FASTMARKETS FOEX

PIX Pulp index presentation

September, 2023

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Fastmarkets FOEX

- Operated as a private company for almost 20 years
- First PIX index for NBSK Pulp Europe launched in 1996
- 2014: Acquired to become a sister organization to RISI
- 2017: RISI & FOEX acquired by Fastmarkets
- Operates as a PRA (Price Reporting Agency) with a price reporting team of 4
- Compiles and publishes audited PIX pulp, paper, paperboard, recovered paper, wood & wood-based biomass/bioenergy price indices

Fastmarkets FOEX

- Owns the trademark rights to PIX indices worldwide; indices can be used commercially under license agreement/subscription.
- Anti-trust clearance by EU DG-IV (EU Directorate-General for Competition) received
- Fully IOSCO (International Organization of Securities Commissions) assurance reviewed for PIX European Pulp and Recovered Paper in 2021, external audit conducted also for PIX Pulp China Indices in spring 2022. The external audits continue annually.
- BMR (Benchmark Regulation) authorization in 2021 through FBA Oy (Fastmarkets Benchmark Administration) a supervising body seated in Helsinki for all Fastmarkets prices/indices.

PIX Index System

- Participation is voluntary, free of charge, anonymous
- Large number of price providers, sellers and buyers represented
- Lowest and highest 10% of the prices eliminated before calculating the average
  - not applicable for potential PIX Pulp Spot price indices
- Weighting of price data is based on annual volumes. For pot. Spot indices, on traded volumes
- Published on foex.fi on Tuesdays at 12 Helsinki time, China on Fridays at 10 am
- Price reporting is systematical and according to index specifications and methodology.
- Index values never retroactively modified (typing errors corrected, though)

PIX Index System

- Rigorous control system for each index calculation process.
- Two-tier approval procedure after which the PIX index in question is locked for publishing.
- Annual index methodology reviews including an Open Consultation on the market are conducted for each index groups within Pulp, Paper, Packaging board, Recovered Paper etc.
- Price submitting companies receive annually our guideline, the Data Submitter Policy document, according to our policies and commitments.
- Clear division between price index production and subscription sales within Fastmarkets.

PIX Pulp Spot Indices Europe/Turkey

Fastmarkets FOEX is engaged in a project to launch PIX Pulp Spot indices

- The purpose of the Spot price indices:

