Log Market Analysis

April 2023



Photo 1: Earthflow in Ashcroft Pine Forest after Cyclone Gabrielle, Gisborne region (photo March 2023).

The content of this Log Market Analysis is produced quarterly as part of a suite of documents that comprise the regular reporting to forest owners during harvest. This standalone document is made available to other forest owners approaching harvest to keep them informed on market conditions.

We have included log price series separately for Wairarapa and Gisborne forests, as the price series differ for reasons including different customers, log specifications and locations.

Forest Enterprises (FE) is currently harvesting approximately 550,000 tonnes of logs per annum for Wairarapa, Gisborne and Hawke's Bay forest owners, plus a further 450,000 tonnes for a private impact investment fund manager in the same regions.

IMPORTANT

Every effort has been made to provide current accurate information in this document, which is for information purposes only. Any opinions and views expressed are those currently held by Forest Enterprises; however, the reader accepts that where they are opinions and views in respect of future prices, they may subsequently be proven incorrect. The nature of the international log market is that of price fluctuations, and these fluctuations can be material, and material changes can arise due to factors not previously able to be foreseen.



Overview



Photo 2: Damage after Cyclone Hale in Portview Group Forest, Gisborne (photo May 2023).



Photo 3: Roads in Hokoroa Group forests, Gisborne damaged by flooding, and soil loss below the road (photo March 2023).



Wairarapa Log Prices Per Tonne

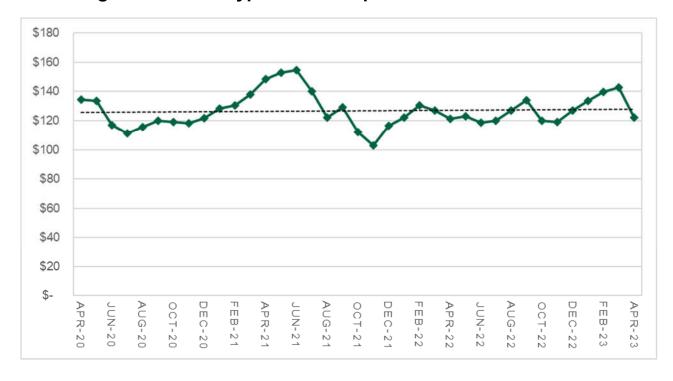
Grade	Forest Enterprises Mar-23	Forest Enterprises 36 Month Average	Current vs 36 Month Average	Percentage of the 36 Month Average
Export P40	\$213.00	\$179.15	\$33.85	119%
Export P30	\$179.00	\$155.00	\$24.00	115%
Export A	\$151.00	\$129.25	\$21.75	117%
Export K	\$134.40	\$114.60	\$19.80	117%
Export KI	\$127.35	\$105.95	\$21.40	120%
Export Pulp	\$112.80	\$92.50	\$20.30	122%
Domestic P35	\$185.00	\$182.20	\$2.80	102%
Domestic S30	\$127.00	\$125.35	\$1.65	101%
Domestic S20	\$112.00	\$110.35	\$1.65	101%
Domestic Pulp	\$31.00	\$31.00	\$0.00	100%

Export sales units are volumetric (JAS) while domestic sales units are paid per tonne. The Export JAS prices have been converted to \$/tonne. Refer to page 5 for more detail on the JAS to Tonne Conversion.

Index Log Price \$142.86 \$127.10	\$15.76 112%
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Index Log Price is calculated using benchmarks from our Wairarapa forest crops to estimate an average log grade recovery for a typical Wairarapa forest. Applying these estimates to our long run prices per grade has derived an Index Log Price. This index price helps to estimate the average logs sales predicted for a typical forest.

Index Log Price for our typical Wairarapa Forests





Gisborne Log Prices Per Tonne

Grade	Forest Enterprises Mar-23	Forest Enterprises 36 Month Average	Current vs 36 Month Average	Percentage of the 36 Month Average
Export P40	\$227.45	\$182.35	\$45.10	125%
Export P30	\$177.30	\$143.80	\$33.50	123%
Export A	\$158.50	\$129.35	\$29.15	123%
Export K	\$139.10	\$114.60	\$24.50	121%
Export KI	\$132.45	\$106.60	\$25.85	124%
Export Pulp	\$129.85	\$95.70	\$34.15	136%
Domestic P35	\$189.00	\$180.00	\$9.00	105%
Domestic S30	\$133.00	\$137.15	(\$4.15)	97%

Export sales units are volumetric (JAS) while domestic sales units are paid per tonne. The Export JAS prices have been converted to \$/tonnes. Refer to page 5 for more detail on the JAS to Tonne Conversion.

