Roundwood markets in UNECE regions in 2021-22

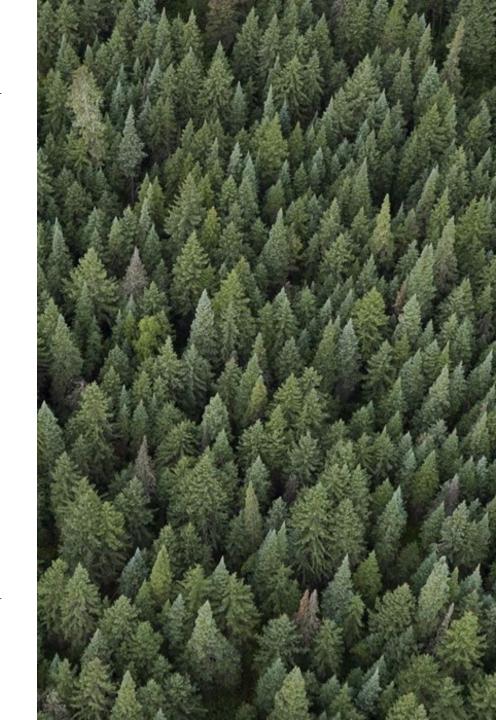
Key trends and outlook

Foresta2021 – Joint Session of the UNECE Committee on Forests and the Forest Industry and FAO European Forestry Commission

23rd November 2021







Key dynamics impacting UNECE roundwood markets in 2021-22

COVID rebound



- Strong lumber markets in US and Europe
- Paper and packaging rebounding
- Housing crisis in China?

Russian log export ban



- Challenge for China
- Opportunity for other log exporters
- Russian industrial expansion?

Climate / forest health



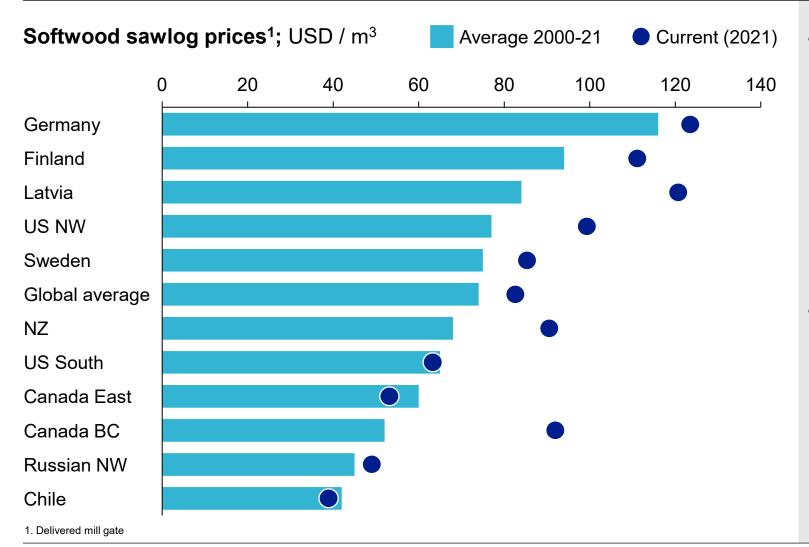
- Decline in BC harvests in wake of mountain pine beetle
- Fires in US West
- Temporary surge in Central European harvest

Sustainability initiatives



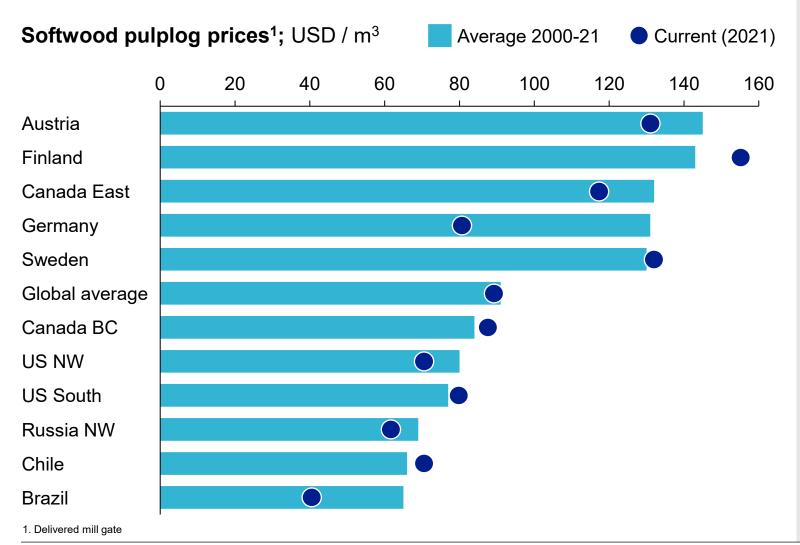
- LULUCF
- EU Forest Strategy
- Carbon forestry

