

Annex

Forest Products Market Statement

I. Overview of forest products markets in 2019 and 2020

1. Despite relatively good economic growth, overall consumption of forest products in the ECE region decreased slightly in 2019 compared to 2018, with consumption decreasing for industrial roundwood, sawnwood, wood-based panels and pulp and paper. This was largely the result of Europe and North America, as the countries of Eastern Europe, the Caucasus and Central Asia (EECCA) showed relatively good growth in the consumption of sawnwood (5%), with only industrial roundwood showing a reduction in consumption. It should be kept in mind that growth showed positive for all products other than pulp and paper when compared to 2015 (table 1). In the Russian Federation roundwood removal are expected to decline from 2019 to 2020 due to expected declines in forest products production.

2. The year 2020 started as a continuation of 2019 until the COVID-19 pandemic impacted the ECE region. Anecdotally and based on information given at the 2020 Market Discussions, the forest sector appears less affected by COVID-19 than many other industries; it was deemed essential by many governments and thus continued to operate during lockdown and at least in the short term there has been better than expected demand for most forest products, especially after the end of the first half of the year. Information given at the 2020 Market Discussions indicate that demand for forest products is high and will remain so, barring any dire changes. Demand for housing and from growing economies should ensure strong consumption of forest products through the decade. In addition, demand for innovative construction solutions, such as cross-laminated timber (CLT) is increasing exponentially (forecasted to double in the US between 2020 and 2024).

Table 1

Apparent consumption of industrial roundwood, sawnwood, wood-based panels and paper and paperboard in ECE region, 2015-2019

	<i>Thousand</i>	2015	2016	2017	2018	2019	<i>Change (volume) 2018-2019</i>	<i>Change (%) 2018-2019</i>	<i>Change (%) 2015-2019</i>
Industrial roundwood									
Europe	m ³	401,548	410,042	409,358	441,652	424,913	-16,739.7	-3.8	5.8
EECCA	m ³	185,471	194,721	198,419	226,348	213,170	-13,177.9	-5.8	14.9
North America	m ³	494,222	516,384	513,350	534,285	522,862	-11,423.8	-2.1	5.8
ECE region	m ³	1,081,241	1,121,148	1,121,127	1,202,286	1,160,944	-41,341.3	-3.4	7.4
Sawnwood									
Europe	m ³	103,760	107,552	110,809	112,780	112,393	-387	-0.3	8.3
EECCA	m ³	17,219	16,689	17,792	17,039	17,890	850	5.0	3.9
North America	m ³	112,603	117,570	118,392	120,097	117,491	-2,605	-2.2	4.3
ECE region	m ³	233,582	241,811	246,992	249,916	247,774	-2,142	-0.9	6.1
Wood-based panels									
Europe	m ³	68,738	72,065	74,556	77,019	76,378	-641	-0.8	11.1
EECCA	m ³	17,131	16,687	18,351	21,198	21,326	128	0.6	24.5
North America	m ³	53,073	54,270	56,603	54,771	53,060	-1,711	-3.1	0.0
ECE region	m ³	138,943	143,023	149,511	152,988	150,765	-2,223	-1.5	8.5
Paper and paperboard									
Europe	m.t.	88,365	88,407	89,396	88,949	85,466	-3,483	-3.9	-3.3
EECCA	m.t.	9,106	9,561	9,507	10,016	10,052	36	0.4	10.4
North America	m.t.	75,651	75,602	75,037	74,445	71,835	-2,609	-3.5	-5.0
ECE region	m.t.	173,123	173,571	173,940	173,410	167,353	-6,056	-3.5	-3.3

Note: Sawnwood includes sleepers after 2016.

Source: FAOSTAT, 2020; UNECE/FAO, 2020.