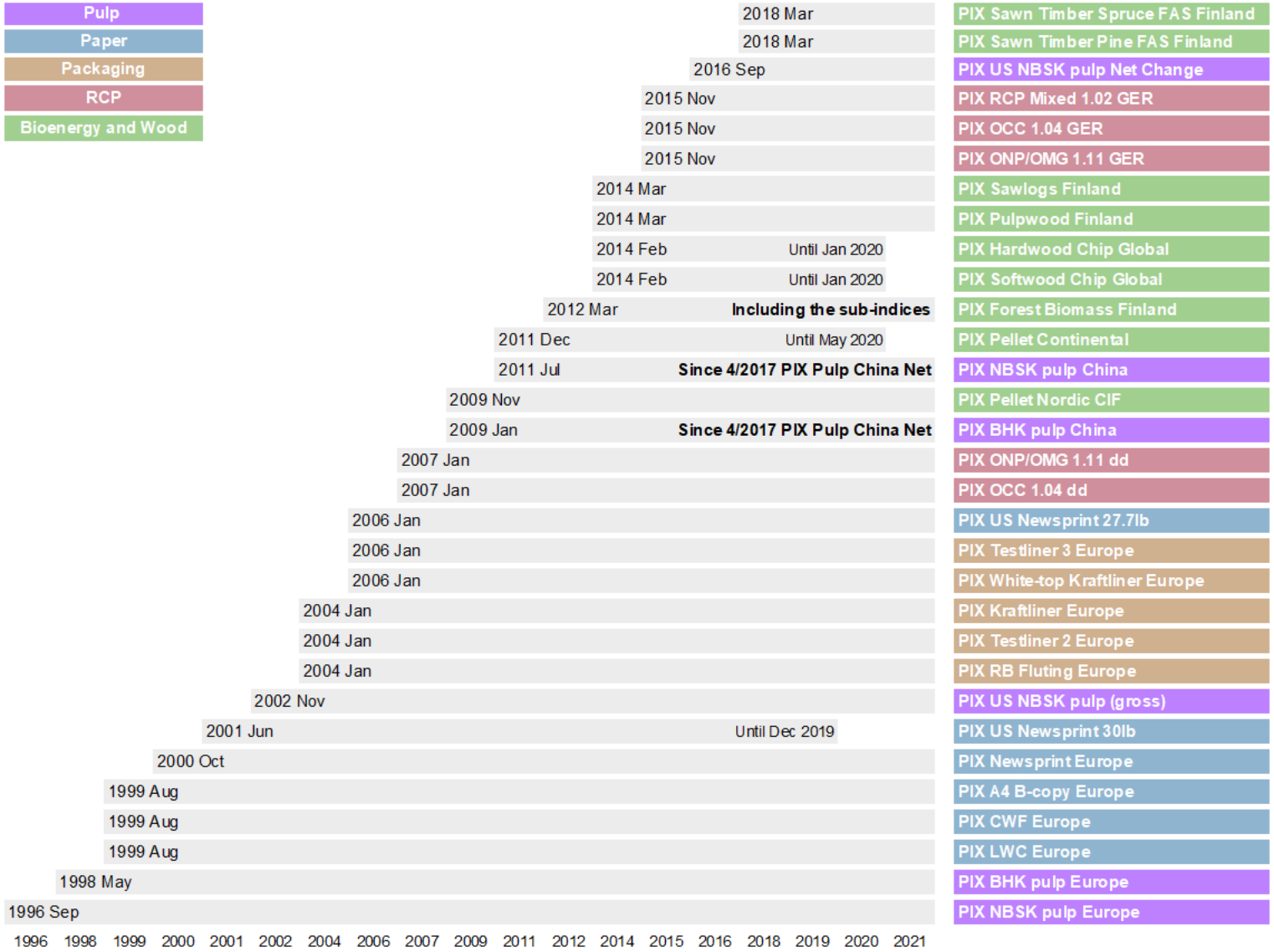
  The PIX Pulp Spot price Europe/Turkey indices track the weighted average of the reported spot trades in the observation week. Two indices,

  PIX NBSK Spot and PIX BHKP Spot

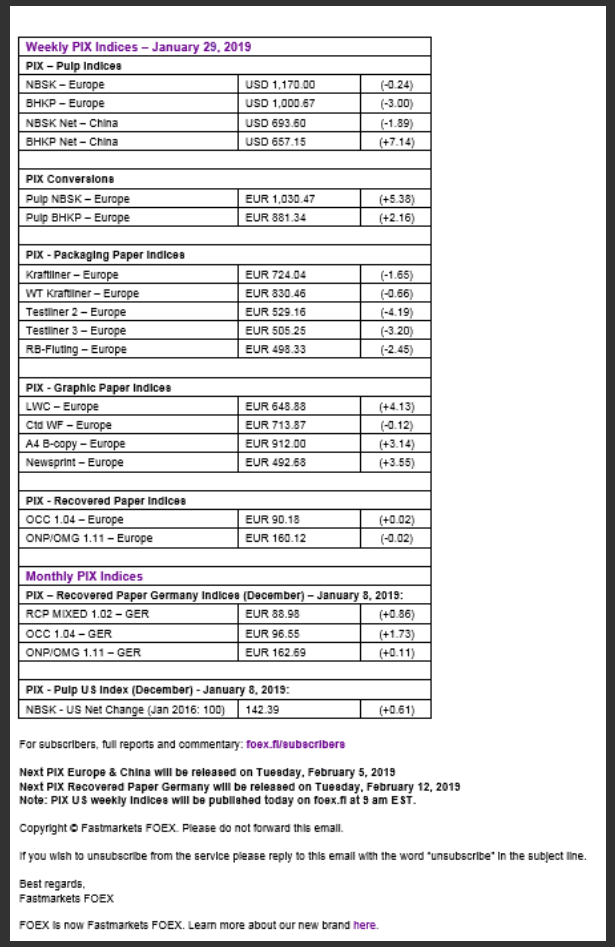
- The PIX Spot indices show:

  1. The weighted spot price average.
  2. The total volume of the spot trades the index is based on.

Fastmarkets FOEX – Current PIX Indices



PIX Pulp and Paper Service



Weekly PIX Indices – January 29, 2019		
PIX – Pulp Indices		
NBSK – Europe	USD 1,170.00	(-0.24)
BHKP – Europe	USD 1,000.67	(-3.00)
NBSK Net – China	USD 693.60	(-1.89)
BHKP Net – China	USD 657.15	(+7.14)
PIX Conversions		
Pulp NBSK – Europe	EUR 1,030.47	(+5.38)
Pulp BHKP – Europe	EUR 881.34	(+2.16)
PIX - Packaging Paper Indices		
Kraftliner – Europe	EUR 724.04	(-1.65)
WT Kraftliner – Europe	EUR 830.46	(-0.66)
Testliner 2 – Europe	EUR 529.16	(-4.19)
Testliner 3 – Europe	EUR 505.25	(-3.20)
RB-Fluting – Europe	EUR 498.33	(-2.45)
PIX - Graphic Paper Indices		
LWC – Europe	EUR 648.88	(+4.13)
Ctd WF – Europe	EUR 713.87	(-0.12)
A4 B-copy – Europe	EUR 912.00	(+3.14)
Newsprint – Europe	EUR 492.68	(+3.55)
PIX - Recovered Paper Indices		
OCC 1.04 – Europe	EUR 90.18	(+0.02)
ONP/OMG 1.11 – Europe	EUR 160.12	(-0.02)
Monthly PIX Indices		
PIX – Recovered Paper Germany Indices (December) – January 8, 2019:		
RCP MIXED 1.02 – GER	EUR 88.98	(+0.86)
OCC 1.04 – GER	EUR 96.55	(+1.73)
ONP/OMG 1.11 – GER	EUR 162.69	(+0.11)
PIX - Pulp US Index (December) - January 8, 2019:		
NBSK - US Net Change (Jan 2016: 100)	142.39	(+0.61)

For subscribers, full reports and commentary: **foex.fi/subscribers**

Next PIX Europe & China will be released on Tuesday, February 5, 2019
Next PIX Recovered Paper Germany will be released on Tuesday, February 12, 2019
Note: PIX US weekly indices will be published today on foex.fi at 9 am EST.

