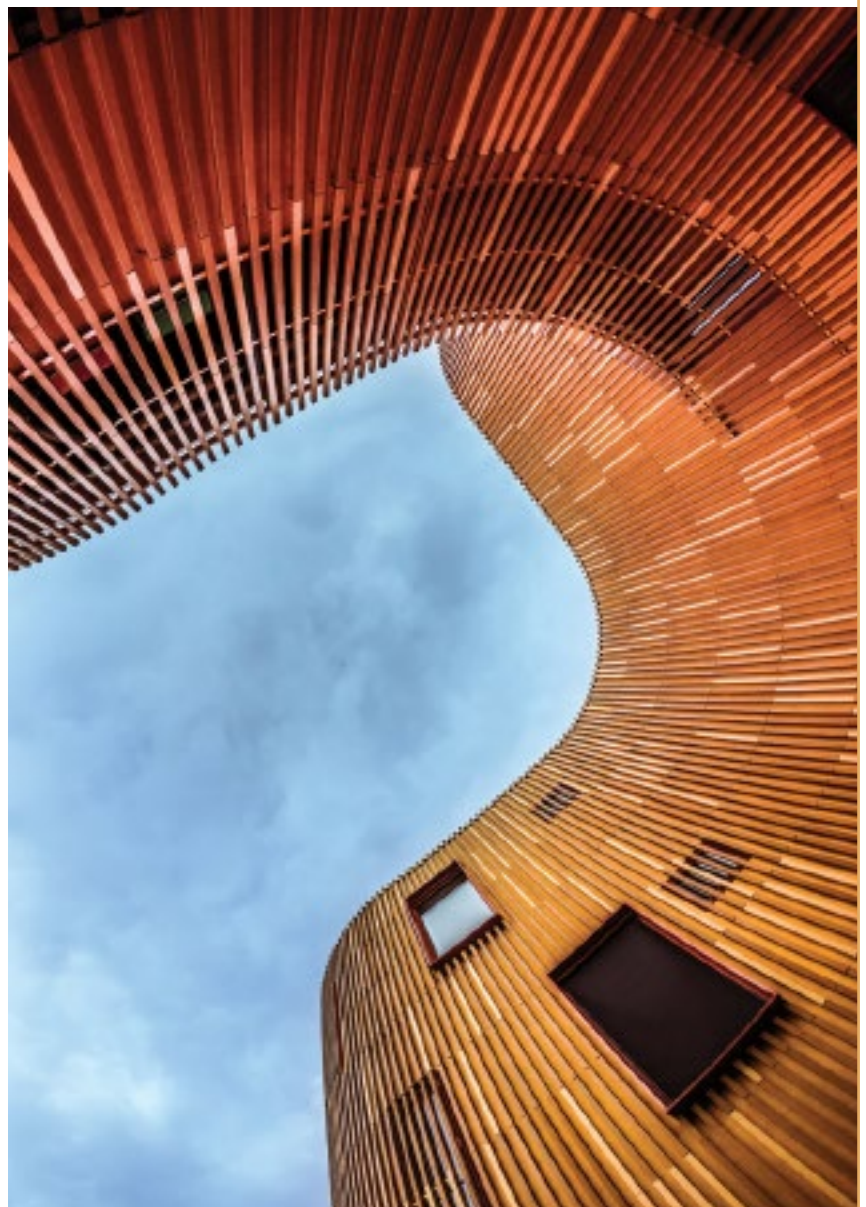
#Wood4Climate

WRITER: SILVIA MELEGARI

Europe is moving towards better and greater climate action on forests inside and outside the Union – the manifold forest- and wood-based products will play a pivotal role, if managed more sustainably.

The latest findings of the IPPC Report are clear: rising temperatures are affecting our climate and consequently our environment and the functioning of our world. Our economy is affected as well. Global warming can be attributed to two factors, those that occur naturally and those that may be anthropogenic (human-activity-induced). Human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels, with a likely range of 0.8°C to 1.2°C. Global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate.¹

Coherent and holistic solutions are needed to reduce and remove the emission of greenhouse gases from the atmosphere. It is imperative to combat climate change and at the same time avoid curbing economic and social development. Sustainably managed forests and products derived from these forests play an essential role in mitigating climate change by reducing greenhouse gases emissions and contribute to an environmental-friendly economic growth. The positive effects of using wood from sustainably managed forests can be strengthened if actions are taken to use more long-life wood products.



REVOLVE SPRING 2019



2

Growing trees absorb carbon dioxide from the air and convert it to oxygen, which is then released and stored as carbon in their branches, leaves or needles, trunks, roots and surrounding soil. When trees start to decay, or when forests die due to wildfire, insects or disease, the stored carbon is released back into the atmosphere. In any of these cases, the carbon cycle begins again as the forest is regenerated, either naturally or by planting. Forests managed for timber have an important role to play in conserving global biodiversity. Scientific studies proved that unmanaged forests are often susceptible to disturbances including insect and disease outbreaks and generate a much greater carbon debt if they are combusted during a wildfire, rather than a managed forest with much less dead and dying fuel wood.

Harvested wood products store carbon over time depending on the type of products and how they are used over short and long time-scales. Harvested wood products create an opportunity to provide long-term carbon reduction benefits by storing carbon and by substituting more energy-intensive materials. Manufacturing wood into products requires far less energy than other materials – and almost no fuel

energy. Indeed, most of the energy comes from converting residual bark and sawdust to electrical and thermal energy, adding to wood's light carbon footprint.

Harvested wood products create an opportunity to provide long-term carbon storage benefits by storing carbon and by substituting more energy-intensive materials.

The benefits of wood

Increasing the use of wood or wood-based materials in construction and in products such as furniture, cabinets, flooring, doors and window frames represents a significant opportunity for emission reductions. With growing pressure to reduce the carbon footprint in buildings, designers are increasingly called upon to balance functionality and cost objectives with reduced environmental impact. Wood is a natural choice. It's renewable, recyclable, and has a lighter



1. Source: Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. Learn more: www.ipcc.ch/

2. Wooden building at Camber Sands beach, United Kingdom. Photo: Oliur

WOOD PRODUCTS

carbon footprint than other construction materials. Additionally, it is the only structural building material with third-party certification systems in place to verify that products come from a sustainably-managed resource. European producers use wood coming only from sustainably-managed forests to ensure that the wood we use minimizes its footprint on local ecology, habitats and peoples.

The need for more urban housing and the engagement for climate change mitigation imposes building solutions with low energy and low carbon footprints. Wood offers us a new way to think about sustainable buildings. On average, when we substitute wood for energy-intensive building products, we

offset two tons of carbon emissions for every dry metric ton of wood used. This occurs because we are eliminating fossil fuel emissions that would have been released into the air had we used more energy-intensive materials, thus adding to the net benefit of wood.

New advances in engineered wood are allowing the construction of tall, safe, and more economical wood buildings. Moreover, wood has a higher insulation rating compared to other materials as a result of its natural cellular structure. Using wood helps to save energy over the life of a building, as its cellular structure provides outstanding thermal insulation: as per estimations, 15 times better than concrete, 400 times better than steel and 1 770 times better than aluminium.

When forest products are used in construction, they continue to store carbon for the whole life of the structure and beyond when wood fibre is recycled or reclaimed. The possibility of re-using wood products (after one service unit) is another important climate benefit characteristic of this material. Wood can be re-used as product either for the same purpose as before or for less demanding purposes after simple reshaping, for example from structural timbers to flooring. Even if wood products after one service unit are not qualified for further use, they can still be reprocessed for making new wood-based products or be used as a source of renewable energy. ●



3. Villa Heekholland, Hook of Holland, Netherlands.
Photo: David Peters

4. Wood cellular structure provides outstanding thermal insulation: 15 times better than concrete, 400 times better than steel and 1 770 times better than aluminium.
Photo: Clarisse Meyer



Created in 1958, the European Organisation of the Sawmill Industry (EOS) is a Brussels-based non-profit association representing the interests of the European sawmilling sector on European and International level. Through its member federations and associated members, EOS represents some 35.000 sawmills in 13 countries across Europe (Austria, Belgium, Croatia, Denmark, Finland, France, Germany, Latvia, Norway, Romania, Sweden, Switzerland and the United Kingdom) manufacturing sawn boards, timber frames, glulam, decking, flooring, joinery, fencing and several other wood products. Together, they represent 77% of the total European sawn wood output and a turnover of almost 37 billion EUR with over 259,000 job opportunities annually in the EU.

www.eos-oes.eu

A Blueprint for EU Climate Action on Forests & Wood Products

To mitigate climate change, we need to reduce greenhouse gas emissions and store more carbon. Healthy forests can do both. For this reason, governments and organizations can improve their social responsibility and reduce their environmental footprint through policies and procurement processes that encourage the use of wood products coming only from sustainably-managed forests. Wood products, legally-sourced from sustainably-managed forests, can play a key role in decarbonizing the economy – due to their lower carbon footprint compared to other materials and the CO₂ stored in them – while boosting the circular bioeconomy.

In line with the objectives of the 2015 Paris Agreement, the European Sawmill Industry aims to strengthen climate change mitigation through European policies that balance environmental, social and economic aspects. The following list encapsulates the main priorities of the sawmill industry:

- A comprehensive and coherent approach to sustainable forest management for the promotion of healthy forests that absorb more CO₂ and produce renewable wood products will have a large impact in reducing CO₂ emissions.
- Using 98% of logs coming from the European forests, the sawmill industries have played (and continue to play) a crucial role in shaping the landscape, economy, and culture of the forestry sector in Europe. Ensuring the longevity of forest resources through the implementation of sustainable forest practices has been always a concern for sawmill operators. As first transformer of forest biomass, the European sawmill industry is the key driver of the forest based bio-economy. Thereupon, in order to guarantee to the sector a reliable raw material supply is of utmost importance to:
 - Implement climate policy objectives which do not neglect a sustainable mobilization of wood resources
 - Encourage silvicultural practices to enrich the timber size and quality
- Assessing the impact of decisions affecting the use of forest resources should be more coherent and take into

considerations the cross-sectoral effects of wood product use and net impacts on the bioeconomy.

- Need to create markets – within and outside Europe – for traditional and innovative new wood products supports sustainable forestry, helps to counteract greenhouse gas emissions, and puts the timber industry at the forefront of a carbon-free Europe.
- Need for a level playing field: products entering the European market must comply with the high environmental and social standards that characterize the European Union.
- Need to recognize the environmental benefits of using wood products instead of more energy-intensive materials by assuring that carbon accounting systems are full-life cycle accounting systems.
- Need to support performance-based public procurement policies for building materials and foster tools to strengthen Green Public Procurement from more public sector entities.

The transition to a low-carbon economy presents significant opportunities and challenges. The European sawmill industry has the potential to boost the economic growth of Europe with the use of wood products while addressing climate change. Enhancing the competitiveness of the European sawmill industry and advocating for using more sustainable wood products contributes to sustainable and environmentally friendly economic growth for Europe.

6.9 Bioeconomy

The European Bioeconomy Strategy and its Action Plan emerged in 2012 from the Innovation Union and Resource Efficient Europe flagship initiatives of the EU 2020 strategy, recognising that the bioeconomy, currently worth EUR 2.3 trillion in turnover and accounting for 8.2% of the EU's workforce, plays a central role in addressing a number of key interlinked challenges.

The European Commission defines the bioeconomy as “the production of renewable biological resources and the conversion of these resources and waste streams into value added products, such as food, feed, bio-based products and bioenergy. Its sectors and industries have

strong innovation potential due to their use of a wide range of sciences, enabling and industrial technologies, along with local and tacit knowledge.” Source: “Innovating for Sustainable Growth - A Bioeconomy for Europe” (2012). Furthermore, the European Commission recognises that a strong bioeconomy will help Europe to live within its limits. The sustainable production and exploitation of biological resources will allow the production of more from less, including from waste, while limiting negative impacts on the environment and reducing the heavy dependency on fossil resources, mitigating climate change and moving Europe towards a post-petroleum society.

6.9.1 Update of the Bioeconomy Strategy

On 11 October 2018, the EU Commission published the update of the Bioeconomy Strategy aiming at accelerating the deployment of a sustainable European bioeconomy so as to maximise its contribution towards the 2030 Agenda and its Sustainable Development Goals (SDGs), as well as the Paris Agreement.

The new Commission's document responds to the main challenge to achieve sustainability while modernise industries and reinforce Europe's position in a highly competitive global economy, thus ensuring the prosperity of its citizens. Maximising the impact of EU Research and Innovation is key in this respect.

For this reason, for the next Multiannual Financial Framework for 2021-27 the EU Commission intends to give a significant boost for systemic research and innovation in the areas and sectors covered by the bioeconomy, in particular with EUR 10 billion foreseen for the Horizon Europe cluster for “Food and Natural Resources”. In addition to research and innovation grants under Horizon 2020, the EU will deploy a targeted financial instrument - the EUR 100 million Circular

Bioeconomy Thematic Investment Platform - to de-risk private investments in sustainable solutions.

FOCUS ON FORESTRY & WOOD PRODUCTS INTRODUCTION

A sustainable European bioeconomy is necessary to build a carbon neutral future in line with the Climate objectives of the Paris Agreement.

Delivering a sustainable circular bioeconomy requires efforts by public authorities and industry. To drive this collective effort, and based on three key objectives, the Commission will launch 14 concrete measures in 2019, including:

1. Scaling up and strengthening the bio-based sectors

- establish a €100 million Circular Bioeconomy Thematic Investment Platform to bring bio-based innovations closer to the market and de-risk private investments in sustainable solutions;

POSITIVE ACKNOWLEDGEMENT: KEY ROLE OF WOOD PRODUCTS

In terms of its environmental benefits, the bioeconomy can contribute to the defossilisation of major industries, such as the energy and transport sectors, the chemical industry (e.g. plastics) and the construction sector (use of wood and its composites with other materials in the construction industry as a substitute for non-renewable building materials, such as steel and concrete with possibly lower use of energy and greenhouse gas emissions). Wood products have significantly lower greenhouse gas emissions than fossil material alternatives over the complete life cycle of the product (including use and disposal), yielding an average saving of 1.5 to 3.5 tons of carbon dioxide emissions per 1 ton of wood products used, instead of construction materials such as concrete.

- facilitate the development of new sustainable bio-refineries across Europe.

2. Rapidly deploying bioeconomies across Europe

- develop a strategic deployment agenda for sustainable food and farming systems, forestry and bio-based products;
- set up an EU Bioeconomy Policy Support Facility for EU countries under Horizon 2020 to develop national and regional bioeconomy agendas.

3. Protecting the ecosystem and understanding the ecological limitations of the bioeconomy

- implement an EU-wide monitoring system to track progress towards a sustainable and circular bioeconomy;
- enhance our knowledge base and understanding of specific bioeconomy areas by gathering data and ensuring better access to it through the Knowledge Centre for the Bioeconomy;
- provide guidance and promote good practices on how to operate in the bioeconomy within safe ecological limits.

The sustainable European bioeconomy is necessary to build a carbon neutral future in line with the Climate objectives of the Paris Agreement. In this respect, the update bioeconomy strategy recognises that **in the construction sector engineered wood offers great environmental benefits** as well as excellent economic opportunities. Bioenergy, currently the EU's largest renewable energy source, is expected to remain a key component of the energy mix in 2030 and contribute to meet the EU renewable energy targets.

FORESTRY

*The European Commission will actively support and promote **all types of innovations and practices for sustainable food and farming systems, forestry and bio-based production** through a systemic and cross-cutting approach linking actors, territories and value chains.*

The Commission will develop a Strategic Deployment Agenda which will provide a long-term vision on pathways to deploy and scale up the bioeconomy in a sustainable and circular manner. This systemic approach will address, amongst others: **“new opportunities arising for the forestry sector in view of replacing non sustainable raw materials in construction, packaging with bio-based materials** and for providing more sustainable

innovations in sectors such as forestry-based textiles, furniture and chemicals, and new business models based on the valuation of forestry ecosystem services”.

FORESTRY KEY DATA

The agriculture, forest-based and marine sectors (mainly aquaculture and fisheries) are the main primary producers/suppliers of biomass. The average EU-28 annual domestic biomass production from the land-based sectors (forestry and agriculture, excluding pastures) is 1466 megatonnes of (above ground) dry matter (wood production 510 Mt -78,9% steam wood).

About 84% of the EU forest area is considered potentially available for wood supply. In this area 444 megatonnes of wood grow every year (wood net annual increment, i.e. excluding losses due to natural mortality of trees). The EU average wood harvest rate is around 65 % of the wood net annual increment, though such rates vary widely across the member states. This results in many cases in an increase of forest-based woody biomass stock over time (around 100 megatonnes of carbon annually and approximately 9% of Europe's fossil fuel emissions). However, reported harvesting is likely to be consistently underestimated by up to 20%, meaning that biomass availability is actually higher than statistically recorded. Over 95 % of roundwood used by the EU's wood-processing sector comes from EU forests. There is a potential for increasing harvest rates and wood mobilisation to provide additional quantities of woody biomass without exceeding the total annual increments, in order to maintain a domestic EU wood supply to the existing wood-processing industries, and also to service the growing demands from bio-based materials and products within the bioeconomy. Yet, trade-offs with other forest ecosystem services - e.g. carbon sink, nature conservation, recreation, soil and flood protection – need to be carefully assessed. The implementation of sustainable forest management principles, as enshrined in the EU Forest Strategy, must ensure sustainable wood mobilisation in the EU.