A. Economic developments with implications on the forest sector

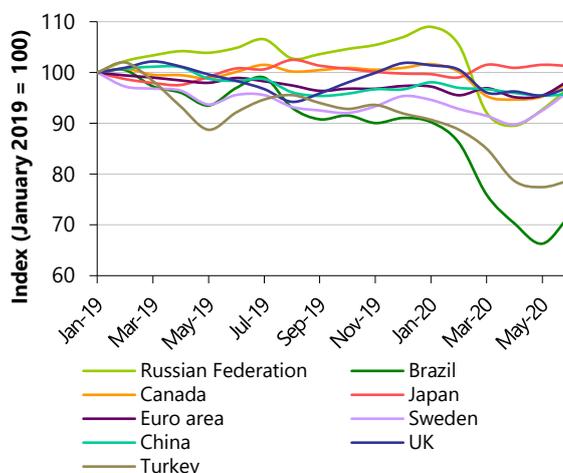
3. Economic activity decelerated markedly in the ECE region in 2019. The deceleration was generalised and affected all subregions, against a general background of increasing trade tensions, slower global growth and increased uncertainty. This adverse external context depressed manufacturing and dampened capital spending, affecting particularly those economies that are more exposed to global trade. In the euro area, the contribution of external demand to growth continued to decline. In the United States, weaker domestic demand explained the deceleration. By contrast, in the EECCA countries, external factors played a determinant role in the observed slowdown. In early 2020, the COVID-19 pandemic and the confinement measures enacted to arrest its spread inflicted a devastating blow across the region and beyond. Countries with sizeable service sectors were hit particularly strongly. In the EECCA countries, depressed commodity prices added to the contractionary forces, despite some recovery from previous lows. Efforts to contain the pandemic have yielded different degrees of success across the region but the economic outlook remains uncertain.

4. Developments in the labour market remained positive in 2019. The unemployment rate in the euro area reached pre-crisis levels and differences across countries in the monetary union narrowed. After years of tightening labour markets, the recourse to temporary work declined. However, a loss of momentum could already be seen in late 2019, in line with the weakening of the economy. In the EECCA countries, unemployment reached new lows. These benign developments ended abruptly with the COVID-19 pandemic. Service sectors hit by the crisis are particularly employment intensive. In the European Union (EU), the increase in unemployment in early 2020 has been limited by government funded job retention schemes, in sharp contrast with the United States, where the unemployment rate reached double digits in the second quarter of 2020, putting an end to a decade of employment creation. While the permanent effects on employment are still difficult to predict, a higher dispersion of unemployment rates across the EU seems likely, reflecting the differentiated impact of the crisis.

5. Despite rising wage costs, the impact on inflation remained muted, which contributed to an increase of the purchasing power of households. In the EU, the pace of household real income growth accelerated but this was driven to a larger extent than in the past by increases in wages rather than employment, thus having a lower impact on consumption. In the euro area, the household saving rate rose steadily in 2019, and soared in early 2020, as countries started to introduce COVID-19 containment measures. In the United States, the saving rate was flat in 2019 but skyrocketed in early 2020. Fiscal measures introduced in 2019 raised household income growth in some countries, including several economies in Central Europe. Overall, the improvement in the labour market continued to boost consumption in the EU. By contrast, in the United States the deceleration of consumption explained half of the slowdown in output growth in 2019.

6. In the absence of inflationary pressures and faced with softening economic activity, monetary authorities have loosened monetary policy further. In the second half of 2019, the US Federal Reserve lowered the target range for the federal funds rate by 75 basis points (bps) and slashed it by 150 bps in the first months of 2020. In the euro area, interest rates were pushed further into negative territory and the European Central Bank (ECB) restarted in November 2019 net asset purchases, to be maintained for as long as necessary. Since mid-2019, the rates in the Russian Federation have showed gradual but steady decline, still remaining positive at the 4.25% level. The euro continued the slide against the dollar initiated in 2018, in a context of growing political risks, trade tensions and unfavourable interest rate differentials. However, the trend reversed in 2020, as relative economic prospects were reassessed. Lower commodity prices have translated into exchange rate pressures in several EECCA economies in 2020 (graph 1).

Graph 1
Major currencies used to trade forest products indexed against the US dollar, January 2019–June 2020



Note: A diminishing index value indicates a weakening of the currency value against the US dollar; an increasing index value indicates a strengthening of the currency value against the US dollar.

Source: International Monetary Fund (IMF Data), 2020.

7. The economic outlook appears highly uncertain, as there is no clarity regarding the duration of the pandemic, its spread and the possible need for further restrictive measures. Economic activity has bounced from very depressed levels after mobility restrictions were eased, supported by significant policy stimulus. However, the recovery from this low point will be insufficient to prevent a deep output contraction in the region in 2020, even if a new wave of infections in the second half of the year is avoided. The COVID-19 crisis threatens to leave a long-lasting legacy, resulting in economic disruption and increased unemployment. While the actions of monetary authorities have contributed to stabilise financial markets, further financial turmoil cannot be excluded, with negative implications on access to finance by corporates and funding costs. Net productive investment, which was already weak before the crisis, is likely to decline further, thus darkening the medium-term growth outlook. The possibility that the transition period after the United Kingdom left the EU could end without an agreement on a future trading relationship cannot be completely ruled out yet, clouding further economic prospects.