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Best regards,
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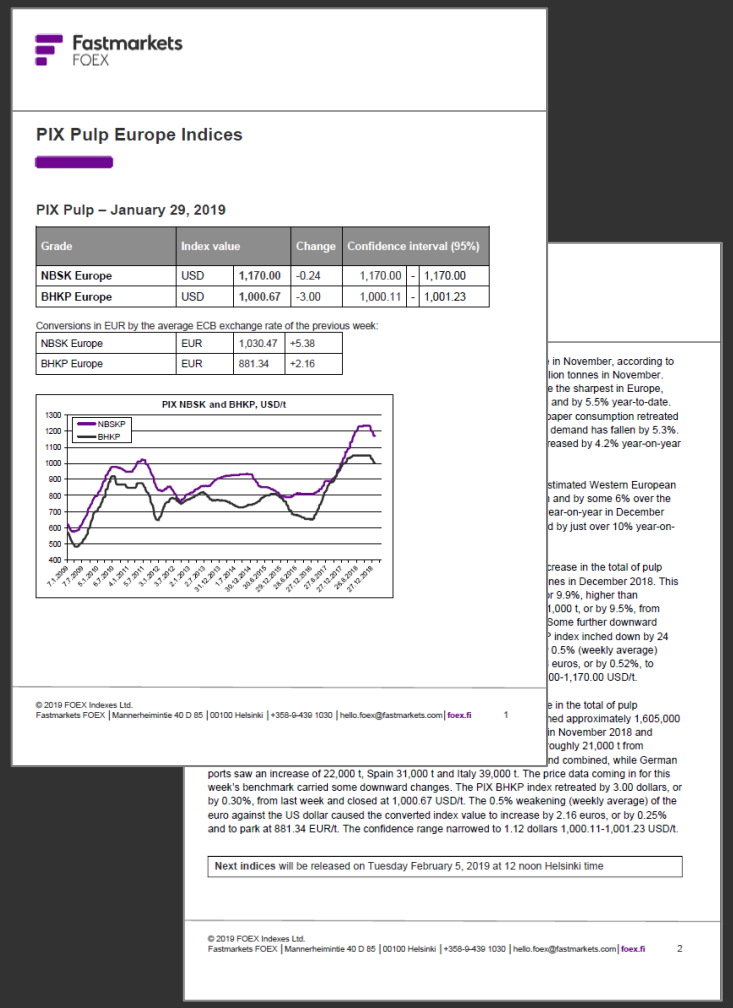

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PIX Pulp Europe Indices

PIX Pulp – January 29, 2019

Grade	Index value		Change	Confidence interval (95%)		
NBSK Europe	USD	**1,170.00**	-0.24	1,170.00	-	1,170.00
BHKP Europe	USD	**1,000.67**	-3.00	1,000.11	-	1,001.23

Conversions in EUR by the average ECB exchange rate of the previous week:

NBSK Europe	EUR	1,030.47	+5.38
BHKP Europe	EUR	881.34	+2.16

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in November, according to
lion tonnes in November.
e the sharpest in Europe,
and by 5.5% year-to-date.
paper consumption retreated
demand has fallen by 5.3%.
reased by 4.2% year-on-year

stimated Western European
and by some 6% over the
ear-on-year in December
d by just over 10% year-on-

crease in the total of pulp
nes in December 2018. This
r 9.9%, higher than
1,000 t, or by 9.5%, from
Some further downward
index inched down by 24
0.5% (weekly average)
euros, or by 0.52%, to
00-1,170.00 USD/t.

e in the total of pulp
hed approximately 1,605,000
in November 2018 and
oughly 21,000 t from
nd combined, while German
ports saw an increase of 22,000 t, Spain 31,000 t and Italy 39,000 t. The price data coming in for this week's benchmark carried some downward changes. The PIX BHKP index retreated by 3.00 dollars, or by 0.30%, from last week and closed at 1,000.67 USD/t. The 0.5% weakening (weekly average) of the euro against the US dollar caused the converted index value to increase by 2.16 euros, or by 0.25% and to park at 881.34 EUR/t. The confidence range narrowed to 1.12 dollars 1,000.11-1,001.23 USD/t.

Next indices will be released on Tuesday February 5, 2019 at 12 noon Helsinki time

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PIX PULP & PAPER EMAIL

Weekly email sent to subscribers right after publishing

PIX LETTERS

Weekly letters available for subscribers at foex.fi

PIX HISTORIES (OPTION)

Weekly histories since index launch available for subscribers at foex.fi

PIX BIOENERGY & WOOD SERVICE

- EMAIL LAUNCHED IN OCT 2021!

Sales of PIX Pulp and Paper Service and data license contracts handled by Fastmarkets Sales

PIX Bioenergy & Wood Service

- PIX Bioenergy & Wood email with all the latest index values
- Access to Fastmarkets FOEX subscriber page with
  - 3 monthly newsletters (PIX Forest Biomass Finland, PIX Pellet Nordic, PIX Sawn Timber Finland)
  - index history series for all PIX bioenergy and wood indices

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