- According to the Standing Committee of Agricultural Research Foresight on Sustainable Agriculture, Forestry and Fisheries in the Bioeconomy, the BIOBOOM scenario foresees that the amount of biomass used globally for biobased materials and chemicals could grow from 1.24 billion tons in 2012 to 5.7 in 2050, while the BIO-MODESTY scenario assumes that the growth in demand for biomass for materials and energy will be relatively low.

WOOD IN COSTRUCTION

The bio-based sector does not only contribute to growth and jobs but can also help to sequester carbon through its long-term storage e.g. in wooden and woody biomass-based products.

In the construction sector, greater use of wood as a substitute for more energy-intensive non-renewable building material can reduce greenhouse gas emissions. According to a report from the Food and Agriculture Organization (FAO) of the United Nations an analysis of 21 studies on mitigation potential of wood use in buildings and furnishing showed that most studies concluded that wood products have lower greenhouse gas emissions than alternatives over the complete life cycle of the product (including use and disposal). Analyses of the average impact of using wood instead of concrete suggest an average reduction of 2.1 tons of carbon dioxide emissions per 1 ton of wood products used.

A 1% increase of European wood-based products in the market share of the global construction, textile and plastics markets could generate a revenue for the European wood-based bioeconomy in the scale of EUR 10 to 60 billion. This would amount to 3% - 20% of the current total turnover of the EU forest industry. The additional industrial roundwood use of this 1% increase would be at least 83 million cubic metres, which would be 23% of the total industrial roundwood production in the EU in 2016 (355 million cubic metres, data FAOSTAT). However, while the annual harvest would still be below the net annual increment, such an increase in the EU roundwood utilisation would reduce the EU's carbon sink, therefore trade-offs across all bioeconomy areas need to be carefully considered.

WOOD PRODUCTS IN A CIRCULAR PROSPECTIVE

The bio-based sector does not only contribute to growth and jobs but can also help to sequester carbon through its long-term storage e.g. in wooden and woody biomass-based products.

Advances in bio-based innovation foster the circularity of the bio-based sector and the whole bioeconomy by enabling the processing of current side streams, residues and waste into products. For instance, side streams of both wood working industries and pulp, paper and board manufacturing can be converted into large number of new bio-based products

with new functionalities (e.g. nanocellulose, carbon nano-fibres, adhesives, normal and intelligent textiles, flexible electronics, 3D printing applications). The technologies also enable biowaste and residues from farms and forest-based sector, from cities or from the food sector to be transformed into bio-based products such as chemicals, organic fertilizers, biofuels and eventually heat and power, if a more circular use is not possible.

KEY ACTIONS

To ensure that the bioeconomy operates within the planetary boundaries, first and foremost a robust assessment of the amounts, types, qualities and impacts of the sustainable production and use of biomass from all sources is needed.

Notwithstanding the wealth of information available, significant data gaps remain, impeding fully assess the different impacts of the bioeconomy. Notably, information is still scarce on how much biomass is available and can be mobilised sustainably, how much is being used and for which purposes, and how the increased pressure on natural resources can be reconciled with environmental, economic and social sustainability in Europe and globally.

Specific Action: Enhance information and the knowledge base on the bioeconomy, including sustainable biomass supply and demand, and forward looking, cross-sectoral assessments, and make it accessible through the Knowledge Centre for Bioeconomy.

As part of the development of the Forest Information System for Europe, specific sections in the system will address the data and information needs to support the sustainable development of the bioeconomy, to support assessing the sustainable availability of domestic biomass resources in the context of climate change and biodiversity loss Indicators.

A large and growing number of EU and national policies draw on, or affect directly and indirectly, Europe's forest ecosystems and their services. As the need for renewable materials and energy increases, **the demand for various types, dimensions and qualities of woody biomass is on the rise as well.** There is hence a need for improved efforts to provide more accurate, frequent and harmonised data and assessment tools on the status and management of forest ecosystems through the FISE.

In particular, this action would help the European Commission and all other relevant players to:

- a) analyse economic, social and environmental impacts of the future development of the EU's and global bio-based economy on the EU's forest-based and related industries;
- b) support policy initiatives at EU and Member States levels to mitigate negative impacts but also enable or enhance positive impacts;
- c) identify other necessary and/or desirable enabling and/or mitigating actions and their actors;
- d) inform the EU's long-term forest growth and biomass availability scenarios and assessments.

Promote and/or develop standards and emerging market-based incentives, and improve labels applicable to bio-based products on the basis of reliable and comparable data on environmental and climate performance

Product policy environmental oriented instruments such as Green Public Procurement (GPP) and the EU Ecolabel should only promote the increased market uptake of bio-based products and processes if they are proven to be beneficial also from an environmental perspective. One of the key elements in determining their potential superiority is that their life cycle environmental performance is better than existing alternatives. EU methods for measuring life cycle environmental performance in a comparable way exist: these are the Product and Organisation Environmental Footprint methods (PEF and OEF, respectively), adopted by the Commission in 2013. The methods were developed based on existing standards with the aim of making results comparable, reproducible and reliable.

- They accommodate a broader suite of relevant environmental performance criteria, allowing to calculate in a harmonised way 16 different impacts (including climate change, direct land use, water use, acidification, eutrophication and resource use, of a product, a service or an organisation by looking at the entire value chain (from cradle to grave). The methods were field tested in collaboration with Member States, NGOs and 25 industry sectors, including 11 pilots related to feed and food products. For these product groups, the European Commission made freely available more than two thousand Life Cycle Inventory data, which are adequate for comparing similar final products and are used in combination with primary data to do so.

Through relevant funding programmes and by 2025, the EU Commission (and Member States, when relevant) will:

- 1) **Address methodological and data challenges**, through EU funds such as LIFE, the Horizon programmes and other funding opportunities would contribute to their development. Covering these developments with EU funds would also help to make them available for free to any user in the world, further reducing the cost of access to users and strengthening the environmental assessment of bio-based products and their supply chain. Member States should contribute to the creation, update and maintenance of such datasets. The number of datasets to be developed will depend on the type of bio-based products and their supply chains that will be identified as priority. Considering that biomass is an important environmental hotspot, it could be one of the priorities for data development.
- 2) Propose, whenever relevant and possible, to **consider the inclusion of specific requirements promoting bio-based materials and products during the development of EU Ecolabel and GPP criteria** for new or existing product groups, according to Environmental Footprint²⁴⁷ results, and in line with available EU standards and technical reports,²⁴⁸ as well as with the strategic approach for EU Ecolabel and GPP. The action will contribute to the Circular Economy and potentially to the Plastics Strategy.
- 3) **Promote and/or develop existing standards and labels** and emerging market-based incentives for bio-based products.

These combined actions will allow for the full exploration of the potential of biobased products, analyse their Environmental Footprint in comparison to alternative fossil-based products, and allow their promotion on markets, boosting consumer confidence and their uptake.

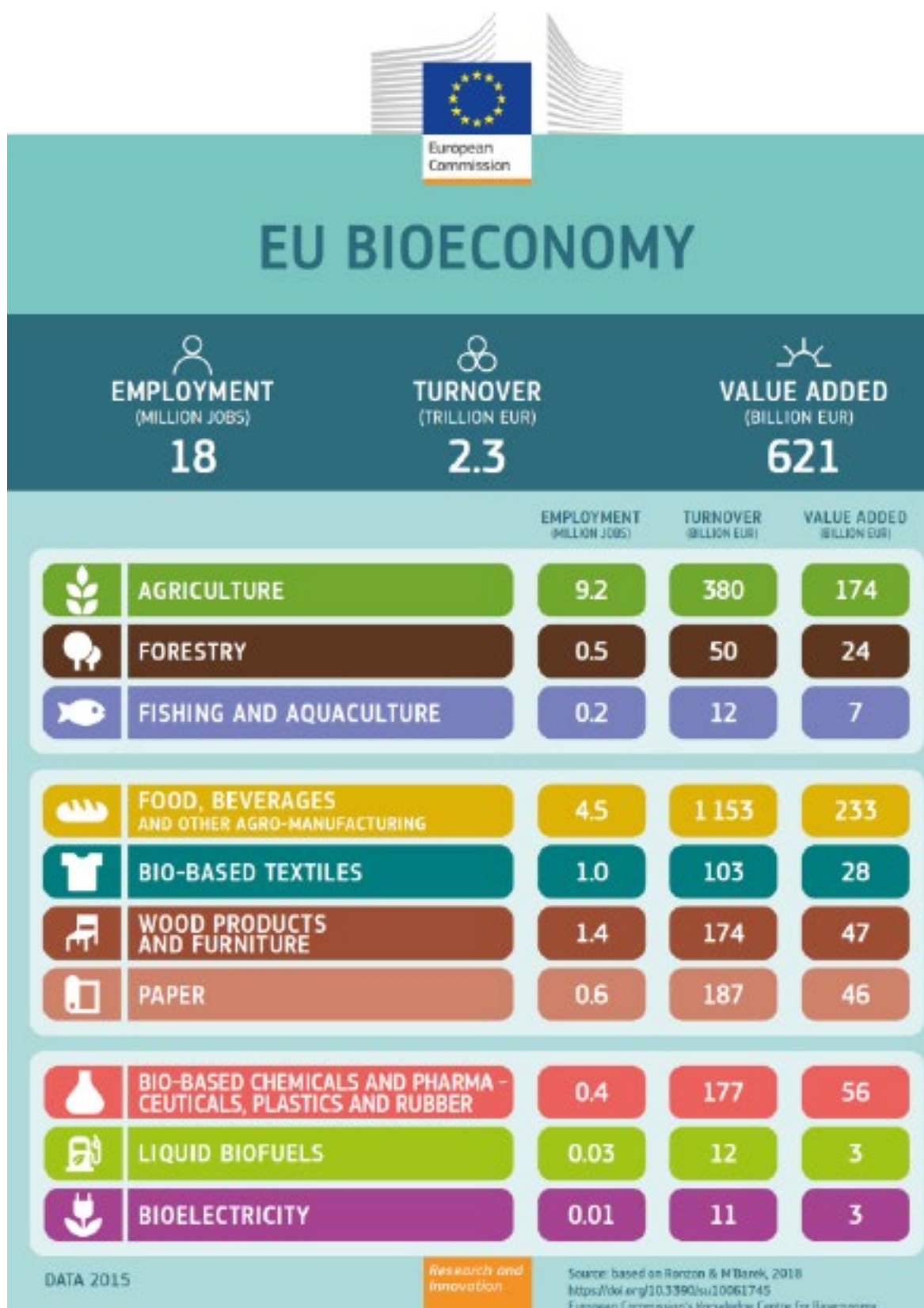
OVERALL CONCLUSIONS

*The finite biological resources and ecosystems of our planet are essential to feed people, provide clean water and affordable and clean energy. **A sustainable bioeconomy is essential to tackle climate change and land and ecosystem degradation.***

It will address the growing demand for food, feed, energy, materials and products due to an increasing world population, and reduce our dependence on non-renewable resources. Deploying a sustainable and circular bioeconomy will boost the competitiveness of the bioeconomy sectors

and support the creation of new value chains across Europe while enhancing the overall status of our natural resources. Such a bioeconomy will rely and capitalise mainly on domestically available sustainable renewable resources,

and on advances in sciences, technologies and innovations merging the physical, digital and biological worlds, in some of the EU's most significant sectors and industries.



Wood in Construction - 25 cases of Nordic Good Practice

On 19 April 2019, the European Commission published on its “Bioeconomy webpage” the publication on “Wood in construction - 25 cases of nordic good practice”.

Abstract. Building with wood has an untapped potential to transform the construction industry and create the next generation of low-carbon and healthy buildings. The Nordics, with an abundance of sustainably managed forest resources and a long history of building in wood, are well placed to lead in this construction revolution. Across the wood in construction value chain, from forestry and processing, through production and design, to construction and decommission, the Nordic region is innovating to build bigger and more sustainably with wood than ever before. This publication features 25 Nordic cases from across the value chain working with wood in exciting and innovative ways. These projects demonstrate the benefits and drivers for building with wood, and provide inspiration

for architects, land managers, city planners, designers, suppliers and many more. The 25 cases point to five trends within Nordic wood in construction that paint a picture of where the industry is headed: 1) multifunctionality; 2) saving time and costs; 3) investing in scalability; 4) pushing the boundaries; and 5) circular design. The team behind this report – the Nordic Wood in Construction Secretariat – is an initiative commissioned by the Nordic Council of Ministers and the Swedish Government, and hosted by EIT Climate-KIC. The secretariat’s aim is to support and accelerate the use of wood in Nordic construction through a portfolio of projects, fostering greater dialogue, knowledge-sharing and collaboration between stakeholders from the private sector, public sector, and academia.

Copy of this publication is available here:

<http://norden.diva-portal.org/smash/get/diva2:1297443/FULLTEXT03.pdf>

6.9.2 Report by the European Economic and Social Committee on the “Communication updating the 2012 Bio-economy Strategy”

Currently only the European Economic and Social Committee (EESC) is working on the “Communication updating the 2012 Bio-economy Strategy”.

On 28 February the EOS Secretariat attended the hearing organised by the EESC and proposed to include the several sawmill-related considerations to the EESC report (*inputs presented orally and in a separate email to the EESC expert.*)

From the discussion emerged that the EESC recognises that bioeconomy provides options for reducing CO₂ emissions and reliance on imported fossil resources. “For example, EU forests sequester an amount of carbon corresponding to 10% of the EU’s yearly emissions, while providing a sustainable and constant supply of biomass for renewable energy. Furthermore, estimates show that 100 000 chemicals currently in production can, in theory, be sourced from renewable raw materials. This does not mean all of them should be, but it is theoretically possible. This will not only offer the possibility of producing our everyday household items locally and renewably, it will also help create jobs, particularly in coastal and rural areas, and growth in Europe, where the technological edge still remains strong. According to industry estimates, one million new jobs could be created by 2030 in the bio-based industries. However, major barriers remain on the path towards greater innovation within the

EU bioeconomy. An important obstacle relates to product cost-competitiveness, both compared to fossil alternatives and to equivalent products from elsewhere in the world. Cost-competitiveness is affected by many factors, including technology readiness level, labour costs, fossil fuel subsidies and amortisation, as well as the low level of market support for bio-based products. This competitiveness issue is compounded by difficulties in accessing finance for innovative projects and production facilities and, often, ongoing low end-user awareness of bio-based products, as well as by a lack of skills and operational relationships to drive the sector forward. Moreover, permit procedures for new bio-based projects are becoming lengthy and burdensome, leading to significant legal uncertainties and financial risks for economic actors”.

The EESC Opinion on the bioeconomy is expected to be adopted in June 2019.

Inputs presented orally and in a separate email to the EESC by EOS

Approximately, 98% of the logs processed by the European Sawmill Industries comes from European forests. In an evolving green economy the European Sawmill Industry plays a key role and it can be defined as the **backbone of the circular bio-economy**.

Indeed, residues from sawmill processes can be converted into a broad range of wood-based products including bio-composite materials, bio-bioplastics, textiles and carbon-neutral biofuels. Simultaneously, the production of saw-logs, and the correlated use of by-products and residues, complies with the resource efficiency principle, guarantees the highest profitability for forest owners and assures the raw materials needed for developing the bio-economy. Sawmill residues can be used further processed and be transformed in biodegradable additive for the manufacturing of mortars and concrete.

From an economic point of view, the largest sources of income (80%) for forest owners (both private and public) come from the sale of logs to the sawmill industries. When discussing the forest-base bio-economy, it is undeniable that the sawmill industry plays a central role.

Nevertheless, a reliable wood supply is a major challenge for the sector. Forest change caused by the climate, forest pests but also trade, cause significant variability for the sector. Regarding the trade issue, logs ban currently in place in territories such as Ukraine and Belarus and logs exports such as the “China-Europe Wood Industry Committee” initiative created in order to facilitate the logs trade from Europe to China negatively impact raw material supply. If we look at the hardwood sawmill industries, this subsector has lost 30% of its sawmill in France in the last 10 years. Similar situation is faced by the hardwood sawmill in Germany and Belgium. Moreover, in 2017 China imported from Poland 40ths m3 of softwood roundwood. In 2018 – almost 1mln.

- From an economic point of view, the largest sources of income (80%) for forest owners (both private and public) come from the sale of logs to the sawmill industries that use on approximative average, 98% of logs sourced from European forests. When discussing the forest-base bio-economy, it is undeniable that the sawmill industry plays a central role and should be seen as a key component of it.
- The forest bio-economy relies on renewable biological resources to produce added values materials contributing to Europe’s growth, offering opportunities for innovation and jobs especially in Europe’s rural areas. Reliable wood supply is a major challenge for the forest-based industries. Forest change caused by the climate, forest pests but also trade, create uncertain for the sector. Regarding the trade aspects, logs bans or export limitations currently in place in territories such as Ukraine and Belarus and logs exports dramatically affect wood availability and reduce the opportunities for developing a strong bio-economy in Europe.
- With a view of enhancing the European forest bio-economy the EESC call for:
 - Creating favourable market conditions for the entire European Forestry Industry chain including necessarily opportunities for the micro and small forest-based industries. A comprehensive funding approach (beyond the R&D and pre-commercial stages) in order to commercialise new products is needed.
 - Implementing climate policies objectives which do not neglect a sustainable mobilisation of wood resources. EU forests have contributed to climate mitigation already for decades accumulating more timber volume (growing stock) than was harvested.
 - Encouraging silviculture practices to enrich the timber size and quality in order to respond to market preferences for species and quality and responding to environmental needs.