Sawlog prices are well above long-run average levels



- Sawlog prices in many regions are well above average, e.g.,
 - Germany 7%
 - Finland 18%
 - Latvia 44%
 - BC 77%
- Key drivers:
 - Strong lumber market
 - Supply constraints (e.g. BC)
 - China log imports (e.g. Germany, NZ)

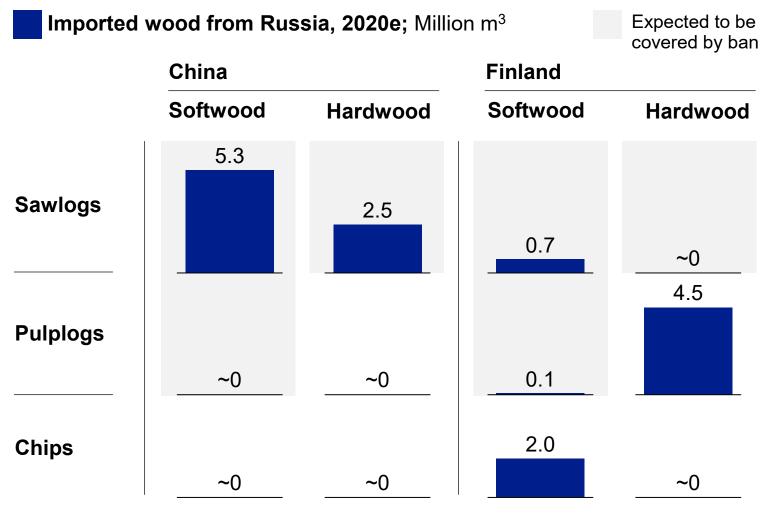
Pulplog prices are mostly around long-run average levels



- Pulplog prices around average level in most regions.
- Some exceptions (e.g. strong prices in Finland, weak in Germany, Brazil).
- Key drivers:
 - Slight rebound in P&P and panel markets
 - Elevated sawmill residue supply

Russia log export ban FORESTA2021

China and Finland are both dependent on Russian logs; China mainly for sawmills, Finland for pulp and paper



Important for Chinese sawmill industry

- 10-15% of softwood log imports, 30% of hardwood log imports
- Secondary impact on residues for panel mills

Less impact on Finland

- Russian import mostly hardwood pulplogs (not covered)
- Softwood imports mainly as chips not covered

Delivered mill gate

Russia log export ban FORESTA2021

Of the largest lumber-exporting regions, Russia has the greatest potential to increase exports



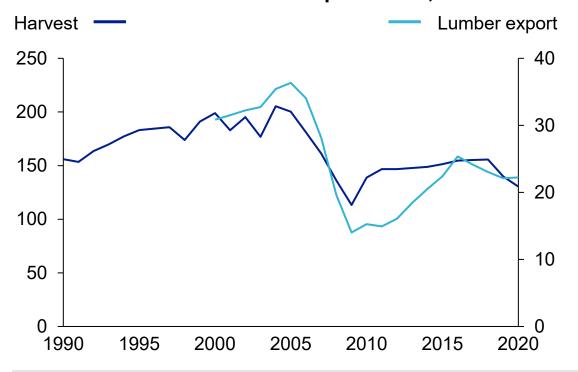
^{1.} Germany and Austria, 2. Belarus, Ukraine, Czech Republic, Romania, Slovenia, Poland, Slovakia, Bosnia and Herzegovina