B. Policy and regulatory developments affecting the forest products sector

8. The Government of the Russian Federation initiated amendments to their forest legislation in 2020 in order to ensure roundwood chain of custody through a digital platform. The amendments also encourage investments. Information on forest protection and restoration, as well as a record of wood and timber product transactions will be registered in the unified state digital platform. The Russian Government increased the minimum investment required for priority projects in forest development from 300 million roubles (\$3.75 million) up to 2 billion roubles for modernization (\$25 million), and up to 3 billion roubles (\$37.5 million) for greenfield projects. Control over fulfilment of investors' obligations was enhanced. Starting in September 2020, 45 million ha of non-fertile agricultural lands became eligible for use as forest plantations.

9. In April 2020, the Government of the Russian Federation started a programme to assist in purchases of wooden houses by providing banks with support for consumer loans of up to

350,000 rubles (\$4,375). In anticipation of this change, the number of applications for the construction of wooden houses increased by 30% compared to the same period in 2019. Lending for wooden houses will be supported under a standard mortgage. The desire of city dwellers to escape from COVID-19 exposure and the related constraints fueled the sales of houses and construction of new ones. The housing construction programme in Russia provides for the annual commissioning of at least 40 million square meters of low-rise housing. At least 20% of residential, social and cultural facilities has been targeted by the Government to be built with wood.

10. The policy focus in the European subregion was on climate change and circular economy, in the EECCA legal and sustainable harvesting of forests and the increased use of wood for construction as a big topic, while trade disagreements dominated policy topics on forest products in North America.

11. The urgency to address climate change continues to be evidenced in policy and private sector commitments. As of April 2020, 45 national jurisdictions worldwide have implemented a carbon pricing initiative, either through taxes on fossil fuels or through cap-and-trade programs. As of June 2020, 237 companies across 44 countries and representing over \$3.6 trillion in market cap have committed to ambitious emissions reduction targets.

12. Climate action is at the heart of the European Green Deal, with 25% of the EU budget dedicated to climate action that was presented by the European Commission in December 2019. The program is an integral part of this Commission's strategy to implement the United Nations' 2030 Agenda and the sustainable development goals. Some of the following parts of the climate action may be particularly relevant to forests and forest products (i) EU Emissions Trading System (EU ETS) to reduce greenhouse gas emissions from the power sector, industry and flights within the EU, (ii) National targets for sectors outside emissions trading, such as transport, buildings and agriculture, (iii) Ensuring our forests and land contribute to the fight against climate change and (iv) Boosting energy efficiency, renewable energy and governance of EU countries' energy and climate policies.

13. On 4 November 2020, in Russia the Federal Act on the reduction of greenhouse gas emissions came into force.

14. A significant proportion of the budget dedicated to climate action will be invested in biodiversity and nature-based solutions. The presented biodiversity strategy highlights the following key commitments for nature protection by 2030 (i) Legally protect a minimum of 30% of the EU's land area and 30% of the EU's sea area and integrate ecological corridors, as part of a true Trans-European Nature Network (ii) Strictly protect at least a third of the EU's protected areas, including all remaining EU primary and old-growth forests and (iii) Effectively manage all protected areas, defining clear conservation objectives and measures, and monitoring them appropriately.

15. The European Council recognized the need for a new EU forest strategy to further strengthen the consistency and coherence of EU forest-related policies after 2020. Key objectives of the New EU Forest Strategy will be effective afforestation, forest preservation and restoration in the EU so as to increase the potential of forests to absorb and store CO₂, promote the bio-economy and reduce the impact and the extent of fires, while protecting biodiversity. The strategy will cover the whole forest cycle and promote the numerous ecological and socio-economic services forests provide.

16. The European sub-region, particularly central Europe, has seen several mass outbreaks of *Ips typographus* (spruce bark beetle) infestations since 1970, which ranged from as little as about 2 million m³, 1971 to 1980; to as much as 14.5 million m³ from 2002-2010. These are dwarfed by the current outbreak, which has exceeded 200 million m³ and appears to be continuing in 2020.