6.10 European Raw Materials Week 2018

The third edition of the Raw Materials Week took place in Brussels from 12 - 16 November 2018. The event was organised in order to discuss and exchange views on all relevant issues: policy, technology, international cooperation, framework conditions, etc.



For the first time, the European Raw material week had a session dedicated to the Forest-Based Industries 2050. On this occasion the EOS Secretariat was invited to give a presentation on the sectoral information needs, including data gaps and data inconsistencies. While the EOS President Sampsa Auvinen was invited as a panelist to share his views on the future perspectives of the forest-based industries over the next thirty years.

In a nutshell, the presentation that the EOS Secretariat gave was about:

- Data inconsistencies and gaps in the Joint Forest Sector Questionnaire and consequently the related databases that draw their data from it;
- Inconsistencies between nomenclatures which classify products also damage the quality of data;
- General information gaps that prevent full understanding of markets, for example;
- The future forest composition and distribution: the European Environmental Agency reports that the supply of softwood species will decrease in many parts of Europe whereas the supply of hardwood species will increase. This is in contrast to long-term trends in the market which have seen the demand for sawn softwood on the rise in the last two decades, while the demand for sawn hardwood is stable;
- Lack of Harmonised System codes for mass timber construction products such as glulam and CLT;

- Lack of a pan-European database on wooden housing starts.

Moreover, EOS called for establishing an operative task force within the competent working groups of the EU Commission in order to identify the strategic information needs of the industry sub-sectors for 2050.

A letter of support for this initiative has been circulated amongst the Brussels' based organisations representing the Forest-Based Industry.

The colleagues of the other sub-sectors and as a result of that EOS, together with many organizations representing the interest of various sub-sectors of the forest-based industry, officially asked to the European Commission to set up a task force to try and address those issues.

Following this initiative, on the 7th of March, a preliminary meeting with the representatives of the EU Commission was organised. Associations representing the interests of the bioenergy, the paper sector and the forest sector were also present. As a result of this preliminary meeting, it was agreed that every sub-sector should with the Commission its data-related concerns by the 22nd March. Following that, the Commission will investigate whether the best option is creating a formal Task Force or if proceeding with the organisation of meetings in a more informal way.

Data gaps identified by EOS and sent to the European Commission (DG GROW)

How to Improve/Expand Existing International Databases – EOS Draft Input

Overall, there are good available databases in the woodworking industry. But there are some inconsistencies and gaps that prevent full understanding of markets.

The following are some of the suggestions of the European Organization of the Sawmill Industry:

- The EU Bioeconomy Strategy reckons that: “in the construction sector, greater use of wood as a substitute for more energy-intensive non-renewable building material can reduce greenhouse gas emissions”. However, at present, while national statistics are often available, a EU-level database on wooden building is lacking.

➔ **EOS thus calls for the creation of a database which would include at EU Country-level total number of housing starts – in a given year – and the percentage on this of wooden buildings.** In absence of this, it is challenging to track progress (or lack of it) in the greater use of wood as a building material.

- Engineered Wood Products such as gluelam, cross-laminated timber, laminated veneer lumber, are becoming more and more important in the market.

➔ **These products need to have their own code in the Harmonised System** (which is the international product nomenclature). EOS acknowledges that this process is ongoing at international level: products such as gluelam and CLT are expected to get their own well-defined code in the next revision which will go live in 2022. **EOS fully supports this process but also call to systematically track the production of these products**, which at present is not tracked.

- One of the main problems is the situation with NACE and CN nomenclatures. The Statistical classification of economic activities in the European Community, abbreviated as NACE, is the classification of economic activities in the European Union (EU); NACE is a four-digit classification providing the framework for collecting and presenting a large range of statistical data according to economic

activity in the fields of economic statistics. CN, the Combined Nomenclature is the classification used within the EU for the purposes of foreign trade custom tariffs and statistics and provides a degree of detail going beyond that in the Harmonised System.

➔ **The NACE system is based on economic activity, the CN on trade: two different point of views. However, data should be more aligned. If you extract data from the two sources you will notice huge differences.**

- Connected to the above, the main data source of the sector which informs some databases such as Eurostat or FAOStat is the Joint Forest Sector Questionnaire, which collects yearly data from countries about roundwood, charcoal, residues, pellets, sawnwood, veneer sheets, wood-based panels, wood pulp, other paper, recovered paper, paper and paperboard. However, the breakdown by softwood or hardwood species is unavailable.

Considering that the JFSQ uses the Harmonised System (HS) which is fully compatible with all national systems and the EU's CN, and considering that in the latter the breakdown by tree species is available, **EOS calls for the inclusion of figures at tree species level (at least the main ones) in international databases such as FAOStat – production of sawn spruce, sawn pine, sawn oak, sawn beech broken down by country.**





**To: Peter Handley
Malwina Nowakowska**

**Cc: Constanze Veeh
Jeremy Wall**

**European Commission
DG Growth
Unit C-2: Resource Efficiency & Raw Materials
BREY 11/166
B-1049 Brussels/Belgium**

Brussels, 06 February 2019

TACKLING DATA GAPS AND ASSESSING MARKET TRENDS: Kind Request to Establish a F-BI Task Force possibly in the Framework of the Expert Group on Forest-Based Industries and Sectorally Related Issues

Dear Mr Handley,

Dear Ms Nowakowska,

The European Forest-Based Industry (henceforth F-BI) is one of the important pillars of the European Union (EU) green economy. Universally recognized as a traditional manufacturing sector, over the last few years it has been displaying creativity and innovation, putting on the market a plethora of products that live up to the expectations of modern consumers. The usage of F-BI products remains one of the cornerstones of the multiple EU policies aiming at fostering the decarbonization of the economy and meeting the goals of the Paris Agreement.

In the light of the above, the potential of the F-BI products and the wood supply need to be properly tracked through correct and fully reliable data. A failure to do that might lead to misperceptions regarding the size and the prospects of markets, which, in turn, might lead to policy decisions based on mistaken assumptions.

Currently, the F-BI disposes of an overall good and vast basis of data, but many F-BI sub-sectors have noticed flaws in the available databases and also general information and knowledge gaps that prevent full understanding of markets. During the latest EU Raw Materials Week, in the session *Forest-Based Industries 2050* held on November 15, one of the issues raised by the F-BI was, indeed, that in the coming decades all stakeholders need to step up and improve the available data.

In the wake of this situation, the signatories of this letter kindly invite the European Commission to explore the possibility to create a Task Force potentially in the framework of the Expert Group on Forest-Based Industries and Sectorally Related Issues in order to address the aforementioned issues. Trusting that the EU Commission will identify the most appropriate organizational form of the Task Force (or, if necessary, a more appropriate forum), we would like to emphasize the following two sets of questions that should be prioritised:

- a) Identify data and information gaps in existing data sources/databases of the sectors (for instance, Eurostat, FAO, UNECE, Joint Forest Sector Questionnaire, Joint Wood Energy Enquiry, etc...);
- b) Identify general information gaps that prevent full understanding of some market dynamics.

An open list of expected outputs of the Task Force includes proposals on how to improve existing databases, and what kind of new studies/databases the F-BI needs to fill the identified knowledge gaps. Also, an important aspect to be addressed is the enhanced co-operation among the international bodies dealing with forest products markets and statistics to avoid duplication of efforts and bridge the existing gaps in a cost-effective manner.

As the issue is of high importance, the Task Force is expected to convene regularly, with its frequency to be discussed by stakeholders at a later moment. The exact set-up of the Task Force would be investigated during its first meeting. If needed, the signatories of this letter would be happy to provide clarifications to the Commission in a preliminary meeting.

Thanking you in advance for considering this proposal, we remain,

Kind Regards,

BIOENERGY EUROPE – The Voice of European bioenergy
 CEI-BOIS – European Confederation of Woodworking Industries
 CEPF – Confederation of European Forest Owners
 CEPI – Confederation of European Paper Industries
 EOS – European Organization of the Sawmill Industry
 EPF – European Panel Federation
 ETTF – European Timber Trade Federation
 EUSTAFOR – European State Forest Association
 FEP – European Federation of the Parquet Industry
 INTERGRAF – European Federation for Print and Digital Communication
 WEI-IEO – European Institute for Wood Preservation

6.11 The European Trade policy

6.11.1 Croatia: national measures against *Corythuca arcuata* and movements of oak logs

On occasion of the STANDING COMMITTEE ON PLANTS, ANIMALS, FOOD AND FEED held in Brussels on 11 october 2018 - 12 october 2018 (Section Plant Health) it was reported that Croatia reported on their national measures against *Corythuca arcuata* and movements of oak logs. In particular, Croatia presented the results of a study carried out to evaluate the efficacy of national measures in limiting the spread of the pest *Corythuca arcuata* on oak forests. During the exchange of views concerns were expressed about the

efficacy of the measures to allow a real eradication – or at least containment – objective. Moreover, some of the other affected Member States stated that they would not support the emergency measures undertaken by Croatia.

➡ As a conclusion the Commission requested Croatia to withdraw the national decree that is limiting movement and trade of oak logs. An official letter was sent to the Croatian competent authority.

6.11.2 Ukraine logs export ban

A law signed by the Ukrainian President Petro Poroshenko on July 7, 2015, banned exports of unprocessed hard wood from November 1, 2015. Still, exports of pine was allowed till January 1, 2017. At the beginning of 2017, Ukraine banned exports of pine wood despite pressure from EU to lift the wood export ban. The President of the European Commission expressed a wish and expectation to end the ban on exports of wood products from Ukraine.

The EU considers that the longstanding trade restriction by Ukraine is in violation of key trade provisions of the EU-Ukraine Association Agreement, which prohibit any form of export restrictions. While the EU strongly supports legitimate measures taken by states to preserve forests and to combat illegal logging, the EU has repeatedly stated that Ukraine's export ban cannot be considered an appropriate or effective measure for that purpose and has repeatedly offered co-operation in the area of forest preservation and management.

Last February 2019, the EU Commission officially published its requests for the bilateral dispute settlement consultations with Ukraine over wood export ban.

The bilateral dispute settlement consultations was expected to last 30 working days aiming at finding a solutions mutually acceptable to the parties to the dispute. If a solution is not found, a so called "arbitral panel" will have 100 days to identify the balance solution.

The EU considers that the longstanding trade restriction by Ukraine is in violation of key trade provisions of the EU-Ukraine Association Agreement, which prohibit any

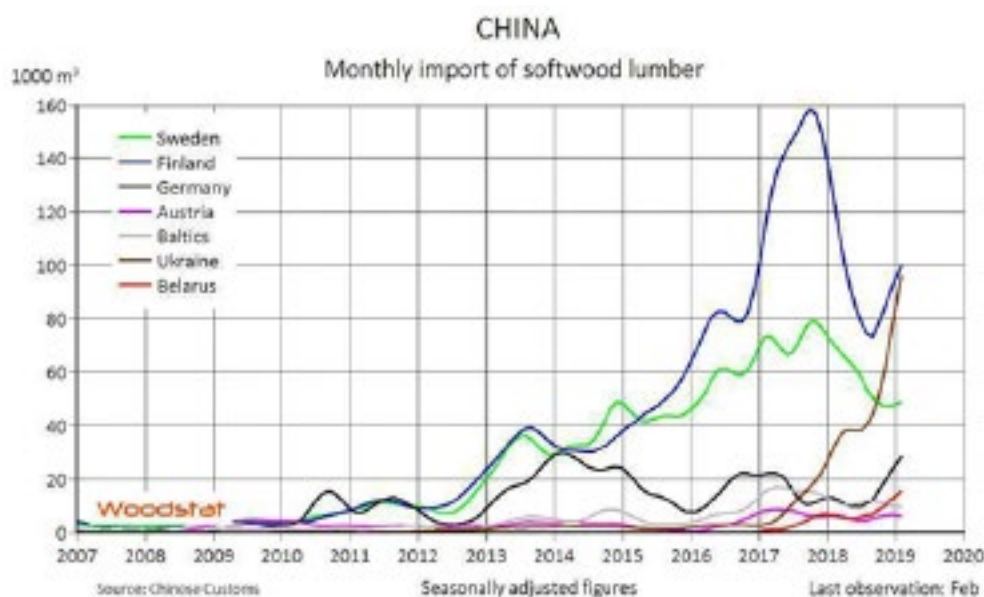
form of export restrictions. Further official information is available at: <http://trade.ec.europa.eu/doclib/press/index.cfm?id=1968>

Additionally, the EOS secretariat received confirmation that a new legislative initiative was launched by the same members of the Ukrainian Parliament who were behind the current logwood ban legislation. The new bill seeks to extend the ban to firewood (tariff line 4401 10 00 00).

- Members of the Ukrainian parliament Werchowyna Rada petitioned for an export ban on firewood on 16 January 2019. The draft bill "On the protection of the Ukrainian forests" provides for a moratorium on exports of firewood. The purpose of this is to close the loophole that exists in the ban on log exports in place since November 2015 and January 2017. At the moment, only logs with a maximum length of 2 m declared under the customs tariff 4401 are exempted from the ban on exports. The possibilities are being exploited by wood-based panel and pulp manufacturers in central and southeast Europe, for example, to import industrial wood from the Ukraine legally even though the ban on log exports has come into force

The almost identical bill was adopted at the plenary of the Parliament last year and successfully vetoed by the President. It never became law.

On 11 April, EOS draw the attention of DG TRADE to the data regarding the exports of European softwood lumber to China (Russia is not included). (*Data received by Woodstat on the very same day*)



While EOS recognise that the Ukraine political and economic situation is challenging and complicated, this figure shows that the Ukrainian logs ban not only poses a problem in terms of supply of wood in the EU, but it allowed Ukraine to become a significant competitor for the EU producers even in China. In the space of just two years (since the logs export ban was extended also to pine), Ukraine could become the

largest European exporter of softwood lumber to China—from virtually no exports at the beginning of 2017.

EOS therefore urged the European Commission to continue in its efforts aiming to remove the unlawful ban, while EOS also confirmed its full availability to provide any kind of support on this matter.

In 2018, the European Organisation of the sawmill Industry was appointed as Member of the EU-Ukraine Advisory Group. Article 299 of the EU-Ukraine Association Agreement stipulates that each Party establish an Advisory Group (AG) on sustainable development, to advise on issues relating to the chapter on trade and sustainable development. The AGs comprise independent representative civil society organisations (CSOs), with balanced representation of employers' and workers' organisations and non-governmental organisations, as well as other relevant stakeholders. Meetings are organised under the responsibility of the European Economic and Social Committee.

6.11.3 Market Access Advisory Committee

In 2019 the European Organisation of the Sawmill Industry was appointed by DG TRADE to take part in the the Market Access Advisory Committee (MAAC).

The Market Access Advisory Committee (MAAC) serves as a general platform for coordinating market access issues, ensuring a coherent approach as well as increasing transparency among all partners, including tackling of specific barriers to trade that need a more detailed discussion among experts and EU Member States. The MAAC meetings are organised by DG TRADE of the European Commission.

EOS attended the MAAC meeting for the first time on the 30th of April. One agenda point of the meeting is the presentation of the Trade and Investment Barrier Report, in which the Commission mentions the recent launch of proceedings with Ukraine under the Association Agreement (due to the log export ban put in place by Ukraine). One point of interest for the European woodworking industry regarding the Russian list of barriers was also discussed during the meeting:

- Export quota on birch logs: in July 2018 Russia adopted export quotas affecting quality birch logs (diameter of at least 15 cm and length of at least 1 m), as a temporary measure between 1.1.2019 and 30.6.2019, with a total export quota of 567000 cubic meters. The measure is

currently in force and affecting import of quality birch logs into the EU. During the meeting it was stated that it is likely that the birch logs export quotas will be renewed even after June 2019

During the meeting EOS also raised the attention on a trade barrier erected by Mexico, which is negatively impacting on German exports of sawnwood. To import sawn wood (into Mexico), air dried, wet or green, the exporter must conduct phytosanitary treatment in the exporting country, which

consist of a Heat Treatment (HT). During this heat treatment the wood must maintain a core temperature of 56°C for 30 min. Kiln-dried wood does not require heat treatment. Since the wood is mechanically debarked before being cut, small bark residues ($\leq 50\text{cm}^2$) may adhere to the trunk. Despite the previous treatment, these small residues must be removed manually, as Mexican import regulations do not allow any bark residues. This post-treatment of the wood involves considerable costs and expenses which are excessive. EOS has asked this barrier to be removed.

6.11.4 European Commission proposes signature and conclusion of Japan

Following the signature of the EU-Japan Economic Partnership Agreement (EPA) in July 2018, and the conclusion of the ratification procedures by both partners at the end of 2018, the agreement entered into force on 1 February 2019.

- The two houses of the Japanese National Diet completed their ratification of the EPA on 29 November and 8 December 2018, respectively. On 20 December 2018, the Council adopted the decision to conclude the agreement. The EU and Japan notified each other of the conclusion of their respective ratification procedures on 21 December 2018. The EPA thus entered into force on 1 February 2019. The agreement is the EU's largest bilateral trade agreement to date. It establishes a free trade area with a combined market of around 640 million consumers, accounting for roughly a third of the world's gross domestic product (GDP).