Climate / forest health FORESTA2021

Forest damage, related to climate change, is impacting roundwood supply in Canada and Europe - for many years to come

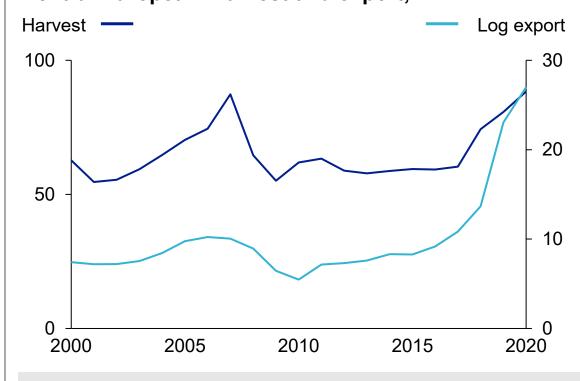
Canada harvest and lumber export to US; Million m³



Implication: Reduced lumber supply to US and Asia

1. Germany and Czech Republic

Central European¹ harvest and export; Million m³

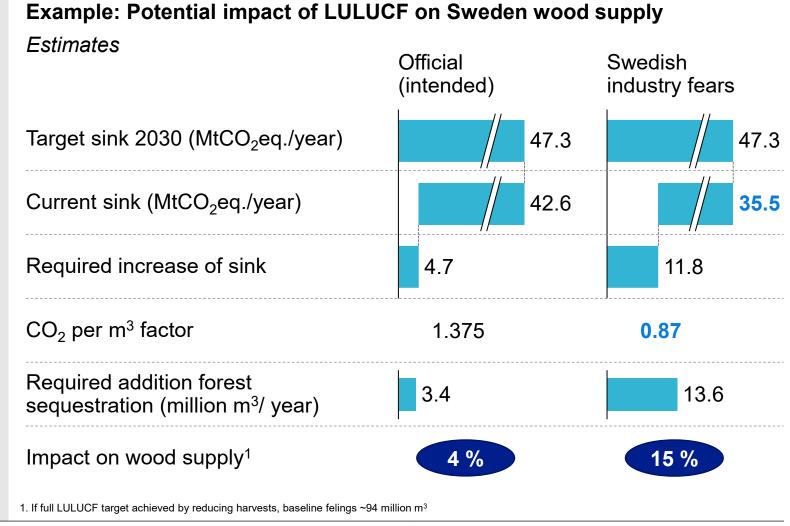


Implication: *Temporary* surge in log exports to China, supply to domestic lumber industry Sustainability initiatives FORESTA2021

Sustainability initiatives, while arguably necessary, will have a large impact on wood supply

Sustainability initiatives impacting forestry

- LULUCF (EU)
 - Targets for increased forest sequestration
- EU Forest Strategy
 - Continuous cover forestry (selective logging)
 - Increased forest protection
- Forest carbon markets
 - NCX (US)
 - Voluntary carbon offsetting



Global roundwood market outlook (pricing)



	UNECE regions			Other regions				
North America		Europe (EU)	CIS, Central Asia	Asia-Pacific	Latin America			
Sawlogs	Strong lumber market Additional potential in US South, Canada E, US NW	Strong lumber market / export Post bark beetle	Russia log export ban Sawmill expansion	Strong lumber market Russia export ban Reduced NthAm export	Declining exports, with reduced supply and more domestic demand			
Pulpwood	Strong sawmill residue supply P&P demand returning to normal	Central: sawmill residues Nordic: strong pulp production, harvest constraints	Strong pellet industry	Pulpmill expansion China restrictions on RCP import and log import from Australia	Plantations expanding with demand (e.g. new pulp mills)			
Things to watch for	 Housing starts US South expansion Carbon forestry	Sawmill expansionLULUCF, end of clear-cuts?	Pellet / panel / P&P expansion with new sawmlls	Chinese housing crisis?NZ peak export	Afforestation for climate			

