

Global Pulp



Methodology and price specifications – September 2021



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Mission statement

Fastmarkets is a leading commodity price reporting agency (PRA) covering the metals, mining, minerals and forest products industries. Our products include Metal Bulletin, American Metal Market, RISI, FOEX, Random Lengths, AgriCensus and Industrial Minerals. For more than 100 years we have been providing commodities price reporting services for use by market participants in their day-to-day commercial activities. These services include assessments and indices of commodity prices as well as news, research and commentary on the underlying markets.

Our mission is to meet the market's data requirements honestly and independently, acting with integrity and care to ensure that the trust and confidence placed in the reliability of our pricing methodologies is maintained. We do not have a vested interest in the markets on which we report.

Introduction

Fastmarkets RISI is the leading global provider of pricing intelligence for the pulp and paper markets and has been producing price assessments since the 1970's.

Fastmarkets' reporters are required to abide by a code of conduct and clear pricing procedures during their market reporting and pricing activities. Fastmarkets is completely independent and has no vested commercial interest in any of the markets it prices.

We are the world's largest dedicated forest products price reporting team. We have offices in New York, Boston, San Francisco, Eugene, Charlottesville, Atlanta, Brussels, Helsinki, Beijing, Shanghai, Singapore and Sao Paulo.

The aim of this document is to provide a clear overview of Fastmarkets RISI's Global Pulp methodology and specifications for the prices it assesses. If you have any questions, please contact Fastmarkets Forest Products' Senior VP of Indices, Matt Graves, at matt.graves@fastmarkets.com.



Price discovery process and methodology

Methodology Rationale

Fastmarkets RISI produces independent, fair and representative price assessments and indices for global market pulp on a weekly, monthly and twice-monthly basis. Fastmarkets RISI's rationale is to adopt and develop the price discovery process and the methodology described in the present guide to produce assessments that are a consistent and representative indicator of value of the market to which they relate for the trading period they measure.

During the price discovery process, the price reporter's goal is to discover at what representative level market participants have concluded business, made offers or received bids over a certain defined trading period – generally the calendar month indicated for monthly prices and the period since the conclusion of the previous price quotation for weekly or bi-weekly prices. Final assessments generally reflect prevailing market prices at the end of the month or towards the end of the pricing window. In the case of North American contract pulp, mid-month assessments represent the preliminary price only and are superseded by the end-month assessment, which represents the final settlement price.

The time period, or window, identified to assess a market (e.g., daily, weekly, every two weeks, monthly) is determined by Fastmarkets RISI after considering the number of data points that Fastmarkets RISI can reasonably expect to collect on a consistent basis over the selected period to support the price assessment process.

Fastmarkets RISI publishes weekly pricing rationales to explain the calculation of key benchmarks such as Northern Bleached Softwood Kraft CIF China. These notes explain, for instance, whether any data has been excluded and why, information on the data collected and whether fall-back procedures have been applied.

Definitions

Fastmarkets RISI uses the following definitions:

Nature of the transaction

Contract: Transactions between suppliers and buyers who have a written contract or an ongoing unwritten relationship that involves regular transactions over time.

Spot: Transactions without a long-term contract or commitment.



What is being measured by the price?



List Price - In a contract transaction, the list price is the producer's initial asking price, as announced publicly or communicated to the buyer as the starting point for negotiations. RISI's Pulp & Paper News Service reports list prices as they are announced by producers or as they are initially communicated to buyers.

Effective List Price - In a contract transaction, buyers and sellers must agree to a price each month and then apply a discount that has been agreed upon earlier. The "Effective List price for contract transactions" is the price on which buyers and sellers agree to be the baseline price off of which pre-agreed discounts are taken. The Effective List price is net of competitive allowances or any other temporary market-wide discounts that are not captured in the standard contract discount that was previously agreed to between the buyer and the seller.

Spot Price - Spot prices are for transactions without a long-term contract and reflect the net transaction price - i.e. a level from which no further discounts, allowances or performance rebates are given.

Net Price – Net prices are levels settled after deducting discounts given by sellers to buyers following their negotiations, usually held on a monthly basis in Asia.

Resale Price – resale prices are for stocks that Chinese traders sell on to their domestic buyers in China.



Data collection criteria

Fastmarkets RISI reporters aim to talk to a broad sample of market participants specifically involved in the buying and selling of the pulp grade of interest, with a good representation of both sides of the market, including producers and consumers, as well as traders.

Data is collected from market participants directly involved in contract business primarily by telephone, but also by email, digital messaging or direct submission. All input data received is kept confidential and stored in a secure network.

Fastmarkets RISI's Data Submitter Policy provides guidelines to ensure the high level of data quality and integrity that we expect from contributing organizations providing pricing data. The policy can be found on Fastmarkets RISI's website or is available upon request.

