Finnish Forest Sector Economic Outlook 2020–2021

Jari Viitanen, Antti Mutanen ja
Sari Karvinen (eds.)

Natural resources and
bioeconomy studies
80/2020

NATURAL RESOURCES
INSTITUTE FINLAND

Executive summary

Jari Viitanen[1)], Antti Mutanen[1)], Matleena Kniivilä[2)], Esa-Jussi Viitala[2)], Marja Kallioniemi[2)], Kari Härkönen[2)], Jussi Leppänen[2)], Esa Uotila[2)] and Johanna Routa[1)]

1) Natural Resources Institute Finland, Yliopistokatu 6, FI-80100 JOENSUU

2) Natural Resources Institute Finland, Latokartanonkaari 9, FI-00790 HELSINKI

Strikes and other industrial actions in the Finnish forest industry in January–February and the fall in global demand due to the COVID-19 pandemic will reduce the production and export volumes of several forest industry products and export prices in 2020. The demand for paperboard, tissue paper, and label papers has been brisk, but due to the capacity closures, the production of printing and writing paper in Finland is experiencing a particularly deep decline. Industrial roundwood removals will also decrease, employment and profitability in the forest sector will weaken slightly, the stumpage prices of roundwood will decrease and the stumpage earnings in private forestry will start to decline.

After summer 2020, economic recovery has already begun in several market areas and the recovery is expected to continue next year. As global market demand recovers, production and export volumes of forest industry products will start to grow, except for printing and writing paper. The effects will also be passed on to forestry as felling volumes increase and stumpage prices rise.

Recovering will start in 2021

The global economy and trade experienced a sharp drop due to the COVID-19 pandemic in the spring of 2020. During the summer, however, the recovery has begun with the help of large monetary and fiscal policy support packages in both Finland and abroad.

Picture: FInnish Forest Industries.

Despite the gradual recovery, in the euro area, the economy will shrink on average by 7–8 percent this year. In Germany, the economic downturn is slightly smaller. In China, economic growth will slow down close to zero. Although the recovery has already started since the summer, the demand for forest industry products in main export markets will weaken this year on an annual basis. Economies will recover in 2021, but there are large differences in the pace of recovery across countries. The world economy, weighted by last year's export shares of the Finnish forest industry, will contract by almost six percent this year, but will grow by more than five percent next year.

The euro strengthened by about seven percent against the US dollar in March–September 2020 and is expected to strengthen further this autumn and next year. The Russian rouble also remains weak against the euro. The Swedish krona, in turn, has strengthened slightly against the euro since the spring and is expected to continue to strengthen next year.

COVID-19 pandemic affecting the sawmill industry less than expected

The industrial actions in the Finnish forest industry in early 2020, the restriction measures imposed due to the pandemic, and the increased uncertainty about economic development are reflected in the Finnish sawnwood export volumes. However, the effects of the pandemic appear to be smaller than feared. The rapidly increased popularity of do-it-yourself (DIY) construction has supported the demand for sawnwood. In 2020, the volume of Finnish sawnwood exports is expected to decrease by 12 percent and production by nine percent compared to 2019. Although the fall in the export price of sawnwood has reversed, the average export price in 2020 will remain slightly lower than in 2019. In 2021, the recovery of economies and construction is expected to be reflected in the Finnish sawnwood exports by an eight percent growth. Sawnwood production is expected to grow by six percent, while domestic demand for sawnwood remains subdued as volume of new construction will decline in Finland.

Export demand for Finnish birch plywood in industrial applications has decreased as a result of the pandemic in 2020. Export demand for softwood plywood has remained more stable than in the case of birch plywood. Overall, Finnish plywood production and exports are both expected to shrink by 12 percent in 2020. In 2021, as the economies in export countries recover, Finnish plywood exports are projected to grow by nine percent and production by three percent. At the same time, the average export price of plywood will increase slightly.

Paperboard overtaking paper in terms of export earnings in 2021

Demand for paper has weakened sharply in Europe this year. In Finland, the decline in production and exports of paper has been exacerbated not only by the effects of the pandemic but also by industrial action early this year and by the reduction in production capacity. Next year, in addition to declining demand, the fall in Finnish paper production will be significantly affected by the closures of paper machines. Paper production in Finland is estimated to decrease by a total of almost 40 percent of the 2019 production figures between 2020 and 2021. Both this year and next, average export prices of paper will fall, but capacity cuts will enable to slow down the negative development.