Roundwood market outlook FORESTA2021

UNECE Timber Forecasts for 2020-22



Forecast	roundwood	removals:	Million m ³
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Demand drivers		North America		E	Europe (EU)			CIS, Central Asia		
Total			+0.8%			+0.7%)		-0.8%	
Sawlogs	SW lumber ++HW lumber +Plywood and veneer +	297	303	307	220	-0.8% 221	216	135	-1.2% 137	132
Pulplogs	Pulp for paper +/-Pulp for other uses +Panels +	188	-0.2% 187	187	159	+2.0% 163	165	49	+0.6% 50	50
Other industrial	Posts and poles +/-	15	0.0% 15	15	6	+4.7% 7	7	18	-2.0% 18	17
Wood fuel	Residential heating +/-Bioenergy plants +	62	+0.1% 62	62	112	+1.2% 113	115	18	-0.8%	18
		2020	2021	2022	2020	2021	2022	2020	2021	2022

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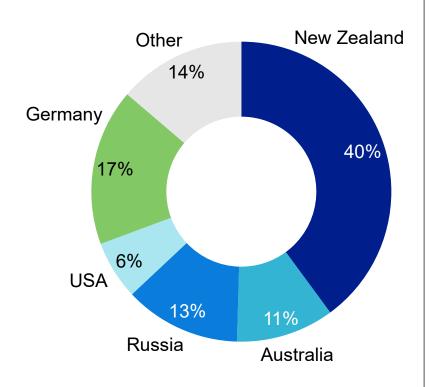


Backup slides for questions

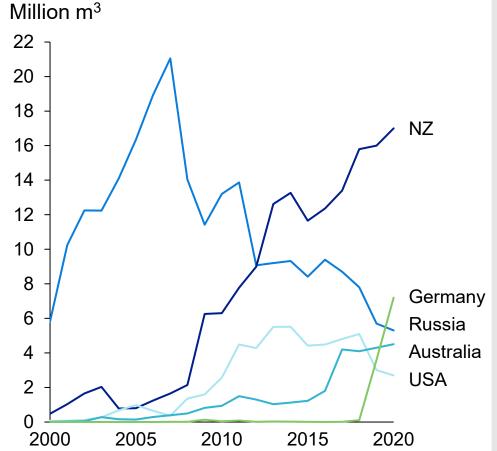
Backup FORESTA2021

Since tariffs were first introduced in 2007, China has replaced ~75% of Russian volumes with imports from other countries





Development of imports by source;



Key take-aways

- Since 2007, China has shifted ~15 million m³ of Russian softwood log imports to other sources, especially New Zealand
- China has further diversified import mix recently with increasing volumes from Australia and Germany.
- Exports from Europe are likely a short-term phenomenon, due to bark beetle salvage.

Backup FORESTA2021

Decreased Russian exports of softwood logs to China will create opportunity for New Zealand and European exporters

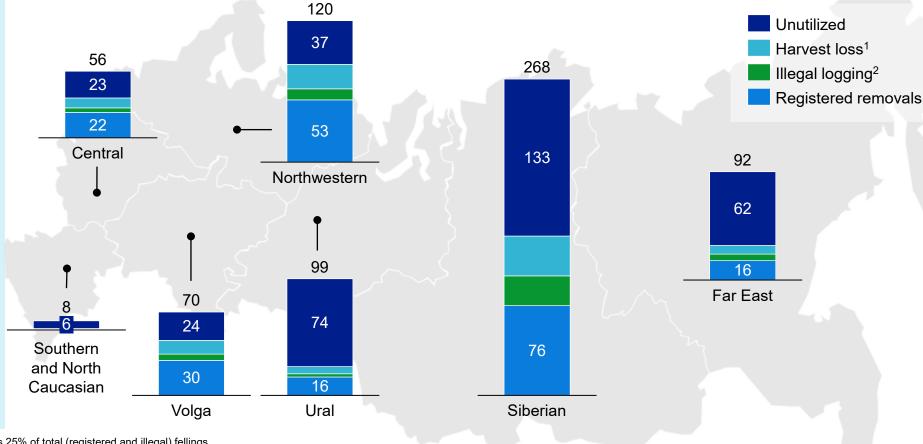


Backup FORESTA2021

Most potential for additional log supply is in the east of Russia

Large unutilized potential in east of Russia – not currently available due to cost constraints and long distances from processing facilities or railroad.