17. Salvage volume, as a result of beetle infestation, exceeded 50 million m³ in 2018 (mostly spruce). The epidemic worsened in 2019, with salvage almost double the 2018 level. Preliminary estimates for 2020 indicate that beetle salvage volumes will exceed the level of 2019. During COVID-19, global demand for wood products remained strong, thus there should be opportunity to export both logs and products. However, the shelf life of these logs is estimated at less than two years, thus it is likely that not all of it will be salvaged.

18. In the long-term, this epidemic will have negative consequences on future harvest volumes. However, the short-term result of the beetle infestation is an overabundance of industrial roundwood at depressed prices because of the glut (which has provided abundant and low-cost raw materials for sawmills). Information given at the Market Discussions suggest that in central Europe roadside prices for spruce sawlogs fell from 84€ in 2014 to 57€ in 2019. In 2019 the region exported more than 6 million m³ of the salvaged spruce to China, often shipped in what would have been shipping containers returned to China empty. Czechia and Germany are now significant industrial roundwood exporting countries.

19. In the west of the US, fires damaged vast areas of forests, with about 70% of the burned area on timberlands owned by the US government. Salvage operations will impact local markets for logs, as private forest owners are already engaged in salvaging the burned timber. The US government supplies a minor component of the roundwood used by mills and because of their federal law and National Environmental Policy Act (NEPA) in conjunction with management objectives, faces more challenges in salvaging the timber before it degrades and becomes unprofitable to harvest. Even if there was a concerted effort to try to salvage as much of this timber as possible, it is doubtful that enough logging contractors could be mobilized.

20. Both the beetle epidemic and fires are, at least in part, the result of climate change and past and current forest management practices. A changing climate and silvicultural practices that are out of sync with nature have both played a role in increasing the severity of these events. The problem is of global scale and will require global solutions.

21. Member states mentioned that they were actively supporting the forest sector with aid in regards to the beetle epidemic and effects of the COVID-19 response.

22. The area of certified forests worldwide reached 430 million ha by mid-2019. This is an increase by 1.4% over mid-2018 and slightly below the level of mid-2017. The area of double certified forests increased to 93 million ha (+8%) in mid-2019. Initial data on forest area certified may have reached the highest level on record by mid-2020. This can only be confirmed once information on double-certified forest area becomes available.

23. The United States-Mexico-Canada Agreement known as the USMCA came into effect on 1 July 2020. The USMCA replaces NAFTA which expired 30 June 2020. An analysis prepared by the International Trade Center (USITC) estimates that USMCA would raise U.S. real GDP by \$68.2 billion (0.35 percent) and U.S. employment by 176,000 jobs (0.12 percent). The analysis also found that the environment chapter of the agreement references clean technologies as a means of improving environmental and economic performance and the role that forests play in carbon storage but is otherwise minimalistic on greenhouse gas emissions and climate change mitigation.

24. The US Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) announced the implementation of phase six of the Lacey Act enforcement schedule, which will go into effect on 1 October 2020. First enacted in 1900, the Lacey Act combats trafficking in illegal wildlife, fish, or plants. The Food, Conservation, and Energy Act of 2008 amended the Lacey Act to provide that importers submit a declaration at the time of importation for certain products. APHIS ensures compliance with the declaration requirement and products requiring a declaration have been phased-in since enforcement began in 2009. The additional products covered under the phase six enforcement schedule

include certain essential oils (cedarwood, sandalwood, etc), wood cases and trunks, oriented strand board (OSB), boxes, crates, pallets, and musical instruments.

25. The USDA Forest Service is revising its NEPA regulations that govern environmental analysis and decision making for the agency, including forest management and harvesting activities. The USDA Forest Service last updated its NEPA regulations in 2008, and the proposed rule is intended to allow for timelier decisions based on high quality, science-based analysis and to improve project implementation while meeting environmental responsibilities.

II. Summary of regional and subregional markets for key forest products

A. Wood raw materials

26. The total consumption of roundwood – comprising logs for industrial uses and fuel – in the ECE region was estimated at 1.4 billion m³ in 2019, the first decrease after six consecutive years of increase. The apparent consumption of logs for industrial purposes was down by 3.2%, to 1.16 billion m³, although this was still 7.5% higher than in 2015. Of the total volume of roundwood harvested in the ECE region in 2019, about 18% (260 million m³) was used for fuel, a decrease of 3.7 million m³ (-1.4%) compared with 2018.