The immediate impact of the COVID-19 pandemic on the Finnish paperboard industry was positive as demand for paperboard increased. In annual terms, however, the production and export volumes will remain slightly lower in 2020 than in 2019 due to the economic downturn and labour disputes. Stora Enso's kraftliner machine in Oulu, which will be launched at the end of 2020, will significantly increase the total volume of paperboard production in Finland next year. The total paperboard production will increase by 13 percent. The average export price of paperboard will decrease in 2021 as the share of kraftliner, which is cheaper than folding boxboard, increases in exports. Overall, the long-term outlook for paperboard remains positive. In 2021, paperboard will become Finland's most important forest industry product in terms of export value.

Finnish wood pulp exports will decrease by five percent this year due to the globally declining demand for paper. Pulp production will decrease significantly more than exports as domestic demand for pulp decreases with the closure of paper machines. In 2021, economic growth will recover and the demand for pulp will also strengthen. This year, average export price of pulp will be about 14 percent lower than last year. In 2021, the export price will but remain still far from the peak years.

Profitability of the Finnish forest industry declining

The profitability of the Finnish pulp and paper industry will continue to decline this year. However, the differences between sub-industries are large. In production of paperboard and label and tissue paper, the outlook is positive, but the demand for printing and writing papers is declining and the downward trend in pulp prices has been sharp over the past couple of years. However, low-cost pulp and other reductions in variable costs will improve the profitability of the production of fine papers, other papers and paperboard. Overall, the profitability of the Finnish pulp and paper industry will improve to some extent in 2021.

Industrial roundwood removals decreasing and stumpage prices declining in 2020

The COVID-19 pandemic has also changed the structure of demand in the Finnish roundwood market. Due to the relatively high sales volumes of sawnwood, the demand for sawlogs has decreased more moderately than the demand for pulpwood. The demand for pulpwood is affected by the rapid decline in paper and pulp production. Felling volumes in non-industrial private forests will decrease by 13 percent this year. As felling volumes in state and forest industry's forests will decline slightly more moderately, total industrial roundwood removals will decline by 12 percent to 56 million cubic meters. Although the development of stumpage prices has been steady since the end of last year, as an annual average, stumpage prices of sawlogs will fall by 2–4 percent. Stumpage prices of pulpwood will remain at approximately last year's level. The imports of roundwood will increase by eight percent.

In 2021, the Finnish roundwood market is expected to recover due to the growth in the wood products industry. The industrial roundwood removals will increase by four percent. The stumpage prices of sawlogs will increase by 3–4 percent from the current year. Pulp and paperboard production will also increase, which will rise the stumpage prices of pulpwood by 0–3 percent. The imports of roundwood are forecast to remain at the current year's level.

Gross stumpage earnings sagging in 2020

In 2020, the gross stumpage earnings in non-industrial private forestry will decrease to about EUR 130 per hectare (EUR 1.8 billion) but will rise again in 2021 to about EUR 140 per hectare (EUR 1.9 billion). Substantial final felling volumes have increased forestry investments in reforestation. In 2020, investments are forecast to rise by a couple of percent to EUR 18 per hectare (EUR 250 million), but in 2021 investments will decline slightly.

The operating result of non-industrial private forestry was EUR 128 per hectare in 2019. Declining stumpage earnings and increased investments will reduce the result to EUR 110 in 2020. Increasing removals will turn the operating result back into growth in 2021, when it will rise to EUR 120 per hectare. The return on investment in roundwood production in non-industrial private forests declined by one percent in 2019 due to the fall in stumpage prices. In 2021, rising stumpage prices and removal volumes will raise the return on investment to almost seven percent.

Picture: Erkki Oksanen, Luke.

Employment in forest sector declining

In 2019, the forest industry employed a total of 40,000 people, which was three percent less than in 2018. Both the wood products industry and the pulp and paper industry each employed 20,000 people. Employment figures in the forest industry will be weakened this year by the contraction in exports and construction. The employment in the forest industry is projected to decline further by three percent in 2020. Although economic development is expected to improve in 2021, the employment in the forest industry is projected to decline further by one percent.