In 2017, Japan was the sixth largest destination market for EU exports of goods and fifth largest market for EU agri-food exports. In the same year, the EU was Japan's third largest trading partner in goods. Total trade in goods between the EU and Japan accounted for €129.5 billion in 2017, with a trade deficit on the EU side of €8.2 billion. In 2015, Japanese multinational enterprises (MNEs) accounted for 5 % of foreign companies in the EU and employed 625 000 people. The revenues resulting from the turnover of Japanese firms in the EU were more than four times higher than the revenues from Japanese exports to the EU (€375 million and €75.8 million, respectively). In the case of the EU, these two figures did not differ significantly (€84.1 million from EU exports to Japan, and €86.1 million from turnover of EU companies in Japan). (Source of this information: EPRS | European Parliamentary Research Service)

This Economic Partnership Agreement has been closely monitored by the EOS Secretariat throughout the negotiating phase due to its importance for the EOS Members.

A memorandum published by the European Commission reminds that tariffs on all wood products will be fully eliminated, with seven years staging for the most important priorities. It has to be noted that Japan has declared that the pace of tariff reduction will have to follow their fiscal year (from April to March). Therefore, since the agreement enters into force on the first of February, the schedule of the Japanese tariff reduction will be the following:

- Year 1: 01/01/2019 – 31/03/2019 (so a very short year of only two months)
- Year 2: 01/04/2019 – 31/03/2020
- Year 3: 01/04/2020 – 31/03/2021
- Year 4: 01/04/2021 – 31/03/2022
- Year 5: 01/04/2022 – 31/03/2023
- Year 6: 01/04/2023 – 31/03/2024
- Year 7: 01/04/2024 – 31/03/2025

Reported below, the schedule of Japanese tariffs reduction for the products of interest for the European Sawmill Industry (sawn hardwood can already enter Japan tariff-free).

Regarding illegal logging, the memorandum states that "The EU and Japan share a common commitment to combat illegal logging and related trade. Trade in illegal timber is not an issue between the EU and Japan. The EU has a very clear legislation on illegal logging, just like Japan, which applies to imports from any country of origin. Both partners have surveillance and certification systems in place to prevent the import of illegal timber. The two partners also work closely with third countries to support them in setting up efficient mechanisms to address the problem. The agreement

| Tariff Line | Description | Current Rate | 1st year | 2nd year | 3rd year | 4th year | 5th year | 6th year | 7th year | 8th year |
|-------------|--|--------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 440710110 | Wood sawn or chipped lengthwise, sliced or peeled, of a thickness exceeding 6mm but not more than 160 mm, of pine (<i>Pinus</i> spp.), fir (<i>Abies</i> spp.), (other than California red fir, grand fir, noble fir and pacific silver fir) or spruce (<i>Picea</i> spp.), (other than sitka spruce), planed or sanded | 4.8% | 4.2% | 3.6% | 3.0% | 2.4% | 1.8% | 1.2% | 0.6% | free |
| 440710121 | Wood sawn or chipped lengthwise, sliced or peeled, of a thickness exceeding 6mm but not more than 160 mm, of pine (<i>Pinus</i> spp.), | 4.8% | 4.2% | 3.6% | 3.0% | 2.4% | 1.8% | 1.2% | 0.6% | free |
| 440710129 | Wood sawn or chipped lengthwise, sliced or peeled, of a thickness exceeding 6mm but not more than 160 mm, of fir (<i>Abies</i> spp.), (other than California red fir, grand fir, noble fir and pacific silver fir) or spruce (<i>Picea</i> spp.), (other than sitka spruce) | 4.8% | 4.2% | 3.6% | 3.0% | 2.4% | 1.8% | 1.2% | 0.6% | free |
| 440910200 | Beadings and mouldings, of coniferous | 3.6% | 3.2% | 2.7% | 2.3% | 1.8% | 1.4% | 0.9% | 0.5% | free |
| 440910310 | Wood continuously shaped (tongued, grooved, rebated, chamfered, V-jointed, beaded, moulded, rounded or the like) along any of its edges, ends or faces, excluding drawn wood, beading and mouldings, of pine (<i>Pinus</i> spp.), fir (<i>Abies</i> spp.) (other than California red fir, grand fir, noble fir and pacific silver fir), spruce (<i>Picea</i> spp.) (other than sitka spruce) and larch (<i>Larix</i> spp.), not more than 160mm in thickness | 5.0% | 4.4% | 3.8% | 3.1% | 2.5% | 1.9% | 1.3% | 0.6% | free |
| 44186000 | Posts and beams | 3.9% | 3.4% | 2.9% | 2.4% | 2.0% | 1.5% | 1.0% | 0.5% | free |
| 441899 | Other (include glulam and CLT) | 3.9% | 3.4% | 2.9% | 2.4% | 2.0% | 1.5% | 1.0% | 0.5% | free |

includes a legal provision committing both partners to the prevention of illegal logging and related trade.”

The European Commission’s analysis of the economic impact of the agreement, published in June 2018, indicated that the EU’s GDP could rise by approximately 0.14 %, and EU exports to Japan by around €13 billion by the time the EPA is fully implemented in 2035. The agreement will provide for significant economic opportunities for sectors such as agri-food and textiles, and it is predicted that no EU sector will be impacted by noticeable losses.

In addition to exploiting the untapped potential of bilateral trade and strengthening the EU’s economic presence in the Asia-Pacific region, the EPA, together with the Strategic Partnership Agreement (SPA), will provide a platform

for stronger relations between the EU and Japan. The agreement also conveys a strong message on the parties’ commitment to promoting a free and fair trading system and to rejecting trade protectionism.

The Economic Partnership Agreement between the EU and Japan is expected to strengthen the economic relations between the two economies having a positive impact on small and medium-sized enterprises (SMEs) as well because it facilitates exporting and importing and reduces costs. SMEs represent 99% of all companies and provide about two thirds of jobs in the private sector and over 50% of economic output (in the EU around 56% and in Japan over 50%). Therefore both parties have agreed on a specific chapter for SMEs in the EPA to ensure that more small companies will gain from the benefits of this agreement.



6.11.5 Brexit

At this writing (end of April 2019), it is impossible to predict the final outcome of the Brexit process. After many months of tension, the EU has agreed to an extension of the Brexit deadline until 31 October, with a review in June. A no-deal Brexit remains possible in case the UK and the EU do not find an agreement.

THE WITHDRAWAL AGREEMENT

In November 2018, the European Union (EU) and the United Kingdom (UK) endorsed an agreement that would ensure an orderly UK withdrawal from the EU on 30 March 2019, as well as a political declaration setting out the main parameters of the future EU-UK relationship. The withdrawal agreement is an extensive legal document aiming, among other things, to preserve the essential rights of UK nationals living in the EU-27 and EU citizens living in the UK; to ensure that all financial commitments vis-à-vis the EU undertaken while the UK was a Member State are respected; and to conclude in an orderly manner ongoing processes in various areas (e.g. circulation of goods already on the market and ongoing judicial procedures). Importantly, the agreement establishes a 21-month transition period, extendable once, to help businesses and citizens to adapt to the new circumstances, and the EU and UK to negotiate their future partnership agreements. During this time, the UK will be treated as a Member State, but without any EU decision-making and representation rights. Furthermore, one of the agreement's three protocols, the Protocol on Ireland/Northern Ireland contains a legally operational 'backstop', aiming to avoid a hard border on the island of Ireland in the future. It has long been the most contested aspect of the withdrawal deal. The political declaration, by contrast, is a non-binding text, providing the basis for future EU-UK economic and security cooperation, taking into account both sides' red lines and principles. With just days to go to the Brexit deadline, the procedures to approve the withdrawal deal have still not been finalised, due to continuing opposition within the UK Parliament. While extending the Article 50 negotiating period now appears highly likely, all scenarios are still possible, including the UK leaving the EU without a deal at the end of March 2019. Source: "Brexit: Understanding the withdrawal agreement and political declaration" by the European Parliament



In the event of a no-deal Brexit, the plants currently managed under EU plant passports will require a phytosanitary certificate issued by the national plant protection organisation (NPPO) in the member state of export. When the UK leaves the EU, the EU will apply third country controls on imports from the UK, including controls on all plants for planting, certain wood, wood products or bark and all wood packaging material.

The UK NPPO will ensure that UK exports of regulated plants and plant products comply with EU third country requirements when issuing phytosanitary certificates as they do now for third countries. Wood packaging material (WPM) moving between the UK and the rest of the EU can currently move freely without checks or controls. WPM include: pallets- crates- boxes- cable drums- spools and dunnage. If the UK leaves the EU with no deal, all WPM exported from the UK to the EU and all WPM being imported from the EU to the UK must meet ISPM15 international standards by undergoing heat treatment and marking. All WPM may be subject to official checks either upon or after entry to the EU. Checks



on WPM will continue to be carried out in the UK on a risk-targeted basis only. The plant health risk from WPM imported from the EU is not expected to change as a result of an EU exit. In case of a no-deal Brexit at any rate there will not be tariffs on products falling under chapter 4407 of the Harmonised System (sawnwood products). Also, other wood and paper products are expected to have no tariffs when exported from the UK to the EU.

The UK government will implement its own UK Timber Regulation which will have the same requirements as the EU Timber Regulation (EUTR) and Forest Law Enforcement Governance and Trade (FLEGT).

On 1 February 2019, the EOS Secretariat attended the Civil Dialogue Group on Forestry and Cork where the EU Commission gave a presentation about the BREXIT issue and the status of the negotiations.

➡ The information reported below summarizes the BREXIT information given by the EU Commission on that occasion. At the moment - *as per information given by the EU Commission* - there is no clear understanding on the consequences of the votes in the House of Commons on the UK government's Brexit motion. It appears affirmative that the EU Commission is not willing to reopen any negotiation on the withdrawal agreement.

To be noted.

- As a member of the EU, the UK benefitted from the agreement on the free movement of goods between EU countries (no import duties, taxes or customs clearance). If the UK leave the EU on 29 March 2019 without a deal there would be changes to the procedures that apply to businesses trading with the EU. Businesses will have to apply the same customs and excise rules to goods moving between the UK and the EU as currently apply in cases where goods move between the UK and a country outside of the EU. This means customs declarations would be needed when goods enter the UK (an import declaration), or when they leave the UK (an export declaration).
- As written above, in the event of no deal, **wood packaging material** moving between the UK and the EU **must meet ISPM15 international standards by undergoing heat treatment and marking**. Wood packaging material may be subject to official checks either upon or after entry to the EU.

Wood packaging material includes: pallets, crates, boxes, cable drums, spools and dunnage.

Summary of the information given on occasion of the Civil Dialogue Group on Forestry and Cork.

Key aspects of the withdrawal agreement:

The Withdrawal Agreement establishes the terms of the UK's withdrawal from the EU. It offers legal certainty once the Treaties and EU law will cease to apply to the UK.

The EU and the UK agree on the direct effect and the supremacy of the entire Withdrawal Agreement under the same conditions as those applicable in Union law, as well as the fact that the Court of Justice of the European Union is the ultimate arbiter for matters related to EU law or Union law concepts.

DISPUTES. In the event of a dispute on the interpretation of the Withdrawal Agreement, an initial political consultation would take place in a Joint Committee. If no solution is found, either party can refer the dispute to binding arbitration. The decision of the arbitration panel will be binding on the Union and the UK. In case of non-compliance, the arbitration panel may impose a lump sum or penalty payment to be paid to the aggrieved party. Finally, if compliance is still not restored, the Agreement allows parties to suspend proportionately the application of the Withdrawal Agreement itself, except for citizens' rights, or parts of other agreements between the Union and the UK. Such suspension is subject to review by the arbitration panel.

The Withdrawal Agreement covers the following areas:

- **Common provisions**, setting out standard clauses for the proper understanding and operation of the Withdrawal Agreement.
- **Citizens' rights**, protecting the life choices of over 3 million EU citizens in the UK, and over 1 million UK nationals in EU countries, safeguarding their right to stay and ensuring that they can continue to contribute to their communities.
- **Separation issues**, ensuring a smooth winding-down of current arrangements and providing for an orderly withdrawal (*for example, to allow for goods placed on the market before the end of the transition to continue to their destination*).
- A **transition period until the end of 2020 (which can be extended once, by up to one or two years)** during which the EU will treat the UK as if it were a Member State, with the exception of participation in the EU institutions and governance structures. The transition period will help in particular administrations, businesses and citizens to adapt to the withdrawal of the United Kingdom.

When the UK is no longer a Member States, it will no longer be part of the EU-Free Trade agreements.

TRANSITION PERIOD

UK bound by the obligation from all EU international agreement;

Guarantees integrity and homogeneity of Single market and Custom union;

EU will notify its international partners that the **UK is an assimilated Member States for the purpose of international agreements**, including agreements that enter into force during the transitional period.

- The **financial settlement**, ensuring that the UK and the EU will honour all financial obligations undertaken while the UK was a member of the Union.
- The overall **governance structure** of the Withdrawal Agreement, ensuring the effective management, implementation and enforcement of the agreement, including appropriate dispute settlement mechanisms.
- Three Protocols:
 - The terms of a **legally operational backstop** to ensure that there will be no hard border between **Ireland and Northern Ireland**.
 - A protocol on the Sovereign Base Areas (SBA) in **Cyprus**, protecting the interests of Cypriots who live and work in the Sovereign Base Areas following the UK's withdrawal from the Union.
 - A Protocol on **Gibraltar**, which provides for close cooperation between Spain and the UK in respect of Gibraltar on the implementation of citizens' rights provisions of the Withdrawal Agreement.

Goods placed on the market

The Withdrawal Agreement provides that goods lawfully placed on the market in the EU or the UK before the end of the transition period may continue to freely circulate in and between these two markets, until they reach their end-users, without any need for product modifications or re-labelling.

This means that goods that will still be in the distribution chain at the end of the transition period can reach their end-users in the EU or the UK without having to comply with any additional product requirements.

Protection of intellectual property rights

Under the Withdrawal Agreement, the protection afforded to existing EU unitary intellectual property rights (trademarks, registered design rights, plant variety rights etc.) on the territory of the UK will be maintained. All such protected rights will have to be protected by the UK as national intellectual property rights. The conversion of the EU right into a UK right for the purpose of protection in the UK will be automatic, without any re-examination and will be free of cost. This will ensure the respect of existing property rights in the UK and provide for the requisite certainty in respect of users and right holders.

NO DEAL SCENARIO

International agreements do not longer apply to UK; EU traders to check rule of origin in as UK "ingredients" will no longer be considered as EU origin.

6.11.6 India-EU bilateral relations

India-EU bilateral relations date to the early 1960s with India being amongst the first countries to establish diplomatic relations with the European Economic Community in 1962. A Cooperation Agreement signed in 1994 took the bilateral relationship beyond trade and economic cooperation. The Cooperation Agreement together with the Joint Political Statement signed in 1993, opened the way for annual ministerial meetings and a broad political dialogue.

India and the EU are negotiating a bilateral Broad-based Trade and Investment Agreement (BTIA) since 2007. The India-EU Joint Commission dealing with economic and commercial issues meets annually, as do its three SubCommissions on Trade, Economic Cooperation and Development Cooperation.

In the framework of the EU-India Sub-Commission on Trade in New Delhi held on 6th June 2018 DG GROW invited the

European stakeholders to share their views regarding trade between India and the various EU industrial sectors.

Reported below, the message sent by EOS.



European Organisation of the Sawmill Industry aisbl

European Organisation of the Sawmill Industry: Who We Are

The European Organization of the Sawmill Industry (EOS) is a Brussels-based non-profit association representing the interests of the European sawmilling sector on European and International level. Through its member federations and associated members, EOS represents some 35.000 sawmills in 12 countries across Europe manufacturing sawn boards, timber frames, glulam, joinery, and several other wood products. The European sawmill industry processes both softwood and hardwood and is responsible for a turnover of almost 37 billion EUR, employing over 250.000 people in the EU.

EOS reckons that a new meeting of the EU-India Sub-Commission on Trade will take place in New Delhi on the next 6th June 2018. We have learned with concern of a more protectionist posture of India regarding trade: the Indian government has decided to increase import duties on a number of products which impact at least \$65 billion worth of imports. Indeed, one of the points in the agenda of the meeting is: *Import duties: recent increases in 2018-19 Union budget in India.*

! EOS considers India as an important economic and trade and investment partners. In line with the “EU-India Agenda for Action-2020”, EOS welcomes the commitment of both parties to establishing a stable economic climate which is favourable to the expansion of trade and economic cooperation. A more open Indian market would be beneficial for Indian and European players alike.

Below more details on the position of the European Sawmill Industry.

India: A Country with High, though Untapped, Potential

India will soon surpass China to become the most populous country in the world. This youthful population will cause a rapid growth of the construction market. EOS reminds that wood is a renewable raw material which retains carbon throughout its lifecycle. Thus a higher utilization of wood products, including in the construction sector, could significantly contribute to the decarbonization of the Indian economy, which is particularly important in view of the impressive growth rates of the country. The EOS Members manufacture products using sustainably-sourced wood mainly from European forests and a higher utilization of EU wood products could add momentum to the decarbonization efforts of India. In India, having undergone decades of deforestation, the forest cover has stabilized in the last 15 years: severe logging restrictions are in place and as a result the local timber production is low and **the country has to massively rely on imports to feed its consumption.**

India has a thriving range of industries for semi-processed and value-added timber products, including wooden handicrafts, pulp and paper, plywood and veneer and wooden furniture. Exports of wooden handicrafts in particular are on the rise. While India is one of the world’s top producers of tropical logs, it **is also one of the world’s largest consumers of wood products.** This is mainly due, however, to the sheer size of India as its per capita consumption of wood is very low.