Fastmarkets RISI encourages data sources to provide data on all their concluded transactions and welcomes provision of data from employees in back office functions. Fastmarkets RISI may sign Data Submitter Agreements (DSAs) with any data provider, if requested to do so.

Depending on market liquidity, Fastmarkets RISI reserves the right to also base its prices on bids, offers, deals heard and market participants' assessment or indication of prevailing values.

Price specifications and reference units

Fastmarkets RISI has clear specifications for all the price points that it covers. All the reference units, such as currency and volume, are in line with recognized pulp and paper markets trading conventions.

Fastmarkets RISI's specifications detail the material's characteristics or quality, location, incoterm, payment terms and the minimum volume accepted. These specifications are determined in consultation with market participants and following industry convention. Reporters ensure that the information they receive matches these specifications.

Guidelines on the use of judgement

To produce the price assessment, greater weighting is generally given to actual concluded transaction data; bids/offers are second in order of importance, followed by data sources' own assessment of the market when they have no business to report. However, other considerations might also intervene such as, the trustworthiness of a data source based on past data submissions, or their willingness to provide data on a consistent basis.



In the absence of sufficient transaction data, bids and offers or other actual price information, Fastmarkets RISI reserves the right to use other factors to determine the assessment. These include:

- market participants' trigger prices;
- market participants' reports of the change in prices from previously assessed periods;
- market fundamentals such as changes in inventory levels, shipments, operating rates and export volumes;
- · relative values of similar commodities in the same region;
- relative values of the same commodity in different regions;
- changes in the value of the commodity's primary feedstock or primary derived product(s).

In very opaque markets, where little actual market data is available, price developments may at times not be immediately apparent. If Fastmarkets RISI price assessors detect this, their market assessments in the next reporting period would generally reflect the price change. This is in line with Fastmarkets RISI's policy of acting on new information as it becomes available.

All Fastmarkets RISI price specifications define the minimum lot size accepted. When volume information is available, this is also taken into consideration in the assessment process. For instance, typically a deal with a bigger volume will carry more weight in the price reporter judgement than a smaller volume transaction.

However, price reporters will also consider, for instance, to normalize or discard a price reported for a deal with an abnormally large or small volume. As commodity markets differ in liquidity level at different periods, the methodology does not set any minimum number, or threshold, of transactions to be gathered on which to base the assessment.

The weighting of any single data provider's data is limited so that it doesn't dominate the assessment. For key benchmark prices (e.g. US NBSK – see specifications below), this cap is more formal: no single data provider's data will be weighted so that it contributes more than 25% of the final assessment. For other assessments the cap is set at 50%.

Criteria to discard pricing data

Data are excluded from the assessment in the following cases:

- The price of a transaction is indexed to published prices from Fastmarkets RISI or other sources.
- A transaction price is considered "indexed" when it is entirely determined according to a formula based on a published price assessment. However, even when parties have a long-term index-priced contract (i.e. stipulation that each month's price will be determined based on a published price assessment), they may sometimes supersede the contract terms by choosing to determine a given



month's price by negotiation. For instance, this can happen if parties negotiate and agree on the price for a given month before that month's Fastmarkets RISI price assessment has been published. In a case like this, even though the overall contract is indexed, the given month's price is not considered indexed and would thus be included in that month's price assessment.

- The transactions don't meet the assessment specifications.
- The transaction has special circumstances that, in the price assessor's judgment, render it unrepresentative of the broader market and/or not repeatable.
- The transaction is between affiliated companies.

Procedure to ensure consistency in the price discovery procedures

All Fastmarkets RISI price assessments are set by a first reporter who covers that specific market, peer reviewed by a second reporter, and always signed-off and approved by a senior reporter or editor prior to publication. This peer review process is in place to make sure that pricing procedures and methodologies are correctly and consistently applied and to ensure integrity and quality of the published prices.

Price reporters are formally trained in the price discovery process and must abide by a written Code of Conduct and pricing procedures.

On a regular basis, Fastmarkets RISI staff reviews markets and methodologies to ensure that assessment methodologies and the assessments they produce are appropriate for the market. Fastmarkets RISI has also committed to conducting one external audit per year of one key assessment.

Publication of the price assessment

At the end of the pricing session, Fastmarkets RISI reviews the pricing information it receives to set a price range to reflect the representative spread of prices at which business has been transacted, offered or bid. In some markets Fastmarkets RISI may also publish a single point price reflecting the average prevailing market value.

For Fastmarkets RISI's full publishing schedule for global pulp prices, please see here.

Fall-back procedure

Fastmarkets RISI does not set a minimum number of price points for calculating its price assessments. In the unlikely event that there are not enough eligible price points in a given week, Fastmarkets RISI may decide to roll forward previous price data or to roll forward the previous price assessment.