In 2019, the number of people employed in forestry rose to 26,000, which was almost a fifth more than in 2018. The employment increased in all sub-sectors of forestry. During 2020, the decrease in the production volumes of the forest industry will affect the industrial roundwood removals and thus employment. The employment in forestry is forecast to fall by six percent this year. In 2021, the number of people employed in forestry is expected to remain in the level of 2020.

The use of forest chips and wood pellets increasing in 2021

The beginning of 2020 was warmer than usual. Hence, the use of forest chips is not expected to increase on an annual basis this year. The EU emission allowance prices rose sharply in 2019 but turned to a slight decline after the start of the COVID-19 pandemic. The decline, however, was a temporary one, and currently the emission allowance prices are again at the 2019 level. The higher price of emission allowances supports the competitiveness of wood chips and by-products in heat production. In 2021, the use of forest chips is estimated to increase by a couple of percent. Domestic consumption and production of wood pellets is expected to continue to grow at an annual rate of a few percent as new pellet plants are put into operation to replace fossil fuels.

Basis and risks of the forecast

The Finnish Forest Sector Economic Outlook provides information on the current situation in the forest sector and the near-term outlook. The forecasts are based on public statistics, global economic development forecasts, market information from the forest sector from various sources, and studies conducted at the Natural Resources Institute Finland (Luke). The forecasts are based on the so-called derived demand principle, in which fluctuations in the economic development of the domestic and export markets are assumed to be reflected through the demand for Finnish forest industry products in forest industry production and the domestic roundwood market.

Average nominal stumpage prices (over bark) in non-industrial private forests 2019–2021f.

Roundwood assortment	2019	2020f	Change	2021f	Change
	€/m³	€/m³	%	€/m³	%
Pine sawlogs	56.5	54.1	-4	56.5	4
Spruce sawlogs	59.9	58.1	-3	60.0	3
Birch sawlogs	43.9	43.1	-2	44.2	3
Pine pulpwood	17.7	17.5	-1	17.8	2
Spruce pulpwood	19.5	19.7	1	19.7	0
Birch pulpwood	16.8	16.7	-1	17.2	3

Source: Natural Resources Institute Finland.

Key forecasts 2019–2021f.*

Forecast variable		2019	2020f	2021f
		% y-o-y change		
Sawnwood	production	-4	-9	6
	exports	3	-12	8
	export price	-9	-1	3
Plywood	production	-11	-12	3
	exports	-9	-12	9
	export price	-1	-3	1
Pulp**	production	2	-10	4
	exports	12	-5	5
	export price	-20	-14	3
Paper	production	-14	-25	-18
	exports	-10	-25	-18
	export price	4	-4	-2
Paperboard	production	-3	-1	13
	exports	-2	-1	13
	export price	1	-1	-2
Fellings of industrial wood		-9	-12	4
Roundwood imports (incl. chips)		-1	8	0

*Price changes are nominal.