- The volume of products manufactured by the European sawmills and traded with India is still relatively minor. In 2017, according to Eurostat, the EU 28 countries exported to India around 321 thousand tons of sawn softwood and 30 thousand tons of sawn hardwood. These figures are much lower than volumes exported to China: in 2017, the EU 28 countries exported to India around 1626 thousand tons of sawn softwood and 653 thousand tons of sawn hardwood. These data show that there is untapped potential. A factor that is probably hindering higher exports of wood products to India is tariff barriers to trade. According to the Market Access



European Organisation of the Sawmill Industry aisbl

Database of DG TRADE, **India levies duties of 10% on products** which are of particular interests to the sawmill industry such as those that fall under **HS 4407 (sawnwood) and HS 4418 (builders' joinery and carpentry of wood).**

Conclusions

EOS calls for a balanced economic cooperation with India that would also consider measures to increase the export of European sawnwood to India. India is traditionally a high producer of tropical hardwoods, but, as it was emphasized at the International Softwood Conference of 2016, there is evidence of increasing interest of consumers towards non-tropical species. A higher consumption of sustainable European wood products would help India tackle the pressing issue of climate change and satisfy changing consumers' tastes. Eliminating barriers to trade would lead to a win-win outcome both for the Indian and the European economy. In a spirit of reciprocity and mutual benefit, EOS calls for an agreement that takes into account international standards to which both sides have committed, including those set out within the framework of the World Trade Organisation (WTO) and International Labour Organisation.

6.11.7 European Commission Promoting an Active Policy Towards China

In March, the Commission published a **Communication entitled "EU-China Strategic Outlook"** which aims to rebalance the relationship between the EU and China.

EOS SUMMARY OF THE EUROPEAN COMMISSION COMMUNICATION EU-CHINA – A STRATEGIC OUTLOOK

Against the backdrop of China's growing economic power and political influence, the European Commission and the High Representative review European Union-China relations and the related opportunities and challenges. They set out 10 concrete actions for EU Heads of State or Government to discuss at the European Council of 21 March.

In order to maintain prosperity, values and social model over the long term, there are areas where the EU needs to adapt to changing economic realities and strengthen its policies. Based on clearly defined interests and principles, the EU Commission recognises that the EU should also seek to deepen effective and coherent engagement with China. Given the importance of EU-China economic relations, it is important to maintain very close trade and investment links, while developing a more balanced economic relationship.

The Communication argues that there is a growing appreciation in Europe that the balance of challenges and opportunities presented by China has shifted. In the last decade, China's economic power and political influence have grown with unprecedented scale and speed, reflecting its ambitions to become a leading global power.

China can no longer be regarded as a developing country. It is a key global actor and leading technological power. Its increasing presence in the world, including in Europe, should be accompanied by greater responsibilities for upholding the rules-based international order, as well as **greater reciprocity, non-discrimination, and openness of its system.**

To this end, The EU's response should be based on three objectives:

- Based on clearly defined interests and principles, the EU should deepen its engagement with China to promote common interests at global level.
- The EU should robustly seek more balanced and reciprocal conditions governing the economic relationship.
- Finally, in order to maintain its prosperity, values and social model over the long term, there are areas where the EU itself needs to adapt to changing economic realities and **strengthen its own domestic policies and industrial base.**

Specifically, the Commission invites the European Council to endorse the ten actions, some of which can be considered relevant also for the EU Sawmill Industry:

- *Action 2: In order to fight climate change more effectively, the EU calls on China to peak its emissions before 2030, in line with the goals of the Paris Agreement.*

On climate change, China is at the same time the world's largest carbon emitter and the largest investor in renewable energy. The EU welcomes the role of China as one of the main brokers of the Paris Agreement. At the same time, China is constructing coal-fired power stations in many countries; this undermines the global goals of the Paris Agreement.

China is a strategic partner on climate change and the clean energy transition, with whom we need to continue developing a strong relationship, given the sheer size of its emissions (around 27 % of the global amount), which continue to rise. A commitment by China to peak its emissions before 2030 would give new impetus to fighting climate change in line with the Paris Agreement and inspire action globally. In addition, the EU and China should strengthen their cooperation on sustainable finance, to channel private capital flows towards a more sustainable and climate-neutral economy.

- *Action 4: To preserve its interest in stability, sustainable economic development and good governance in partner countries, the EU will apply more robustly the existing bilateral agreements and financial instruments, and work with China to follow the same principles through the implementation of the EU Strategy on Connecting Europe and Asia.*

European companies face a lack of level playing field when competing in third countries' markets with Chinese companies enjoying access to state backed loans and export credits at preferential terms and applying different corporate and labour standards. In this light, the EU should continue to promote stability, sustainable economic development, and respect for good governance, in partnership with third countries and with even greater vigour.

The EU's Strategy on Connecting Europe and Asia provides a clear framework for confident engagement with the EU partners, enabling the Union to seek synergies between the EU and third countries, including China, in transport, energy and digital connectivity, on the basis of international norms and standards. The key principles of EU's engagement on connectivity are financial, environmental and social sustainability, transparency, open procurement and level playing field.

The EU-China Connectivity Platform represents an initial opportunity to strengthen cooperation and work in reciprocal and transparent ways, and should be expanded. It aims at promoting sustainable transport corridors based on the principles of the Trans-European Transport networks policy. The imminent launch of a study on railway corridors, between the EU and China, exemplifies the possibility of creating synergies with the Trans-European Transport network policy.

- *Action 5: In order to achieve a more balanced and reciprocal economic relationship, the EU calls on China to deliver on existing joint EU-China commitments. This includes reforming the World Trade Organisation, in particular on subsidies and forced technology transfers, and concluding bilateral agreements on investment by 2020, on geographical indications swiftly, and on aviation safety in the coming weeks.*

China has also increasingly become a strategic competitor for the EU while failing to reciprocate market access and maintain a level playing field. China's growing economic weight increases the risk for the global economy of negative spill-overs from distortions in China's economic system and from possible sudden economic downturn. **Given the magnitude of EU trade and investment links, it is important to develop a more balanced and reciprocal economic relationship.** This can be achieved through various means: by working together with China in international fora to upgrade the rules and by making decisive progress in bilateral negotiations, but also by making use of tools such as the recently modernised and strengthened trade defence instruments.

- *Action 6: To promote reciprocity and open up procurement opportunities in China, the European Parliament and the Council should adopt the International Procurement Instrument before the end of 2019.*

EU companies often encounter difficulties to gain access to procurement opportunities in the Chinese as well as other foreign markets, in particular in sectors where EU companies are highly competitive (e.g. transport equipment, telecommunications, power generation, medical equipment and construction services). **This protectionist trend is rising.**

- *Action 7: To ensure that not only price but also high levels of labour and environmental standards are taken into account, the Commission will publish guidance by mid-2019 on the participation of foreign bidders and goods in the EU procurement market. The Commission, together with Member States, will conduct an overview of the implementation of the current framework to identify gaps before the end of 2019.*
- *Action 8: To fully address the distortive effects of foreign state ownership and state financing in the internal market, the Commission will identify before the end of 2019 how to fill existing gaps in EU law.*

EU policy tools do not fully address the effects within the EU internal market of subsidies granted by foreign governments. EU competition policy instruments apply without discrimination to all economic operators, irrespective of their origin. EU state aid rules only cover aid granted by Member States. Further, EU merger control does not allow the Commission to intervene against the acquisition of a European company solely on the grounds that the buyer benefitted from foreign subsidies. Trade defence instruments address subsidies that affect the price of products imported into the EU. However, **these instruments do not cover all potential effects of unfair subsidies or support by third countries. To close this gap, it is necessary to identify how the EU could appropriately deal with the distortive effects of foreign state ownership and state financing of foreign companies on the EU internal market.**

On the 9th of April, a **EU-China Summit took place**, providing a forum for engagement at the highest level and for advancing the relationship as regards the bilateral and multilateral agendas. The shared objective of equitable and mutually beneficial cooperation in bilateral trade and investment was one of the key topics discussed. **The EU and China reiterated their willingness to provide each other with broader, non-discriminatory market access.** The EU and China have also signed a Memorandum of Understanding on a dialogue in the area of the State Aid Control and the Fair Competition Review.

The State aid dialogue is a mechanism of consultation, cooperation and transparency between China and the EU in the field of State aid control. This dialogue will further the EU and China's mutual interest and joint work to promote fair global competition. It is also part of the Commission's broader strategy to address the distortion that national subsidies policies put on a global level playing field where companies can compete on their merits. **The Agreement on the Terms of Reference of the EU-China Competition Policy Dialogue, also agreed at the Summit, has the aim to facilitate requests to investigate alleged anti-competitive behaviour.** The Agreement acknowledges that the EU and China share a common interest to minimise any potentially adverse effects of enforcement activities on each other's interests.

A Common Statement about the EU-China Summit was published. Please find attached copy of the EU-China Summit Joint statement (Annex 3). The following passages are of particular relevance for the European sawmill industry:

The EU and China will continue to enhance practical cooperation, so as to foster fair competition in the market for operators of all countries, including the companies of the two sides, and promote the sound growth of the bilateral and global economic and trade relations.

The EU and China underline their strong commitment to implement the Paris Agreement and the Montreal Protocol, and, given the urgency to take domestic and international action to effectively provide a global response to the threat of climate change, to further intensify their cooperation on the basis of the 2018 joint Leaders' Statement on Climate Change and Clean Energy.

The EU and China recall that carbon pricing and fossil fuel subsidy reform are key steps in this regard. In this context, the EU and China will reinforce their cooperation on green finance in order to harness private capital flows towards a more environmentally sustainable economy. Both sides will work together for a successful outcome of the UN's Sustainable Development Goals and Climate Action Summits in September 2019.

The EU and China stress the importance of showing

resolve on the clean energy transition and of assuming greater leadership on the global environmental agenda. Both sides will actively implement the Memorandum of Understanding on Circular Economy cooperation and promote practical cooperation between industries. Both sides recognise the importance of cooperation in addressing global environmental challenges, including pollution and marine litter. Both sides are willing to deepen cooperation on issues such as halting biodiversity loss, CITES implementation and enforcement, combating illegal trade in wildlife and wildlife products, sustainable forest management, combating illegal logging and associated trade, as well as desertification and land degradation.

The EU and China will cooperate to improve the economic, social, fiscal, financial and environmental sustainability of Europe-Asia connectivity and interoperability. **The two sides will continue to forge synergies between the EU strategy on Connecting Europe and Asia as well as the EU Trans-European Transport Networks and China's Belt and Road Initiative**, and welcome the agreement, in the framework of the EU-China Connectivity Platform, on the terms of reference for the Joint Study on sustainable Railway-based Corridors between Europe and China. The two sides will enhance communication within the framework of the EU-China Connectivity Platform.



Photo: EOS Picture

7. High Level Conferences co-organized by EOS

The International Softwood Conference (ISC) and the International Hardwood conference (IHC) are co-organized by EOS and ETTF, which are also the holders of the events. The International Softwood Conference (ISC) is organised annually, instead the International Hardwood Conference

(IHC) is a biannual event. The conferences are organized in turn by a member federation of EOS or ETTF: this means that the conferences take place every year in different countries, which are usually decided one year in advance.

7.1 The International Softwood Conference

The 66th INTERNATIONAL SOFTWOOD CONFERENCE was held from 10th to 12th October, 2018 in Riga, Latvia. The 2018 International Softwood conference was hosted by the Latvian Timber Traders & Producers Association, the European Timber Trade Federation (ETTF) and the European Organization of the Sawmill Industry (EOS).

Conference offered to get market analysis from the perspective of top-class international speakers. The presentations were focused on facts and figures showing softwood production as well as consumption in the most relevant timber markets such as USA, Canada, North Africa and Egypt, Russia, France, China and other.



The 66th International Softwood Conference attracted over 200 participants.

The development of production and consumption suggests that the nice pace of growth which was observed in 2017 and the beginning of 2018 is expected to continue into the rest of the current year. While the situation for 2019 looks good, there are some darkening clouds on the horizon.

In Europe most markets are on the rise, with strong demand across the continent. Mr Andreas von Möller, President of ETTF, provided a comprehensive overview of the construction activity in Europe, showing that the confidence index is going up and the production index has reached the highest levels since 2010. The wood door sector is also doing well, whereas the window door sector is stable. Mr Sampsa Auvinen, President of EOS, underlined in his presentation that the European demand has been very lively over the last few months and is set to remain so in the short run. A buoyant construction activity is indeed pushing up European demand to the highest levels of this decade – and medium-term positive forecasts justify the moderate optimism. The financial performance of the European sawmilling industry is solid and investments in operation improvements are taking place.

However, some elements may cast a shadow on an this relatively rosy picture: both presidents emphasized that the uncertainty surrounding Brexit could take its toll on the British economy, which could result in decreasing import volumes. A fully-fledged trade war between the US and China is another potentially destabilizing factor. Mr Auvinen and Mr von Möller also stressed that there might be a risk of overheating in the construction sector. Even more importantly, there are challenges connected to raw materials: supply problems are limiting the potential growth of production. In the short term, the availability of roundwood is indeed tight in many European countries. A very hot summer and a locally stormy autumn worsened the quality of supply causing the presence on the market of many logs damaged by pests and storms, in addition to record-high forest fires in many EU countries. In the long term many factors, including - but not limited to - climate change, may limit the supply of softwood in many parts of Europe.



In the picture, a moment of the panel discussion on forest certifications.



2018 ISC. Visit to sawmill "Vika Wood" Ltd.

While lively European markets remain the traditional destination of European production, an ongoing trend points to increasing importance of overseas markets for many European companies. The area of the world which stands out is Asia, particularly China, which after a booming 2017 has somewhat slowed down in 2018. Japan as well remains an important export destination for many European sawmills, while some North African markets are recovering following a couple of negative years. Exports to the US have skyrocketed at the beginning of the year, but the consensus was that there is not much scope for further growth of deliveries to the US. The long-term potential of the market is impressive as per capita consumption in some of the fastest growing countries in the world is still very low compared to North America and North European countries.

In the afternoon of the first day a lively panel discussion took place between representatives of forest certification schemes, FSC and PEFC, representatives of ETTF and EOS and of the Confederation of the Private Forest Owners. A frank and constructive exchange of views confirmed the importance of sourcing sustainable wood materials while guaranteeing a clear and feasible chain of custody system.



2018 ISC. Nurserie Norupe.

In sum, in 2018 there are many reasons for the industry to be satisfied. Overall, demand in both internal European markets and many faraway destinations keeps growing. However, a recurrent theme of this year's International Softwood Conference has been that in the past abrupt falls have followed euphoric periods. According to many stakeholders 2019 is set to be a year of consolidation of the growth achieved in previous years, but since there are many tailwinds in the global political and economic context, a slowdown cannot be ruled out.

On Tuesday, the 9 October, the International Softwood Conference was anticipated by the visit to sawmill "Vika Wood" Ltd, to sawmill "Kurekss" Ltd. While on Wednesday, the 10th October, the ISC participants had the opportunity to visit the sawmill Smiltene Impex and the Rīgas Meži sawmill & nurserie Norupe.

The next edition of the International Softwood conference will take place in Antwerp on 16-18 October 2019.

For more information and to download the 2018 ISC presentations please visit the website: <http://ettf.info/isc2018>

KEY MESSAGES of the International Softwood Conference 2018

WHEN, HOW AND WHERE THE NEXT CRISIS WILL START?, KĀRLIS DANĒVIČS, SEB BANKA, CHIEF RISK OFFICER

The presentation of Mr Danēvičs is the first one of the ISC 2018. He provides an insightful overview of the international economy, trying to individuate some imbalances that might lead to the next global recession.

The most significant take-home messages of his presentation are the following:

- Drawing from an example of the Baltic Region, he notices that the Baltic States before the 2007-2008 global economic crisis were growing very fast; but the accumulation of risks and imbalances led to a big fall, from which they slowly recovered. Conversely, Poland was growing at a slower pace but managed to avoid a

crisis – the only European country to record positive GDP growth rates in the toughest year of the crisis – by having a more balanced growth. It seems that these days this lesson tends to be forgotten.

- He adds that there were four factors that led to the crisis of ten years ago: Too sharp growth in credits; unsustainable current account deficits; Labor costs growth > labor productivity increase; Overheated real estate market. He states that some countries already have a number of these imbalances. Turkey has all four of them.
- In general, he notes that crises often arise as a result of irrational decisions of human, who during booms are prone to think: “this time is different”. But history repeats itself, and economic crises keep happening.
- He notices that demand fall is the primary reason for downfalls to be triggered (examples: Nokia, Kodak).
- He notices that the price/earning ratio is very high. Even in 2007 and in 1929 it was also impressively high.
- Statistically, moreover, every now and then recessions happen. Now, we are already 10 years since the previous crisis, so it is more and more likely that at some point a new recession will take place.
- Geopolitical uncertainties, a crisis in China, Cybercrime and IT disruptions, and real estate markets are some of the possible causes of the next crisis.
- There are many indicators that show that the global economy has passed the peak and it is slowing down.
- Emerging markets have been having a mixed performance: India and China are still growing fast, but a stronger US Dollar, the looming trade war, and a Chinese deceleration are significant downside risks. In Russia the recovery is weak and sanctions threaten the rouble.
- Overall, with the exception of Europe, private debt is growing in many large economies, including the US and China.

MARKET DEVELOPMENTS - EUROPEAN USERS, ANDREAS VON MÖLLER (EUROPEAN TIMBER TRADE FEDERATION PRESIDENT)

Mr von Möller analyzes the softwood market from the user side. He starts his presentation by focusing on construction activity, which at EU level has been growing for some years. Italy is still suffering, while France even though it is still below the level of 2010 is recovering. Germany has slightly slowed down from a relatively healthy level whereas the UK is doing fine. In addition to this, confidence is high in most of the big European countries. Building permits have been increasing for three years.