Methodology review and consultation process

Fastmarkets' editorial teams carry out a formal review and approval of its methodologies on an annual basis. The process starts with an open consultation in which feedback is invited from users. Further consultation follows should any material change to the methodology be proposed. Material changes are those that, once implemented, may result in fundamental changes to the published price.

At the end of the consultation process, the editorial teams review any feedback received and decide on whether a change should be made before announcing and explaining that decision to the market via a pricing notice/coverage note. The editorial teams may also suggest changes or additions to methodologies on an ad-hoc basis to reflect market developments, in which case they will follow the same process as outlined for formal reviews.

For more details, please refer to Fastmarkets' Methodology Review and Change Consultation Process document available on the Fastmarkets website, as well as on divisional websites such as Fastmarkets MB, Fastmarkets RISI or Fastmarkets FOEX.

Price correction policy

Publication of price errors can occasionally happen for reasons that may include technical input errors or incorrect application of the methodology. To minimize the inconvenience to our subscribers, Fastmarkets RISI aims to investigate each error as soon as it becomes aware of it and to publish a correction promptly on our website through a pricing notice with an explanation of the reason for the correction.

Fastmarkets RISI will publish a correction of a price only where it has established undeniably that there has been an error. Fastmarkets RISI price assessments are produced based on the best data available at the time of the assessment. It will not retroactively change a price based on new information or additional submission of data received after a respective pricing session has closed.

Occasionally, in very opaque markets, price developments may not become apparent for some time. If this happens, Fastmarkets RISI reserves the right to adjust a price series upwards or downwards to bring it back in-line with market values. Such cases should not be considered corrections but rather non-market price adjustments. A retroactive correction of the price history would not normally be made.

Fastmarkets RISI has a very structured process for such non-market adjustments, similar to that for changes to methodologies and specifications. They would only be implemented after industry consultation. Ample notice would be given of the proposed adjustment and stakeholders would have the chance to send their feedback.



Queries and complaints

Fastmarkets RISI encourages engagement from the market on its pricing principles and methodology. The company promotes understanding of its pricing procedures and is committed to responding to requests for further information and clarification on a timely basis.

There are multiple channels for interaction with the pricing team including email, telephone and instant messenger services.

If a user has an issue with the published prices, then they may contact the pricing team. In the event that the response is not satisfactory the issue may be escalated to the internal compliance department. For more details refer to Fastmarkets' Complaint Handling Policy available on the Fastmarkets RISI website.

Fastmarkets RISI takes all queries and complaints seriously and will seek to provide an explanation of the prices wherever possible. It is important to note, however, that input data remain confidential and cannot be provided to third parties.

Become a contributor to the price discovery process

Fastmarkets continually seeks to increase the number of market sources willing to take part in the price discovery process. The main condition Fastmarkets requires from contributors is for them to be active participants in the market. Fastmarkets' Data Submitter Policy provides guidelines defining the high level of data quality and integrity that Fastmarkets expects from contributing organization providing pricing data. Market participants that wish to provide pricing data and be part of the price discovery process should first read the Data Submitter Policy available on the Fastmarkets website.

All data sources are subject to review before their data submitted is fully taken into account in the pricing process. The aim is to make sure that submitters are trustworthy and have sufficient visibility and understanding of the market to be able to provide viable price data.

If you want to become a contributor to Fastmarkets pricing or have questions or comments about the methodology and price specifications, please contact Fastmarkets Forest Products' Senior VP of Indices, Matt Graves, at matt.graves@fastmarkets.com.



Price specifications

NORTH AMERICA

Contract Pulp

Assessment: Northern Bleached Softwood Kraft (Canadian)

Quantity: min. 100 tonnes

Location: US East Incoterm: Delivered

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Effective List, before regular volume and contract discounts.

Publication: Monthly. Preliminary price on 2nd or 3rd Friday of the month. Final price 2nd to last business

day of the month. Prices are published at 4.30pm ET.

Notes: Prices are for prime quality tonnage. Wet-lap pulp is excluded. Includes Canadian premium

reinforcement NBSK.

Price ID: 163

Assessment: Southern Bleached Softwood Kraft (US)

Quantity: min. 100 tonnes

Location: US East Incoterm: Delivered

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Effective List, before regular volume and contract discounts.

Publication: Monthly. Preliminary price on 2nd or 3rd Friday of the month. Final price 2nd to last business

day of the month. Prices are published at 4.30pm ET.

Notes: Prices are for prime quality tonnage. Wet-lap pulp is excluded.

Price ID: 164

Assessment: Northern and Southern Bleached Hardwood Kraft (Canada/US)

Quantity: min. 100 tonnes

Location: US East Incoterm: Delivered

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.



Price Type: Effective List, before regular volume and contract discounts.