**Figures refer to total pulp production and exports.

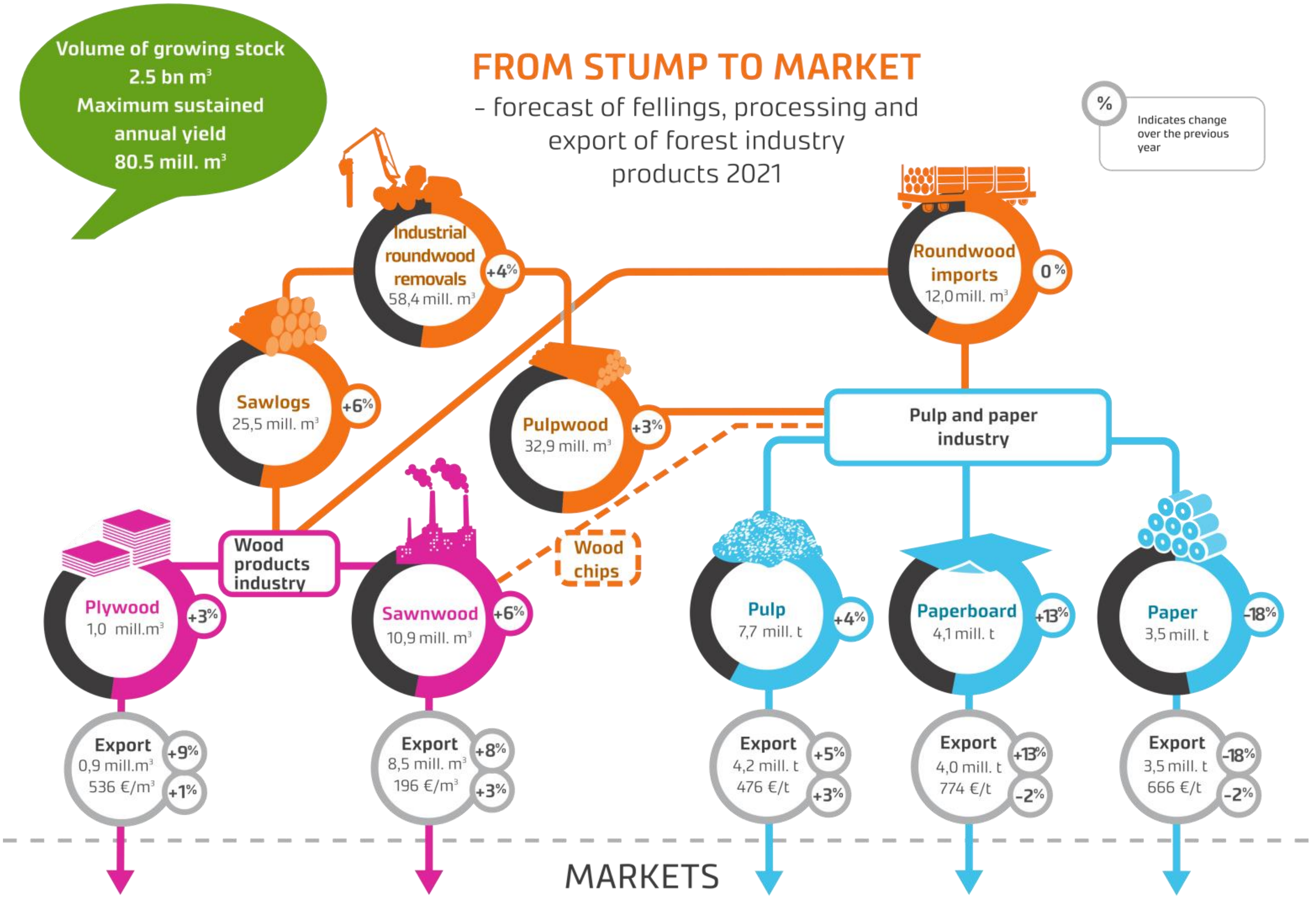
Sources: Finnish Forest Industries, Finnish Customs and Natural Resources Institute Finland.

The effects of changes in the operating environment of the forest sector and the state's economic control measures have also been considered when making the forecasts. Worse-than-expected economic development would lower the export prices, production and profitability of the Finnish forest industry compared to the forecasts presented here. From the forest industry, the effects would also spread to the roundwood market, forestry employment and the profitability of private forestry as the demand for wood decreases. In that case, the development of the Finnish forest sector would be weaker than the forecasts now presented. Better-than-expected economic development, in turn, would do the opposite.

The perceptions of the economic development of the world economy and the export markets is formed based on forecasts of various organizations (e.g. OECD, IMF, ETLA, Nordea, Bank of Finland). The forecasts in this Finnish Forest Sector Economic Outlook are based on September 2020 data for the forest sector and forecasts for global economic development for 2020–2021. The forecasts for the Finnish forest sector correspond to the researchers' perception of the most probable development. They are point forecasts and are based on export market growth forecasts as well as other background assumptions about market developments.