The door sector at EU level is recovering ground (+6% in 2017 vs 2016, highest level in 10 years), with Netherlands, Italy, Poland and Spain doing particularly well. A slight decline was observed only in the UK. Wood windows production is slightly increasing (+2%); Austria, Italy, Poland are doing well while the UK keeps declining. The wood window sector has overall a 15-20% market share in the window market across Europe.

Mr von Möller goes on to make a one-by-one country review.

- In the Netherlands, he argues, there is a positive general perception. GDP growth is solid, unemployment is very low, and the housing sector is doing fine. Imports and consumption of softwood, following some difficult years have now been growing for three years. However, there is a shortage of workforce which can have a negative impact on the sector.
- In Denmark, the economy is also doing fine, and imports and consumption are on the rise. However, a combination of diminishing stockpiles in Sweden, an unusually dry summer with risk of forest fires and increasing demand for pulpwood for the paper industry is challenging the supply side.
- In France, the year 2018 has been a satisfactory one until now. The building sector has been growing, but it is now expected to stabilize. Innovative products such as CLT and glulam are enjoying growing sales and replacing traditional products. GDP growth is expected at 1.8% in 2018.
- While the Belgian economy has been doing quite well, the local industry instead has several challenges, including the impact of Brexit, a weak furniture sector, the presence of bark beetles, and a shortage of skilled workers. Overall, however, many segments of the woodworking industry had a good H1 2018, especially the construction elements.
- In Spain, the construction activity is developing well. The current situation is acceptable in main cities. But consumption is still limited mainly to renovation sector. Softwood imports are expected to increase, but there are many downside risks in the economy.
- In Italy the construction industry is doing fine, and the timber markets in the first part of the year were satisfactory. There is caution and uncertainty regarding the future.

- In the UK 2017 and 2018 were positive. Both production and consumption of softwood were on satisfying levels, benefiting from a lively construction sector. However, Brexit casts a shadow for the future.
- The German economy is in a very long economic upswing; non-stop since 2014. Private consumption is strong, and the job market is excellent. In H1 2018 German timber trade was at +5.6% vs H1 2017. The sales growth in the wood construction sector is a key driver. There is moderate optimism for 2019 but also in Germany there is a shortage of skilled workers.

In sum, Mr von Möller argues that the general situation in Europe is positive in 2018 (following a very good 2017). While there are many elements that may lead to believe in a positive 2019, there is an abundance of downside risks that imposes caution. Risks include, but are not limited to, a poor quality of logs due to bad weather, a chaotic Brexit, an intensification of the trade wars, a real estate bubble. A feature common to many EU countries is the shortage of skilled workers, which prevents the industry from fully taking advantage of the present high demand.

MARKET DEVELOPMENTS - EUROPEAN PRODUCTION, SAMPSA AUVINEN (EUROPEAN ORGANISATION OF THE SAWMILL INDUSTRY PRESIDENT)

The third presentation is given by EOS President Sampsa Auvinen, who focuses his presentation on the European producers. He begins by stating that the industry has been going through a long and positive cycle, but cautions that at some point this will be over. While at the end of 2017 the situation looked very balanced, there are now some elements of imbalance. The main take-home messages of his presentation are the following:

- Demand is strong in Europe, and prices are on a very satisfactory level. However, production could not really keep up. It did increase but not as much as it could have due to raw material challenges: a hot but stormy summer-beginning of autumn in many parts of Europe damaged the quality of many logs. Pests are very widespread (especially in Central Europe) and forest fires were observed in many parts of Europe. Presently the conditions are not suitable to increase capacity.
- He analyzes production in Europe with a particular focus on the EOS countries, where, total production of sawn softwood increased by 1,3% in 2017 and reached 79,6 million m³. In 2018, production is expected to increase 2,55 % to 81,7 million m³ and in 2019 0.9% to 82.5 million m³. Germany is having a positive 2018 and there are good signals even for next year. Austria's production will increase this year and possibly go up even next year. France's production has been growing for two years while Switzerland remains stable. Sweden's production is expected to be stable in 2018 and to grow in 2019, whereas Finnish production will increase to reach 12 million m³. Norway's production is slightly growing, remaining on very high levels, while Romania's production has slightly declined in 2018. In the Baltics, Latvia's production is expected to slightly grow in 2018.



- Raw material prices increased in 2017 and slightly declined at the beginning of this year. However, they remain on lower levels than the ones recorded in the period 2010-beginning of 2015.
- The macroeconomic situation in Europe looks relatively good and economic growth should continue at a moderate pace. A satisfactory development in construction activity across Europe is welcome by the industry. Construction activity is expected to slow down in the short and medium term, but it should still remain in positive territory. The picture is quite rosy as far as Europe is concerned, but Brexit could spoil this.
- Regarding China, in 2018 European producers have been losing market share to Russia; overall, China's imports will probably keep growing and it remains a fundamental market player for many European exports. There is increasing evidence, though, that Chinese statistical data describing the state of the economy are suspect, maybe even dodgy. However, the government has made it clear that it intends to foster private consumption, which bodes well for our industry.

- Japan, despite an aging population, remains a very important export market for Europe. Housing starts declined a little bit and the import during January-July 2018 totaled 3.53 million m³ (-3.0% vs Jan-Jul 2017)
- Overall, it looks like in Asia – not only in China and Japan – the appetite for softwood is growing. Considering that the relative per capita consumption is relatively low, the scope for growth is enormous. Apart from the two giants, South Korea is currently the most important market, but India has the potential to become a very relevant market as the economy grows
- The MENA area remains also very important: The MENA region's economies are picking from low levels. The region has had difficult times due to political uncertainty and low oil prices but it seems that activity is improving. International funding is coming to Egypt for large infrastructure projects as the economic climate improves.
- The US market is importing annually about 2 million m³ from Europe, back to pre-crisis levels. Swedish and German mills are especially active in that market. However, the consensus within the industry is that exports to the US will plateau. Many companies still remember the sharp

drop in imports occurred in 2007 and do not wish to expose themselves too much, prices are also very volatile. Fundamentals remain good, though.

- There is good financial health across the industry.
- Currencies movements lately have not been as important as they used to be, but there are chances they in the near future trade will be more strongly influenced by appreciation or depreciation of currencies.

In sum, Mr Auvinen argues that:

- ➔ European economy is on a stable growth pattern.
- ➔ Global demand of sawn timber will continue to increase.
- ➔ Exchange rate fluctuations have not bothered the industry too much lately, but will continue to affect the industry in the future.
- ➔ Financial performance of the European sawmilling industry is good and investments in operation improvements are taking place.
- ➔ Raw material availability will limit European production growth going forward.
- ➔ Prices for raw material and sawn timber will likely continue to increase...

CANADA, DAVID CALABRIGO (SENIOR VICE PRESIDENT, CORPORATE DEVELOPMENT, LEGAL AFFAIRS AND CORPORATE SECRETARY CANFOR CORPORATION)

Mr Calabrigo presents the Canadian market. He shows that in British Columbia (Western Canada) in the medium and long-term the supply of logs will decrease, and mills will have to adjust. He shares his concerns regarding a rise of forest fires – the last two seasons recorded the highest amount of forest fires. On the other hand, demand is strong and renewable, sustainable products, like wood products, will displace non-renewable and energy-intensive product, and demand is expected to further grow as a result. There is an increasing recognition of the contribution that wood products give when it comes to fighting climate change. Also, in the long-term, huge countries such as China and India are expected to increase consumption: presently their per capita consumption of sawnwood is very low, and the potential for growth is huge. The next big market promises to be India, where there is huge potential given the very low per capita wood consumption compared with European or North American countries. China is diversifying its imports and all levels of governments are focused on promoting prefabrication building. Its Prefabrication Construction Initiative offers many benefits for the sawmill industry, as it:

- Further endorses lumber as a green building material
- Promotes wood use in government funded projects like schools, nursing homes and social housing
- Stimulates more multi-story hybrid buildings
- Sets up “green supply chain” for the industry

He states that in North America, labour shortages are driving a move toward the industrialization of home construction, which includes modular and prefabricated housing: this is also a welcome development. Across many countries, there is nice growth in mid-rise and tall wood construction and there is the opportunity to expand the wood products used through collaboration with the steel and concrete industries in hybrid construction models.

For lumber producers, a move to modular and prefabrication brings new requirements for quality and consistency in products. In the future he thinks that it will be key to diversify and to offer a nice range of products: the suppliers who will succeed to do this will have access to additional markets and margins.

He concludes with a note of optimism:

- Demand is strong and sustainable
- Sawmill products are being used in new and innovative applications.

USA, MARC BRINKMEYER (IDAHO FOREST GROUP CHAIRMAN)

Mr Brinkmeyer's presentation is also about North America, but his focus is rather on the US. First, he briefly mentions that in the North Western part of the United States, many forests are at risk. The necessity to take care of forests is one of the recurring themes of this year's conference.

Mr Brinkmeyer then shows that in spite of negative predictions of most economists, the economy under President Trump's Administration is doing well so far. However, federal deficit is accumulating as a result of aggressive tax cuts. Mr Brinkmeyer praises some members of the Administration, who are very close to the forest-based industries. He shows that housing starts have grown if we look at the past few years, but we are still way below historical levels. He lists factors which led to a sharp increase of lumber prices at the beginning of 2018:

- In 2017 the lumber market experienced multiple events that pushed the market to the extreme high end of the historical price range.
- Buyers fear of a pullback kept speculative purchasing to a minimum which combined with good consumption has resulted in the pipeline being extremely thin the last six months.
- Production did not respond to the higher margins like it does normally due to a combination of factors (long wet spring followed by an early and severe fire season) that restricted resource availability.
- Prior major market moves of this magnitude have always been followed by an equally (or deeper) pullback as the run up.
- Prices abruptly fell in recent months, making the market very unstable.

Housing starts, thanks to the increase of single-family starts mainly (which is good for the industry), are expected to increase over the next couple of years and lumber demand will also increase. Production is expected to grow, too, but not as much as demand: imports as a result will probably need to grow (including imports from Europe). As it is the case in many European countries, even in the US there is a significant labor shortage.

- Innovation is entering the construction sector in a meaningful and transformative way.

The industry needs to make sure to protect its market share from rival materials.

Mr Brinkmeyer then talks about the Softwood Lumber Board (SLB), which is an industry-funded initiative established to promote the benefits and uses of softwood lumber products in outdoor, residential and non-residential construction. Programs and initiatives supported by the SLB focus on increasing the demand for softwood lumber products in the US. The SLB is solely involved in growing markets for softwood lumber, and does not discuss or in any way become involved with any government policy or trade dispute. In the first half of 2018, the SLB's investment have generated 592 million board feet of incremental demand, well ahead of last year (468 million bf). An example of how SLB is pushing the boundaries and perceptions of where wood can be used: the SLB partnered with the United States Department of Agriculture to fund blast testing of CLT and nail-laminated timber (NLT) structures. As a result of the successful tests, the US Department of Defence has commissioned mass timber hotels on Army bases around the country.

Mr Brinkmeyer then shows that other materials, such as steel and concrete, are very active in trying to damage the reputation of wood. Finally, he lists actions that will be prioritized by the SLB:

- Protect the current share in established market segments and newer ones.
- Prioritize conversion of projects to wood in the 1 - 4 story (non-residential), 5 & 6 story, and 7 - 12 story segments.
- Support and promote innovative buildings that showcase the capacity of wood construction.
- Expand market acceptance and use of lumber-based mass timber construction in larger and taller buildings.
- Pursue market promotion initiatives beyond the United States.

NORTH AFRICA, GUILLAUME HOTELIN (DEPUTY CEO, GROUP ROBELBOIS)

Mr Hotelin presentation is about the MALT region (Morocco, Algeria, Libya, Tunisia). The region shares many features (such as the burgeoning demographics) but all countries have their very specific aspects. He notices that since the oil prices dropped in 2014 the imports of sawn softwood also dropped by 38%, interrupting a steep growth trajectory which began in the previous decade. The estimates for the next couples of years however are slightly more positive: oil prices are picking up and in both 2018 and 2019 growth will finally resume (barring a major political crisis).

Imported species by MALT countries include pine (redwood, 62% of all imports) spruce (33%), and maritime pine (7%). Top exporters to MALT region are 3: Sweden, which maintains a share of around 36% of exports in 2017, Finland, with a growing share of 29%, and Austria, with a share of around 23%.

Mr Hotelin then proceeds to make a one-by-one review of the MALT countries:

- Morocco: a relatively stable political and macroeconomic picture, trying to diversify imports but there are high social and economic disparities. Construction sector underwent a slowdown since 2012, sawn softwood imports hovering around slightly less than 1 million m³ for some years. Slight growth of imports expected in 2018 and 2019 but a danger consists in the fact that materials such as PVC are more and more used.

- Algeria: uncertainty regarding future trajectory, excessive red tape. A high dependence on oil exports caused a shortage of hard currency which pushed governments to reduce imports. From April 2017 and import licenses system were in place, but licenses were initially not granted and even in Autumn 2017 covered only part of real need. Sawn softwood can be freely imported again since January 2018. Forecast for 2018 is 1.4 million m³ of sawn softwood imports, down from 2 million of 2015.
- Tunisia: economy diversifying, political transition ongoing. But high unemployment rate (common factor in many countries across the region) and security and safety issues negatively impacting on tourism, which is very important for Tunisia. Decline of imports in the last few years but expectations are of slight increase for 2019 at almost 300,000 m³; preference for low grade, and, like in Morocco, tendency to use substitutes
- Libya: Smaller market, country devastated by civil war. Necessity to rebuild infrastructure and housing, imports at around 30,000 m³ in 2017 down from almost 400,000 m³ in 2013. Growth foreseen over the next few years, but imports still below 100,000 m³. Thus, there is potential if peace is fully restored.

In sum the region has potential but many factors are negatively impacting over the last few years. Growth of imports is expected to resume, but more and more substituting materials are entering the market.

RUSSIA, SVYATOSLAV BYCHKOV (ILIM TIMBER MANAGING DIRECTOR)

Mr Bychkov's presentation is about Russia. He begins his presentation by stressing that currencies volatility really had a strong impact on softwood lumber trade, at least when it comes to Russia as the ruble over the last few years has been very topsy-turvy.

Mr Bychkov then stresses that the Russia forest resources are sharply growing, particularly in Siberia and the Far East.

Russia industrial roundwood exports peaked in 2006-2007 with around 50 million m³ exported but then the combination of customs duties with government support for investments in wood processing limited log exports which stabilized around 20 million m³ over the last few years. Sawn softwood exports reached, instead, 27 million m³

in 2017 (2016: 24 million m³) up from 5 million m³ at the end of the '90. Russian domestic consumption was around 9.5 million m³.

China softwood saw log imports from Russia account for 85-90% of total Russian saw log exports and consists mainly from high quality Siberian pine Ø 30 cm and larger. Finland, Sweden and Germany are the major European importers of saw log from Russia, mostly high quality 6 m Spruce. He also emphasized that:

- On December 12th, 2017 Russian Government ratified the quota for logs export in the Far East Decree #1520), and customs duty elevation in 2019-2021 (Decree #1521).
- Customs duty to reach 40% in 2019 and 80% in 2021

which will make log exports without quota economically unfeasible.

- The major export destination which will be negatively affected by duty increase is China.

In 2017 Russian exports of sawn softwood to China reached 15.5 million m³ (up from 12.8 million m³), which more than compensated a decline of 9% to MENA (to 2.5 million m³) and of 2% to the CIS countries (to 3.27 million m³). Exports to Europe reached 3.57 million m³ in 2017 up from 3.46 million in 2016.

Mr Bychkov also informs participants about the latest policy measures in Russia: the Russian Government has approved in September 2018 a Strategy for the wood processing industry development (cluster approach, further processing, pulp and paper production development) targeting 2,5 times growth of added value for 1 m³ of raw material. The Strategy is on hold at the moment as after an unexpected 44% increase of

forest lease rate made the industry much less attractive for investments. An electronic system for monitoring of round wood turnover on federal level started to operate successfully in 2015 and on sawn timber July 01, 2017. There are 47,5 thousand authorized users in 2018.

Finally, he concludes that:

- China remains the key market for Russian log and lumber with increasing share of lumber exports.
- Introduction of the new capacities and redistribution of volumes from MENA and domestic market leads to growth of sawn timber export volumes from Russia to China.
- Sustainable demand and stable prices in China are driving development of sawmilling capacities in Russia both in the North West and Siberia & Far East.
- Short term competitive advantage with Ruble devaluation was finished in 2H'2016 and Ruble strengthening in 2017 brought margins to low level.

LATVIA, ARNIS MUIŽNIEKS (BOARD MEMBER, THE CONFEDERATION OF EUROPEAN FOREST OWNERS (CEPF))

Mr Muižnieks' presentation is centered on forests. He invites all participants to reflect on the fact that many softwood species will shrink in the future in Europe, in particular in Central Europe.

He states that forest owners are confronted with a challenging environment for a number of reasons:

Environment:

- ➡ Climate: global warming is taking/will take a heavy toll on European forests: as a result, pests are on the rise and a change in the composition of forests is ongoing
- ➡ Wildlife: many forests are more and more damaged by wildlife (especially pine trees)

Social:

- ➡ Urbanization: a more and more urban population sees the forest not as something to be managed according also to economic criteria, but mainly as a recreational resource. Urban population sees a cut as the end of a forest, while foresters see it as a new beginning – with roundwood entering the economic system.
- ➡ Legislation: EU forest policy is a scattered puzzle of different, and at times conflicting priorities. This creates confusion by forest owners. Even national legislation sometimes is confusing.