Publication: Monthly. Preliminary price on 2nd or 3rd Friday of the month. Final price 2nd to last business

day of the month. Prices are published at 4.30pm ET.

Notes: Prices are for prime quality tonnage. Wet-lap pulp is excluded.

Price ID: 11851

Assessment: Bleached Hardwood Kraft (Eucalyptus)

Quantity: min. 100 tonnes

Location: US East Incoterm: Delivered

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Effective List, before regular volume and contract discounts.

Publication: Monthly. Preliminary price on 2nd or 3rd Friday of the month. Final price 2nd to last business

day of the month. Prices are published at 4.30pm ET.

Notes: Prices are for prime quality tonnage. Wet-lap pulp is excluded.

Price ID: 219

Assessment: Unbleached Softwood Kraft (Canada/US)

Quantity: min. 100 tonnes

Location: US East Incoterm: Delivered

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Effective List, before regular volume and contract discounts.

Publication: Monthly. Preliminary price on 2nd or 3rd Friday of the month. Final price 2nd to last business

day of the month. Prices are published at 4.30pm ET.

Notes: Prices are for prime quality tonnage. Wet-lap pulp is excluded.

Price ID: 168

Assessment: Fluff (US Southern Kraft, Untreated Softwood Rolls)

Quantity: min. 100 tonnes

Location: US East Incoterm: Delivered

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Effective List, before regular volume and contract discounts.



Publication: Monthly. Preliminary price on 2nd or 3rd Friday of the month. Final price 2nd to last business

day of the month. Prices are published at 4.30pm ET.

Notes: Prices are for prime quality tonnage. Wet-lap pulp is excluded.

Price ID: 171

Spot Pulp

Assessment: Northern Bleached Softwood Kraft

Quantity: min. 100 tonnes

Location: US East Incoterm: Delivered

Timing: Orders in the two weeks prior to publication. Shipment may occur no later than the following

month. Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Spot/net

Publication: Twice-monthly, on 2nd or 3rd Friday of the month and the 2nd to last business day of the month

at 4.30pm ET.

Notes: Prices are for prime quality tonnage. Includes Canadian premium reinforcement NBSK.

Price ID: 635

Assessment: Southern Bleached Softwood Kraft

Quantity: min. 100 tonnes

Location: US East Incoterm: Delivered

Timing: Orders in the two weeks prior to publication. Shipment may occur no later than the following

month. Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Spot/net

Publication: Twice-monthly, on 2nd or 3rd Friday of the month and the 2nd to last business day of the month

at 4.30pm ET.

Notes: Prices are for prime quality tonnage.

Price ID: 638

Assessment: Bleached Hardwood Kraft

Quantity: min. 100 tonnes

Location: US East Incoterm: Delivered



Timing: Orders in the two weeks prior to publication. Shipment may occur no later than the following

month. Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Spot/net

Publication: Twice-monthly, on 2nd or 3rd Friday of the month and the 2nd to last business day of the month

at 4.30pm ET.

Notes: Prices are for prime quality tonnage.

Price ID: 11852

Export Pulp

Assessment: Northern Bleached Softwood Kraft (Canadian)

Quantity: min. 100 tonnes

Location: Japan

Incoterm: Cost, insurance, and freight

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms. 3-9% discount for cash payment or 60

days.

Price Type: Effective List

Publication: Monthly, on the last business day of the month at 4.30pm ET.

Notes: Prices are for prime quality tonnage. Includes Canadian premium reinforcement NBSK.

Price ID: 488

Assessment: Northern Bleached Softwood Kraft (Canadian)

Quantity: min. 100 tonnes Location: Asia (Korea)

Incoterm: Cost, insurance, and freight

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms. 13-16% discount for cash payment or 60

days.

Price Type: Effective List

Publication: Monthly, on the last business day of the month at 4.30pm ET.

Notes: Prices are for prime quality tonnage. Includes Canadian premium reinforcement NBSK.

Price ID: 533



Assessment: Fluff, US southern kraft untreated rolls, net

Quantity: min. 100 tonnes Location: Asia (China)

Incoterm: Cost, insurance, and freight

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net

Publication: Monthly, on the second to last business day of the month at 4.30pm ET.

Notes: Prices are for prime quality tonnage.

Price ID: 14460

EUROPE

Contract Pulp

Assessment: Northern Bleached Softwood Kraft (Canadian)

Quantity: min. 100 tonnes

Location: Europe

Incoterm: Cost, insurance, and freight

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Effective List

Publication: Monthly, in the first full week of the month following the order month.

Notes: Prices are for prime quality tonnage.

Price ID: 607

Assessment: Southern Bleached Softwood Kraft (US)

Quantity: min. 100 tonnes

Location: Europe

Incoterm: Cost, insurance, and freight

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Effective List

Publication: Monthly, in the first full week of the month following the order month.