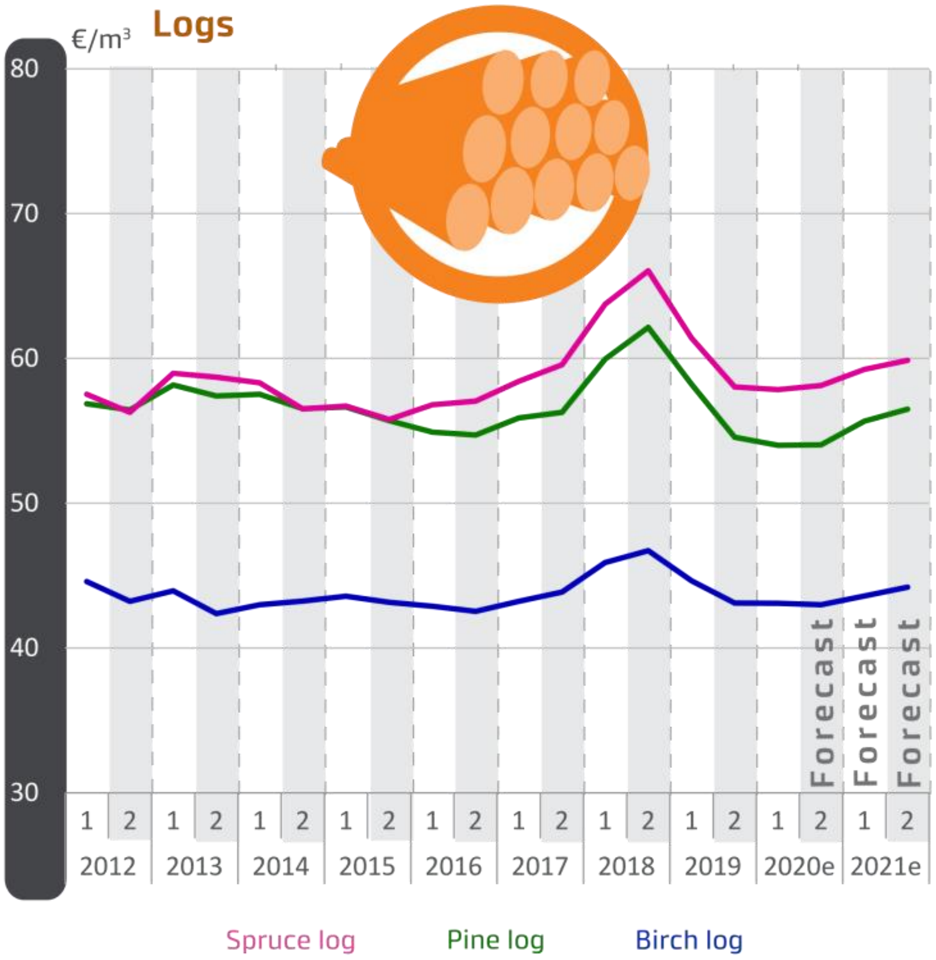
Picture: Erkki Oksanen, Luke.