Index Log Price	Index Log Price	\$166.12	\$134.30	\$31.82	124%
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Index Log Price is calculated using benchmarks from our Gisborne forest crops to estimate an average log grade recovery for a typical Gisborne forest. Applying these estimates to our long run prices per grade has derived an Index Log Price. This index price helps to estimate the average logs sales predicted for a typical forest.

Index Log Price for our typical Gisborne Forests





Factors Influencing Current Log Price

Key: More Benefit to the Investor Less Benefit to the Investor Neutral

Price, Costs and Logistics



Export logs are priced in USD. Exchange rates are often affected by merchandise imports and exports as well as a general level of confidence in the New Zealand economy in comparison with the USD. Inflation is a common topic which is often attributed to central banks boosting money supply. The current exchange rate position of about US61.4c is an improvement in trade terms for New Zealand compared with last quarter's US64.8c. This increases our export log price in NZD terms.

Forest Enterprises takes no forward position or hedge in currency trading. Hedging imposes transaction costs without giving certainty of improved outcomes.

Shipping

Shipping costs have remained stubbornly high, as ship owners can take advantage of other cargo such as grains rather than logs or other destinations. We expected to see log volumes decline which reduces demand for vessels, but this is taking time to play out. Time was also gained by the holiday period at home and abroad which reduces product demand and industrial usage. Construction of new shipping is also low such that owners expect ship supply to remain tight. Port costs are increasing as various inefficiencies play out from things such as Covid which has had a very chilling effect on labour efficiency and wage inflation. Port costs are rising but delays are also increasing.

JAS to Tonne Conversion

JAS-to-tonne conversion remained steady from last guarter up from 100.1% as at 31 December 2022 to 101.2% at 31 March 2023.

Export logs are sold in Japanese Agricultural Standard cubic metres (JAS). JAS is a measure of useable log volume rather than weight. Payments to most contractors are made based on weight, which is appropriate for handling heavy material. This means the return to the forest owner is affected strongly by the conversion of weight to volume in the logs.

Conversion has seasonal trends and varies between log grades, log length and log quality. Accounting for conversion is necessary to report comparable values from different sales options. Our convention is to report all prices in the 'per tonne basis', which accounts for the weight to mass conversion. Our harvest reports show monthly JAS/tonne conversion per forest.

Log Price, Export CFR

CFR (Cost and Freight) is the price in USD paid by the end user/buyer.

China Falling dramatically.

South Korea Falling with China price but slightly less impact.

No change; waiting for fumigation rules to be resolved. <u>India</u>

<u>Japan</u> Price and demand slowing.

Log Demand

Export Log Inventory in Market in Market

<u>China</u> Inventory of logs in China is a leading supply/price indicator. Inventory levels in China are

> relatively flat and slow moving at about 3.9 million JAS. Log supply rose from about 64 days of supply to 71 days with current usage at about 55,000 JAS per day. The speed that logs turn to lumber and lumber turns to cash drives market sentiment. The China market has been described as unwinding; essentially, price will decline until log traders can return

to profitability. Industrial timber usage grows.

South Korea Price has fallen but remains a tick above the China levels. The Korean log usage is a lot

lower than China; supply and demand is more balanced, so oversupply can occur quickly,

which is bad for price stability.

<u>India</u> Nothing to report; no activity.

Japan Lumber inventory is being discounted as imported Chilean lumber prices are lower than

current stock levels from local sawmills who process New Zealand pine.



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Pruned Log Grades

Pruned logs are a stabilising factor in log sales revenues. Local demand is holding up well, except in the case of the Pan Pac sawmill which was extensively damaged in the cyclones and remains closed.



New Zealand Domestic

Our main customers are steady, but demand is somewhat lower than previously due to declining housing construction demand recently.