Notes: Prices are for prime quality tonnage.

Price ID: 608



Assessment: Bleached Hardwood Kraft (Birch)

Quantity: min. 100 tonnes

Location: Europe

Incoterm: Cost, insurance, and freight

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Effective List

Publication: Monthly, in the first full week of the month following the order month.

Notes: Prices are for prime quality tonnage.

Price ID: 700

Assessment: Bleached Hardwood Kraft (Eucalyptus)

Quantity: min. 100 tonnes

Location: Europe

Incoterm: Cost, insurance, and freight

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Effective List

Publication: Monthly, in the first full week of the month following the order month.

Notes: Prices are for prime quality tonnage.

Price ID: 601

Assessment: Bleached Hardwood Kraft (Northern Mixed)

Quantity: min. 100 tonnes

Location: Europe

Incoterm: Cost, insurance, and freight

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Effective List

Publication: Monthly, in the first full week of the month following the order month.

Notes: Prices are for prime quality tonnage.

Price ID: 604

Assessment: Bleached Hardwood Kraft (Southern Mixed)

Quantity: min. 100 tonnes

Location: Europe



Incoterm: Cost, insurance, and freight

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Effective List

Publication: Monthly, in the first full week of the month following the order month.

Notes: Prices are for prime quality tonnage.

Price ID: 605

Assessment: Fluff

Quantity: min. 100 tonnes

Location: Europe

Incoterm: Cost, insurance, and freight

Timing: Orders in the month to date. Shipment may occur no later than the following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Effective List

Publication: Twice-monthly, on 2nd or 3rd Friday of the month and the 2nd to last business day of the month.

Notes: Prices are for prime quality tonnage and are based on the RISI assessment for fluff in North

America. For details of this assessment see above.

Price ID: 609

ASIA

CHINA - DOMESTIC

All China domestic pulp prices are derived from prices originally published by Fastmarkets RISI's sister company UM Paper.

Assessment: Northern Bleached Softwood Kraft (Canada/US)

Quantity: min. 100 tonnes

Location: East China, including Jiangsu, Zhejiang and Shanghai.

Delivery basis: Ex-trader's warehouse

Timing: Orders in the week prior to publication.

Unit: Tonne

Currency: Chinese Renminbi

Payment terms: Assume normal and customary payment terms. Includes 13% VAT

Price Type: Net

Publication: Weekly, each Friday at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 1234



Assessment: Unbleached Softwood Kraft (Chile/N. America)

Quantity: min. 100 tonnes

Location: East China, including Jiangsu, Zhejiang and Shanghai.

Delivery basis: Ex-trader's warehouse

Timing: Orders in the week prior to publication.

Unit: Tonne

Currency: Chinese Renminbi

Payment terms: Assume normal and customary payment terms. Includes 13% VAT

Price Type: Net

Publication: Weekly, each Friday at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 1229

Assessment: Bleached Hardwood Kraft (Domestic Chinese)

Quantity: min. 100 tonnes

Location: East China, including Jiangsu and Shandong.

Delivery basis: Ex-trader's warehouse

Timing: Orders in the week prior to publication.

Unit: Tonne

Currency: Chinese Renminbi

Payment terms: Assume normal and customary payment terms. Includes 13% VAT

Price Type: Net

Publication: Weekly, each Friday at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 1230

Assessment: Bleached Hardwood Kraft (from Russia)

Quantity: min. 100 tonnes

Location: North and Northeast China, including Liaoning, Beijing, Tianjin & Hebei.

Delivery basis: Ex-trader's warehouse

Timing: Orders in the week prior to publication.

Unit: Tonne

Currency: Chinese Renminbi

Payment terms: Assume normal and customary payment terms. Includes 13% VAT

Price Type: Net

Publication: Weekly, each Friday at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 1231

Assessment: Bleached Softwood Kraft (from Russia)

Quantity: min. 100 tonnes

Location: North and Northeast China, including Liaoning, Beijing, Tianjin & Hebei.



Delivery basis: Ex-trader's warehouse

Timing: Orders in the week prior to publication.

Unit: Tonne

Currency: Chinese Renminbi

Payment terms: Assume normal and customary payment terms. Includes 13% VAT

Price Type: Net

Publication: Weekly, each Friday at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 1232

Assessment: Bleached Hardwood Kraft (Eucalyptus)

Quantity: min. 100 tonnes

Location: East China, including Jiangsu, Zhejiang and Shanghai.

Delivery basis: Ex-trader's warehouse

Timing: Orders in the week prior to publication.

Unit: Tonne

Currency: Chinese Renminbi

Payment terms: Assume normal and customary payment terms. Includes 13% VAT

Price Type: Net

Publication: Weekly, each Friday at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 1233

Assessment: Radiata Pine Quantity: min. 100 tonnes

Location: East China, including Jiangsu, Zhejiang and Shanghai.