27. Countries in the ECE region are important in the global wood supply, contributing 60% of the total; seven countries in the region are in the top ten of industrial-roundwood-exporting countries globally. Czechia became the world's third-largest exporter of industrial roundwood in 2019, exporting 13.9 million m³ of coniferous roundwood. The US dropped to sixth position.

28. Russian log exports have been in decline for more than a decade. In 2006, the country exported a record 37 million m³ of softwood logs, but this had dropped to just 7.2 million m³ by 2019, which was 35% lower than in 2018. This trend is of a long-term nature, as the Government of Russia is consistently taking measures to stimulate domestic processing and consumption of wood.

29. The biggest increases in European log production in the last two years were in Czechia (up by 50% from 2017, to 25.5 million m³ in 2019) and Germany (up by 23% from 2017, to 53 million m³ in 2019). The increase, which was due to the salvage logging of trees affected by bark beetle, was consumed by domestic industries as well as by forest product manufacturers in neighbouring countries and China.

30. Within Europe, the major log flows in 2019 were from Czechia to Austria and Germany; from Norway to Sweden; from Poland to Germany; and from Germany to Austria.

31. By far the biggest beneficiary of the log surplus in Europe in 2019 was China, which shifted its log sourcing from North America and the Russian Federation to Oceania and Europe. China's log imports from Europe increased 20-fold between 2017 and 2019. In contrast, its import volume from the US dropped by 80% in less than two years – from 1.5 million m³ in the third quarter of 2018 to 0.32 million m³ in the first quarter of 2020.

32. China is by far the world's biggest importer of industrial roundwood, and its import volume increased further in 2019. China imported four times more industrial roundwood in 2019 than the other nine countries in the top ten extra-regional importers combined.

33. Data supplied by UNECE member States (all data are year over year) indicate that removals of industrial roundwood will decrease in the UNECE region by 1.0% in 2020 and 0.7% in 2021. Subregionally, the forecast is for Europe to decline by 2.3% in 2020 and grow

by 1.5% in 2021; EECCA to increase by 0.2% in 2020 and 0.5% in 2021; and North America to shrink by 0.6% in 2020 and 2.6% in 2021.

B. Sawnwood

34. The three ECE subregions recorded mixed results in the consumption of sawn softwood in 2019: modest declines were recorded in Europe (-1.8%) and North America (-2.7%) and were offset by a gain in Eastern Europe, the Caucasus and Central Asia (EECCA) (+5.3%). The production of sawn softwood was also mixed: Europe recorded a small gain (+0.6%); the EECCA increased by 3.2%; while North America was lower (-3.9%).

35. In Europe, lower demand and higher production meant sawn softwood exports increased in volume (+3.4%) as ample supplies of low-cost spruce-bark beetle timber allowed central European as well as Scandinavian regions to expand output and exports. The volume of European sawn softwood exports increased to 55.6 million m³ in 2019, but average export prices per m³ decreased by 9.8%.

36. The EECCA subregion produced 48.7 million m³ of sawn softwood in 2019 (+3.2% over 2018). EECCA sawn softwood exports amounted to 37.4 million m³ in 2019 (+1.7%).

37. North American sawn softwood output was 101.6 million m³ in 2019 (-3.9% over 2018). Exports dropped significantly (-7.7%) to 30.0 million m³, with the U.S. recording a drop of 20.1% (-581,000 m³) while Canada was lower by 6.5% (-1.9 million m³). North America imports declined to 25.2 million m³ (-4.1%).

38. Sawn hardwood consumption and production were also mixed in the ECE region, despite good economic conditions in most of the region in 2019.

39. The ECE region is a net exporter of sawn hardwood, with only the European subregion exporting less than they import. Apparent consumption went up by 10% in Europe and 30% in the EECCA. However, consumption in North America was flat albeit at a level that is much higher than Europe and the EECCA combined.

40. European hardwood lumber production grew by 2.1% in 2019, to 14.4 million m³, with consumption growing to over 15 million m³. In the EECCA, sawn hardwood production increased by 3.2%, to 4.2 million m³, and consumption at 1.9 million m³. North American sawn hardwood consumption was flat in 2019 at 20.8 million m³, and production edged lower (-2.1%) to 23.4 million m³.