Russia's annual allowable cut and harvest by Federal District, 2017; Million m³

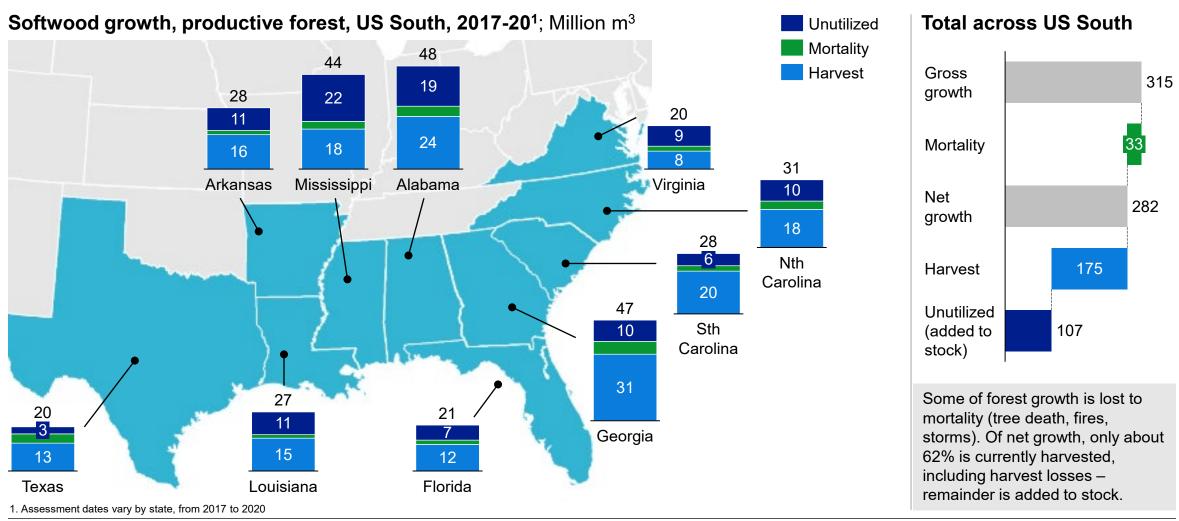


^{1.} Estimated, assuming logging waste and bark is 25% of total (registered and illegal) fellings

^{2.} Estimated, assuming 25% of harvests in Siberia and Fast East are illegal, 15% in rest of Russia (20% overall)

Backup FORESTA2021

Forest growth of \sim 315 million m³ across the region, in production forests, of which \sim 175 million m³ is harvested



Backup FORESTA2021

Global lumber markets are in flux, with several trends suggesting a tighter demand-supply balance in years to come

Developments in global lumber markets

Softer markets Mixed impact Tighter markets

Actual / near

term

ノ Supply

- Russia expected to introduce an export ban on softwood logs and high-value hardwood logs from Jan 2022
- Restricted sawlog supply to China, increased import of lumber and sawlogs from other regions
- Increased Russian export of lumber, and investments in improved quality (kiln-drying).
- Canada's harvest potential reduced with mountain pine beetle in BC.
- Central Europe harvests increased short-term due to bark beetle damage but will fall to below pre-beetle levels from 2022/23.
- Decreased export from LatAm to domestic economy rebound and reduced sawlog supply.

Demand

- Strong demand in US due to COVID stimulus and increased DIY
- Continued strong demand growth in China post-COVID

Potential /longterm

- Additional US South supply potential of ~20 million m³ long-term
- Increased focus on forests' role in climate change abatement, growth in forestry carbon markets
- Longer rotations and forest protection (esp. NthAm and Europe)
 - Surge in new forest planting (e.g., Southern Hemisphere)
- Increased frequency of climate-related forest damage (insects, fire)
- Increased investment in plantation forestry in new regions, e.g., Africa, SE Asia, increasing sawlog and lumber supply.

Increased use of wood in construction, including multi-family and non-residential, driven by interested in "green building materials" and innovation in modular solutions (e.g., CLT).