Delivery basis: Ex-trader's warehouse

Timing: Orders in the week prior to publication.

Unit: Tonne

Currency: Chinese Renminbi

Payment terms: Assume normal and customary payment terms. Includes 13% VAT

Price Type: Net

Publication: Weekly, each Friday at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 1235

Assessment: Chinese Bagasse

Quantity: min. 100 tonnes

Location: Guangxi.

Delivery basis: Ex-trader's warehouse

Timing: Orders in the week prior to publication.

Unit: Tonne

Currency: Chinese Renminbi



Payment terms: Assume normal and customary payment terms. Includes 13% VAT

Price Type: Net

Publication: Weekly, each Friday at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 1219

Assessment: **Chinese Bamboo**Quantity: min. 100 tonnes
Location: Guizhou, Sichuan.

Delivery basis: Ex-trader's warehouse

Timing: Orders in the week prior to publication.

Unit: Tonne

Currency: Chinese Renminbi

Payment terms: Assume normal and customary payment terms. Includes 13% VAT

Price Type: Net

Publication: Weekly, each Friday at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 1220

CHINA - IMPORTS

Assessment: Northern Bleached Softwood Kraft (Imports from N. America/Scandinavia)

Quantity: min. 500 tonnes

Location: China

Incoterm: Cost, insurance and freight

Timing: Orders in the week prior to publication for delivery in the current month or following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net

Publication: Weekly, each Friday at 2pm Singapore time.

Notes: Standard dryness i.e. 90% air dry and standard strength characteristics. Baled, fully bleached,

prime grade pulp. Excludes premium reinforcement NBSK.

Price ID: 1218

Assessment: Bleached Hardwood Kraft (Imports from Russia)

Quantity: 1,000 tonnes

Location: China

Incoterm: Cost, insurance and freight

Timing: Orders in the week prior to publication for delivery in the current month or following month.

Unit: Tonne

Currency: US Dollar



Payment terms: Assume normal and customary payment terms.

Price Type: Net

Publication: Twice monthly on Fridays at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 1215

Assessment: Bleached Softwood Kraft (Imports from Russia)

Quantity: 500 tonnes Location: China

Incoterm: Cost, insurance and freight

Timing: Orders in the week prior to publication for delivery in the current month or following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net

Publication: Twice monthly on Fridays at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 1216

Assessment: Bleached Hardwood Kraft, Eucalyptus, imports from South America (net price)

Quantity: min. 1,000 tonnes

Location: China

Incoterm: Cost, insurance and freight

Timing: Orders in the week prior to publication for delivery in the current month or following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net

Publication: Twice monthly on Fridays at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 1217

Assessment: Bleached Softwood Kraft, Radiata Pine (Imports from Chile)

Quantity: 500 tonnes Location: China

Incoterm: Cost, insurance and freight

Timing: Orders in the week prior to publication for delivery in the current month or following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net

Publication: Twice monthly on Fridays at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.



Price ID: 1226

Assessment: Unbleached Softwood Kraft, (Imports from Chile/N. America)

Quantity: 500 tonnes Location: China

Incoterm: Cost, insurance and freight

Timing: Orders in the week prior to publication for delivery in the current month or following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net

Publication: Twice monthly on Fridays at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 1236

Assessment: Unbleached Softwood Kraft, (Imports from Russia)

Quantity: 500 tonnes Location: China

Incoterm: Cost, insurance and freight

Timing: Orders in the week prior to publication for delivery in the current month or following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net

Publication: Twice monthly on Fridays at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 1237

Assessment: Bleached Chemi-Thermomechanical Pulp, Hardwood

Quantity: 1.000 tonnes

Location: China

Incoterm: Cost, insurance and freight

Timing: Orders in the week prior to publication for delivery in the current month or following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net

Publication: Twice monthly on Fridays at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 11849

Assessment: Bleached Chemi-Thermomechanical Pulp, Softwood

Quantity: 500 tonnes



Location: China

Incoterm: Cost, insurance and freight

Timing: Orders in the week prior to publication for delivery in the current month or following month.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net

Publication: Twice monthly on Fridays at 2pm Singapore time.

Notes: Prices are for prime quality tonnage.

Price ID: 11850

East Asia - IMPORTS

Assessment: Northern Bleached Softwood Kraft (Imports from N. America/Scandinavia)

Quantity: 200 tonnes

Location: East Asia (South Korea, Japan, Taiwan, Southeast Asia)

Incoterm: Cost, insurance and freight Timing: Shipments in the month to date.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net contract price

Publication: Monthly, usually the first Friday of the month for orders the previous month.

Notes: Prices are for prime quality tonnage.