41. China continued to dominate imports of temperate and tropical sawnwood in 2019, with imports of over 38 million m³ (\$8.6 billion). ECE region countries dominate global exports of sawnwood, with Canada and Russia far and away the global leaders.

42. The biggest suppliers of tropical sawnwood to the ECE region are Thailand and Malaysia, both of which have experienced reduced production in 2019, which will likely continue into 2020.

43. Data supplied by UNECE member States (all data are year over year) indicate that the production of sawnwood will decrease in the UNECE region at an annual rate of 1.6% in 2020 and increase 1.2% in 2021. Subregionally, the forecast is for Europe to decline by 1.6% in 2020 and increase by 3.2% in 2021; EECCA to increase by 2.4% in 2020 and 2.8% in 2021; and North America to shrink by 3.1% in 2020 and 1.5% in 2021.

C. Wood-based panels

44. In general, 2019 was mixed for the wood-based panel sector in the ECE region. Overall, panel production declined slightly (down by 0.7%) in the ECE region while apparent consumption was down by 1.5%, despite relatively good economic growth. The consumption of structural panels (plywood and OSB) was down by 4.0% in 2019 whereas the consumption of non-structural panels increased by 0.2%.

45. Total wood-based panel consumption in Europe decreased by 0.8% to 76.4 million m³ in 2019. Apparent consumption of structural panels was weak in Europe (-3.4%). Due to a decrease in imports (-1.6%) and increase in exports (+1.9%) production only decreased by -1.4%. Non-structural panel consumption in Europe remained stable with slight reduction of production (-0.8%) due to decreased export (-1.4%).

46. The apparent consumption of wood-based panels increased by 0.6% in Eastern Europe, Caucasus and Central Asia in 2019, to 21.3 million m³. Production increased by 1.1% in 2019, to 26.2 million m³. The Russian Federation's production of wood-based panels was 17.6 million m³, an increase of 1.3% over 2018.

47. Apparent consumption of wood-based panels in North America fell by 3.1% in 2019, largely attributable to the US trade actions which caused the value of US and Canadian panel exports to fall by 9.7% and 21.9%, respectively. Production capacity increased by 1%, while capacity utilization in North American structural panel industry decreased from 78% in 2018 to 75% in 2019.

48. As in previous years, Indonesia and Malaysia were the dominant tropical plywood exporters in 2019, together supplying over 71% of world exports.

49. Data supplied by UNECE member States (all data are year over year) indicate that the production of wood-based panels will decrease in the UNECE region at an annual rate of 3.8% in 2020 and increase by 4.4% in 2021. Subregionally, the forecast is for Europe to decline by 3.1% in 2020 and grow by 3.4% in 2021; EECCA to decrease by 6.8% in 2020 and increase by 10.9% in 2021; and North America to shrink by 1.4% in 2020 and 2.4% in 2021.

D. Paper, paperboard and woodpulp

50. The global pulp, paper and paperboard industry experienced general weakness in 2019 compared with 2018 (when pulp prices reached record levels and paperboard demand was strong). The production of graphic paper declined due to closures and reduced consumption, the result of increased electronic communication. In contrast, growth continued in the consumption of sanitary and household papers, certain paperboard products and specialty papers, and pulps, including fluff and dissolving.

51. Prices for printing and writing papers and newsprint fell in EECCA in 2019 due to weaker demand, but prices for paperboard and tissue were relatively stable. Prices for market pulp fell considerably in 2019 after a rapid rise in 2018.

52. The production of graphic papers declined throughout the ECE region in 2019 – by 7.1% in Europe, 0.2% in EECCA and 11.2% in North America. Apparent consumption also fell in the three subregions – by 7.1% in Europe, 10.4% in EECCA and 10.7% in North America.

53. The apparent consumption of packaging material in 2019 fell in Europe (by 2.8%, the first decline since 2011) and North America (by 1.7%, the first drop since 2013); on the other hand, it increased by 2.4% in EECCA.

54. Data supplied by UNECE member States (all data are year over year) indicate the production of paper and paperboard will decline in the UNECE region by 2.7% in 2020 and 1.8% in 2021. Subregionally, the forecast is for paper and paperboard production to decline in Europe by 4.6% in 2020 and remain steady (+0.2%) in 2021; increase in the EECCA by 1.0% in 2020 and by 1.6% in 2021; and North America to decrease by 1.1% in 2020 and 4.3% in 2021.