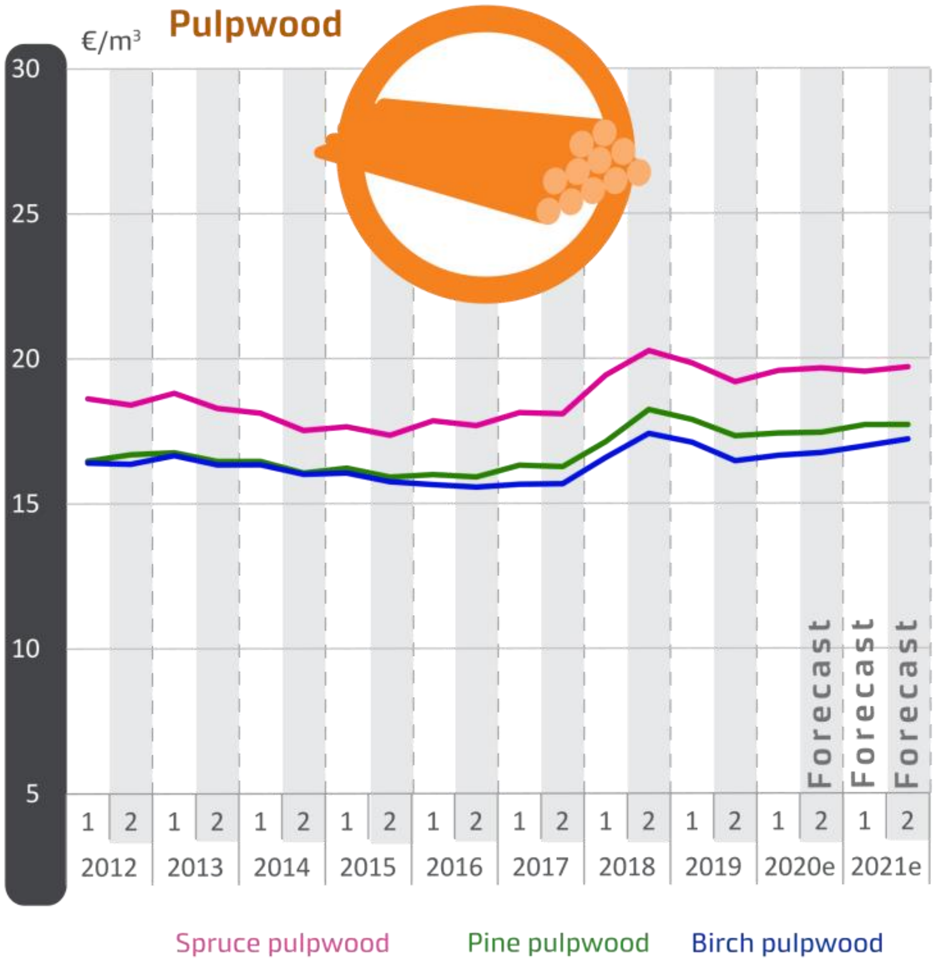
The main uncertainties of this year's and next year's forecasts are related to the success of preventing the spread of new waves of the COVID-19 pandemic and the corresponding economic impact. Other uncertainties affecting the global economy include the U.S. presidential election in early November, its outcome, and possible policy changes. The trade dispute between the United States and China has been overshadowed by the pandemic over the summer but is feared to escalate again after the election. The impact of trade dispute could extend to world trade globally. The Brexit negotiations between the European Union and Britain are partly deadlocked. There is still uncertainty about the final content of the resignation agreement and its effects on trade. Geopolitical conflicts around the world may also continue to escalate.



FROM STUMP TO MARKET
– forecast of fellings, processing and export of forest industry products 2021
Volume of growing stock 2.5 bn m³ Maximum sustained annual yield 80.5 mill. m³
% Indicates change over the previous year
Industrial roundwood removals 58,4 mill. m³ +4%
Roundwood imports 12,0 mill. m³ 0 %
Sawlogs 25,5 mill. m³ +6%
Pulpwood 32,9 mill. m³ +3%
Pulp and paper industry
Wood products industry
Wood chips
Plywood 1,0 mill.m³ +3%
Sawnwood 10,9 mill. m³ +6%
Pulp 7,7 mill. t +4%
Paperboard 4,1 mill. t +13%
Paper 3,5 mill. t -18%
Export 0,9 mill.m³ +9% 536 €/m³ +1%
Export 8,5 mill. m³ +8% 196 €/m³ +3%
Export 4,2 mill. t +5% 476 €/t +3%
Export 4,0 mill. t +13% 774 €/t -2%
Export 3,5 mill. t -18% 666 €/t -2%
MARKETS

Biannual stumpage prices of logs and pulpwood 2012-2021e in 2019 prices (cost-of-living index)





luke.fi

The executive summary is a translation of the summary of the Finnish original publication ”Metsäsektorin suhdannekatsaus 2020–2021”, and is based on information available in October 2020.

Further information
Jari Viitanen
Natural Resources Institute Finland (Luke)
Yliopistokatu 6 B, FI-80100 Joensuu
Phone: +358 29 532 3033
firstname.lastname@luke.fi

ISBN	978-952-380-077-9 (Print)
ISBN	978-952-380-078-6 (Online)
ISSN	2342-7647 (Print)
ISSN	2342-7639 (Online)
URN	http://urn.fi/URN:ISBN:978-952-380-078-6

Authors: Jari Viitanen, Antti Mutanen and Sari Karvinen (eds.)
Publisher: Natural Resources Institute Finland (Luke), Helsinki 2020
Year of publication: 2020
Photos: Erkki Oksanen/Luke, Finnish Forest Industries, Pixabay
Cover photo: Metsä Fibre Joutseno pulp mill, Metsä Group
Printing house and publishing sales: PunaMusta Oy, http://luke.juvenesprint.fi