- ➡ NGO initiatives: they often convey a message by which trees are only good if left standing. They really influence popular opinion and even the United Nations logo stresses the non-timber values of forests.

From the economic point of view the picture is more mixed. There are indeed some reasons to be optimistic: for instance, research and development will increase productivity.

Mr Muižnieks shows a chart about the increase of broadleaved woodland which is taking place in practically all European countries. He also stresses that we need to find more incentives for forest owners to become active managers. In general, he observes that forests compared with some decades ago have many more functions, which increases the costs for forest managers.

Finally, he argues that all these challenges are compounded by forest certification: the majority of the private forest owners perceive forest certification as additional financial burden with no financial return. Forest sector is driven by strict national and international regulations. Nevertheless, in the past years private forest owners face situations when certification is being enforced.

EGYPT, IBRAHIM ELSHAL (ELSHAL TIMBER CEO)

Mr Elshal gives a presentation about the situation in Egypt. He reminds that Egypt is a young country with a burgeoning population (around 100 million people and projected to grow) and no forests, so it is structurally a very important markets for sawn softwood exporters and while there might be political and economic challenges, it will always need to import a lot of sawnwood. In 2017, Egypt imported 4 million m³ of sawn softwood, which is tantamount to 41% of total Middle East and North Africa (MENA) imports.

Mr Elshal argues that the political situation in Egypt is stable, as President el-Sisi won the elections at the beginning of 2018. Economic problems remain, but in the short-term, the government borrowing strategy will postpone any severe crisis. The budget deficit was 11.4% of GDP in 2018, and while there is no longer a problem of scarce foreign currencies reserves, a burgeoning debt is a source of concern. The economy in general and the construction market in particular adjusted to the Egyptian Pound flotation shock – the economic decision-makers decided to end the Pound's peg to the Dollar and as a result the pound underwent a huge depreciation at the end of 2016, when then official rate was USD 1 = EGP 8.88 and in a few days it sank to USD 1 = EGP 19.5. Economic reforms are underway, and the International Monetary Fund said at the end of September that Egypt's economy shows signs of recovery. In the construction market there are several ongoing projects, including building from scratch new cities to accommodate the growing population. Mr Elshal thinks that the planned ambitious projects are likely to continue but the falling purchasing power of the population is worrying

as the majority of Egyptians cannot afford the very high housing prices in the new cities and new housing projects. Mr Elshal then proceeds to analyze the softwood market: sawn softwood imports grew by 4% in the period Jan-Jul 2018 compared with the corresponding period of 2017 to 2.1 million m³. Finland retains the leadership for the second year running with 800,000 m³ exported (+13%), followed by Russia with 660,000 m³ (+29%) and Sweden with 490,000 m³ (-28%). Regarding prices, they were rising from the beginning of 2017 until May-June of 2018, then they stabilized and from end of August there was a slight decrease. At the end of September, stocks reached very high levels.

Mr Elshal then wraps up by summarizing what he said and offering predictions for next year:

- The political and security situation will likely remain stable.
- With the government economic strategy, no big crisis is probably looming, but for the long-term the very high debt level is a concern.
- Infrastructure and public projects will probably progress at the same level.
- The young and fast-growing population should keep housing demand high, but there is a concern about the high prices and balance between supply and demand.
- Now, the Egypt softwood market is already oversupplied, stockd are very high and this will affect volumes of imports and prices until Dec-18 or Jan-19.
- During Q1 2019, there will probably be a supply-demand balance; then, prices are expected to reach relative stable levels, and after that imports volume will start recovery.

FRANCE, ARMEL CHAUMONT (INDUSTRIAL SALES DIRECTOR FRANCE - SCA WOOD)

The presentation of Mr Chaumont is about the latest developments in the French sawn softwood market. France is a mature economy, an important European country with a population of 65 million people, and younger than the average EU population. GDP growth in 2018 is set to be at 1.8%, slightly below the EU average of 2.1%. Forests cover 31% of the French territory, and two thirds of forests are hardwood ones, 21% softwood and 12% mixed forests. Timber production, however, is made up mainly of softwood 83%. 35% of softwood production is certified, 12% is kiln-dried (data from 2016). The low-share of kiln-dried goods is the



reason why France does not export too much abroad: less than 10% of production is exported, mainly to other European countries.

Exports of softwood logs to China are not concerning but rising.

France imports considerable amounts of sawn softwood from other European countries, mainly from Germany (430,000 m³ in 2017), Finland (390,000 m³), Belgium (335,000 m³), Russia (330,000 m³), Sweden (310,000 m³).

Consumption per capita is increasing but remains far from the peak achieved in 2007. By segment the construction sector absorbs 40% of sawn softwood, followed by packaging, pallets, and concrete forming (27%).

Construction in both the residential and non-residential sector increased from 2015 until 2017 but this year it looks like there will not be a growth. Unfortunately, it is the multi-family home market (that consumes less lumber than the single family one) which tended to grow.

Mr Chaumont then goes on to show the promotional activities which have been going on in France, such as *Pour Moi C'est Le Bois*, which targets the construction and packaging markets also through TV spots and advertisements, and aims to promote wood products at the heart of cities to make them more sustainable; another promotional tool is the website bois.com, which shows the different markets and products of the sector. In 2019 a new project will aim to promote wood cladding, which will target builders, designers, architects, journalists.

Mr Chaumont argues that probably in 2019 there will be a slight slowdown of construction but expects promotional activities to bear fruits. 2019 according to Mr Chaumont will be a year of transition, barring a major political and economic crisis.

CHINA, MATHIAS FRIDHOLM (BUSINESS PERFORMANCE MANAGER, SCA WOOD)

Mr Fridholm presentation is focused on the Chinese market. First, he cautions the audience not to trust too much Chinese statistics and figures. He argues that the Chinese government is attempting to steer GDP growth more towards consumption than investment.

China is a global leader in E-Commerce and Mr Fridholm argues that this is becoming relevant also for our industry. The construction market is strong and growing since 2015. However, it is difficult to establish if this is a bubble. The Chinese currency appreciated last year, but in 2018 depreciated again, which is not good for Chinese importers. At any rate, he argues that prefabricated buildings will fit very well in the Chinese market.

The trade war with the US is gaining momentum and a 200 Billion USD tariff scheme has been slapped by the US in September, which includes a lot of wood products. China has retaliated against this and has published a list of products to be tariffed. Wood products will have the following duties:

- 5% tariff on Douglas-fir logs,
- 20% tariff on spruce logs, hemlock logs and hardwood logs,
- 20% tariff on softwood lumber,
- 20-25% tariff on hardwood lumber

Mr Fridholm sees a good future for sawn softwood in China: the government looks serious about the environment because it threatens the stability of the country. Therefore, it wants to increase the consumption of wood.

Overall, Mr Fridholm states that China is trying to become more and more independent – the amount of wood from plantation forests that they will harvest in the next few years is bound to sharply increase. However, there is no reason to believe that the importance of the Chinese market for many European exporters will decline. Quite the contrary, there are many elements that are conducive to believe in an increase of exports, barring a major political and economic crisis.

HUMAN RESOURCES, TOM AUSTEN (DIRECTOR, MILLER MCKENZIE)

Mr Austen's presentation concluded the 2018 edition of the International Softwood Conference.

Mr Austen states that at global level around 13.7 million people work in the wood-working industries (sawmills,

furniture, panel manufacture); in Europe the estimated number is between 2 and 2.5 million. Mr Austen wonders how much investment and time companies devote to secure long-term success, including human resources. A recent global study held by ManpowerGroup, on over 38,000

employers around the world, found that a staggering 54% of companies are openly experiencing a talent shortage that has a medium or high impact on their ability to meet client needs. Only 38% of global companies say they have enough data about their workforce to understand strengths and potential vulnerabilities from a skills perspective. This is probably even lower in the timber sector. Many employees feel that their skills are becoming obsolete. Industries will have to adapt to technological advances such as digital technologies, which are precious when it comes to increasing productivity and improving cost-efficiency. They will also enable better understanding of clients wants and needs. In this sense the forest-based industries seem to be lagging way behind the average. In a survey, less than 10% of companies active in the forest-based sector declare that they are prepared to harness digital technology in dealing with human resources aspects of their organization such as organization of work, changing the skill and job mix of workforce and so on. Only 18% of forest products companies have strategies for evolving their models over the next three years (cross-industry benchmark: 44%). On the other hand, the large majority of employees foster the introduction of digital technology into businesses.

He argues that digital change should be driven from the top. Leadership needs to broaden its thinking about the role of

digital technology - which may require bringing executives on board who are prepared for a digital world.

Mr Austen then states that in the UK the percentage of employees in the forest products sector older than 40 is 53% and growing. Succession planning for an ageing workforce are issues which need to be addressed. Few young people around the world decide to choose timber as a career option: the sector is not sufficiently attractive. There are many functions nowadays in the forest-based industries which can appeal highly-educated young professional. The sector needs to do more to attract them.

In short, challenges are manifold: the forest-based industries need to beat the skills shortage, offer a career path, invest time and money in workforce development, attract young workers by raising perceptions of the industry. Mr Austen invites businesses to think if they have plans to do so in the medium- and long-term.

Disclaimer: This summary of the International Softwood Conference 2018 has been prepared by the EOS Secretariat based on the presentations given during the Conference. It has been done to the best of the knowledge of the Secretariat, but it does not necessarily reflect the views of the presenters of the Conference nor it claims completeness.



2019 ISC. A moment of the sawmill visit.



SAVE THE DATE

67th International Softwood Conference **2019**

16 - 18 October

ANTWERP - BELGIUM

Antwerp, on the crossroads of international trade and a major harbour for wood and wood products, will be the host city of the 2019 International Softwood Conference from 16 to 18 October.

Organised by the European Organisation of the Sawmill Industry, EOS, the European Timber Trade Federation, ETTF, and the softwood import section of Fedustria, the Belgian federation of the Textile, Wood and Furniture Industries, the conference will gather representatives of leading softwood producing and importing companies for two days of inspiring presentations and contacts.

In addition to the “technical” meetings, participants will be able to get to learn Antwerp better with a welcome reception and official conference dinner at famous landmarks such as the MAS (Museum aan de Stroom) and the Antwerp Zoo. All meetings will be held at the Radisson Blu Astrid Hotel.

Full details on the conference will soon become available via (ettf.info/isc2019). For queries contact isc2019@fedustria.be.



7.2. The International Hardwood Conference

SAVE THE DATE. On 21st and 22nd November, the International Hardwood Conference will be held in the city of Berlin. The event is co-organised by the Deutsche Säge- und Holzindustrie Bundesverband e. V. (DeSH) together with the European Timber Trade Federation and European Organisation of Sawmill Industries.

The 2019 IHC is taking place in a country where forests and forestry have a long history. Each year millions of tourists marvel at „the Germans love“. The forestry sector in this country is considered as a model for sustainability: the forests serve equally as habitat, climate factor, recreation area and source of livelihood for many people.

The German capital Berlin offers a contrast to the idyllic surrounding forests and lakes. Berlin is a vibrant metropolis in constant change. Thus, the atmosphere of Berlin forms the perfect setting for this year's Hardwood Conference, on which we want to discuss the change and the challenges of the sawmill and wood industry: How will the global markets develop? Will there still be enough raw material for all of us in future? Which products will be in demand? These and other questions want to be investigated.

FURTHER INFORMATION: WWW.IHC2019



Previously, in 2017, the International Hardwood Conference, was held in Venice, an Italian city, which was built on an ingenious foundation system of largely hardwood piles. On that occasion, the IHC communicated a confident, international hardwood industry that's adapting to market needs. The event was organised by Italian trade federation Fedecomlegno in association with the European Timber Trade Federation and European Organisation of Sawmill Industries. The IHC acknowledged that the sector had obstacles to overcome. Illegal logging and trade remained significant issues and verifying the legality and sustainability of the bona fide industry's products could also prove complex, said speakers. Ensuring raw material supply, given growing worldwide demand, was another challenge.

Presentations are available at the following link:

<http://ihc2017.info/en/welcome/>



8. European Standardisation – Update

CEN/TC 124 “Timber structures”



Chairperson: Mr Frédéric Rouger

Secretary: Mr Guillaume Rousselet

Structure of the technical committee

| Reference | Title | Convenor |
|-----------------------|---|--------------------|
| CEN/TC124/WG 1 | Test methods | Christophe Sigrist |
| CEN/TC124/WG 2 | Solid timber | Frédéric Rouger |
| CEN/TC124/WG 3 | Glued laminated timber | Tobias Wiegand |
| CEN/TC124/WG 4 | Connectors | Barbara Sogato |
| CEN/TC124/WG 5 | Prefabricated wall, floor and roof elements | Simon Aicher |
| CEN/TC124/WG 6 | Wood poles | Willie Clason |

Published standards

| Reference | Date | Title |
|-------------------------|------------|--|
| EN 12512:2001/A1:2005 | 2005-09-28 | Timber Structures - Test methods - Cyclic testing of joints made with mechanical fasteners |
| EN 409:2009 | 2009-04-01 | Timber structures - Test methods - Determination of the yield moment of dowel type fasteners |
| EN 15736:2009 | 2009-08-19 | Timber Structures - Test methods - Withdrawal capacity of punched metal plate fasteners in handling and erection of prefabricated trusses |
| EN 26891:1991 | 1991-02-21 | Timber structures - Joints made with mechanical fasteners - General principles for the determination of strength and deformation characteristics (ISO 6891:1983) |
| EN 14592:2008+A1:2012 | 2012-05-23 | Timber structures - Dowel-type fasteners - Requirements |
| EN ISO 8970:2010 | 2010-06-15 | Timber structures - Testing of joints made with mechanical fasteners - Requirements for wood density (ISO 8970:2010) |
| EN 16351:2015 | 2015-10-14 | Timber structures - Cross laminated timber - Requirements |
| EN 15497:2014 | 2014-04-30 | Structural finger jointed solid timber - Performance requirements and minimum production requirements |
| EN 338:2016 | 2016-04-06 | Structural timber - Strength classes |
| EN 14358:2016 | 2016-06-22 | Timber structures - Calculation and verification of characteristic values |
| EN 16784:2016 | 2016-06-29 | Timber structures - Test methods - Determination of the long term behaviour of coated and uncoated dowel-type fasteners |
| EN 1382:2016 | 2016-02-17 | Timber Structures - Test methods - Withdrawal capacity of timber fasteners |
| EN 1383:2016 | 2016-02-17 | Timber structures - Test methods - Pull through resistance of timber fasteners |
| EN 14081-1:2016 | 2016-02-10 | Timber structures - Strength graded structural timber with rectangular cross section - Part 1: General requirements |
| EN 1912:2012/AC:2013 | 2013-08-21 | Structural Timber - Strength classes - Assignment of visual grades and species |
| EN 16929:2018 | 2018-12-12 | Test methods - Timber floors - Determination of vibration properties |
| EN 1380:2009 | 2009-04-01 | Timber structures - Test methods - Load bearing nails, screws, dowels and bolts |
| EN 15737:2009 | 2009-08-19 | Timber Structures - Test methods - Torsional resistance of driving in screws |
| EN 15228:2009 | 2009-03-25 | Structural timber - Structural timber preservative treated against biological attack |
| EN 789:2004 | 2004-10-20 | Timber structures - Test methods - Determination of mechanical properties of wood based panels |
| EN 380:1993 | 1993-07-18 | Timber structures - Test methods - General principles for static load testing |
| EN 595:1995 | 1995-03-22 | Timber structures - Test methods - Test of trusses for the determination of strength and deformation behaviour |
| EN 14081-3:2012+A1:2018 | 2018-10-24 | Timber structures - Strength graded structural timber with rectangular cross section - Part 3: Machine grading; additional requirements for factory production control |
| EN 336:2013 | 2013-10-02 | Structural timber - Sizes, permitted deviations |
| EN 384:2016+A1:2018 | 2018-11-21 | Structural timber - Determination of characteristic values of mechanical properties and density |
| EN 1075:2014 | 2014-12-17 | Timber structures - Test methods - Joints made with punched metal plate fasteners |
| EN 14251:2003 | 2003-12-03 | Structural round timber - Test methods |
| EN 14229:2010 | 2010-10-06 | Structural timber - Wood poles for overhead lines |
| EN 13271:2001/AC:2003 | 2003-09-24 | Timber fasteners - Characteristic load-carrying capacities and slip-moduli for connector joints |
| EN 14374:2004 | 2004-11-24 | Timber structures - Structural laminated veneer lumber - Requirements |
| EN 16737:2016 | 2016-05-25 | Structural timber - Visual strength grading of tropical hardwood |

| Reference | Date | Title |
|---------------------|------------|--|
| EN 1381:2016 | 2016-02-17 | Timber structures - Test methods - Load bearing stapled joints |
| EN 14545:2008 | 2008-10-01 | Timber structures - Connectors - Requirements |
| EN 14081-2:2018 | 2018-10-24 | Timber structures - Strength graded structural timber with rectangular cross section - Part 2: Machine grading; additional requirements for type testing |
| EN 14250:2010 | 2010-01-27 | Timber structures - Product requirements for prefabricated structural members assembled with punched metal plate fasteners |
| EN 383:2007 | 2007-01-10 | Timber Structures - Test methods - Determination of embedment strength and foundation values for dowel type fasteners |
| EN 1912:2012 | 2012-04-18 | Structural Timber - Strength classes - Assignment of visual grades and species |
| EN 912:2011 | 2011-07-13 | Timber fasteners - Specifications for connectors for timbers |
| EN 12512:2001 | 2001-11-21 | Timber structures - Test methods - Cyclic testing of joints made with mechanical fasteners |
| EN 408:2010+A1:2012 | 2012-07-25 | Timber structures - Structural timber and glued laminated timber - Determination of some physical and mechanical properties |
| EN 14080:2013 | 2013-06-26 | Timber structures - Glued laminated timber and glued solid timber - Requirements |
| EN 594:2011 | 2011-06-29 | Timber structures - Test methods - Racking strength and stiffness of timber frame wall panels |
| EN 596:1995 | 1995-03-22 | Timber structures - Test methods - Soft body impact test of timber framed walls |
| EN 13271:2001 | 2001-11-21 | Timber fasteners - Characteristic load-carrying capacities and slip-moduli for connector joints |