E. Wood energy

55. Traditional wood energy continues to play a major role in the ECE region. Production is reported to have decreased slightly (by 5 million m³), resulting in 270 million m³ of fuelwood harvested and consumed in the ECE region in 2019. Traditional fuelwood is often traded in informal markets and officially reported volumes are considered underestimates by many experts. In some countries officially reported volumes may only cover 1/3 of the real market.

56. Modern wood-based fuels, namely wood pellets for industrial purposes (electricity and combined heat and power) and in private households (for heat generation) are steadily on the rise. The ECE region is the epicentre of production and consumption of wood pellets. Globally, 80% of the pellets are produced in the ECE region and 90% of global exports originate from ECE countries.

57. In 2019, 36.7 million tonnes of pellets were produced in the ECE region (+8.8%) with Europe being the sub-region with by far the biggest consumption while North America confirmed its leading position as the number one exporter of wood pellets worldwide.

58. The EECCA subregion has had the largest increases in annual production (the Russian Federation 14% and Belarus 36%).

59. The main driver of increased demand and international trade are renewable energy policies that aim to reduce the share of fossil fuels in the national energy mix. Japan and the Netherlands are two countries where policy has boosted wood pellet demand in 2019. In Russia, measures are being developed to convert municipal district-heating systems to use wood-based fuels.

60. Viet Nam is the only country outside the ECE region with a significant production of wood pellets and may soon become the second most important exporter of pellets worldwide. South Korea and Japan are the only two countries outside the ECE region with significant imports of wood pellets.

61. Data supplied by UNECE member States (all data are year over year) indicate the production of wood pellets will decrease in the UNECE region by 2.5% in 2020 and increase by 2.7% in 2021. Subregionally, the forecast is for wood pellets production to grow in Europe by 2.6% in 2020 and by 5.0% in 2021; increase in the EECCA by 2.0% in 2020 and 7.7% in 2021; and North America to shrink by 9.2% in 2020 and 1.5% in 2021.

F. Value-added wood products

62. Value-added wood products could be described as primary wood products that have been further processed into secondary products such as furniture, builders' joinery and carpentry (BJC), profiled wood, and engineered wood products (EWPs). Demand is linked to drivers such as economic growth, housing and construction, fashion and design, and demographics.

63. BJC comprises a wide array of wood products, including wooden windows and doors; pre-assembled wooden flooring; posts and beams; shakes and shingles; and EWPs, which include I-beams (also called I-joists); finger-jointed sawnwood; glulam (sawnwood glued into beams); laminated veneer lumber (LVL); and mass timber panels (MLP), including cross-laminated timber. Profiled wood is wood shaped by machines, such as mouldings, tongue-and-groove, and lap siding.

64. Despite relatively good economic growth and otherwise favourable conditions, 2019 was a mediocre year for most value-added wood products, such as furniture, BJC and profiled wood. The first half of 2020 has been better for many value-added wood products than most analysts would have predicted.

65. Cross-laminated timber production and demand continued to grow at an amazing pace. Global production capacity for 2020 is estimated to be 2.8 million m³, of which 48% is in Europe, 43% in North America, 6% in Oceania, and 3% in Asia (South America and Africa have trace amounts of production). Germany, Austria and Switzerland, Italy and Czechia continue to be the epicentre of global CLT production with an estimated production of 920,000 m³ in 2019.

66. As for the CLT production in the EECCA countries, a plant in the Ukraine has recently been constructed and is now operative. Several projects have been announced in Russian Federation, the first of which (50,000 m³ capacity) has started production. By 2022, all the necessary regulatory and technical base for the mass construction of pre-fabricated homes in Russia will be prepared, which will increase the domestic demand for sawn timber. There are a wide variety of products called “mass timber panels” under production in North America, including CLT. As of late 2018, ten mass timber panel manufacturing plants were in operation in North America (five in Canada and five in the US), with a combined annual production of about 400,000 m³. As of year-end 2019, 14 plants were currently producing mass timber panels in North America, with a further three under construction. The current operational capacity of these plants is 910,000 m³ but over half of this production is industrial matting (platforms for heavy equipment). Thus, the operational capacity of mass timber panels for use in buildings in North America in 2019 was about 439,000 m³ and is expected to increase by another 62,000 m³ in 2020.

67. The COVID-19 pandemic will have an impact on 2020 and 2021 market developments, with a general perception that most segments of the value-added wood products sector will see a falling off before things start to improve later in 2021.