Price ID: 632

Assessment: Eucalyptus

Quantity: 500 tonnes

Location: East Asia (South Korea, Japan, Taiwan, Southeast Asia)

Incoterm: Cost, insurance and freight Timing: Shipments in the month to date.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net contract price

Publication: Monthly, usually the first Friday of the month for orders the previous month.

Notes: Prices are for prime quality tonnage.

Price ID: 620

Assessment: Northern Bleached Hardwood Kraft (Mixed)

Quantity: 500 tonnes

Location: East Asia (South Korea, Japan, Taiwan, Southeast Asia)

Incoterm: Cost, insurance and freight



Timing: Shipments in the month to date.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net contract price

Publication: Monthly, usually the first Friday of the month for orders the previous month.

Notes: Prices are for prime quality tonnage.

Price ID: 622

Assessment: Southern Mixed Hardwood Kraft

Quantity: 500 tonnes

Location: East Asia (South Korea, Japan, Taiwan, Southeast Asia)

Incoterm: Cost, insurance and freight Timing: Shipments in the month to date.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net contract price

Publication: Monthly, usually the first Friday of the month for orders the previous month.

Notes: Prices are for prime quality tonnage.

Price ID: 624

Assessment: Bleached Hardwood Kraft (Acacia from Indonesia)

Quantity: 500 tonnes

Location: East Asia (South Korea, Japan, Taiwan, Southeast Asia)

Incoterm: Cost, insurance and freight Timing: Shipments in the month to date.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net contract price

Publication: Monthly, usually the first Friday of the month for orders the previous month.

Notes: Prices are for prime quality tonnage.

Price ID: 628

Assessment: Bleached Chemi-Thermomechanical Pulp (Aspen)

Quantity: 200 tonnes

Location: East Asia (South Korea, Japan, Taiwan, Southeast Asia)

Incoterm: Cost, insurance and freight Timing: Shipments in the month to date.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.



Price Type: Net contract price

Publication: Monthly, usually the first Friday of the month for orders the previous month.

Notes: Prices are for prime quality tonnage.

Price ID: 630

Assessment: Bleached Softwood Kraft (Radiata Pine from Chile)

Quantity: 200 tonnes

Location: East Asia (South Korea, Japan, Taiwan, Southeast Asia)

Incoterm: Cost, insurance and freight Timing: Shipments in the month to date.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net contract price

Publication: Monthly, usually the first Friday of the month for orders the previous month.

Notes: Prices are for prime quality tonnage.

Price ID: 639

Assessment: Softwood Kraft (Imports from Chile/N. America)

Quantity: 200 tonnes

Location: East Asia (South Korea, Japan, Taiwan, Southeast Asia)

Incoterm: Cost, insurance and freight Timing: Shipments in the month to date.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net contract price

Publication: Monthly, usually the first Friday of the month for orders the previous month.

Notes: Prices are for prime quality tonnage.

Price ID: 641

Assessment: Bleached Chemi-Thermomechanical Pulp (Blended)

Quantity: 200 tonnes

Location: East Asia (South Korea, Japan, Taiwan, Southeast Asia)

Incoterm: Cost, insurance and freight Timing: Shipments in the month to date.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net contract price

Publication: Monthly, usually the first Friday of the month for orders the previous month.

Notes: Prices are for prime quality tonnage.

Price ID: 685



Assessment: Bleached Chemi-Thermomechanical Pulp (Spruce)

Quantity: 200 tonnes

Location: East Asia (South Korea, Japan, Taiwan, Southeast Asia)

Incoterm: Cost, insurance and freight Timing: Shipments in the month to date.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net contract price

Publication: Monthly, usually the first Friday of the month for orders the previous month.

Notes: Prices are for prime quality tonnage.

Price ID: 686

Assessment: Southern Pine (Imports from US)

Quantity: 200 tonnes

Location: East Asia (South Korea, Japan, Taiwan, Southeast Asia)

Incoterm: Cost, insurance and freight Timing: Shipments in the month to date.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms.

Price Type: Net contract price

Publication: Monthly, usually the first Friday of the month for orders the previous month.

Notes: Prices are for prime quality tonnage.

Price ID: 1228

LATIN AMERICA

Assessment: Bleached Hardwood Kraft (Eucalyptus) Domestic

Quantity: 300-500 tonnes

Location: Latin America (main ports in Argentina, Colombia, Chile and Mexico)

Incoterm: Cost, insurance and freight Timing: Orders in the month to date.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms. Publication: Monthly, usually the first Tuesday of the month.

Notes: Prices are for prime quality tonnage.

Price ID: 1078

Assessment: Bleached Hardwood Kraft (Eucalyptus) Domestic



Quantity: 300-500 tonnes

Location: Brazil (Southern and South-eastern regions)

Incoterm: Cost, insurance and freight Timing: Orders in the month to date.