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Housing and Business

A tough time for new home buyers with interest rates rising rapidly. Mortgage servicing is getting harder and there are a lot of people who may consider themselves struggling. Inflation and house price declines are complicated by reserve banks money printing operations. The Government-created rivers of cash are drying up and real estate markets are losing confidence, as well as working people facing headwinds from wage and salary restrictions.



Log Agency

Washups had been in investors' favour as earlier price rises flowed through to increased revenues from sales settled after monthly prices were estimated. This trend is now well and truly over as we book lower than forecast prices from recent sales. There will be large log sales price reductions coming through in May from April deliveries. The faster price settles at the new equilibrium level the sooner we can run better forecasting of short-term returns. Log sellers are pessimistic in the short term though.

Log Supply

New Zealand A lot of harvest capacity has been cut from high-cost areas such as the

East Cape, and many loggers have relocated into the Taupō storm-damage areas where forest recovery is ramping up. Log supply will shrink

with the current pricing, as well as the wet winter conditions.

Australia Slow

<u>Europe and Russia</u> Production is declining as many logs are sold below the cost of production.

Pacific Northwest (PNW) Lumber demand is slow, but price rising slightly.

Point of Interest

CFR Pricing - logs and lumber remain in a down phase in the China market, with soft demand resulting in prices declining over April and into May.

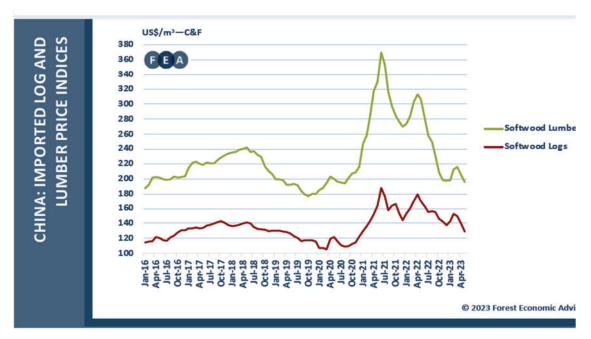
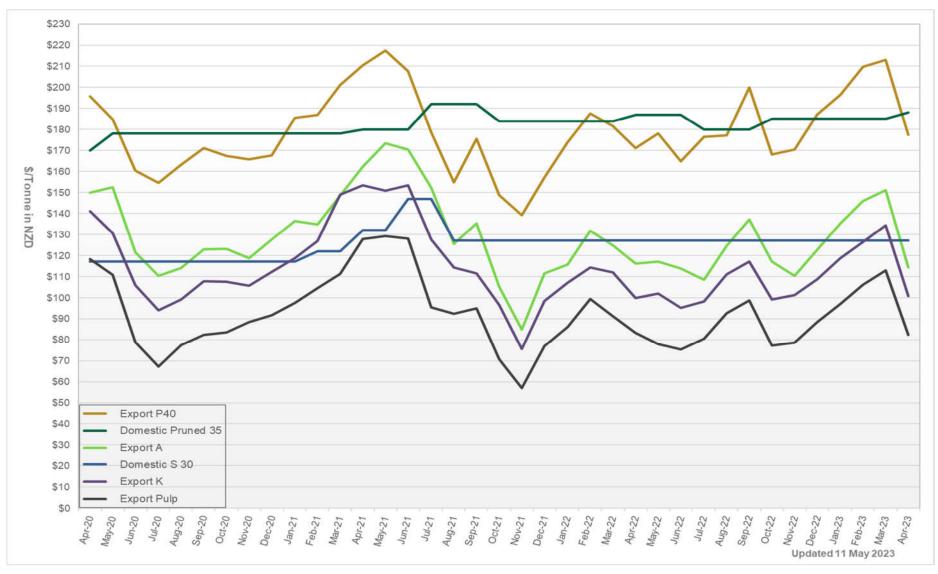


Photo 4: Graph from PFP market report.



Lower North Island Log Price Graph per Tonne



Log Price Graph: Tracks the key log prices for a 37-month period. The first 36 months are the months which comprise the average referred to under Log Prices per Tonne above. The 37th month shows the indicative prices scheduled for the current month. Export sales units are volumetric (JAS) while domestic sales units are paid per tonne. The Export JAS prices have been converted to tonnes. These log price averages do not reflect any price adjustments that may occur following washups with our log export partners.