Pending standards

| Project | Title | Status | Initial Date | Forecasted voting date |
|---------------------------------------|--|----------------|--------------|------------------------|
| EN 14081-2:2018/prA1(WI=00124182) | Timber structures - Strength graded structural timber with rectangular cross section - Part 2: Machine grading; additional requirements for type testing | Under Drafting | 2019-03-12 | 2020-12-23 |
| EN 384:2016+A1:2018/prA2(WI=00124183) | Structural timber - Determination of characteristic values of mechanical properties and density | Under Drafting | 2019-03-12 | 2020-12-23 |
| FprEN 14374(WI=00124137) | Timber structures - Laminated veneer lumber (LVL) - Requirements | Under Approval | 2015-10-20 | 2018-08-31 |
| FprEN 14592(WI=00124149) | Timber structures - Dowel-type fasteners - Requirements | Under Approval | 2015-05-12 | 2018-03-14 |
| prEN 12512 rev(WI=00124173) | Timber structures - Test methods - Cyclic testing of joints made with mechanical fasteners | Preliminary | | |
| prEN 13271 rev(WI=00124168) | Timber fasteners - Characteristic load-carrying capacities and slip-moduli for connector joints | Preliminary | | |
| prEN 14081-3 rev(WI=00124181) | Timber structures - Strength graded structural timber with rectangular cross section - Part 3: Machine grading; additional requirements for factory production control | Under Drafting | 2019-03-12 | 2020-12-23 |
| prEN 14229 rev(WI=00124164) | Structural timber - Wood poles for overhead lines | Preliminary | | |
| prEN 14250 rev(WI=00124163) | Timber structures - Product requirements for prefabricated structural members assembled with punched metal plate fasteners | Preliminary | | |
| prEN 14545 rev(WI=00124171) | Timber structures - Connectors - Requirements | Preliminary | | |
| prEN 14545 rev(WI=00124180) | Timber structures - Connectors - Requirements | Preliminary | | |
| prEN 15736 rev(WI=00124161) | Timber structures - Test methods - Withdrawal capacity of punched metal plate fasteners in handling and erection of prefabricated trusses | Preliminary | | |
| prEN 15736 rev(WI=00124169) | Timber Structures - Test methods - Withdrawal capacity of punched metal plate fasteners in handling and erection of prefabricated trusses | Preliminary | | |
| prEN 16351(WI=00124177) | Timber structures - Cross laminated timber - Requirements | Under Approval | 2017-11-14 | 2019-09-24 |
| prEN 1912 rev(WI=00124178) | Structural Timber - Strength classes - Assignment of visual grades and species | Preliminary | | |
| prEN 409 rev(WI=00124174) | Timber structures - Test methods - Determination of the yield moment of dowel type fasteners | Preliminary | | |
| prEN 409 rev(WI=00124162) | Timber structures - Test methods - Determination of the yield moment of dowel type fasteners | Preliminary | | |
| prEN 594 rev(WI=00124172) | Timber structures - Test methods - Racking strength and stiffness of timber frame wall panels | Preliminary | | |
| prEN 912 rev(WI=00124167) | Timber fasteners - Specifications for connectors for timbers | Preliminary | | |
| prEN ISO 8970(WI=00124165) | Timber structures - Testing of joints made with mechanical fasteners - Requirements for timber density (ISO/DIS 8970:2018) | Under Approval | 2015-10-13 | 2019-08-05 |
| (WI=00124170) | Timber structures - Glued laminated timber and glued solid timber made from hardwood species - Requirements | Preliminary | | |

CEN/TC 175 “Round and Sawn Timber”



Chairperson: Mr Philippe Pangault

Secretary: Mr Frédéric Henry

Structure of the technical committee

| Reference | Title |
|-------------------------|---|
| CEN/TC 175/WG 1 | General matters, definitions, measurement methods |
| CEN/TC 175/WG 2 | Sawn timber |
| CEN/TC 175/WG 4 | Round timber |
| CEN/TC 175/WG 30 | Specific user requirements - Consolidation |
| CEN/TC 175/WG 32 | Specific user requirements - Timber in joinery |
| CEN/TC 175/WG 33 | Specific user requirements - Timber in flooring |
| CEN/TC 175/WG 34 | Specific user requirements - Timber in packaging and pallets |
| CEN/TC 175/WG 36 | Specific user requirements - Other timber products |
| CEN/TC 175/WG 37 | Specific user requirements - Timber in stairs |
| CEN/TC 175/WG 38 | Specific user requirements - Timber in cladding and panelling |
| CEN/TC 175/WG 39 | Specific user requirements - Fire retardant treated wood |

Published standards

| Reference | Date | Title |
|-------------------------|------------|--|
| EN 14221:2006 | 2006-11-08 | Timber and wood-based materials in internal windows, internal door leaves and internal doorframes - Requirements and specifications |
| EN 13183-2:2002/AC:2003 | 2003-09-17 | Moisture content of a piece of sawn timber - Part 2: Estimation by electrical resistance method |
| EN 1927-2:2008/AC:2009 | 2009-04-01 | Qualitative classification of softwood round timber - Part 2: Pines |
| EN 1611-1:1999/A1:2002 | 2002-08-21 | Sawn timber - Appearance grading of softwoods - Part 1: European spruces, firs, pines, Douglas fir and larches |
| EN 1534:2010 | 2010-10-27 | Wood flooring - Determination of resistance to indentation - Test method |
| EN 844-8:1997 | 1997-03-19 | Round and sawn timber - Terminology - Part 8: Terms relating to features of round timber |
| EN 844-9:1997 | 1997-03-19 | Round and sawn timber - Terminology - Part 9: Terms relating to features of sawn timber |
| EN 975-1:2009/AC:2010 | 2010-09-29 | Sawn timber - Appearance grading of hardwoods - Part 1: Oak and beech |
| EN 1309-3:2018 | 2018-01-24 | Round and sawn timber - Methods of measurements - Part 3: Features and biological degradations |
| EN 844-2:1997 | 1997-03-19 | Round and sawn timber - Terminology - Part 2: General terms relating to round timber |
| EN 844-7:1997 | 1997-03-19 | Round and sawn timber - Terminology - Part 7: Terms relating to anatomical structure of timber |
| EN 844-10:1998 | 1998-04-22 | Round and sawn timber - Terminology - Part 10: Terms relating to stain and fungal attack |
| EN 16755:2017 | 2017-10-11 | Durability of reaction to fire performance - Classes of fire-retardant treated wood products in interior and exterior end use applications |
| EN 14298:2017 | 2017-10-25 | Sawn timber - Assessment of drying quality |
| EN 13489:2017 | 2017-09-27 | Wood-flooring and parquet - Multi-layer parquet elements |
| EN 1910:2016 | 2016-04-27 | Wood flooring and wood panelling and cladding - Determination of dimensional stability |
| EN 13227:2017 | 2017-11-01 | Wood flooring - Solid lamparquet products |
| EN 17009:2019 | 2019-03-13 | Flooring of lignified materials other than wood - Characteristics, assessment and verification of constancy of performance and marking |
| EN 1313-1:2010 | 2010-01-27 | Round and sawn timber - Permitted deviations and preferred sizes - Part 1: Softwood sawn timber |
| EN 13226:2009 | 2009-05-27 | Wood flooring - Solid parquet elements with grooves and/or tongues |
| EN 12248:1999 | 1999-06-23 | Sawn timber used in industrial packaging - Permitted deviations and preferential sizes |
| EN 12249:1999 | 1999-06-23 | Sawn timber used in pallets - Permitted deviations and guidelines for dimensions |
| EN 1309-2:2006 | 2006-03-15 | Round and sawn timber - Method of measurement of dimensions - Part 2: Round timber - Requirements for measurement and volume calculation rules |
| EN 13183-2:2002 | 2002-04-17 | Moisture content of a piece of sawn timber - Part 2: Estimation by electrical resistance method |
| EN 1611-1:1999 | 1999-08-18 | Sawn timber - Appearance grading of softwoods - Part 1: European spruces, firs, pines and Douglas firs |
| EN 14762:2006 | 2006-02-15 | Wood flooring - Sampling procedures for evaluation of conformity |
| EN 14915:2013+A1:2017 | 2017-06-07 | Solid wood panelling and cladding - Characteristics, requirements and marking |
| EN 13647:2011 | 2011-05-18 | Wood flooring and wood panelling and cladding - Determination of geometrical characteristics |
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| Reference | Date | Title |
|-------------------------|------------|--|
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| EN 844-12:2000 | 2000-11-22 | Round and sawn timber - Terminology - Part 12: Additional terms and general index |
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| EN 1313-2:1998/AC:1999 | 1999-06-30 | Round and sawn timber - Permitted deviations and preferred sizes - Part 2: Hardwood sawn timber |
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| EN 1315:2010 | 2010-01-27 | Dimensional classification of round timber |
| EN 14951:2006 | 2006-03-15 | Solid hardwood panelling and cladding - Machined profiles elements |
| EN 14076:2013 | 2013-12-11 | Timber stairs - Terminology |
| CEN/TS 13307-2:2009 | 2009-12-02 | Laminated and finger jointed timber blanks and semi-finished profiles for non-structural uses - Part 2: Production control |
| EN 12246:1999 | 1999-06-23 | Quality classification of timber used in pallets and packaging |
| EN 1927-1:2008 | 2008-03-26 | Qualitative classification of softwood round timber - Part 1: Spruces and firs |
| EN 14519:2005 | 2005-12-21 | Solid softwood panelling and cladding - Machined profiles with tongue and groove |
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| EN 13756:2018 | 2018-09-12 | Wood flooring and parquet - Terminology |
| EN 844-4:1997 | 1997-03-19 | Round and sawn timber - Terminology - Part 4: Terms relating to moisture content |
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| EN 14761:2006+A1:2008 | 2008-07-09 | Wood flooring - Solid wood parquet - Vertical finger, wide finger and module brick |
| CEN/TS 15717:2008 | 2008-04-16 | Parquet flooring - General guideline for installation |
| EN 1927-2:2008 | 2008-03-26 | Qualitative classification of softwood round timber - Part 2: Pines |
| EN 16449:2014 | 2014-03-12 | Wood and wood-based products - Calculation of the biogenic carbon content of wood and conversion to carbon dioxide |
| CEN/TS 12169:2008 | 2008-01-30 | Criteria for the assessment of conformity of a lot of sawn timber |
| EN 14220:2006 | 2006-11-08 | Timber and wood-based materials in external windows, external door leaves and external doorframes - Requirements and specifications |
| EN 844-5:1997 | 1997-03-19 | Round and sawn timber - Terminology - Part 5: Terms relating to dimensions of round timber |
| EN 13183-3:2005 | 2005-03-16 | Moisture content of a piece of sawn timber - Part 3: Estimation by capacitance method |
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| EN 13556:2003 | 2003-06-25 | Round and sawn timber - Nomenclature of timbers used in Europe |
| EN 16481:2014 | 2014-06-18 | Timber stairs - Structural design - Calculation methods |
| EN 13629:2012 | 2012-04-11 | Wood flooring - Solid individual and pre-assembled hardwood boards |
| CEN/TS 14464:2010 | 2010-07-21 | Sawn timber - Method for assessment of case-hardening |
| EN 13488:2002 | 2002-12-18 | Wood flooring - Mosaic parquet elements |
| EN 1316-2:2012 | 2012-10-17 | Hardwood round timber - Qualitative classification - Part 2: Poplar |
| EN 13442:2013 | 2013-03-13 | Wood flooring and wood panelling and cladding - Determination of the resistance to chemical agents |
| CEN/TS 15680:2007 | 2007-11-28 | Prefabricated timber stairs - Mechanical test methods |
| EN 13696:2008 | 2008-12-10 | Wood flooring - Test methods to determine elasticity and resistance to wear and impact resistance |
| EN 844-11:1998 | 1998-04-22 | Round and sawn timber - Terminology - Part 11: Terms relating to degrade by insects |
| EN 1438:1998 | 1998-08-19 | Symbols for timber and wood-based products |
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| EN 1309-1:1997 | 1997-04-23 | Round and sawn timber - Method of measurement of dimensions - Part 1: Sawn timber |
| EN 975-1:2009 | 2009-03-18 | Sawn timber - Appearance grading of hardwoods - Part 1: Oak and beech |
| EN 1316-1:2012 | 2012-10-17 | Hardwood round timber - Qualitative classification - Part 1: Oak and beech |
| EN 1313-2:1998 | 1998-11-18 | Round and sawn timber - Permitted deviations and preferred sizes - Part 2: Hardwood sawn timber |
| EN 15146:2006 | 2006-12-13 | Solid softwood panelling and cladding - Machined profiles without tongue and groove |
| CEN/TS 15676:2007 | 2007-11-21 | Wood flooring - Slip resistance - Pendulum test |
| EN 975-2:2004 | 2004-07-07 | Sawn timber - Appearance grading of hardwoods - Part 2: Poplars |
| EN 13990:2004 | 2004-02-11 | Wood flooring - Solid softwood floor boards |
| EN 1312:1997 | 1997-02-19 | Round and sawn timber - Determination of the batch volume of sawn timber |
| EN 15644:2008 | 2008-12-10 | Traditionally designed prefabricated stairs made of solid wood - Specifications and requirements |

Pending standards

| Project | Title | Status | Initial Date | Forecasted voting date |
|-----------------------------------|---|----------------|--------------|------------------------|
| FprEN 844(WI=00175157) | Round and sawn timber - Terminology | Under Approval | 2017-04-28 | 2018-12-08 |
| prCEN/TS 13307-2 rev(WI=00175174) | Laminated and finger jointed timber blanks and semi-finished profiles for non-structural uses - Part 2: Production control | Preliminary | | |
| prEN 13307-1 rev(WI=00175175) | Timber blanks and semi-finished profiles for non-structural uses - Part 1: Requirements | Preliminary | | |
| prEN 13556 rev(WI=00175170) | Round and sawn timber - Nomenclature of timbers used in Europe | Preliminary | | |
| prEN 13629(WI=00175178) | Wood flooring - Solid individual and pre-assembled hardwood boards | Under Enquiry | 2018-04-19 | 2020-01-08 |
| prEN 13647 rev(WI=00175179) | Wood flooring and wood panelling and cladding - Determination of geometrical characteristics | Under Drafting | 2018-04-19 | 2020-01-08 |
| prEN 14220 rev(WI=00175171) | Timber and wood-based materials in external windows, external door leaves and external doorframes - Requirements and specifications | Preliminary | | |
| prEN 14221 rev(WI=00175173) | Timber and wood-based materials in internal windows, internal door leaves and internal doorframes - Requirements and specifications | Preliminary | | |
| prEN 14342 rev(WI=00175172) | Wood flooring and parquet - Characteristics, evaluation of conformity and marking | Preliminary | | |
| prEN 1534(WI=00175176) | Wood flooring and parquet - Determination of resistance to indentation – Test method | Under Enquiry | 2018-03-08 | 2019-12-22 |
| (WI=00175180) | Guidance for the preparation of the declaration of performance and CE marking | Preliminary | | |
| (WI=00175177) | Wood flooring and parquet – Determination of top and bottom layer delamination of multilayer elements – Test method | Under Drafting | 2018-04-19 | 2020-01-08 |

EOS organisation 2018/2019

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- Joël Lefebvre - Groupe Lefebvre (FR)..... Vice-President for Hardwood
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- Carsten Doebling - Ilim Timber Germany (DE)
- Nicolas Douzain-Didier – Fédération Nationale du Bois (FR) replacing Marc Siat – Siat Braun (FR)
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EOS Secretariat - Offices

EOS is located, together with other European wood associations at Rue Montoyer 24 in Brussels, Belgium. The office building, located 5 minutes' walk from the European Parliament, provides opportunities for meetings of national federations too and members are always welcome to use the various facilities when in Brussels.



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ANNUAL REPORT 2018/2019

The European Organisation of the Sawmill Industry (EOS) aisbl, an international non-profit association according to Belgian law, represents the interests on the European and international level of the sawmill industries from 12 European countries (Austria, Belgium, Croatia, Denmark, Finland, France, Germany, Latvia, Norway, Romania, Sweden and Switzerland), producing about 80% of the total European sawn wood output. The sector represents a turnover of around 37 billion EUR and 16% of the overall woodworking and furniture industry in EU28.

The EOS secretariat extends its thanks to all persons and organisations that have contributed to the publication of this report.

Note: the information provided in Chapter 4 “Main results from the EOS Market Survey April 2018” as well as in the country reports is based on information supplied by the EOS member federations and may differ from the information included in other databases or reports. If the EOS member federations could not provide the required information, the EOS secretariat has used information derived from other sources in order to present the full picture.