Unit: Tonne

Currency: US Dollar

Payment terms: Assume normal and customary payment terms. Include PIS/Cofins taxes paid by producers. Do not include domestic ICMS tax which are variable according to location. Maximum prices are the list price based on the European FOEX of the previous month, while minimum prices include average discounts for the country.

Publication: Monthly, usually the first Tuesday of the month.

Notes: Prices are for prime quality tonnage.

Price ID: 1123

Revision History

Changes to methodology and specifications will be tracked here.

September 2021 – Amends timing for China import pulp following consultation

In September 2021, following industry consultation, Fastmarkets RISI amended the timing for assessments of pulp imported to China. The old timing specification read "Orders in the week prior to publication for delivery in the next three months." This was changed to "Orders in the week prior to publication for delivery in the current month or following month."

April 2021 - Adds details of pricing rationales, changes timing of US assessments

In April 2021 Fastmarkets RISI added details of pricing rationales now published for NBSK CIF China assessments. At the same time, the publishing time for US assessments was changed to 4.30pm ET following market consultation.

January 2021 – Adds note on domestic China assessments

October 2020 - Removes NA export and deinked pulp assessments

Following consultation, Fastmarkets RISI discontinued assessments for deinked pulp delivered the US East and export assessments for Southern bleached softwood kraft and Northern and Southern mixed bleached hardwood kraft CIF Japan. These assessments were removed from the methodology guide.

September 2020 - Adds assessments for fluff pulp CIF China, section on complaints

In September 2020, Fastmarkets RISI launched assessments for fluff pulp, US southern kraft, untreated rolls CIF China. This methodology guide was updated to include these. A section on queries and complaints was also added, as were publishing times.



June 2020 – Removes quarterly Japan and South Korea assessments

Quarterly pulp and paper assessments for Japan and South Korea were discontinued in June 2020. The specifications for these assessments were thus removed from this methodology guide. We also updated the details for the timing of assessments for pulp imports CIF China.

May 2020 – Corrects Price ID for Bleached Hardwood Kraft, Brazilian Eucalyptus, Europe, CIF The Price ID for Bleached Hardwood Kraft, Brazilian Eucalyptus, Europe, CIF was corrected to 601. This did not reflect a change in methodology.

March 2020 - Adjusts regional definitions in domestic price assessments

To bring PPI Asia assessments more in line with their underlying UM Paper assessments, and following market consultation, the regional definition for domestic China pulp price assessments was adjusted in February. This methodology guide was updated accordingly. Minimum volumes were also added for North America assessments.

January 2020 - Removes North America, Latin America export to China assessments

Effective January 2020, Fastmarkets RISI discontinued assessments of NBSK, Radiata and Eucalyptus export to China prices, published in PPI Pulp & Paper Week and World Pulp Monthly Table 5. From January 2020, Fastmarkets RISI retained only the PPI Asia China pulp assessments, which are republished in the other two publications.

September 2019 – Changes frequency of China NBSK import assessments

Fastmarkets RISI adjusted the timing of assessments of Northern Bleached Softwood Kraft, Imports from N. America/Scandinavia (Price ID 1218) in September 2019 to weekly from twice monthly. This methodology guide was updated accordingly.

September 2019 – Removes Nikkei as source of Japan assessments

Since September 2019, Fastmarkets RISI has no longer used Nikkei as the source of its Japan pulp and paper assessments. Price assessments now follow the same methodology as other markets. The methodology guide has been updated accordingly.

July 2019 – Adjusts timing of European fluff price assessments

Fastmarkets RISI adjusted the timing of European fluff price assessments in July 2019 to bring them in line with US fluff price assessments, to which they are formally tied. This methodology guide was changed accordingly.

May 2019 – Removes European spot price assessments

Following market consultation, Fastmarkets RISI discontinued European spot price assessments in May 2019. This methodology guide was changed accordingly.

April 2019 – Adds net price assessments for North American exports to China



Following market consultation, Fastmarkets RISI added new net price assessments for NBSK, radiata pine and eucalyptus exports to China. The corresponding effective list price assessments are due to be discontinued in October 2019.

February 2019 – Adjustments to North American export prices

Corrects timing of assessments of North American exports to Asia (Japan, Korea, China) and adds detail of WPM assessments of eucalyptus and radiata pine to China.

January 2019 - Fastmarkets rebranding

Fastmarkets RISI revamped all methodology and specifications guides, including Global Pulp, in January 2019 as part of a company-wide rebranding. This was done to improve the consistency of content across all Fastmarkets methodology guides and to give them a common look and feel.

The methodologies were not changed materially during this process, however additional detail was added on minimum transaction volumes considered, assessment windows and whether the assessments were intended to reflect prices at the time of publication or average prices over a certain period prior to that.

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